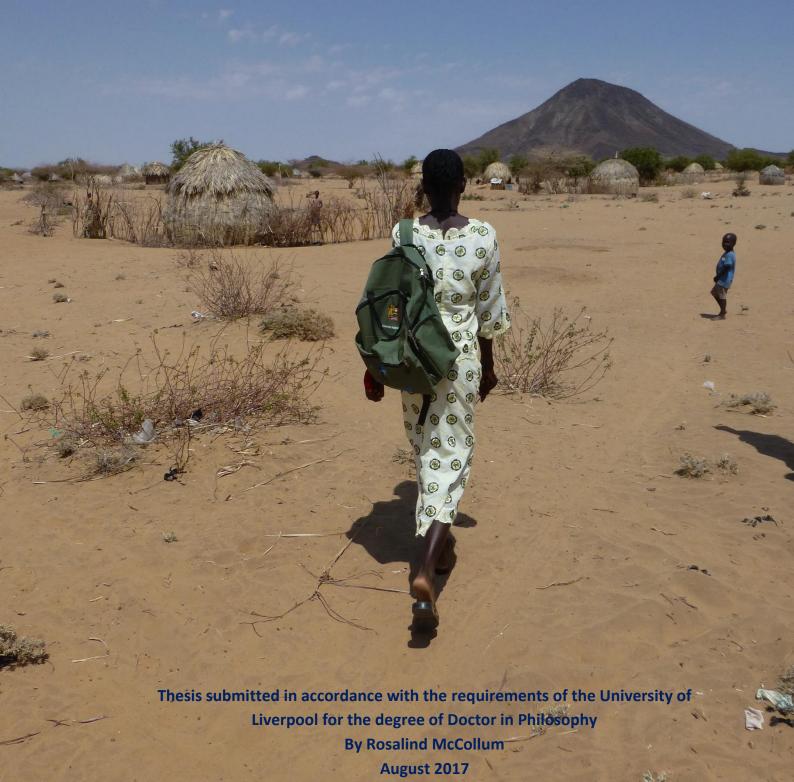
Process, power and politics: setting priorities for community health and equity in the recently devolved Kenyan health system



Abstract

Devolution in Kenya was politically driven, motivated by the desire to share power and resources across regions, so as to remedy historical inequities. This led to transfer of planning, management and budgeting responsibilities for a range of services, including health, from central government to 47 new sub-national governments (known as counties), starting in 2013. This transition was driven by increasing frustration with inefficiencies and inequities associated with the former centralised government. Objectives for devolution are to strengthen democracy and accountability, increase community participation, improve efficiency and reduce inequities. However, global experiences have shown that transfer of powers does not always lead to achievement of these objectives. Rather, potential risks include that inefficiencies will multiply, inequities will widen and corruption will become more widespread.

Health has been the most controversial of all devolved services in Kenya, contributing to recurring health worker strikes. Respondents described that ideally, priorities should be set following a series of consultations between local decision-making actors, guided by local evidence and community-generated priorities, bounded by available resources, using cost-effectiveness and equity principles to identify context-appropriate interventions which advance universal health coverage.

This thesis which, to the best of our knowledge, is the first study of its kind, aims to explore priority-setting for community health and equity across counties and multiple health systems levels in Kenya post-devolution. It uses mixed qualitative approaches in ten counties including interviews, focus group discussions and participatory photography research conducted two to three years after devolution took place. It includes respondents from national to community level to analyse county health priority-setting processes, power dynamics and implications for health equity and community health services.

This study shows that many respondents across health systems levels identify equity as a guiding principle, with devolution bringing positive ramifications for previously neglected counties, reducing inequities between counties. County decision-makers, who often hold greatest power compared with health workers and community members, perceive building health facilities as the most appropriate way to achieve health equity. Community members who have a more holistic understanding are not yet sufficiently empowered to understand the benefits and limitations of choices available to them or to reflect this within the priorities they identify. There is wide variation between counties, with emerging examples of stronger, more equitable health priority-setting, with inclusion of an illustrative case study.

Overwhelmingly the findings from this study relate to power dynamics. We found a lack of clarity surrounding roles for decision-making actors, inadequate information, unclear criteria and processes for guiding priority-setting. Within the confusion created by the limited guidance and capacity, opportunistic actors have seized available power to manipulate priorities to align with personal objectives, such as political re-election. The resulting increase in complexity blurs lines of accountability creating a situation that makes progress beyond a single elected term challenging.

This has led to increased focus on tangible curative services, stifling opportunities for strengthening quality and community-based primary health care.

Devolution has brought a period of colossal upheaval with changes in roles and power locus within the health system. Clearer guidance, capacity building, stronger community empowerment, involving marginalised groups in priority-setting processes and accountability mechanisms are needed if devolution's objectives are to be realised.

Declaration

I, Rosalind McCollum, declare that the work in this thesis is my own under the supervision of Miriam Taegtmeyer, Sally Theobald and Tim Martineau. At no previous time was this work submitted for a degree or qualification.

Where information has been derived from other sources I confirm that this has been indicated in the thesis.

Rosalind McCollum

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List of Acronyms

ANC Ante-Natal Care

CEC County Executive Committee
CHC Community Health Committee

CHEW Community Health Extension Worker
CHMT County Health Management Team

CHW Community Health Worker
CHV Community Health Volunteer
CFSP County Fiscal Strategy Paper

CIDP County Integrated Development Plan
DHMT District Health Management Team

DHS Demographic Health Survey
FGM Female Genital Mutilation
FGD Focus Group Discussion
FIF Facility Improvement Fund
GDP Gross Domestic Product
HRH Human Resources for Health
HSSF Health Sector Services Fund

IDI In-Depth Interview

KEPH Kenya Essential Package for Health KHSSP Kenya Health Sector Strategic Plan

KII Key Informant Interview

LMIC Lower Middle Income Country

LSTM Liverpool School of Tropical Medicine

MCA Member of County Assembly

MOH Ministry of Health

NCD Non Communicable Disease
NGO Non-Governmental Organisation
NHIF National Hospital Insurance Fund

OECD Organisation for Economic Co-operation and Development

OOP Out-Of-Pocket

QI Quality Improvement
SWG Sector Working Group
UHC Universal Health Coverage

List of supporting manuscripts

- R. McCollum, W. Gomez, S. Theobald, and M. Taegtmeyer, "How equitable are community health worker programmes and which programme features influence equity of community health worker services? A systematic review," *BMC Public Health*, vol. 16, no. 419, pp. 1–16, 2016.
- R. McCollum, L. Otiso, M. Mireku, S. Theobald, K. de Koning, S. Hussein, and M. Taegtmeyer, "Exploring perceptions of community health policy in Kenya and identifying implications for policy change," *Health Policy Plan.*, vol. 31, no. 1, pp. 10–20, 2015.
- L. Otiso, R. McCollum, M. Mireku, R. Karuga, D. Koning, Korrie, and M. Taegtmeyer, "Decentralising and integrating HIV services in community-based health systems: A qualitative study of perceptions at macro, meso and micro levels of the health system," *BMJ Glob. Heal.*, vol. 2, no. e000107, pp. 1–10, 2017.

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Thanks be to God.

Dedication

For Dad, who always supported and encouraged me. You taught me to work hard, to persevere and to always put God first.

Thank-you for being proud of me. I miss you and I wish you were here to see me graduate.

Chapter 1: Introduction

The introductory chapter of this thesis will highlight the justification for this study, define the aim and objectives and provide an overview of the thesis structure. Three key definitions frame the chapter:

Health equity implies that ideally everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential, if it can be avoided [1].

Community health services are delivered in the community, to encourage the involvement and empowerment of communities to change health-related beliefs, behaviours and improve access and uptake of preventive and curative health services [2].

Intersectionality approaches provide a framework within which to understand and respond to health inequities by trying to uncover underlying power structures that create them [3].

1.1 Justification for the study

Dramatic differences in mortality and life expectancy exist between and within countries with poorer survival chances and lower use of facility-based services among more disadvantaged groups [1], [4]–[6]. Many countries, including Kenya, are seeking to attain Universal Health Coverage (UHC), which means the health system will need to be structured in a way which expands priority promotive, preventive, curative and rehabilitative services, includes more people and reduces out-of-pocket payments [7]. Barriers to demand for health services must first be addressed before equitable access to UHC can be achieved [8]. The well-planned introduction and inclusion of trained and adequately supported community health workers (CHWs¹)

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¹ CHW refers to any health worker carrying out functions related to health care delivery; trained in some way in the context of the intervention, and having no formal professional or paraprofessional certificate or degree in tertiary education (page 7 [108]).

within the health system can play a key role in addressing barriers to acceptability and use of health services [9].

CHWs have been shown to improve equitable child survival, health and nutrition by bringing services closer to the homes of hard-to-reach and underserved populations [10]–[14]. They promote equitable access and utilisation of health services by reducing inequities relating to place of residence, gender, education and wealth and can contribute towards more equitable uptake of referrals at health facility level [9]. Community-based approaches are likely to be cost-effective for delivery of some essential health interventions [15], resulting in an economic return of up to 10:1 in Sub-Saharan Africa through increased productivity from a healthier population [16]. Not only this but CHWs are uniquely placed to enter their neighbour's homes and observe social determinants of health, allowing them to provide targeted health promotion and disease prevention education.

The Government of Kenya has described the need to promote equity since gaining independence in 1963 and has made excellent progress towards reducing child mortality, with under-five mortality rates reduced from 115 deaths per 1000 live births in 2003 to 52 deaths per 1000 live births in 2014 [17], [18]. However, these improvements mask an increasing relative inequity, with urban child survival gaps between the richest and poorest children doubling in recent years [19]. In fact Kenya is reported to have some of the most inequitable cities globally for health [20]. There are marked differences between and within Kenya's 47 counties in access to essential health services, health facilities and health workers [21]. Differences in the use of health services are shaped by a number of intersecting factors including geographic location, wealth, education level, gender and age according to the recent Demographic Health Survey (2014).

Kenya recognises the importance of community health services in policy documents, making community health the first tier of its four tier health system and describing the need for country wide scale-up of community health interventions [22], [23]. However, despite support within policies and strategies, Kenya's community health strategy prior to devolution (and at national level post-devolution) has been almost

entirely donor funded, with no allocation for community health funds available to the national community health and development unit for developing their annual work plan. This donor reliance has upon occasion resulted in inequitable access to community health services, based on donor preference when establishing community units [24].

In 2013 Kenya devolved planning, management and budgeting responsibilities for a range of services, including health, from central government to 47 new sub-national governments, (now known as counties). The reforms were driven by increasing frustration with inefficiencies and inequities associated with the former centralised government process and in response to growing local and international pressure, following the post-election violence of 2007-08 [25]. Devolution aims to strengthen democracy and accountability, increase community participation, improve efficiency and reduce inequities [26]. However, global experiences have shown that the transfer of powers to lower levels does not always lead to the achievement of devolution's aims [27]–[32].

Devolution in Kenya has been described as "among the most ambitious in the world, transferring key functions and financing to an entirely new level of sub-national government" [33]. Devolution is the most comprehensive of the four forms of decentralisation (de-concentration, delegation, privatisation and devolution) and in Kenya included transfer of administrative, political and fiscal functions from the national to the sub-national (county) levels [32], [34]. Article 43.1 of the new Constitution (2010) demonstrates commitment within devolution to the equitable provision of health services as "Every person has the right to the highest attainable standard of health which includes the right to health care services" (page31[26]).

Kenya's decision to vote for a new Constitution, and with it devolution, has the potential to transform longstanding inequities. Each county government now has the power to determine which services (including community health) are prioritised, informed directly by community participation and the local county context. Little is known about the impact of devolution in Kenya, or about how and why priorities for

health are set and how this influences the access, use and effective coverage of health services.

1.2 Study Aim and Objectives

This thesis aims to understand decision-making and priority-setting for community health and equity following devolution of health services in Kenya by pursuing a mixed qualitative approach, two to three years after devolution began. It will seek to develop lessons for health equity following devolution by addressing three main objectives:

Objective 1: Understand how process, power and politics effect equitable county level priority-setting processes.

Objective 2: Explore felt impact of devolution for the health system, particularly delivery of community health services.

Objective 3: Identify early successes and challenges for health equity from community to national level following devolution.

1.3 Structure of the thesis

This thesis is presented in five chapters (see Figure 1). Chapter 2, will introduce the concepts of decentralisation, priority-setting, health equity and community health workers both globally and within Kenya. This will include findings from two papers arising from this work and published in the peer reviewed literature - a systematic review on CHW programme equity and an outline of devolution in Kenya and its implications for community health policy change [9], [26].

Chapter 3 describes and justifies the methods and their relationship to fulfilling each of the three research objectives. It outlines which methods were used in each level and in each county. Interviews with 269 individuals and 14 focus group discussions were conducted in total. 14 key informant interviews were conducted at national level and in-depth interviews with 120 county level decision-makers in each of ten diverse counties. In three of these counties data from interviews with 49 health workers were included. In two of these counties 86 interviews with close-to-

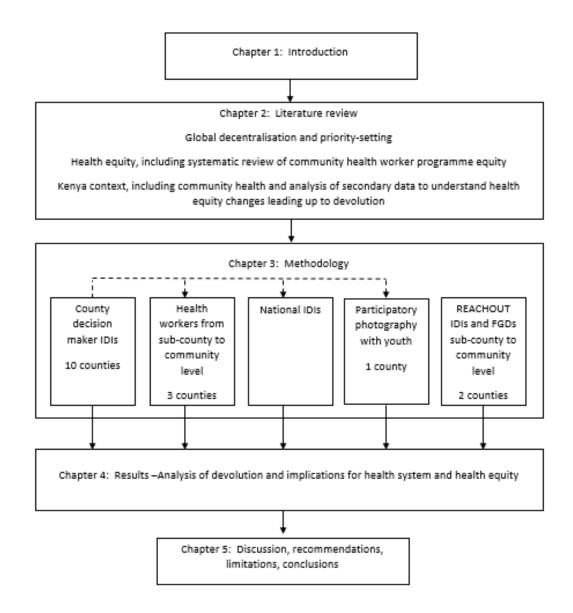
community (CTC) providers², their supervisors and community members were carried out. Finally, participatory photography research was conducted among youth from Korogocho informal settlement, who often do not adequately engage with health services. There is also reflexive consideration of my role within the research.

Chapter 4 documents the research findings, introducing the leading decision-making actors, decision-making processes for health, influencing factors associated with decision-making (including power dynamics) at the county level. Following this, the successes and challenges identified by county level decision-makers, national key informants and health workers from facility and community levels are analysed. This provides insight into the early impact of devolution across the health system, particularly the delivery of community health services. Finally, qualitative findings about 'health equity' are presented, as understood and experienced by all respondents, including community health volunteers (CHVs) and community members from two counties. This incorporates participatory photography research findings generated by youth from Korogocho informal settlement.

Chapter 5 draws together and provides a discussion of the results and how these relate to the literature, highlighting the implications of devolution in Kenya for progress towards Universal Health Coverage, limitations associated with the study, contribution to new knowledge along with recommendations for improvement and closing conclusions.

² A CTC provider is a health worker who carries out promotional, preventive and/or curative health services and who is the first point of contact at community level. A CTC provider has a minimum level of training in the intervention they carry-out, but not more than two or three years para- professional training [291].

Figure 1 Thesis structure



Chapter 2: Literature review

This chapter will introduce the concepts and global literature surrounding key thematic areas upon which this study is built. Literature presented in this chapter will later be explored in the discussion section, where study findings will be related back to current literature by demonstrating similarities and differences, and highlighted contributions of the results to expanding the global body of evidence. The main thematic areas explored through the literature review are:

- 1) Global experiences with decentralisation for health services
- 2) Priority-setting processes
- 3) Health equity and community health
- 4) Health in Kenya

These thematic areas were selected in order to provide the framework and context within which to understand priority-setting for community health and equity after devolution in Kenya. Literature was selected to highlight the key concepts and definitions for each theme; former experiences with devolution and priority-setting, including best practices and challenges experienced in a range of contexts; evidence-based pathways to achieving equity and the role of community health approaches for achieving universal health coverage. Finally, the health in Kenya theme seeks to establish understanding of the health system context by outlining the health context in Kenya, including health policy changes over the years and Kenya's experiences with priority-setting and decentralisation to date.

The search engine PubMed was used to search for relevant papers. Key search terms relating to the main study areas were applied, including: ('Kenya' and) 'health system' and 'decentralisation' or 'devolution' or 'health reform' or 'priority-setting' or 'decision-making' or 'equity' or 'inequity' or 'intersectionality'. No restriction was placed on age of literature for the time frame searched. English language papers only were included. In addition, references from suitable papers were used to snowball and identify other key literature, including further peer-reviewed studies; reports from World Health Organisation and The World Bank and grey literature. Given the media focus on devolution and health in Kenya, grey literature also included local

newspaper reporting of the implications of devolution for health in Kenya. Shared documents or specific google searches were used to identify key Kenyan development and health policy documents recommended by colleagues and interviewees. The section for equity and community health was performed as a systematic review that is published elsewhere [9].

2.1 Global experiences with decentralisation for health services

This section will provide an overview of the literature explaining decentralisation, why countries choose to decentralise and the role of process, power and politics within these reforms. In addition, facilitators and threats to successful decentralisation, the 'decision space' approach and decentralisation's influence on health system performance are summarised.

2.1.1 What is decentralisation?

Decentralisation can be defined as "the transfer of authority, or dispersal of power in public planning, management and decision-making from the national level to subnational levels" (page11 [32]). It is usually dynamic, with the extent of (de)centralisation of services changing over time, depending on the political context [35].

Within any health system there are both central and local/ sub-national levels, with each level having a variety of roles and responsibilities. Decentralisation reforms lead to changes in authority, power and functions between levels. This may include transfer of responsibility for administrative, political and fiscal functions to subnational levels, as follows:

- Administrative decentralisation expands the local level role for delivering public services
- Political decentralisation includes procedures for greater citizen participation and provides locally elected government with greater policy making power and authority

3) Fiscal decentralisation includes mechanisms for sharing public revenue between all levels of government, with local authority over revenue generation and use [36], [37].

Rondinelli (1981) described four main classifications for decentralisation (deconcentration, devolution, delegation and privatisation) [38]. subsequently applied to the decentralisation of health systems by Mills et al. (1990) [32]. These four types reflect the differing degrees of decentralisation of authority between levels, with de-concentration describing the change which occurs when the authority shift for administrative functions is to sub-national offices within the Ministry of Health; delegation when semi-autonomous agencies are granted new powers (typically still administrative); devolution when the shift of administrative, political and fiscal responsibilities is to sub-national level of locally elected government, often considered to be the 'strong' form of decentralisation; and privatisation when ownership is granted to private bodies [29], [37]. However, this classification which identifies the institutional location of powers does not fully account for the dynamic nature of changes which occur over time. The 'de facto' range of choice which is granted to decision-makers at the sub-national levels may vary with time due to the dynamic nature of changing power relationships [29]. Devolution was undertaken in Kenya starting in 2013 (see section 2.4.5).

2.1.2 Why decentralise?

The objectives for decentralisation are diverse, and typically politically driven. In addition to internal political motivations, external pressure exerted by international donors, such as the World Bank and the International Monetary Fund, have promoted decentralisation by making it a component of structural adjustment policies [37]. The most frequently cited benefits of decentralisation are [28], [29], [36], [37], [39]:

- Improved 'allocative' efficiency, by bringing decision-making closer to the general population and allowing local users to shape service provision
- Improved 'technical' efficiency with greater cost-consciousness at local level

- Local consultations and better information about citizen needs and wants at subnational level provide opportunity for local innovation for services delivery
- Increased responsiveness and faster implementation bypassing central bureaucracy
- Improved quality, transparency, accountability and legitimacy through community oversight and involvement within selection, planning and implementation of public projects which respond to citizen needs and wants
- Greater accountability of public officials for priorities set and use of resources
- Promotion of national unity and stability
- Greater equity through distribution of resources to traditionally marginalised areas or populations.

However, the health system is complex and if certain requirements which influence use of "decision space" (see section 2.1.7), correct timing, willingness to learn and improve over time are not in place then decentralisation reforms may in fact lead to negative outcomes [36].

2.1.3 Governance, accountability and health systems perspective or decentralisation

Governance and accountability are crucial to both an effective health system and decentralisation reforms. The institutionalist governance perspective views governance as concerning the distribution of roles/responsibilities and interactions among societal actors (citizens, state actors and health service providers) that shape the 'principal –agent' interactions among them [40]. 'Principal-agent' theory is an approach to analysis of the different actors, a 'principal' contracts an 'agent' to undertake a certain service. It is based on the assumption that the goals of principals and agents differ and that agents typically have more information than the principal, permitting them to pursue their own interests at the expense of the principal, while principals seek to increase their control over agents without expensive efforts to overcome information gaps [40], [41]. Through application of this theory Brinkerhoff and Bossert (2008, 2014) identify governance relationships between three main actors – the state, providers and citizens as described below [40], [42]:

- Citizens and state actors: Combination and expression of citizen demands to
 politicians and policymakers, who ideally are responsiveness to these demands.
 It may be challenging to mobilise voters and therefore needs an informed
 electorate who understand and demand holistic health care.
- 2. State actors and providers: Contract-like connections between state actors and providers, whereby providers carry-out agreed upon responsibilities in exchange for resources and support, with accountability mechanisms in place to encourage compliance. Mechanisms include political accountability where politicians encourage health providers and actors to pursue citizen demands, performance accountability and financial accountability for budgeting, accounting and auditing of resources, with governance relationships including reporting, provision of information for monitoring and accountability.
- 3. Citizens and providers: Ideally citizen satisfaction is considered and incorporated to ensure provision of quality services by providers to meet citizen demands. This may be subject to power and information asymmetries, capacity gaps, accountability failures and perverse incentives. Civil society organisations and community health committees can participate in health provider needs assessments to encourage accountability.

Accountability mechanisms are governance tools which endeavour to "regulate answerability between the health system and / or citizens and between different levels of the health system" (page 321 [43]). Brinkerhoff and Bossert (2008) identify three main governance principles: build and reinforce political will for reform; balance supply-side interventions with support for demand; and integrate health governance with health systems operations, financing, and capacity building.

Accountability mechanisms typically include two main aspects — 'external' or community accountability used by citizens to hold public sector actors (e.g. health providers, policymakers and politicians) to account and 'internal' or bureaucratic mechanisms, which include institutional oversights, checks and balances internal to the public sector [43]. Cleary et al. (2013) identify a range of accountability mechanisms which promote both internal and external accountability. The functionality of these mechanisms was found to be influenced by — resources (time,

space and capacity), attitudes and perceptions of actors, values, beliefs and culture of the system. The mechanisms described include [43]:

Internal accountability

- Human resource management performance appraisals between staff and managers
- Budgeting, planning, priority setting, target setting annual plans based on assessment of local needs guide resource allocation, budget allocation and targets set, facilities report back on progress towards targets.

External accountability

- Clinic committees exchange of information between citizens and providers, opportunity for patients to ask questions or raise complaints, information used for priority-setting
- Provider report cards patients rate quality of care, citizens given information about rights to care, information shared upwards
- Complaints boxes patients give input to service aspects in need of improvement, information shared with providers.

Objectives for decentralisation of health services relate to whether a governance or health systems perspective is prioritised, as described by Mitchell and Bossert (2010) [37]. The governance perspective emphasises the need for increased local accountability with increased 'decision-space' at lower levels, with citizen involvement in priority-setting to increase responsiveness of the health system to the needs of citizens [37], [43]. Citizen preferences are of foremost importance and there is little place for the use of central directives such as 'earmarking' of funds. It focuses on the direction of accountability downward to citizens. Meaningful social participation is integral to health systems governance and is needed to mobilise political support for redistributing power and resources and addressing disparities in social determinants [44].

The **health system** perspective states that the underlying goal for public policy is improved health system performance and not necessarily responsiveness to local

preference per se. Decentralisation is considered one of a number of factors which may influence health systems performance in attaining access, quality, efficiency, equity and health outcomes(such as improved health status, client satisfaction, financial risk protection and equity). The health system perspective is concerned with accountability for improving population health in an acceptable, sustainable and fair manner [37].

This thesis seeks to outline the points of convergence between these two perspectives, by identifying opportunities for how developing social participation for health systems governance can contribute to challenging power imbalances for health and improve population health.

2.1.4 Power and politics

Practices of power are at the heart of every policy process [45]. Naturally, decentralisation is driven and shaped by politics and institutional power dynamics [46].

What is power? Power is "the degree of control over material, human, intellectual and financial resources exercised by different sections of society" (page41 [47]).

What is politics? Politics has been defined as the "contestation and bargaining between interest groups with competing claims over rights and resources" (page 4 [48]).

Power is both dynamic and relational, rather than absolute and is exercised through the social, economic and political relations between individuals and groups[47]. Power can change with the context, circumstances and interest of actors and can be expressed in a range of forms from domination and resistance to collaboration and transformation [47].

Gaventa's work on power is summarised by the power cube, which considers the spaces, places and forms of power (see Figure 2). The spaces for power include opportunities and channels where actors can potentially influence policy and decisions [49]. Naturally, these spaces are shaped by power relations surrounding

who can participate within them. Gaventa summarises these spaces as three main types:

- Closed spaces where elites make decisions behind closed doors, which in Kenya include discussions between county executive committee members and the governor or among members of county assembly;
- **Invited spaces** where citizens are invited to participate by authorities, which in Kenya includes the public participation forums;
- Claimed spaces where less powerful actors claim spaces from the power holders, which in Kenya includes the use of social media platforms by citizens to raise awareness about poor quality services.

Power relations adapt and change as these spaces are realised, with power gained from one space through skills, capacity and experience, used to enter and affect other spaces [49]. Places for power include **household**, **local**, **national** and **global** arenas. The final aspect of power considered in the power cube is forms of power. This builds on 'three dimensions of power' work by Steven Lukes (1974)[50], and subsequent expansion by Veneklasen et al (2002) to identify three main forms – visible, hidden and invisible [47].

- 'Visible power' observable decision making. This includes the visible and definable rules, structures, authorities, institutions and procedures for decisionmaking. Strategies targeting this level seek to change the 'who, how and what' to increase accountability of priority-setting processes.
- 'Hidden power' setting the political agenda, is less obvious. Certain powerful people and institutions maintain their influence by controlling who is involved with decision-making and what is on the agenda. Actions to address this level include empowering advocacy strategies that seek to strengthen organisations of the poor to influence the way in which political agenda is shaped.
- 'Invisible power' shaping meaning and what is important. Problems and issues are kept from the minds of the actors involved, by influencing how they think about their place in the world and controlling access to information, so that people are unable to make informed choices. In this dimension power operates

at a deeper 'invisible' level, so that actors may unwittingly follow against their own best interests, thereby avoiding conflict by making it impossible for people to imagine anything different to the status quo [51], [52]. Power is closely associated with ideology. Beliefs, values, attitudes and ways of analysing life, enforced by structures such as family, education system, religion, the media, the economy and the state, tend to reinforce the dominant ideology and power of the dominant groups within it [47]. Change strategies at this level target social and political culture and individual consciousness.

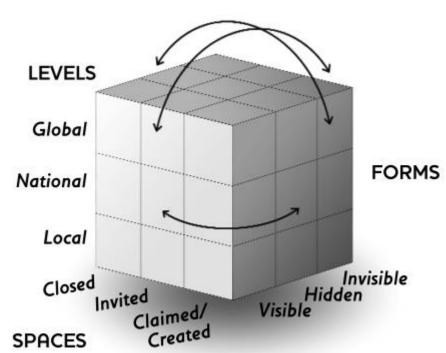


Figure 2 The 'power cube' (Gaventa, 2006)

How power is expressed can be summarised through four main distinctions, one negative (power over) and three positive (power with, power to, power within) summarised by Veneklasen et al. (2002).

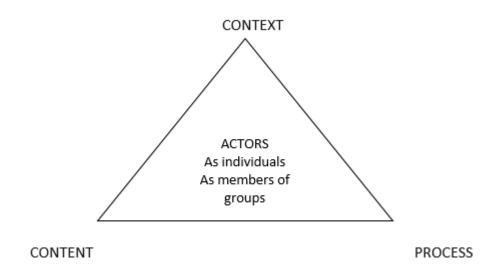
Power over – This is the most commonly recognised form, with typically negative
associations. Power is viewed as 'zero-sum' where the more power one person
has, then the less the other has [52]. Having power involves taking it from
someone else and then using it to dominate and prevent others from gaining it.

- Power with based on mutual support and collaboration to build collective strength. It helps build bridges and promote more equitable relations, e.g. advocacy groups seek to build a coalition which draws on this expression of power.
- 3. Power to refers to the potential of every person to shape their life. Citizen education is based on the belief that every person has the power to make a difference.
- 4. Power within relates to a person's sense of self-worth, values and self-knowledge, having the capacity to have hope and affirming dignity and fulfilment.

Within implementation work, a range of theoretical models seek to outline the practice of power. These include: 'Top-down' model where power is viewed as coordination and control of others by those with authority at the upper levels within an organisation or institution's hierarchy, with implementing actors simply tasked with carrying out plans [45]. 'Bottom-up' theories, which focus on the dynamics within organisations, at times emphasising consensus-building, conflict and power bargaining and highlighting the discretionary power of implementing actors. For example, in street-level bureaucracy theory implementers use their discretionary power as a coping mechanism in challenging environments within the public sector [45].

Walt and Gilson (1994) identified that attention was primarily placed on the content of health reforms, rather than on the actors involved in creating these reforms, the processes for developing and implementing change and the context within which new policy and reforms are developed [53]. Policy and reforms do not occur in a vacuum but are the outcome of complex social, political and economic interactions [53]. In response to gaps with the recognition of these features, Walt and Gilson applied aspects of political economy in the development of their model for health policy analysis (see Figure 3). This provides a useful tool to understand the process of health policy reform and to plan for its effective implementation. It is based around four main components: the content of reform; the actors involved in the reform; the processes for developing and implementing change and the context within which policy or reform is developed and applied [53].

Figure 3 Walt and Gilson model for health policy analysis.



2.1.5 Decision space approach to decentralisation

Despite their popularity, decentralisation reforms have a mixed record in terms of realising their many objectives (for health and more broadly). This is often due to difference between the official public policy goals for health and the goals of local politicians and other decision-making actors [46]. Within priority-setting processes there are a range of political actors/ interest groups, each with their own claim to available health resources, but with differing degrees of authority and ability to bargain and influence others, when competing for these. Applying a political lens to understand changing power dynamics when interpreting the processes and interactions is a useful approach to understanding political behaviours and how they shape policies and priority-setting. There are commonalities between application of the political lens and Bossert's work on 'Decision Space Approach' [28], with three main aspects common to both highlighted below [28], [32], [48], [54]–[56].

- Interactions between different interest groups/actors, including between 'principal' - national Ministry of Health and the 'agent' – the sub-national level of government.
- 2) Interactions between the institutional 'rules of the game' including formal laws, regulations and Constitutional rules, which create the 'de jure' decision space.

3) Interactions with informal political, social and cultural norms and the structural social, economic and political context. In practice the actual decision space (known as 'de facto' informal decision space) may be very different to that described in the official laws and regulations due to the 'informal influences'.

The 'decision space approach' provides an opportunity to examine the 'decision space' allowed at the sub-national level in line with the health systems perspective. It also studies the relationship between the centre and sub-national levels, in order to identify how the centre shapes decisions made at the sub-national level to achieve objectives for decentralisation and health reform. Mechanisms to influence subnational decisions include use of positive incentives, sanctions and information monitoring [28].

2.1.6 Analysis of decision space following decentralisation

Changes following decentralisation will only lead to improved service delivery when the appropriate degree of discretion to make decisions by sub-national levels (decision space), is balanced by the needed capacity to set priorities that reflect local need [54], [57]. Following decentralisation, the use of any new decision space by the sub-national level is critical. Sub-national levels are given greater opportunity for decision-making and are presented with three options: 1) No change - for a range of reasons, including lack of capacity or insufficient funding, the sub/national authorities may choose not to take advantage of their new powers and instead continue to pursue activities as previously implemented under central government [28]. 2) Innovation - sub-national levels may choose to innovate, making new choices not formerly made by central government or 3) Directed change – sub-national levels may choose to follow new change directives suggested by central authorities [58].

Collection of information and monitoring are critical in order to evaluate whether sub-national authorities are achieving the objectives of reform [28]. Bossert (1998) identified decision space indicators related to the key functions at sub-national level following decentralisation: financing; service organisation; human resources; access

rules and governance [28]. This framework has subsequently been widely applied across a range of settings [29], [59]–[63].

In order to understand the changes and their implications, it is fundamental for researchers and policy makers to assess how sub-national levels make decisions to identify priorities and allocate resources within their control. Once this process is understood, it is important to consider how do the new decisions compare with those of the former central government? Are the priorities set and the resources allocated by sub-national level different from decisions made under central government? If they are different, are these decisions and priorities better or worse, in terms of producing health system performance for equity, community empowerment, effectiveness/ patient safety, relevance, social and financial risk protection and efficiency [29], [28].

2.1.7 What influences use of decision space?

There are a number of facilitators (or pre-requisites) for the success of decentralisation through appropriate use of decision space at sub-national levels [27], [31], [36]:

- Strong and committed political leadership at national and sub-national levels,
 with willingness to share power, authority and financial resources
- Acceptance of participation of community and other groups in planning and management by decision-makers
- A clear understanding of the successes, gaps and challenges in the health system
- Involvement and empowerment of health workers throughout the transition to ensure support and ability to hold decision-makers to account
- Availability of easily interpretable quality data
- Re-distribution of adequate funding from central to sub-national levels, with sufficient opportunity for generation of needed local revenue
- Clear understanding at each level of rights, expected standards, roles and responsibilities
- Good working relationship between central and sub-national levels

- Provision of capacity building to sub-national levels including management capacity to facilitate wise decisions
- Clear structures and channels for all community members to participate in the priority-setting process to share their needs and demands (not just local elite)
- Strong accountability mechanisms between sub-national, community and central levels which compel decision-makers to respond to the demands of communities
- Laws, regulations and decentralisation objectives are clear and well-understood
- Decision-makers at sub-national level demonstrate transparency with motivations aligned to decentralisation objectives.

Some of the threats to wise decision-making and decentralisation include [36]:

- Setting of priorities which favour the elite rather than the most vulnerable
- Resistance to decentralisation by central government, leading to ineffective implementation and failure to ensure adequate capacity building for local governments
- Inability to raise sufficient local revenue
- Limited administrative and management capacity in local government. This may
 be a challenge in formerly marginalised areas where decision-makers may have
 had fewer educational opportunities thus deepening inequalities
- Failure to adequately involve and empower communities, for example community members may be unaware of the benefit of preventive health interventions such as immunisation and so may prioritise other more visible curative interventions instead
- Lack of transparency on decision-maker motivations may result in transfer of corruption, increasing tribalism or nepotism associated with political affiliation
- Loss of economies of scale leading to reduced cost-effectiveness.

It is important to understand both the formal and informal influences and the impact these have on decision space and health system performance at sub-national level. Once these are known and understood central authorities are better placed to introduce positive incentives and sanctions, to encourage sub-national levels to set priorities which align with decentralisation objectives.

2.1.8 Health system performance following decentralisation

Decentralisation of health services typically occurs as part of broader political, economic and technical reforms within a country, rather than in isolation [29]. Despite the wide application of decentralisation (by 2000 the World Bank estimated that between 80-100% of the world's countries were experimenting with it [39]), there is still limited evidence for what type of decentralisation should be recommended to achieve better health outcomes for performance or impact on population health outcomes [35].

Two recent systematic reviews by Sales et al. (2016 unpublished) and Cobos-Munoz et al. (2016) studying whether decentralisation improves health system performance, revealed mixed findings [30], [64]. Under decentralisation there was mixed impact for health service coverage, with increased use of decentralised health services in many countries, while in a minority decentralisation reforms led to reduced use [30], [64]. In a re-analysis of multi-country data by Khaleghian (2004) coverage of immunisation was found to vary according to low or middle-income country status, with higher coverage rates in decentralised low income countries, compared with centralised countries and lower coverage in middle-income decentralised countries compared with centralised countries [31]. Exploring potential reasons for these differences the authors propose some of the factors highlighted in section 2.1.7, as facilitators or threats to priority-setting [31].

Other performance outcomes assessed in the review by Sales et al. (2016 unpublished) included mixed impact on geographic access to health services; and increased inequity in distribution of human resources with more rural areas found to struggle to recruit and retain skilled health workers [30]. Responsiveness of the priority-setting processes following decentralisation, as assessed by user satisfaction, provider perspective and community participation found that good management practices and community participation were shown to improve user satisfaction with the quality of services. However, provider perspectives were mixed. Findings relating to quality of care were unclear, with challenges in attribution of quality changes to decentralisation. Performance was felt to be related to the extent of

decision-making space, including the degree of sub-national authority in making decisions and the capacity (technical or financial) to respond, with limited sub-national authority over human resource functions leading to poor human resources for health management with resultant staff attrition [30]. Meanwhile, Cobos-Munoz et al. (2016) found that while quantitative data tended to show positive effects, data from qualitative studies painted a more nuanced picture, highlighting the challenges with decentralisation for drug supply chain and human resource management [64]. As these findings indicate, better health systems performance is likely to depend on a combination of contextual factors surrounding governance and economic systems, accountability mechanisms, rules of decision space and institutional and personal capacity for decision-makers [57].

2.1.9 Decentralisation and health equity

Changes to fiscal responsibilities often form a central component of decentralisation reforms. If sub-national governments are to carry out their functions appropriately they must have the needed revenue and authority to make decisions about its use. This revenue can either be raised locally or transferred by central government [65]. Differing models of decentralisation and their means of revenue generation and resource allocation are likely to have differing impacts on equity [66].

Two recent systematic reviews examined the impact of decentralisation on health equity and found that decentralisation of governance of health systems may enhance or exacerbate health inequities [67], [68]. Alves et al. (2013) carried out a review for Organisation for Economic Co-operation and Development (OECD) countries, while in the study by Sumah et al. (2016) findings were presented from middle and high income countries. Decentralisation had mixed consequences for inequality in health and health care use [68]. It was felt to reduce variation in access to health care in Spain. In Columbia and Chile decentralisation was felt to have led to improved resource allocation. Although utilisation of services was less consistent, it was felt that increased funding was associated with increased utilisation [61]. However, where financial barriers to access were common, disparities in health utilisation were also common. For example, where sub-national authorities were highly autonomous

and independently determined their resource allocation to health, there was a strong relationship between regional income and health expenditure leading to large differences in spending and high levels of variation in health access between subnational levels [67], [68]. In terms of financing health care, substantial central government transfers and re-distribution across sub-national authorities were felt to minimise inequities in financing health between sub-national authorities [67]. Central coordination to define goals, a framework within which to achieve these and mechanisms to redistribute income to reduce disparity are essential [67].

Alves et al. (2013) in OECD countries found a positive relationship between fiscal decentralisation and health outcomes (assessed in terms of infant mortality or life expectancy). They suggested that increased competition between sub-national levels following decentralisation prompted local decision-makers to increase health expenditures with a favourable impact on health, possibly reflecting the people's demand for high quality services and the increased responsiveness of local authorities to this. Decentralisation seemed to incentivise the provision of better, more expensive services, although the efficiency consequences of this were ambiguous [68].

2.2 Priority-setting processes

Fundamental to the success or failure of decentralisation is how sub-national levels use their new decision space to set priorities. Section 2.1.6 has highlighted how the decision space may be used and section 2.1.7 introduced some of the factors which may impact how decisions are made and priorities set at sub-national level. Section 2.2 now provides an overview of some of the key concepts within priority-setting before relating how these can be, and have been, applied following decentralisation.

2.2.1 What is priority-setting?

Priority-setting arises as a consequence of the needs and demand for healthcare resources (such as budget, staff time, equipment and facilities) exceeding the resources available [69], [70], [71]. As a result, some means of choosing between competing demands is required [71]. Priority-setting then is the process for

"determining the priority to be assigned to a service, a service development or an individual patient at a given point in time" (page 15 [70]). Within the health system, priority-setting includes allocation of resources for all of the health systems building blocks, including both preventive and curative services. Decisions must be made about whether interventions are selected to maximise the health of the general population, or to reduce inequities for vulnerable groups [72]. All health systems across all countries set priorities. However, given the relative scarcity of resources available for health it is particularly pertinent in lower and middle-income countries [73].

Priority-setting at the macro level (governments) typically includes the identification of priorities through policies and determining which interventions will be financed [69]. At the meso level (regional health authorities, hospitals) contextual influence may be greater, information and evidence scarcer, processes more unclear and capacity for setting priorities lower [69], [69], [73]. This is particularly the case after drastic changes in priority-setting roles, such as decentralisation.

2.2.2 Theoretical foundations of priority-setting

Priority-setting may be based on approaches from one or more different disciplines, which identifies key values that guide what a good and successful priority-setting process should consider, as summarised in Table 1 by Maluka (2011) [74].

Table 1 Discipline specific approaches to priority-setting and their key values

Discipline	Key values
Evidence-based medicine	Effectiveness
Health economics	Efficiency and equity
Philosophical approaches	Justice
Political science approaches	Democracy
Legal approaches	Reasonableness

Evidence-based medicine is often used by health professionals and is mainly concerned with the effectiveness of established interventions, drawing from current best practices from clinical care research as the basis for clinical decisions [74]. Health economic evaluation is the comparison of costs and consequences of

alternative courses of action and can be defined according to whether technical or allocative efficiency is considered to have greater importance [75]. Cost-effectiveness analysis was introduced based on the assumption that interventions should not only be effective, but also worth the cost [75]. Philosophical approaches are concerned with meeting health needs justly, within the limited resources available, although there can be challenges reaching consensus due to disagreement on what 'justly' means [75]. Political science approaches focus on the interactions and bargaining between different groups in shifting political judgements based on changing political forces to produce policy [75]. Legal approaches focus on the duty of health providers to meet expected standards of care for their patients and the community they are serving [75].

Priority-setting is ideally a technical process, which incorporates a comprehensive analysis including disease burden, cost-effectiveness and the selection of interventions possible within the available budget. In reality, however, it is a complex and difficult process, as political, institutional and managerial factors come into play.

2.2.3 How should priorities be set?

There is limited consensus on what constitutes a successful priority-setting process [76]. However, a framework for evaluating priority-setting at macro and meso levels has recently been developed by Barasa et al. (2015) based on review of the literature which provides useful insights into its essential elements [77]. Two main schools of thought were identified through the literature, which guide this framework [77]:

- 1. Consequential approaches, which prescribe the use of a rational set of rules to set priorities and allocate resources, highlighting the importance of allocative efficiency and equity.
- 2. Procedural measures of priority-setting, which outline a range of conditions which ought to be met within the process of setting priorities.

A common challenge to many of the consequential priority-setting approaches, such as cost-effectiveness analysis, is that priority-setting is complex and value-laden, so gaining a common consensus on rational rules can be problematic [77]. At a

fundamental level priority-setting involves making decisions about which values or principles should dominate [76]. However, there is no simple approach to resolve disagreements, so decision-makers must discuss and try to reach an agreement specific to the context. This process is complex - selecting between competing values, with varying disciplines or decision-makers having their own perspectives, for example economists' may value efficiency; clinicians' effectiveness; and politicians' a legitimate process [76].

In contrast to the consequential approach, procedural measures typically aim at achieving fair process for priority-setting and emphasise the importance of deliberation within decision-making. One of the most prominent procedural frameworks which has had more extensive application at meso level in LMIC countries is the accountability for reasonableness framework [78], [79]. It recognises that establishing a fair process for priority-setting is easier than agreeing on principles or values and makes it possible for all stakeholders to learn about the process [80]. The approach seeks to establish a fair and legitimate process for priority-setting rather than reaching common agreement on principles [80]. Four key criteria are identified which are deemed to contribute to 'fair process'. These are relevance, publicity, appeals and revision and enforcement/ leadership and public regulation [81], [82]. By ensuring the fulfilment of all criteria the approach seeks to provide an idea of what is required for the process, but does not provide details on the ways in which these four conditions should be applied [83].

Through review of the literature Barasa et al. (2015) identify seven process measures of priority-setting, which provide further details of the features which contribute to successful priority-setting, including:

- Stakeholder involvement, when the relevant range of actors participate in decision-making
- Stakeholder empowerment, mechanisms in place to ensure that power differences between actors are minimised. This may include setting clear priority-setting rules, selecting and presenting information in a way which is

understandable by all actors, clearly defining and communicating role for each actor, ongoing engagement over time

- Transparency, procedures, decisions, reasons for decisions to be accessible and communicated to all actors
- Revisions, process to allow for revision by providing opportunity for appeal
- Use of evidence, use of quality information to inform decisions
- Enforcement, mechanisms to ensure previous steps are followed
- Incorporation of community values, provide process for gaining citizen views about priority-setting which are then used to guide decision-making.

Six key outcomes should be attained following priority-setting, namely: Efficiency, equity, stakeholder understanding, shifted/ reallocation of resources and implementation of decisions [77].

2.2.4 Priority-setting following decentralisation

Within a decentralised context there will naturally be overlap between the use of decision space available at sub-national level (innovation, no change or directed change) and priority-setting (see section 2.1.6). Traditionally priorities were set using historical allocation, basing decisions on what has previously been funded [71]. In the decentralised context, this compares with no change in decision-making patterns, despite availability of wider decision space. Historical allocation tends to be more implicit in nature, characterised by a lack of clarity with failure to determine criteria for priority-setting and inadequate public accountability for decisions [84]. One of the objectives for decentralisation is often to 'shake up' priority-setting processes, in order to ensure greater community participation with priorities set being more suited to the local context as a consequence of the greater role for local decision-makers in the process. This compares with innovation for decision-making following decentralisation. Explicit priority-setting seeks to set clear priorities, with a transparent rationale and resource allocation based on agreed upon priorities [84]. It is typically guided by a range of values, such as need; effectiveness; costeffectiveness; justice and solidarity [84]. Many of these values overlap with common expectations for the performance of health systems.

2.2.5 Experiences with application of priority-setting tools

Existing tools not fit for purpose: Despite the wide range of priority-setting frameworks available, a recent systematic review found that "even in high-income settings where participatory, accountable and rational approaches to health priority-setting should be achievable, the process and outcomes of such exercises have been unsatisfactory" (page 192 [69]). This was felt to be a consequence of problems with the process used being overly vague and highlighted the need for clearer processes, criteria and goals [69], [84].

In LMIC a range of potential threats to successful priority-setting have been identified through a recent review carried out by Glassman et al. (2012). These overlap significantly with the threats to decentralisation (see section 2.1.7) and include [85]:

- Urgent demands and short timeframe for priority-setting
- Limited capacity to carry out the needed evaluations for effectiveness and costeffectiveness
- Lack of clarity regarding who is responsible for which aspects
- Limited legitimacy in the context of weak governance and corruption
- Lack of quality data and costings upon which to base decisions.

As a consequence priority-setting and decentralisation reforms are viewed in this thesis as two sides to the same coin. Thereby a potential threat to priority-setting will also be a threat to decentralisation. The success (or failure) of both priority-setting and decentralisation are heavily dependent on the context within which decisions are made, which can largely be considered more important than the official process which is followed (or not followed), depending on the context [69].

2.3 Health Equity

Health equity can at times be ill-defined and the pathway to its attainment unclear. Before genuine health equity is achieved underlying power imbalances need to be addressed to ensure that "everyone should have a fair opportunity to attain their full health potential and, more pragmatically, that no one should be disadvantaged from

achieving this potential if it can be avoided" (page9 [1]). Community health workers can play a vital role in achieving health equity by extending health services to reach traditionally 'marginalised groups' [9], [86]. This section of the literature review will define health equity, which is considered central to both successful decentralisation and successful priority-setting. Potential pathways to achieving greater health equity via universal health coverage will be identified, including community health approaches. The results from a systematic review of the literature (published elsewhere) for the extent of equity within CHW programmes and factors which influence this level of equity will be discussed [9]. Finally, equity does not just relate to health, but instead relates to the changing power dynamics experienced by and between individuals and communities over time. This includes how aspects of social location intersect to influence and impact power within these relationships. An overview of intersectionality is provided and how it can be used to frame analysis of equity-related data.

2.3.1 What is health equity?

Equity is an ethical concept, meaning fairness or social justice and grounded in the principles of distributive justice. It is the absence of systematic disparities of health between different social groups, who have different levels of underlying social advantage/ disadvantage [87]. This definition reflects some of the social power relationships which are at play and the extent to which groups have power to be able to claim and use their rights and opportunities [88].

For the purposes of this thesis **health equity is defined as** "health services which contribute towards eliminating unnecessary and avoidable differences in health, where the whole population has equal access to community-based health services according to need, with equal access to health facility level service(s) according to need, utilisation of health services according to need and equal quality of health services for all, contributing towards community empowerment to tackle underlying social determinants of health, so that everyone can attain their full health potential" (modified [1]).

Just as the concept of equity is value-based, and an ethical concept, equality is not necessarily so, with some inequalities occurring due to natural biological variation, not simply as a consequence of unfair processes in the distribution of resources and conditions [1], [87]. By contrast, inequities in health systematically put certain groups of people who are already socially disadvantaged (e.g. poor, female, living in remote location) at a further disadvantage with respect to their health [87]. Unequal distribution of power, income, goods and services leads to unfair circumstances of peoples' lives, which in turn influences their opportunity to lead a prosperous life [4]. Structural forces which include socioeconomic and political context, governance, policy and cultural and societal values and norms, influence a person's socioeconomic position within their household, community and the health system [4]. This position is determined according to the distribution of power, income, goods and services. It is influenced by a number of domains, some of which can be summarised by the acronym PROGRESS plus (place of residence; race; occupation; gender; religion; education; socioeconomic position; social capital; plus – disability; age; sexual orientation) [89]. By influencing a person's material circumstances, social connectedness, psychosocial factors and behaviours, these domains can influence their exposure and vulnerability to 'health affecting factors' known as the social determinants of health [90]. Together this can give rise to inequitable distribution of health, wellbeing and disease across social groups. In addition to the distribution of disease the provision of health services and social determinants of health can also influence an individual's ability to access and use effective health services.

2.3.2 What are recommended pathways to achieving universal health coverage?

Health equity and universal health coverage are fundamentally about fairness and justice [90], [91]. The World Health Assembly Resolution 58.33 defines universal coverage as "access to key **promotive**, **preventive**, **curative** and **rehabilitative** health interventions for all at an affordable cost, thereby achieving equity in access" [92]. While equity is implicit in universal health coverage, there is still a risk that poorer, less advantaged groups may be left behind, unless health systems maintain an adequate focus on the measurement of equity [93], [94].

Access according to need is about providing clients with the opportunity to use services. This is challenging to monitor and as a result utilisation is often used as a proxy for access, although it does not reveal the true nature of the degree of fit between the client and the health system [88], [95]. Penchansky and Thomas (1981) identified five dimensions which must be met before access is achieved, namely affordability; availability; accessibility; accommodation and acceptability [95]. Ultimately access to services can be no stronger than the weakest of these five links in the chain [96]. In order to meet these dimensions consideration for both supply and demand for health services must first be met. Supply factors (aspects of health systems that hinder or promote service uptake) include: geographic location, availability of drugs, commodities and human resources for health, cost and appropriateness of services, such as the gender and attitudes of health workers. Demand factors (factors at individual, household or community level which influence the ability to use health services) include: vulnerability, livelihood assets, degree of empowerment (which relates with poverty, age, gender, (dis)ability or location and how they intersect), burden of disease and knowledge, attitudes and care-seeking practices [12], [88], [96], [97].

When making fair choices towards universal health coverage the World Health Report (2010) identifies inter-connected dimensions as identified in Figure 4 (Source page xv [7]).

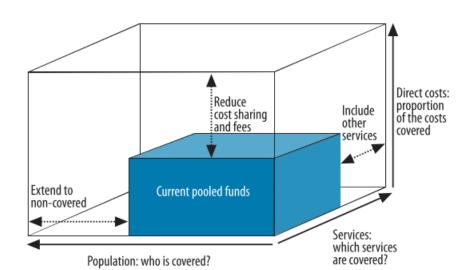


Figure 4 Three dimensions to consider when moving towards universal coverage.

The Report highlights a strategy for adoption by countries seeking to realise UHC that recommends [7]:

- 1. Categorise services into priority classes, considering cost-effectiveness, priority for most vulnerable and financial risk protection.
- 2. First expand coverage for high-priority services for everyone.
- 3. Ensure that vulnerable and disadvantaged groups are not left behind.

Universal health coverage includes quality curative services, as well as public health and population measures, and promotive, preventive and rehabilitative services [7]. A simple classification of services as high, medium and low priority is recommended, with countries not yet having universal coverage for all high-priority services recommended to first expand those, waiting to expand low or medium priority services until there is already near universal coverage for all high-priority services [7].

Coverage for services varies considerably across services and across countries. While there have been substantial global reductions in child and maternal mortality over the past two decades, dramatic differences in mortality and life expectancy exist between and within countries [13], [4], [5]. Evidence has consistently shown that disadvantaged groups have poorer survival chances and lower use of facility-based services [2], [4], [5]. As the World Health Organization 'Closing the Gap in a Generation' report (2008) describes "gender, education, occupation, income, ethnicity and place of residence are all closely linked to people's access to, experiences of, and benefits from health care" (page 8 [4]).

The World Health Organisation and the World Bank have developed a framework within which to evaluate progress towards UHC [98]. Many of the promotive, preventive and curative services identified within this framework can be provided and/ or promoted by appropriately trained and supervised CHWs. For example, family planning can be provided by CHWs at household level, while CHWs can also encourage and refer clients to attend for antenatal/ pregnancy care with a skilled health worker at the local health facility.

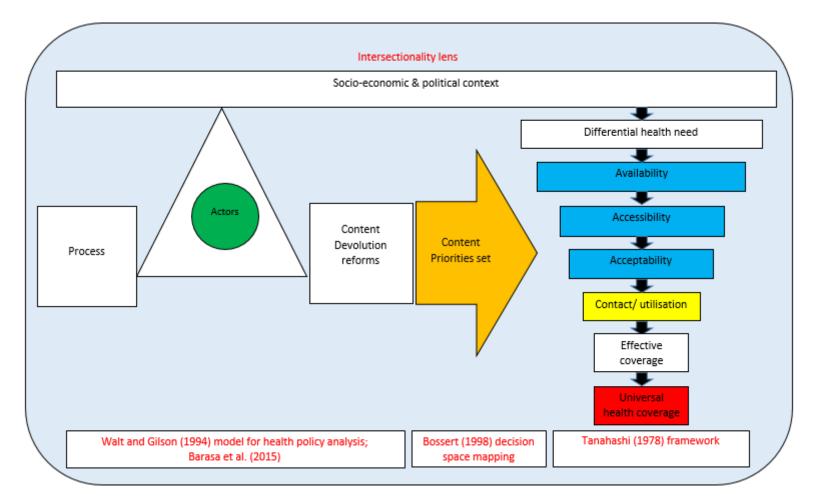
In order to fully appreciate the impact of health interventions, (such as CHW programming) or health reforms (such as devolution) on equity and universal health coverage it is helpful to consider Tanahashi's concept of effective coverage. This is defined as "expressing the extent of interaction between the service and the people for whom it is intended, this interaction not being limited to a particular aspect of service provision but ranging over the whole process from resource allocation to achievement of the desired objective" (page295 [99]). At each coverage level, various factors within the health system work together and interact to influence who has access, with the potential to lose people from the care seeking pathway at each stage. The levels of coverage are [88], [99], [100]:

- Availability coverage The availability of resources such as health workers, health facilities, drugs determines the extent to which a service can be provided.
- Accessibility coverage Defines the population who can use or access the service.
 A service has to be geographically accessible, located within reasonable reach of people who need it and financially affordable.
- Acceptability coverage This domain defines the people who can access the service, are willing to use it and finds it acceptable for example in terms of costs, waiting time, beliefs.
- Contact coverage These are people who have been in contact with the service provider and have utilised the service.
- Effectiveness coverage The proportion of the population in need of an intervention that receive an effective intervention.

Figure 5 (based on authors interpretation of [3], [4], [28], [37], [53], [77], [88], [99], [101]) seeks to link together how the socio-economic and political context impacts the social determinants of health, as well as the priority-setting process, the performance of the health system and the power held (or not) by individuals/groups within a community. These factors combine to influence the availability of health services, along with an individual's ability to access (geographically and financially), accept and use these services and the effectiveness of services provided, drawing from Tanahashi's framework (1978). Any bottleneck or break at any level will result in a person's exclusion from achieving effective coverage. Figure 5 will be referred

to throughout the thesis when seeking to highlight how priority-setting following devolution has influenced the health system performance, power dynamics and equity.

Figure 5 Conceptual framework: Health equity implications of priority-setting and decision-space after devolution



2.3.3 What are the pathways to UHC?

Ensuring access: Two recent reviews (published in a single paper) studied barriers to access and utilisation of maternal, newborn and child health services in Ghana, Bangladesh, Rwanda and Vietnam [8]. These reviews identified demand-side barriers as ethnicity (particularly in Asian countries); religion; physical accessibility; decision-making; gender autonomy and knowledge, information and education. Of these barriers, religion, ethnicity and autonomy related to the acceptability of services, which is often the dimension given the least attention [102]. Attention by policy makers is frequently focused on addressing supply-side barriers i.e. the availability of health infrastructure, health workers or drug availability [8]. The review also revealed sub-national variations in barriers to demand [8]. Decentralisation requires new ways of collecting data and tracking sub-national trends, expanding analysis to include the factors which create local barriers and presents an opportunity for tailored responses [8].

A recent review of universal health coverage and health systems reforms in Latin America found that the countries studied introduced both supply-side interventions, such as expanding insurance coverage or tax-based health systems with demand-side interventions aimed at addressing the social determinants of health and improving access among the most disadvantaged [103]. Redistributive policies, intersectoral action and social sector reforms were introduced with positive effects [44]. Comprehensive community-based primary care that incorporated public health interventions and emphasised a rights-based approach, citizen participation and empowerment, was positioned as the platform for achieving equity and universal health coverage [103]. Not only did the countries studied expand coverage of primary health care services, but they prioritised poorer population segments using both supply (expanded coverage) and demand-side (conditional cash transfer) interventions. In Brazil, Columbia, Mexico and Peru antenatal coverage increased for the poorest groups and the difference between the richest and poorest narrowed [103]. However, inequalities in non-communicable diseases (NCDs), urbanisation, road traffic accidents, violent deaths and illicit drug use - problems rooted in social determinants of health - grew [44].

Intersectoral policies and actions have been introduced in Brazil, Chile, Colombia and Cuba with the shared objective of reducing health inequities through intersectoral action towards the social determinants of health. Actions introduced included support for community participation, particularly engagement with more disadvantaged populations through formal mechanisms [44]. While meaningful cooperation between sectors exists, actions have been hindered by institutional and managerial constraints, such as rigid budgets and limited capacity.

2.3.4 Which aspects of the health system address the social determinants of health?

Four main features of health systems which are oriented towards health equity have been identified by the Health Systems Knowledge Network as part of the Commission on Social Determinants of Health [104]. These include (page9 [104]):

- "Leadership, processes and mechanisms that leverage intersectoral action across government departments to promote population health;
- Organisational arrangements and practices that involve population groups and civil society organisations (particularly those working with socially disadvantaged and marginalized groups) in decisions and actions that identify, address and allocate resources to health needs;
- Health care financing and provision arrangements that aim at universal coverage and redistribute resources towards poorer groups with greater health needs;
- The revitalization of the comprehensive primary health care approach as a strategy that reinforces and integrates other health equity-promoting features."

Chopra et al. (2012) conducted a meta-review of strategies designed to overcome supply and demand bottlenecks to effective coverage of interventions to improve child survival, health and nutrition [13]. A range of common bottlenecks were identified for each of the dimensions (availability, accessibility, utilisation, continuity and effective coverage). Findings revealed that coverage, and in some cases health outcomes, can be improved by addressing health systems bottlenecks and increasing human resources for health, improving geographical access though CHWs or outreach and reducing financial barriers [13]. A re-analysis of national surveys from

54 countries revealed that community-based maternal, newborn and child health interventions were more equally distributed than those delivered in health facilities [105]. Another review by Yuan et al. (2014) concurred that interventions which reduced inequities in maternal and child health included home visits by a CHW to overcome barriers faced by disadvantaged groups in accessing health services [106]. The unique interface CHWs have with communities enables them to address social determinants of health and the next section 2.3.5 details available evidence on CHW programmes and their potential to increase equity.

2.3.5 Equity of community health worker programmes

CHWs can improve equitable child survival, health and nutrition by bringing services closer to the homes of hard-to-reach and underserved populations through their unique position as embedded community members who can forge a link between their community and the formal health system, taking into account social and environmental determinants for health [13], [14], [10]–[12], [107]. Given the evidence for the effectiveness of using CHWs to reduce maternal and child morbidity and mortality, policy makers need to interpret these findings in light of variations in context, stakeholder coordination, programme design and quality to realise universal health coverage [107]–[110].

Those making decisions about CHW programmes need to ensure effective coverage by taking into consideration [88], [99], [10], [109], [111]: Differential health needs of the target population as community, economic, socio-cultural factors and education status of the target group have been demonstrated to influence CHW performance and service coverage; availability of trained, motivated, supervised and equipped CHWs working with a balanced workload and geographic accessibility to reach their catchment population; adequate community ownership to ensure acceptability; utilisation of the services and use of relevant local data to promote evidence-based effective service coverage.

New health interventions typically reach those with higher wealth first, only benefiting the poor later, in what is known as the 'inverse equity hypothesis' and so introducing CHWs within a health system should not be assumed to automatically

result in equitable effective coverage of health services [105], [112]. In order to assess the equity of community health programmes I conducted a systematic review. The conceptual framework, protocol and results of which are published elsewhere [9], [113]. The review followed Preferred Reporting Items for Systematic Reviews and Meta-Analysis Equity (PRISMA-E) guidelines [114]. We set out to respond to two research questions:

- 1. What evidence is there of (in)equity in CHW programmes?
- 2. What influences how equitable CHW programmes are in terms of access, utilisation, quality and community empowerment?

Despite 4945 titles and 328 full text papers, few studies assessed the level of equity of universal³ CHW programmes (34 papers included, from 32 studies). Of these 11 provided an equity analysis of the accessibility of services, 29 of the utilisation of services, five provided an analysis of the quality of services and five considered community empowerment. There was a notable difference in the content of intervention packages between continents. Studies from the Americas (3 papers) presented findings from comprehensive family health programmes; studies from Asia (10 papers) focused on a particular population group, for example maternal and newborn health and studies from Africa tended to have a more disease specific focus, such as malaria or HIV (21 papers). This difference in the comprehensiveness of CHW programmes raises equity questions, particularly within the African context.

Our findings reveal that CHW interventions adopting a universal approach can result in improved equity for CHW service access and use as reported in 11 included studies [6], [11], [115]–[123]. CHW services were found to reduce inequities relating to access for place of residence and wealth.

Acceptance and use of community health services provided by CHWs either within the home or local village health post was reported in 26 studies in the review [115], [119], [121]–[144]. In some studies, CHW services reduced inequities according to place of residence, gender, education, wealth, age, religion, occupation and marital

³ Universal approach refers to services provided for entire population.

status for community level services. CHW programmes also have the potential to contribute to more equitable uptake of referrals to health facilities by reducing barriers due to wealth, language and risk identified through six studies [6], [116], [123], [126], [139], [145].

Quality was less frequently described despite being an important dimension of equity, with only five studies reporting findings for quality. Studies mainly assessed quality in terms of satisfaction from the patient's perspective. Findings for quality tended to be negative, with no clear evidence for fair quality of CHW services, with lower reported satisfaction with CHW services among those considered more vulnerable, compared with rest of the population [118], [120], [121], [142], [146].

Findings from five studies indicate that CHW programmes can generate some degree of community empowerment by utilising existing social capital and addressing knowledge gaps according to wealth [6], [116], [118], [122], [142].

Our systematic review found that CHWs are able to address both supply-side barriers and demand-side barriers (see Figure 6). However, it is important that policy makers consider these in design of programmes. These include supply-side barriers such as low numbers of health workers (including CHWs), time to reach service, cost of services [12], [147] and the multiple demand-side barriers to both CHW services and uptake of health facility services [12], [148].

Figure 6 Key intervention features promoting or threatening equity of CHW service access, use, quality and community empowerment

Pro equity

SUPPLY

- Recruitment of most poor community members as CHWs
- Targeting of poor household for CHW services
- Provision of home based services by CHW e.g. case management, contraception, HTC
- CHW home visit intensity determined by household risk assessment
- Household visits for education and services
- Reduced number of catchment households per CHW
- NGO partner support for supervision and monitoring of home visits/ refresher
- Strengthened referral from community to facility
- Non-resident CHW for use of HTC by vouth
- Individual only testing and counselling
- One to one and group education

DEMAND

- Presence of existing social relationship with CHW
- Free CHW service provision
- Incentive for participation
- Sensitisation meetings and community mobilisation
- Awareness of community based activities

SUPPLY

- No accommodation taken for terrain/ household density when planning intervention
- No CHW resident within the community
- Education requirements for CHW
- Weak supply chain to CHW in most remote communities
- Service provision by non-resident CHW
- Absence of behaviour change communication activities
- Single disease specific intervention

DEMAND

- Far distance between household and CHW residence/ health post
- Need for payment for CHW services
- Need for clients to have to travel to reach CHW services
- Fear of repercussions from spouse (following home based HTC)
- Migratory patterns among men, (absence within the home during service provision)
- Absence of existing social relationship with CHW and community
- Failure to mobilise community

Anti equity

The quality of CHW services for differing socio-demographic groups and the role of CHWs in empowering communities to address underlying social determinants for health are key gaps in the current CHW evidence base. It is vital that equity indicators are included within routine CHW monitoring and incorporated within quality improvement approaches to ensure that the pro-equity statements in CHW policies do not evaporate in practice.

2.3.6 Applying intersectionality approaches to understand power and vulnerability at community and household level

Health equity goes far beyond health, a consequence of privilege and disadvantage which exist within health systems and which intersect with the many aspects of a

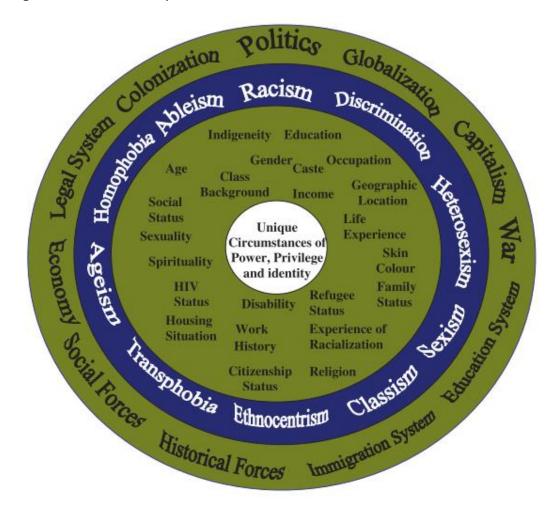
person's social location to affect health [3]. An individual's health and ability to engage with and use health services is the result of multiple complex interactions occurring as a consequence of biological and social determinants of health (see section 2.3.3 and 2.3.4). Intersectionality approaches have recently been gaining leverage in international health as a way to analyse and address the interplays between different vulnerabilities by trying to uncover underlying power structures that create them [3]. These approaches also provide opportunity to re-frame gender mainstreaming as 'diversity mainstreaming' by acknowledging the intersection of gender with a wide range of other structural inequities, dimensions and 'social axes of power' [149]. However, there has been limited empirical analysis within health systems in LMIC contexts to date [3].

Intersectionality theory was informed by activism thinkers and human rights movements during the 1970s and 1980s which sought to breakdown hierarchies which create inequalities, such as patriarchy and capitalism [150]. The term emerged from work by Crenshaw (1989) as a response to the exclusion of black women from feminist theory. Since that time it has come to be applied more widely within public health in seeking to "understand and respond to the 'foundational' causes of illness and disease, which the health determinants perspective seeks to identify and address" (page271 [151]).

The oppressions in society which contribute to inequities do not operate independently within specific contexts. Nor are they additive, instead they intersect in complex patterns according to varying levels of power and privilege held by the actors involved [152]. Intersectionality seeks to understand what happens when two or more dimensions of social inequality intersect [151]. By recognising the importance of multiple dimensions of social inequality, no dimension is considered more important than another since multiple dimensions interact and impact on health [151]. Feminist intersectionality theory interrogates power in society, in order to uncover the convergence of experiences and structural precursors for these dimensions [151], [152]. The intersectionality wheel (Figure 7) demonstrates how a person's unique circumstances interact with aspects of their identity, which interact

with different types of discrimination, which interact with larger forces and structures within society reinforcing exclusion and disadvantage (page5 [150]).

Figure 7 Intersectionality wheel



In keeping with political and policy analysis frameworks [53] (introduced in section 2.1.4), it is important to consider the larger forces and structures, the types of discrimination and how these influence policy change [150]. Power dynamics (see section 2.1.4), which both maintain and are impacted by the structures and larger forces, are crucial when examining the effects of policy decisions such as devolution on a range of citizens with varying levels of (dis)advantage within society. Intersectionality analysis examines the link between how a person's unique circumstances intersect to influence their power (or lack of power); how power can change following decentralisation and how these reforms play out in the lives of those considered most disadvantaged.

Intersectionality thus embraces the complexities essential to understanding the social inequities which in turn lead to health inequities [151], by emphasising that people's lives are multi-dimensional and complex, shaped by many varied factors and social dynamics operating together [153]. By examining how different dimensions of social inequality interact, how relationships and power dynamics between these dimensions are linked and can change over time, intersectionality approaches attempt to link individuals' and groups' experiences with broader structures and systems to reveal how power relations are shaped and experienced [153], [154].

Previous applications of intersectionality approaches have sought to investigate interactions between HIV stigma and masculinity and its impact on use of services [155]; experiences of disability and HIV [156]; black lesbian women and social identity [157] and how drug violence impacts families, with a focus on intersections of gender and social class [158]. While intersectionality studies require intentional approaches to questioning which were not applied when developing questions for this study, it is nonetheless useful to apply an intersectionality lens in approaching analysis and interpretation of data. Given the changing structures and systems which have occurred following devolution, intersectionality approaches can help us learn more about how the intersections between dimensions of social inequality (such as gender, place of residence and ethnicity) among individuals and groups interact within the changing power relations following devolution and the role of CHWs within this. This can provide greater depth of understanding, rather than simply explaining differences by a single circumstance or dimension of social inequality [157]. The thesis returns to this topic in the discussion chapter 5.

2.4 Health in Kenya

This section provides an overview of the Kenya context where the research was undertaken. It describes the health system, a history of decentralisation and health reforms in Kenya, existing evidence for priority-setting approaches and trends in mortality and health equity.

2.4.1 Health morbidity and mortality in Kenya

Kenya, a newly lower middle-income country situated in East Africa, has an estimated population of 46.05 million (2015 estimates) [159]. Since 2013 it operates with a devolved system of governance with 47 sub-national authorities known as counties. Each county is responsible for providing and delivering health services to its citizens [18]. Population for the counties varies from around 101,000 (Lamu County) to 3,138,000 (Nairobi County) [160]. Kenya has made good progress towards reducing child mortality, with under-five mortality rates having reduced from 115 deaths per 1000 live births in 2003 to 52 deaths per 1000 live births in 2014 [161]. However urban child survival gaps have doubled between the richest and poorest children in recent years and there has been no significant change in maternal mortality ratio, currently 362 maternal deaths per 100,000 live births [20], [161].

Kenya has an Eastern coastal border with the Indian Ocean and shares land borders with Ethiopia, Somalia, South Sudan, Tanzania and Uganda [162]. The climate varies from tropical along the coast to arid in Northern Kenya, with implications for the distribution of disease burden. Malaria is more common along the coast (27.2% of children under-five had fever in two weeks before DHS survey 2014) and in Western (36.1%) and Nyanza (37.4%) regions compared with North Eastern region (8.7%) [161]. The arid climate in Northern Eastern Kenya has implications for nutrition, with higher levels of under-nutrition (13.3% children under-five had moderate acute malnutrition compared with 1.9% in Western region [161]).

English and Kiswahili are the two official languages, but there are also numerous unofficial indigenous languages spoken. The country is predominantly Christian (83%) and Muslim (11.2%). There are over 40 tribes in Kenya, with certain practices occurring more commonly among some tribes than others, for example female genital mutilation is widespread among Somali Kenyans (93.6% of women 15-49 years have been circumcised), but almost non-existent among Luo Kenyans (0.2%) [161].

Kenya's population is young, with over 40% aged 0-14 years [162]. The total life expectancy at birth is increasing (currently 64 years (62.6 male, 65.5 female) [162]) and total fertility rate declining (4.9 to 3.9 births per woman over the last decade [161]). The majority of households (71%) in Kenya now have access to an improved source of drinking water [161]. However, only 23% of households have an improved toilet facility not shared with other households. Literacy levels are also improving, although gender disparities persist. Based on 2014 statistics 7% women and 3% men have no education, with 88% women and 92% men considered literate. Meanwhile 86% of households own a mobile phone [161].

25.6% of Kenyans live in urban areas, with 74.4% in rural areas. Agriculture remains the backbone of the economy, with approximately 75% of the population thought to be employed in the agricultural sector (including pastoral activities) [162]. Per capita gross national income (GNI) is \$1340 (based on 2015 estimates) [159], but 43.4% of the population are thought to live below the poverty line (2012 estimates) [162], with wide disparities between geographical areas. According to the latest Kenya Health Policy (2012-2030), communicable diseases still make up the leading causes of death, with HIV and AIDS the leading cause of death in Kenya (29.3% total deaths, with HIV adult prevalence 5.91% based on 2015 estimates [162]), followed by conditions arising during the perinatal period (9.0%), lower respiratory tract infection (8.1%), tuberculosis (6.3%), diarrhoea (6.0%) and malaria (5.8%). However, NCDs are creating an increasing burden on the health system, with 50-70% of all hospital admissions related to NCDs. Cerebrovascular disease and ischaemic heart disease are currently the 7th and 8th leading causes of death [22].

2.4.2 Health financing in Kenya

Total health spending in Kenya has been increasing over recent years from 5.4% of gross domestic product (GDP) in 2009/2010 to 6.8% in 2012/2013 (year before devolution), with government spending on health increasing as a percentage of total government expenditure, from 4.6% in 2009/10 to 6.1% in 2012/2013 [163]. Revenue sources for health spending come from government (34%), private sector (40%) and development partners (26%) [163]. Household out-of-pocket expenditures (excluding cost-sharing) and non-profit institutions serving households

financing schemes make up 27% of total health expenditure [163]. Since devolution, there seems to have been an increasing amount allocated to the health sector by government between 2014/2015 and 2015/2016 [164]. This increased health allocation is felt to be driven by counties choosing to allocate a larger amount to health than was formerly allocated by national government [165].

Figure 8 shows that households with catastrophic expenditure for health (over 10% of total expenditure or over 40% of non-food expenditure) varied over the last decade, peaking in 2007 and reducing somewhat in 2013 (although still remaining higher than 2003 levels (page 48 [166]). Catastrophic expenditure for health is more common among the poorest (8.7%) compared with the richest (3.8%) [166].

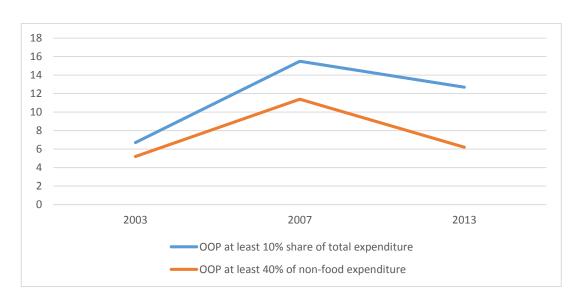


Figure 8 Catastrophic health spending over time

Health insurance coverage in Kenya grew considerably between 2007 and 2013, with coverage increasing from 10% in 2007 to 17.1% in 2013 as a consequence of efforts by the National Hospital Insurance Fund (NHIF) to cover the informal sector on a voluntary basis. However, despite these improvements it is the richest who benefit most from health insurance coverage with only 2.9% of the poorest (and most at risk of catastrophic expenditure) being covered, compared with 41.5% of the richest [166].

2.4.3 Changed health system structure in Kenya

The following section will provide an overview of the changes within the health system in Kenya following devolution, according to:

- 1. Changes in responsibilities pre and post-devolution
- 2. Kenya development documents
- 3. Health service delivery structures (post-devolution)
- 4. Kenya health policy and strategy.

Changing responsibilities: Following devolution there are two recognised levels of government outlined in the Constitution (2010)— the central national level and the sub-national county level [26]. This contrasts with the former de-concentrated health system which was coordinated through national, provincial and district levels [167]. The county level is now responsible for providing services which fall within the first three layers (community, primary and county referral services) and national level is responsible for national referral services and guideline/ policy development. The main changes in roles and responsibilities are outlined in Table 2, changed roles are indicated in italics, unchanged roles in plain text.

Table 2 Main roles and responsibilities for national and sub-national structures before and after devolution

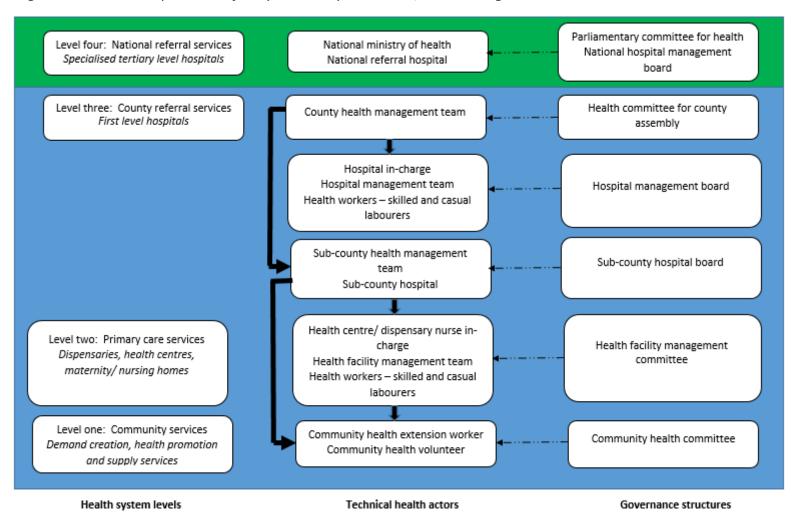
	Pre-devolution [167]	Post devolution [168]
	Health policy	Health policy
	National referral health facilities	National referral health facilities
	Quality assurance and standards	Quality assurance and standards
	Major disease control (TB, HIV,	Major disease control (TB, HIV,
	immunisation)	immunisation)
	Ports and borders	Ports and borders
National	Disaster management	Disaster management
	Training health staff	Capacity building and technical
		assistance for counties
	Coordinating with all partners	No longer coordinating partners,
	Budgeting & allocating resources	budgeting or recruiting
	Recruitment and management of	
	workforce	
	Direct link with national	
Province	Guiding annual planning at district level	Does not exist
	Supervision	

	Pre-devolution [167]	Post devolution [168]
County	Did not exist	County Integrated Development Plan development Budgeting and allocating resources Recruitment and management of workforce County health service delivery for public health, disease surveillance, ambulance, community health services, primary health services, county hospital services Coordinating with partners Disaster management
District/ sub- county	Annual planning and budgeting Control of district budget Implementation of public health, disease surveillance, ambulance, community health services, primary health services, district hospital services	Annual planning and budgeting No longer controlling budgets Implementation of public health, disease surveillance, ambulance, community health services, primary health services, county hospital services

Kenya development documents: Kenya orients to an overarching development document known as Vision 2030, which expresses the country's vision for a globally competitive and prosperous nation with a high quality of life by 2030 [169]. Within this vision, the country aims to provide an efficient and high quality health care system with the best standards through devolution and by shifting the focus from curative to preventive care [169]. The shorter five-year medium term plan for the duration of the Jubilee government's current term (2013 – 2017) identifies policy actions, reforms, programmes and projects which the government will implement within this period, including for health. This emphasises universal access to health care, with community health identified as a flagship project [170].

Kenya health service delivery structures: Health service delivery level is organised around the new Kenya Essential Package for Health (KEPH) [22], according to a four level system as described in the current Health Policy and operationalised in the shorter five year Kenya Health Sector Strategic and Investment Plan (2014 – 2018) [168] (see Figure 9). Those structures in green in the figure are directly implemented by national level, while those in blue are under the responsibility of the county government.

Figure 9 Author's interpretation of Kenya health system levels, actors and governance structures



Kenya health policy and strategy: Kenya's health policy goal is "attaining the highest possible standard of health in a manner responsive to the needs of the population" to be achieved through six policy objectives (eliminate communicable disease, halt/reverse NCDs, reduce violence and injuries, provide essential health care, minimise risk factor exposure, strengthen cross-sectoral collaboration) as outlined in the Kenya Health Policy (2012 – 2030) [22].

The Kenya Essential Package for Health (KEPH) indicates Kenya's commitment to universal health coverage. According to the Kenya Health Sector Strategic and Investment Plan (2014 – 2018) Kenya aims to move towards the three objectives of UHC by:

- 1. Introducing KEPH interventions to populations as and where needed
- 2. Scaling up utilization of KEPH interventions for populations with access to these
- 3. Reducing potential for catastrophic health expenditures for clients [168].

In order to fulfil these objectives there are a number of essential KEPH services outlined in the Kenya Health Sector Strategic and Investment Plan 2014 – 2018. Many of the services are intended to be delivered at level 1 (community level) such as health promotion. The Kenya Health Sector Strategic and Investment Plan outlines three primary outputs – improved access, quality of care and demand for KEPH services. In order to achieve this Kenya aims to improve: physical access to primary health services (within 5km) and public health services (within 2.5km); financial access though removal of user-fees and socio-cultural access through investment in health [168]. Demand for services is to be increased by improving awareness of health problems and services available and improving health seeking behaviours. Finally, quality of care is to be improved by ensuring better client experience; assuring patient safety and ensuring effectiveness of care by developing a health quality policy, establishing national accreditation, institutionalising continuous quality improvement and conducting regular audits [168].

2.4.4 Community health services in Kenya

According to all major health policies and strategies in Kenya, county authorities have a legal mandate to provide community health services as the first tier in the health system. Community health services in Kenya are centred on community units (described as 'level 1 units'). According to the revised strategy each unit consists of 5000 people including five salaried community health extension workers (CHEWs) who will carry out promotive, preventive and curative tasks, supported by ten volunteer community health volunteers (CHVs) (two for each CHEW) who will act as mobilisers, ensuring linkage between community and CHEWs for health related activities in every community unit [171]. In addition, a community health committee, consisting of voluntary community representatives conducts supervision and governance of CHVs and encourages community participation in health-related activities [24], [172].

Level 1 community services link with level 2 primary care services through referral of patients by CHVs or CHEWs to the link primary care facility for a range of services, from preventive (e.g. immunisation and antenatal services) to curative (e.g. management of childhood illnesses). CHV roles and responsibilities are highlighted by photos in Photo 1 (source author's own photographs) and supervision structures are demonstrated in Figure 10 (source [173]), as reported by respondents and observed during visits.

Photo 1 Showing common CHV tasks and activities

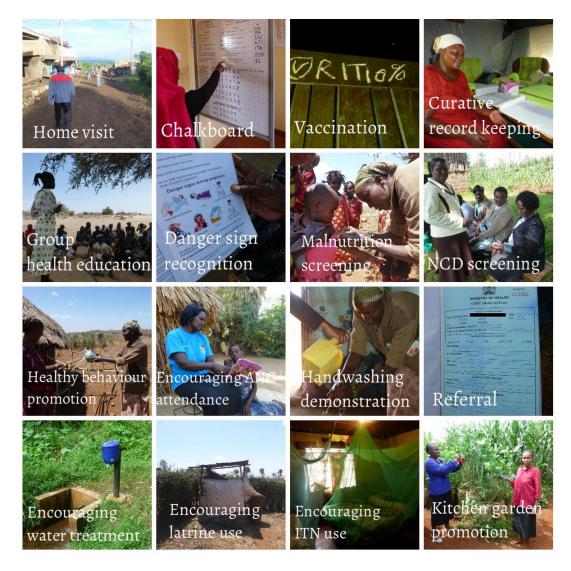
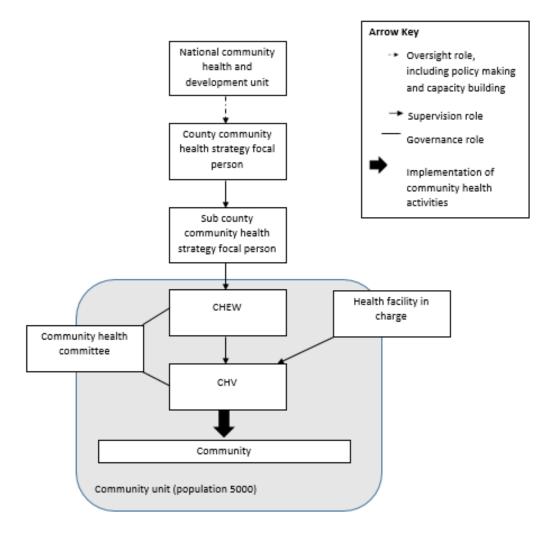


Figure 10 Community health actors and relationships

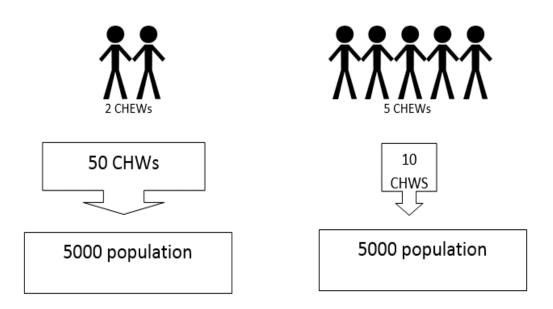


Kenya's Vision 2030 views community health approaches and community empowerment as important aspects for progressing towards the vision by clustering health within the social pillar, emphasising the need to address social determinants of health. It highlights a two-pronged approach to ensuring an efficient and high quality health care system: 1) Devolution of funds and management of health care to communities and district medical officers and 2) shifting from curative to preventive care, with revitalised community health centres [169].

In 2014 (following devolution) national government revised the existing community health strategy in an attempt to create a more acceptable and sustainable community health strategy for county governments [26]. A qualitative study conducted in 2013 (around the start of devolution), revealed appreciation for community health, but uneven coverage; highlighting that equity of services needed

strengthening [24]. Lack of funds for CHV stipends was felt to have led to high attrition and lack of accountability among volunteers [24], [174]. Combined with high CHEW workload these were seen as major drivers for strategy change. Figure 11 shows the community health structure under the former and revised new strategy, which includes a proposed increase in the number of CHEWs nationally from 2,100 to 25,000 by 2017, although there is no national community health specific funding or earmarking to guide county spending. The need for adequate engagement with all community health actors about the strategy revision, with clear planning for change (including a quality focus) and consideration of potential risks to roll-out, such as county prioritisation of other activities were highlighted by the study [24].

Figure 11 Former (left) and revised new (right) community health strategies



Implications of devolution for planning community health services: Opportunities afforded by devolution include the ability to prioritise community health services within the county for more equitable coverage, addressing county specific health burdens, strengthening coordination between actors involved in community health, context-specific task-shifting, training and motivational strategies for CHVs and opportunity for stronger community participation [175]. Potential threats for community health activities associated with devolution include: delays in implementing the revised strategy; the potential for conflict between the national

community health and development unit and county governments and possible resistance to the revised strategy due to the need to budget for recurring salary costs associated with the greater numbers of CHEWs in the new community health strategy [26] (see enablers and threats to use of decision space following decentralisation in section 2.1.7). The revision of the community health strategy took place in 2014 and aligned closely with the ideal of Vision 2030 to shift towards preventive rather than curative care. However, the strategy revision occurred during the first full year following devolution, before communication channels between national and county governments were clear and while power dynamics were still in flux. Perhaps as a consequence of this there has been uneven uptake of the revised strategy, and its contents, across counties.

2.4.5 History of decentralisation in Kenya

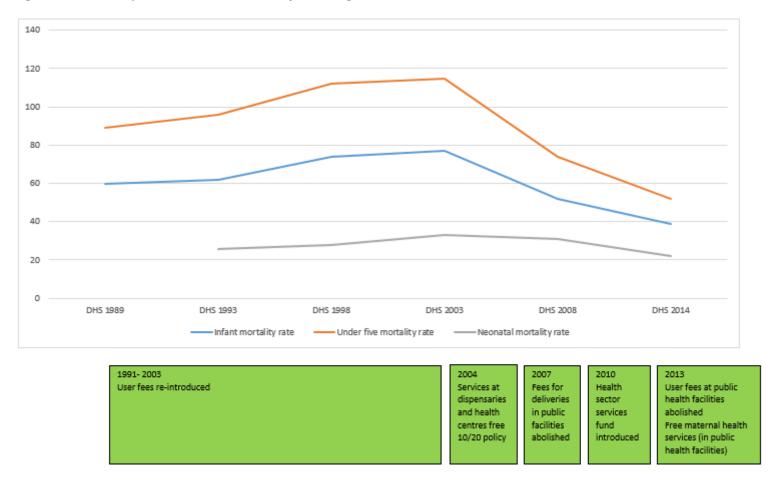
Decentralisation, user-fees and policy change: Trends in practice and equity

Kenya has described the need to promote equity within its health policies since gaining independence in 1963. Multiple policy documents identify equity as a priority, beginning with the Independence Development Blueprint, Sessional Paper No. 10 in 1965 [17]. Various policies and strategies were subsequently introduced but despite the presence of equity within policy the gap between regions actually widened [176]. User-fees and policies around payment have had an important impact on health over time and Figure 12 (source 1989 - 2014 DHS⁴ data) provides an historical perspective of some of the main health fee changes introduced in Kenya alongside trends in under-five and infant mortality rates.

73 | Page

⁴ Note data from 2003 and later are nationally representative, while data before 2003 excludes Northern Kenya.

Figure 12 Mortality rate trends and health fee changes



1960s-1970s: Under colonial administration in Kenya, imagined cultural boundaries were aligned to administrative boundaries [177]. These boundaries, known as the former provinces, remained in place after independence in 1963, and were subsequently used by the three Kenyan Presidents (1963 – 2013) to maintain power and control [178]. At the time of Kenya's independence, the Constitution (known as Majimbo Constitution) provided for devolution to regional assemblies, with the purpose of securing the rights of ethnic minorities [27]. However, by 1964 devolution stagnated and was replaced with a centralised system which did not allow for dissent, with excluded tribes unable to access resources [179]. Previously decentralised functions, including health services, were recentralised. In 1965 user-fees were removed at all public health facilities and a range of other social changes occurred, following which under-five mortality rates reduced. However, under the highly centralised government, service delivery deteriorated during this period with deepening regional disparities in the distribution of services, resource allocations and access to quality health services. Resultant regional variations in health indicators persist today [27], [180].

1980s-1990s: A number of limited decentralisation measures were introduced by the early 1980s with the creation of districts [181]. Officially these measures had the purpose of bringing services closer to the people [27]. However, decentralisation was reportedly about national government 'earning loyalty to ethnic chiefs', with political class and economic patronage working hand-in-hand to sustain corruption and mis-governance (page17 [177]). This led to increasingly ineffective service delivery, delayed audits and lack of sanctions for indiscretions, which encouraged malpractice within the civil service, undermining the capacity of government to generate or spend revenue [27]. This in turn resulted in increased donor reliance, leading to introduction of the World Bank and International Monetary Fund-designed structural adjustment reforms. User-fees were adopted in 1989 [182], characterised by marked differences in people's abilities to pay and decreased service utilisation. They were temporarily suspended in 1990 and exemptions put in place in an attempt to protect the poor [182]. User-fees were again re-introduced in 1991, but exemptions for the vulnerable were poorly implemented, creating a major barrier to

access during this period (1991 – 2003). Mortality rates were seen to rise again throughout the 1990s as shown by the increasing trend in Figure 12. During this period there was a concurrent increase in HIV prevalence within Kenya.

1994 saw the development of Kenya's Health Policy which guided the direction for health until 2010. It aimed to decentralise health decision-making by establishing local district health management boards and district health management teams who held responsibility for running facilities and services within their control, including funds, annual work and procurement plans from early 2000s (see Table 2) [180], [181], [183]. User-fees were maintained throughout this period and limited capacity to implement priorities meant that equity-oriented policy did not lead to equitable access to curative and preventative services [22]. Resource allocation from national to district level was unclear, with use of historical allocation (where budgeting decisions are based on what has traditionally been funded, plus incremental changes, see section 2.2.3) despite the presence of resource allocation formulae [182]. An evaluation of these decentralisation reforms by Ndavi et al. (2009) found that while most DHMTs had plans in place, less than a quarter implemented those plans on time, with lack of funds and transport being cited as common reasons for failure [180].

2000 – 2010: In response to growing health inequities, user-fees were reduced in 2004, with introduction of the '10/20 policy', which reduced fees to 10 and 20 Kenyan shillings (approximately 0.10 US dollars and 0.20 US dollars) in dispensaries and health centres respectively, with exemptions for selected population groups and services [182]. Policy evaluation found increased per capita out-patient visits from 1.7 to 3.1 during the period 2003-2013 and declining mortality rates as indicated in Figure 12 [166]. However, there were challenges with implementation such as inadequate patient knowledge about recommended charges and failure of central funds to reach the health facilities due to bureaucracy. As a coping mechanism many health facilities continued to charge user-fees [184]. Study showed that the policy was not well adhered to by service providers, with continued charging of registration fees and drug shortages, leading to negative implications for service delivery [185].

Wider health systems challenges during the period 2005-2010 of the National Health Sector Strategic Plan II (which introduced the Kenya Essential Package for Health) included: non-functional health facilities; inequitable distribution of resources; right to health not operationalised; contextual health determinants not given adequate attention and most resources directed towards curative/ hospital care rather than prevention or rural/ hard-to-reach areas [174]. Fees for deliveries were abolished in 2007, but it was not until mid-2013 that free maternal health services at public health facilities became a reality, with many facilities operating at a loss or needing to charge as a result of delayed reimbursement [186].

2007 saw the controversial general elections which led to outbreaks of violence including episodes of politically instigated violence [177], multiple deaths and internal displacement of large numbers of people. In response, the National Peace Accord (2008) provided for a Constitutional grand coalition supported by international pressure to ensure finalisation of the new Constitution with devolution to 47 counties.

2010-present: Health sector services fund was rolled out in Kenya in 2010 – 2012. It continues today as a way to improve adherence to user-fee reduction policies and to improve quality and equity of access to health care [184]. They provide central funding to cover operational expenses such as maintenance and refurbishment, support staff, allowances, communications, non-drug supplies, fuel and community based activities [184]. Prior to devolution the national Ministry of Health were responsible for providing infrastructure, trained health workers, drugs and medical supplies. Funds from central government were transferred on a quarterly basis to a health facility's bank account. Funds could then be managed by the health facility staff and community representatives) [184]. A recent evaluation (carried out prior to devolution) found that funds reached health facilities and were managed in a clear and transparent manner with good community involvement leading to reported increased health worker motivation and patient satisfaction. However, challenges

with implementation included lengthy reporting requirements, continued user-fee charging and lack of involvement by district treasury [184].

The second Health Policy (2012 -2030) was developed to align to Vision 2030 and the Constitution (2010), within a changing national and global context (see section 2.4.3) [22]. It is operationalised through the Kenya Health Sector Strategic and Investment Plan (KHSSP) (2013 – 2030) [168]. Equity orients the strategy, which identifies key populations to receive 100% coverage of the Kenya Essential Package for Health (KEPH) Services[168]. It acknowledges challenges for ensuring access to KEPH and identifies potential remedies to address geographical, financial and socio-cultural barriers. The need for further reduction of the burden of pre-payment for health services to improve financial access is noted, but, there is little detail regarding how to tackle causes of inequity.

The new Constitution (of which devolution forms a central aspect) was endorsed by 67% of the population via a referendum held in August 2010 [27]. This move was ultimately the choice of the population, enforced by the international community, rather than a decision driven by national leaders and politicians.

2.4.6 Devolution in Kenya

As stated in the introduction to the thesis, Kenya's devolution has been described as "among the most ambitious in the world, transferring key functions and financing to an entirely new level of sub-national government" [33]. Presented as the remedy to the pathologies of Kenyan politics, including: "the over-centralization of the state that allowed certain ethnic groups to dominate leading to inequitable resource distribution, politicized ethnicity in ways that fuelled violence, and stimulated a political culture of "our turn to eat"" (page 247 [179]). Devolution reform objectives seek to "tackle long- term, deeply entrenched disparities between regions; increase the responsiveness and accountability of government to citizens; allow greater autonomy to different regions and groups, and re-balance power away from a historically strong central government" (page2 [187]). Devolution has reportedly led to increased access to resources for the majority of the population [179].

Chapter 11 of the 2010 Constitution outlines the devolution of functions and transfers authority for decision-making, finance and management of public services, including health, to the 47 county governments [26], [178], [34], [187]. Elections for new county governors and assemblies held in March 2013 marked the official launch of devolution, following which they started to set up the new institutions within the county [188]. Since then, the transfer of funds and functions from central to the subnational county level rolled out rapidly [187], due to political pressure from the Council of Governors (a forum for Governors from all 47 counties) for transfer of functions ahead of schedule [179]. This contrasted with the three year transition period previously anticipated [186]. The rapid transfer of powers led to responsibility for human resource management for health being devolved before the required structures, systems and senior positions had been put in place. This led to salary delays and anxiety among health staff across levels [186].

A previous study indicated that politicians in Kenya have long encouraged their constituents to evaluate their politician by his/her ability to funnel resources to certain groups within local communities through use of Harambee/ local self- help projects and the formalised Constituency Development Funds in return for political support [179]. Early studies of devolution suggest that rather than eradicating the corruption which in part fuelled the transition to devolution, it has instead entrenched local-level negative practices such as rent seeking⁵ by politicians and ethnic patronage⁶ politics [179]. In keeping with this, during the 2013 elections voters demanded private goods and promises of goods for select ethnic groups, suggesting no substantial change to how politics operate in Kenya, with patronage networks still playing a crucial role [179]. As a consequence minority ethnic groups within counties are generally less able to lay claim to the goods and patronage opportunities enjoyed by ethnic counterparts of the winning candidate (typically of the majority tribe within a county) [179].

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⁵ Rent seeking refers to the use of public resources to buy private goods that only benefit the office holder.

⁶ Patronage refers to exchange of public goods, such as jobs in return for political support.

To date there have been limited studies which have assessed the impact of devolution for health services. One recent study by Nyikrui et al. (2015) explored the felt impact of devolution for health facility in-charges and is worth discussion indetail. This qualitative study conducted in one county found a lack of clarity by incharges regarding roles and responsibilities for county and sub-county health management teams following devolution [186]. Considerable financial challenges emerged at health facility and dispensary level, with loss of funds as a consequence of disagreement surrounding the continued direct funding of health sector service fund (HSSF) to health facilities following devolution, along with removal of all userfees from facilities [186]. This was reported to have led to inability to pay utility bills or casual workers, along with an inability to provide free services demanded by the community [186]. Out of necessity facility in-charges developed a range of coping strategies to ensure facilities remained open, including the re-introduction of userfees. After some time HSSF funds and user-fee compensation funds were transferred to facility accounts but there were further challenges surrounding allocation criteria and reporting requirements. There was also felt to have been a deterioration in the availability of drugs, with late payment for drugs by the county resulting in delayed delivery from Kenya Medical Supply Agency (KEMSA). Salary delay for health workers by the county government was felt to result in relationship tensions and staff shortages [186]. Sub-county health managers were argued to have played a key role in supporting in-charges throughout the transition period for devolution.

Following devolution, a range of sources of revenue are available to county governments to fund devolved functions (including health). These include the equitable share from national level (minimum 15%) (article 203 [26]). This is based on a formula from the Commission on Revenue allocation which takes into consideration population (45%); basic equal share (25%); poverty (20%); land area (8%) and fiscal responsibility (2%) [189], [190]. This formula has since been slightly modified, to introduce a new development factor (1%); increase basic equal share to 26% and reduce poverty share to 18%, with other factors remaining unchanged [190]. Due to the disproportionate weighting towards poorer counties the formula is likely to benefit the poor [165]. Since devolution the equitable share allocated

from national to county level has always been over twice the minimum recommendation [187]). The other funding sources (for health and other services) available to county governments include: locally generated revenue; donor funding; conditional grants and an equalisation fund for fourteen previously marginalised counties (Turkana, Mandera, Wajir, Marsabit, Samburu, Tana River, Narok, Kwale, Garissa, Kilifi, Taita Taveta, Isiolo and Lamu County [191]), equivalent to 0.5% of national funds (Chapter 12 [26]).

2.4.7 Priority-setting for health in Kenya

Priority-setting for health before devolution was beset with a range of challenges, including: a lack of clarity about roles and responsibilities by decision-making actors; low knowledge about guidelines; community views not being included in final priorities set; distortion of power leading to limited accountability by some actors and limited relationship between planned activities and budget received. Devolution led to extensive changes for priority-setting at county level. While limited studies have been carried out since devolution, there is some evidence that pre-devolution challenges with priority-setting are recurring in the post-devolution setting.

Priority-setting pre-devolution

Sub-national level planning: There have been limited studies conducted of priority-setting processes in Kenya. A study conducted in one district (Malindi) prior to devolution found that key health indicators were used to identify main health problems before selection of cost-effective interventions, along with setting targets and preparing a district plan and budget for the district health management board approval [192]. Most respondents were unclear about the presence of national guidelines. The process involved the technical DHMT and the district health management board who played a governance role. Hospital and health facility management teams carried out similar tasks when developing their annual work plans before these were collated by the DHMT [192]. While documents identified that priorities should be guided by the importance of problem, availability of funds, cost-effectiveness, cost-sharing measures and core activities, in practice health

indicators and resources played a role in determining the priorities set [192]. Strict national guidelines during this period left little scope for making decisions at the district level and this was exacerbated by limited capacity of district decision-makers [192]. Likewise, another study of district priority-setting in Kilifi district, Kenya found that community engagement in the decision-making process was insightful and raised new issues [193]. Strong emphasis on national indicators, however, resulted in many of the community priorities (including a range of public health priorities, such as health education, sanitation and clean water) remaining unaddressed in the final plan [193]. Health facility staff priorities tended to focus more on health service delivery at the facility and emphasised the importance of immunisation, which was rarely mentioned by committees. In terms of funding allocation based on the facility workplans, the intention according to policy was that funds would be released directly to facilities to support their work plans, but the funds within which they budgeted, were never distributed and there was "little evidence that financial allocations from the national level to each district for the year were influenced by the facility level planning activities" (page241 [193]). The accountability for reasonableness framework (see section 2.2.3) was piloted in one district between 2006 and 2010. It was found to be acceptable to decision-makers, who reported adoption of some concepts within priority-setting approaches [78].

A study of the relationship between budget allocation and actual expenditure conducted in 2005/2006 in Kenya revealed a mismatch between policy, which prioritised primary health care and allocation which remained skewed in favour of tertiary and secondary care [194]. There was also an inability of both central level and districts to spend funds due to the limited planning and capacity at each level of the system [194].

National level planning: Annual operational plans have also been fraught with challenges. From 2000/2001 the medium term expenditure framework was introduced as a tool to align planning and budgeting with annual operational plans introduced later in 2005 [195]. A study of national level annual operational planning and budgeting processes conducted in 2012 revealed the processes run

independently of each other, with the health sector having a budget but no annual operational plan by the start of the new financial year [195]. In agreement with earlier studies the annual operational planning process was felt to be top-down driven, with no link between the availability of resources and the setting of targets. Significant challenges with stewardship of the processes were also noted [195]. The changing context with the revision of the KEPH was felt to have added challenges and a lack of quality data with which to set targets for indicators was another gap in planning, resulting in a lack of evidence-based decision-making and use of 'gut feeling' within planning and a top down approach. Some key stakeholders held inflated levels of power compared with that described on paper contributing to minimal accountability. The study highlighted the difference between the bottom-up process for annual operational planning identified on paper and the top-down process which occurred in practice, suggestive of reluctance on the part of central policy makers to decentralise decision-making [195].

Priority-setting post-devolution

Given the extensive decentralisation to the county governments county decision-makers now have responsibility for some previously national macro priority-setting roles such as human resource management (see Table 2). This is in addition to the more traditional meso level aspects of priority-setting such as determining the mix of programmes, resources and strategies for delivering interventions [69]. Some priority-setting functions, such as the setting of broad priorities (e.g. introduction of free maternal health care) and revision of the community health strategy are retained at national level, creating an innate tension.

According to the Kenya Health Sector Strategic and Investment Plan, county management teams should determine priorities for investment across the different investment areas (organisation of service delivery; health leadership; human resources for health; health infrastructure; health products and technologies; health information; health financing and research and development) [168]. There ought to be prioritisation based on a Resource Allocation Criteria that "considers the health sector principles: equity and gender; participation; people centredness; efficiency;

social accountability; and multi sectoral focus" (page 75 [168]). There is no further information provided, however, regarding these criteria or how these should be developed.

Devolution has changed existing power structures for decision-making around health planning and budgeting, changing incentive structures for those involved with priority-setting. A recent study by Lipsky et al. (2015) assessed the factors which drive political will for devolution and the processes used to make decisions in the Kenyan health sector at county level [196]. Across three study counties there were a range of methods used for identifying priorities, none of which sought input from citizens or civil society structures. Involvement of other stakeholders varied, with only one county described as seeking advice from technical staff. Political influence and visibility of county spending on health were critical in one county, leading to counties spending most development resources on construction, without the funding needed for human resources, supplies or maintenance to ensure they become operational [196]. CHMTs were felt to be constrained in their ability to respond to needs, due to their inability to incur expenditures with funds controlled by county treasuries [196]. Study of progress towards universal health coverage following devolution in two counties by the Overseas Development Institute (2016) revealed that health planning and spending at county level was heavily influenced by politics [165]. This may have contributed to imbalance between preventive and curative spending.

Post-devolution Kenyan hospitals complete an annual work plan and quarterly budget to outline allocation of resources to the priorities present in the workplan, which should be linked and follow the government fiscal year. A recent post-devolution study on priority-setting in two Kenyan hospitals had similar findings to those described in the study done at national level pre-devolution [195] on annual operational planning. The budgeting and planning processes at the hospital level are not closely linked, with budgets (especially the first quarter) often developed in the absence of an annual workplan [197]. Historical allocation was frequently described among hospital departments receiving a similar allocation compared with previous

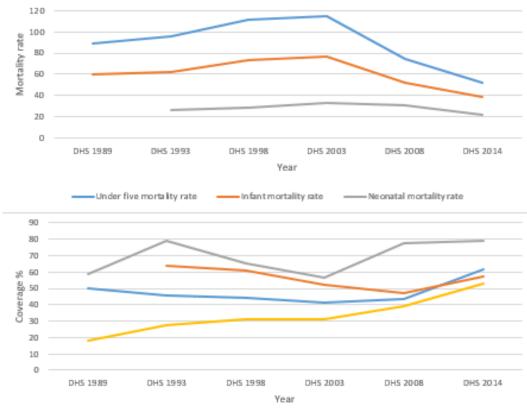
years [197]. Formal criteria used within hospitals in this study included: ability to generate revenue; hospital caseload; international and national priorities; feasibility and affordability. Informal criteria, such as the ability of department managers to lobby and bargain and interpersonal relationships between managers at different levels in the hospital also played a considerable role in influencing priorities [197]. Cost-effectiveness analysis was rarely used and equity was neglected with a preference for priorities with ability to generate revenue. Barasa et al. (2016) found that stakeholder understanding and participation in the process differed between the two hospitals studied, as did transparency. There was little opportunity for reallocation of resources in either study hospital. Use of evidence for decision-making was limited, implementation was poor and there was no involvement of the community [197].

2.4.8 Health Equity Trends and Current Status

While Kenya has made considerable progress towards improving coverage of health services and has reduced mortality rates (see Figure 12), equity gaps have persisted as highlighted in section 2.4.5. Trends in health outcomes (under-five, infant and neonatal mortality rates) and coverage with key health services are indicated in Figure 13. These graphs when viewed together reveal how mortality rates rose from the survey conducted in 1993 – 2003, alongside a corresponding reduction in delivery of services when user-fees were established, over the same period. From 2003 to 2014 mortality rates have dropped and service coverage has risen.

140 120 100

Figure 13 Trends for mortality and coverage with key services between 1989 and 2014



4+ANC =

There are drastic differences in poverty levels across Kenya, with 88% of the population in Turkana living below the poverty line (based on national poverty thresholds), compared with 22% in Nairobi [198]. In addition, Kenya continues to experience wide inequities in service coverage between regions and socio-economic groups. According to a study conducted by Noor et al. (2006) just 63% of Kenyans have access to government health services within an hour of their homes. Feikin et al. (2009) demonstrated that clinic visitation in Kenya decreased linearly from 0.5km to 4km (at which point the rate stabilised) [199]. After controlling for other socioeconomic factors such as wealth and maternal education, the rate of clinic visits decreased by 34% for every additional 1km from residence to a clinic [199]. Accessibility to a private or public health facility varies dramatically between counties, with a facility density of 3.5 per 10,000 population in Mombasa County and less than 1 facility per 10,000 population in Bungoma County [21]. In keeping with these findings, regional differences in utilisation rates for outpatient services remain

- All basic immunisations - Use of modern method family planning

as substantial causes of inequity with variation in annual outpatient visits per capita per county varying from 1.25 per annum in Marsabit County to 4.80 per annum in Migori County [166]. Wide inequities in service coverage between regions and socioeconomic groups persist in the recent DHS (2014), with differences in use of health services based on a person's location, wealth, education level, gender and age [161]. Despite overall increased utilisation of outpatient services between 2003 to 2013 there remains a utilisation gap between wealth quintiles, although the gap between richest and poorest has reduced over time [166]. The gap has however widened for inpatient services with average annual admission rate 28/1000 for poorest and 56/1000 for richest quintile compared to average annual admission rate 14/1000 for poorest and 20/1000 for richest quintile in 2003 [166].

2.4.9 Chapter Summary

This chapter has highlighted key concepts, with global and Kenyan experiences relating to decentralisation, priority-setting and health equity. Leading frameworks and approaches summarised have included:

- Decentralisation and policy reform Walt and Gilson (1994) policy analysis
 framework and Bossert (1998) decision space mapping.
- Priority-setting Accountability for reasonableness and Barasa et al. (2015).
- Health Equity Tanahashi (1978) framework and intersectionality approach.

Community empowerment and engagement has been a common thread within all areas of the literature review. It has been identified as critical to a governance perspective to decentralisation [37]; is fundamental to priority-setting processes [77] and forms a means of extending health service coverage and improving the equity of access, use and quality through CHWs [9]. Intersectionality approaches can guide learning about how the intersections between dimensions of social inequality interact within changing power relations after health reforms, and the role of community empowerment and CHWs within this [151].

Given the recent devolution reforms there are a number of gaps in post-devolution literature within Kenya including: an in-depth analysis of the changing power

dynamics and process for priority-setting at county level; an analysis of the felt impact of devolution for health service delivery as experienced by health workers, CTC providers and community members. In addition, to date there has been limited application of intersectionality analysis for reviewing health reforms and no known application of this to understand Kenyan priority-setting following devolution, having been recognised as a research gap [200].

Chapter 3: Methodology

The aim of this study is to understand the process, power and politics for decision-making and priority-setting for community health and equity following devolution of health services in Kenya. To achieve this aim, I designed a multi-method exploratory qualitative study with a photovoice participatory research component. Key informant and in-depth interviews were used to understand priority-setting processes at county level (thereby responding to objectives 1, 2 and 3, see section 1.2). Focus group discussions and in-depth interviews explored perceptions at community level (responding to objectives 2 and 3). The photovoice participatory research provided a platform to allow youth living in an informal settlement to tell their own story of health and barriers to well-being and service uptake (responding to objective 3). This chapter will provide:

- An overview of my position and the links of the research with REACHOUT consortium
- Justification of the selection of research design and methods for each objective
- Description of data collection and analysis
- Documentation of quality assurance mechanisms, including reflection on my position
- Description of leading ethical considerations
- Explanation of the limitations of the methods.

Details of how each selected method was used are given in section 3.3 below. Table 3 and Figure 14 show how the methods selected sought to answer to the research questions and meet the study objectives. The relationship between the research methods and study findings is identified in Figure 14.

Table 3 Research methods adopted to answer to research questions and objectives

Res	search	Objective	Method
Qu	estion		
1.	How do county decision-makers set priorities for health?	Objective 1: Understand how process, power and politics effect equitable county level priority- setting processes (red box Figure 14)	In-depth interview with county level decision-makers for health across ten counties. In-depth interview with county and sub-county level decision-makers, health workers at community, dispensary, health centre and sub-county, county hospital level in three counties. Key informant interview with stakeholders at national level. Observation of policy writing workshop including county collaboration (one meeting four counties represented). National advocacy workshop with county decision-makers.
2.	What influence has devolution had on health systems building blocks and community health?	Objective 2: Explore felt impact of devolution for the health system, particularly delivery of community health services (green box Figure 14)	In-depth interview with county level decision-makers for health across ten counties. In-depth interview with county and sub-county level decision-makers, health workers at community, dispensary, health centre and sub-county, county hospital level in three counties. Key informant interview with stakeholders at national level. REACHOUT in-depth interviews with sub-county level decision-makers, facility in-charges, community health extension workers, community health volunteers and community leaders at community level in two counties. REACHOUT focus group discussions with community members in two counties.
3.	How is equity understood? What influence has devolution had on health equity?	Objective 3: Identify early successes and challenges for equity of health from community to national level following devolution (blue box Figure 14)	In-depth interview with county level decision-makers for health across ten counties. In-depth interview with county and sub-county level decision-makers, health workers at community, dispensary, health centre and sub-county, county hospital level in three counties. Key informant interview with stakeholders at national level. REACHOUT in-depth interviews with sub-county level decision-makers, facility in-charges, community health extension workers, community health volunteers and community leaders at community level in two counties. REACHOUT focus group discussions with community members in two counties. Photovoice participatory research with youth in informal settlement in one county.

Community health findings REACHOUT context analysis study REACHOUT baseline QI cycle community FGDs and interviews with community key informants and health workers Priority setting In-depth interviews with Photovoice study findings county level decision makers Interviews with health workers from community, health facility and sub county levels and national keyinformants Thesis findings

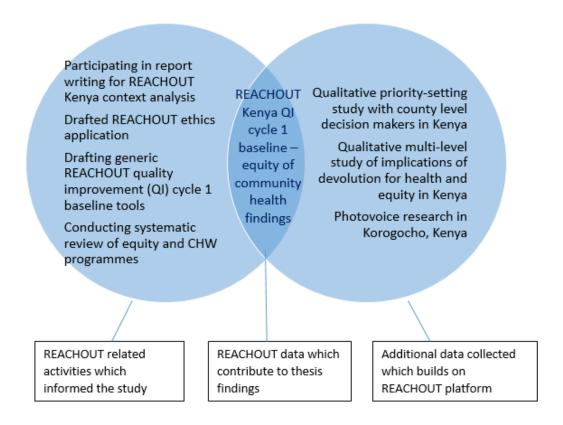
Figure 14 Relationship between research method and study findings

3.1 My position as a researcher within REACHOUT and LVCT Health

REACHOUT is an ambitious 5-year international research consortium aiming to generate knowledge to strengthen the performance of CHWs and other CTC providers in promotional, preventive and curative primary health services in six low-and middle-income countries in rural and urban areas in Africa and Asia (Bangladesh, Ethiopia, Indonesia, Kenya, Malawi, Mozambique). REACHOUT consists of three main research phases: an initial context analysis; a first quality improvement (QI) cycle aiming to improve CHW performance and a second QI cycle which seeks to embed QI approaches. The relationship of this thesis with REACHOUT is summarised in Figure 15 and explained below.

Equity findings

Figure 15 Thesis data relationship to REACHOUT



Prior to collecting data in Kenya I spent time working within the REACHOUT team while based in Liverpool School of Tropical Medicine. During this time, I drafted the REACHOUT ethics application, conducted a scoping study for quality improvement approaches and drafted the REACHOUT generic qualitative topic guides for use during QI cycle 1 baseline data collection, see Figure 15. I attended REACHOUT consortium meetings in Liverpool and Amsterdam where draft topic guides were presented to REACHOUT team members from all six implementing countries for feedback. These topic guides were used to collect REACHOUT equity data included in chapter 4.

Throughout this research I have collaborated closely with colleagues from the REACHOUT Kenya team at LVCT Health⁷. LVCT Health is a national Kenyan non-governmental organisation with experience in HIV service delivery and HIV and community health systems research. LVCT Health started as a research project in

⁷ http://www.lvcthealth.org/

1998 and registered as a non-government not-for-profit organisation in 2001. They are one of the largest non-government providers of HIV testing and counselling in Kenya and support government and partners to scale up access, quality and coverage of HIV, sexual and reproductive health related services and programmes. LVCT Health has significant research experience along three key thematic objectives: to strengthen community and facility based health systems; to improve equity of HIV services, and to reduce sexual and gender-based violence through evidence-based interventions.

I first visited Kenya and LVCT Health in 2013 where we collaborated in writing the first draft of the Kenya context analysis report for REACHOUT. Data collected by LVCT Health during the REACHOUT context analysis is referenced in section 2.4.4, providing insight and understanding of the Kenya community health context and informing the subsequent development and design of this study. Emerging from this data we drafted a paper which considered the implications of policy revision for community health [26] and drafted two further papers regarding the opportunity for integration of HIV following devolution [173] and gaps in community health supervision. I visited REACHOUT Kenya again in October 2014 for several weeks, during which time I continued to build relationships with the LVCT Health team; and through their multiple links was introduced to national community health stakeholders and finalised applications for research permits and ethics application.

The LVCT Health team conducted research assistant training, modified and pilot tested the generic REACHOUT QI1 topic guides in January 2014. I returned to Kenya in February 2014 and joined LVCT Health colleagues by assisting with supervision of data collection within Kitui County. This was led by Maryline Mireku and involved a team of eight research assistants. A separate team of similar size conducted research in Nairobi County. Following completion of data collection we (LVCT Health research manager, Robinson Karuga and two research assistants - Maryline Mireku and Nelly Muturi) modified the generic REACHOUT QI 1 coding framework for application with the Kenyan data during a two day workshop. Following this we coded QI1 baseline data; some of these results are included in Chapter 4.

Findings from the Kenya context analysis and QI baseline studies highlighted the changing landscape for health, and community health in particular as counties shaped their own agenda and assigned budget accordingly. This helped inform the subsequent collection of data from county decision-makers and across multiple health systems levels, exploring the implications of priority-setting for community health and equity. This research was facilitated by introductions to one (or more) decision-makers at the county level by a member of the LVCT Health team in advance of my arrival. In several counties the LVCT Health team member also accompanied me on the first day of data collection for introductions. All data collection tools were drafted after having sought feedback from LVCT Health colleagues and supervisors, who were also part of the wider REACHOUT study. Preliminary findings were presented and discussed with LVCT Health research manager and two REACHOUT research assistants before leaving Kenya in April 2016, providing opportunity for reflection and preliminary engagement of the team within the analytical process, see section 3.6.2.

The context analysis and baseline findings were also used to inform the photovoice study by identifying youth as underserved users of community health services. In order to promote openness in discussion the research was conducted by one LVCT Health staff member (Lydia Kitone) already working within Korogocho and one children's officer (Christine Oyumba) who has previously supported LVCT Health activities, following a two-day training conducted by myself. Lydia and Christine negotiated access and permission to conduct the study within Korogocho by engaging in discussions with community elders and leaders, who were already familiar with them and the work of LVCT Health in their community. During the final photovoice celebration and exhibition the LVCT Health Nairobi manager (Jane Thiomi) facilitated the day's events. Following the end of the photovoice study, female youth continued to engage with LVCT Health through a different ongoing project within Korogocho.

3.2 Research design and methodological justification

A naturalistic research paradigm was adopted, using non-experimental research to observe the changes to priority-setting processes, power dynamics and implications for community health and equity following devolution as they occurred [201]. The study did not seek to influence priority-setting, in accordance with the principles of naturalistic inquiry outlined by Guba (1981). Rather use of a range of study methods (key-informant interviews, in-depth interviews, focus group discussions, observation), with a variety of respondents from national to community level were selected in order to try to recognise the differing realities which exist between respondents regarding the priority-setting process and implications of this for health equity and community health service delivery, following devolution.

Acknowledging constructivism and the belief that the reality perceived is based on social, historical and individual contexts, aligns closely with intersectionality approaches and was important in guiding the selection of qualitative methods. This was in order to better understand the political, technical, ethical, contextual aspects crucial to analysing devolution reforms, which could not be fully understood through a quantitative approach [202]. An intersectionality approach was adopted towards analysis in keeping with the naturalistic paradigm, in acknowledgement of the intersections of the drivers of inequity in the lives of study respondents, the interrelation between researcher and participant and the changing nature of the implications of devolution for groups and individuals over time [191], [192].

The research design is an exploratory multi-method qualitative study with a photovoice participatory photography research component. The qualitative research methodology was adopted to explore inductively, the complex area of decision-making, through generation of rich data by seeking to understand the 'why' and 'how' questions about devolution [202], [203]. This methodology gives "due emphasis to the meanings, experiences, and views of all the participants" (page 43 [203]), to develop possible explanations and theories surrounding decision-making at multiple levels [204].

"Photovoice is a process by which people can identify, represent, and enhance their community through a specific photographic technique" (page 369 [205]). Its origins lie in critical consciousness, feminist theory and documentary photography, with foundations on the work of Paulo Freire, including problem-posing education, by enabling people to think critically about their community with use of visual images, potentially stimulating social action [205]. It aims to enable people to record and reflect on their community's strengths and their concerns, to promote critical dialogue and knowledge and to reach policymakers [205].

Photovoice research is consistent with the principles of community-based participatory research, by maintaining a focus on the social, structural and environmental inequities through active involvement of community members and researchers. This active involvement ideally involves all aspects of the research process and seeks to affect the location of power towards those affected by the problem, with knowledge produced by the participants by taking action, including tackling social injustice [206], [207]. Given the focus on equity and community voice, photovoice research was selected in order to produce evidence that may otherwise be difficult to obtain by learning from those not normally involved in priority-setting, in keeping with the principles of intersectionality analysis [208], [207]. It has previously been applied across a range of contexts, with a variety of respondents, including youth [209]–[212].

In-depth and key informant interviews, were guided by a series of topics and potential questions focussed on decision-making, changes in the health system since devolution, including community health and health equity, while encouraging the respondent to guide the direction of the interview within these issues [203].

Observation of meetings was used to develop greater understanding by the researcher and provide further insights into guidance provided by national staff to county level community health decision-makers by watching behaviour and discussions in the natural setting [203]. Findings helped to triangulate and consolidate my understanding of these areas, but are not included explicitly in the results.

Photovoice research method was selected due to its community based participatory approach [210], which seeks to involve participants in the research process, recognising the unique strengths each participants brings [210]. Focus group discussions were used at community level within REACHOUT and as part of the photovoice sub-study (there was also one FGD with decision-makers) in order to exploit group interactions to generate greater depth of data [203].

3.3 Study Methods and Sites

Four main methodological components were adopted to collect the needed data, as identified in Figure 16 below.

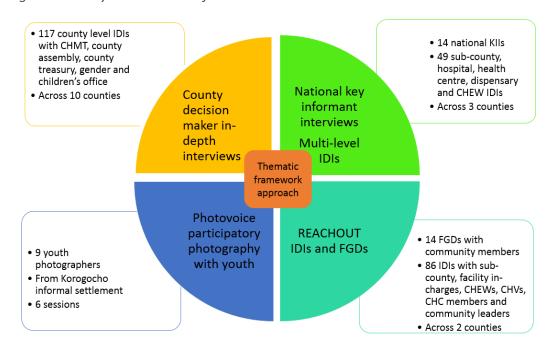
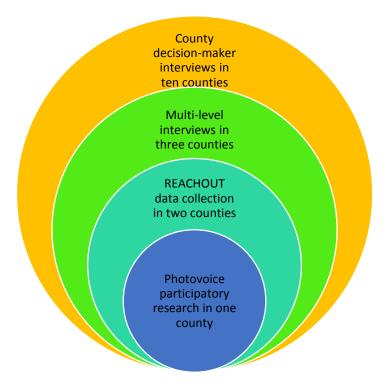


Figure 16 Study method chart for data collection

Research data was collected across ten counties for county decision-maker data, with data collected from three of the ten counties for multi-level data. REACHOUT data was collected from two counties (Nairobi and Kitui). Both these counties were included in the county level and multi-level data collection (Nairobi, Kitui and Marsabit). Relationship between study counties is highlighted in Figure 17 below. Data was first collected through REACHOUT in two counties, which informed the

subsequent data collection collected at county level and later at multi-level, national level and photovoice participatory photography research.

Figure 17 Study county relationship



3.3.1 County decision-maker in-depth interviews

County selection: Qualitative data was collected across ten counties in Kenya. Ten is a relatively large number of counties to visit and conduct research. Given the diversity between counties and the large number (47) of counties in Kenya's devolved government, it was felt that a study of this scale was merited and required, in order to reach saturation and adequately understand decision-making processes within Kenya.

To ensure diversity of counties selected a series of criteria were applied in order to select at least one county from seven of the eight former provinces (former North Eastern Province was excluded due to insecurity). In addition to former province, another selection criterion was to ensure inclusion of rural agrarian (6), rural nomadic (3) and urban (1) counties. Figure 18 indicates selected counties with a red dot.

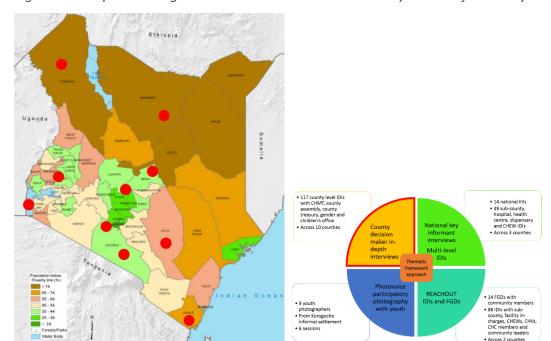


Figure 18: Map indicating selected counties and related study method for county data

As well as ensuring diversity for poverty incidence and for key community and health indicators (% community unit coverage, live births in previous 5 years % delivered by skilled provider, % children age 12-23 months fully vaccinated, service readiness index). In Table 4 indicators above national average are highlighted in green, while those below average are in red.

Table 4 Selection criteria for study counties

County	Rural/urban	Province	Population size ⁸	Community unit coverage ⁹	Live births in previous 5 years % delivered by skilled provider [18]	% children age 12-23 months who are fully vaccinated [18]	Service readiness index ¹⁰ [21]	Poverty incidence (Headcount ratio) [213]
National average				35%	61.8%	67.5%	57%	45.2%
Homa Bay	Rural agrarian	Nyanza	1,025,668	103%	60.4%	53.7%	60%	48.4%
Kajiado	Rural nomadic	Rift Valley	731,436	38%	63.2%	48.9%	62%	38%
Kitui	Rural agrarian	Eastern	1,077,723	27%	46.2%	52.7%	57%	60.4%
Kwale	Rural agrarian	Coast	691,656	48%	50.1%	82.0%	65%	70.7%
Marsabit	Rural nomadic	Eastern	309,858	5%	25.8%	66.6%	56%	75.8%
Meru	Rural agrarian	Eastern	1,443,374	21%	82.8%	78.3%	56%	31.0%
Nairobi	Urban	Nairobi	3,339,848	20%	89.1%	60.4%	48%	21.8%
Nyeri	Rural agrarian	Central	738,083	28%	88.1%	77.8%	59%	27.6%
Turkana	Rural nomadic	Rift Valley	910,314	19%	22.8%	56.7%	48%	87.5%
Vihiga	Rural agrarian	Western	590,228	29%	50.3%	90.9%	63%	38.9%

⁸ www.ehealth.or.ke/mcul

⁹ www.ehealth.or.ke/mcul

¹⁰ Service Readiness refers to the capacity of the health facilities (public and private) to provide health services. The readiness in this aspect showed the basic requirements to provide services such as infrastructure, amenities, basic equipment, standard precautions for infection control, diagnostic tests, medicines and commodities.

County participant selection: Within each county participants were selected who could provide information about the decision-making processes. Purposive sampling was applied, where respondents were chosen with 'a purpose'. This followed discussions with Kenyan colleagues to identify respondents who were known to hold decision-making roles at the county level, thereby meeting the requirements of 'symbolic representation' for qualitative sampling [204]. This led to the identification of 'technical' respondents including: County Executive Committee Member for Health, Chief Officer for Health and members of the County Health Management Team (Director for Health, County Community Health Strategy Coordinator, County Public Health Officer) and 'legislative' respondents from the County Assembly (Chairperson for Health Committee). In order to ensure diversity, I also included respondents who did not necessarily play known key decision-making roles for health but who had in-depth knowledge and understanding of health-related fields, such as gender and children's issues. This selection was a combination of convenience and purposive sampling, which endeavoured to deliberately include voice and experience for those not typically deemed powerful in decision-making (women and children), within the study restrictions of English language interviewer and short time-frame in each county, which led to selection of gender and children's office representatives. The selection of representatives on behalf of women and children was a limitation, as it reduced the opportunity for members of these groups to tell of their own experiences first hand. Early review of the findings revealed the emergence of budgeting as a key theme and so a flexible and iterative approach to sampling was adopted. The sampling frame was expanded to include the chairperson for the budget committee within the county assembly and a representative from the county treasury.

Given the elite social status of some of the respondents there were issues surrounding negotiation before gaining access to meet [214]. Colleagues within LVCT Health introduced me to either the Director of Health or County Executive Committee Member for Health within the ten counties. I then followed this up with email and/or phone call to seek permission to visit the county and requested their assistance with further introductions to other potential respondents within the

county health management team (CHMT). I also shared copies of letter of introduction from LVCT Health, research permits and ethical approval letters with respondents. Once I arrived within the county, negotiations began to gain access to meet with the members of county assembly (MCA). In some instances, a member of the CHMT would assist by providing these introductions. However, in most counties the MCAs were hard-to-reach and so I would need to pass through the clerk for the county assembly who played a 'gatekeeper' role in permitting or denying access to meet with the MCAs [214]. Demographics for county level respondents interviewed are shown in Table 5 and Table 6.

Table 5 County level demographics

County	Se	ex	Health/N	#	
County	Female	Male	Health	Non-health	respondents
Homa Bay	1	10	7	4	11
Kajiado	5	8	6	7 ¹¹	13
Kitui	2	8	5	5	10
Kwale	3	9	6	6	12
Marsabit	1	11	7	5	12
Meru	2	10	8	4	12
Nairobi	6	6	7	5	12
Nyeri	5	7	8	4	12
Turkana	4	10	9	5	14
Vihiga	6	6	7	5	12
Total	35	85	70	50	120

Table 6 County demographic breakdown for job title

Job title	Male	Female	#respondents
County executive committee member for health	6	3	9
Chief officer for health	7	3	10
Director/deputy director for health	17	2	19
CHMT member	19	13	32
Total county level health respondents	49	21	70
Children's office representative	7	3	10
Gender representative	6	4	10
Member of county assembly (or representative)	15	5	20
County treasury representative	6	0	6
Other county informants		1	4
Total county level non-health respondents	37	13	50

¹¹ In Kajiado 4 respondents were interviewed together in a small FGD.

Data collection tool: A formative research stage allowed for the opportunity to identify the range of issues to be included within the data collection tool (see Appendix 1). I conducted several information gathering interviews with stakeholders at national level to inform development of this tool. In addition, in order to provide a framework within which to examine priority-setting I selected the accountability for reasonableness framework (see section 2.2.3), drawing on previous use of the framework for guiding topic guide development [215]. The draft tool was guided by these interviews, informed by literature review, reviewed by supervisors and Kenyan colleagues who provided feedback and advice. Several interviews were conducted in the first county, followed by a period of reflection which allowed opportunity to review and amend the data collection guide to ensure that questions elicited the responses required.

3.3.2 National, County and CHV Observation

While at health facility or during time spent with CHVs I requested verbal consent from respondents to take photographs as part of the research, which reflected the stories described, such as overcrowded store or remote setting of health facility. Taking photographs raises questions around who has the right to take and display images and for what purposes [216]. Photographs from observations at health facilities have been included in Chapter 4 to highlight issues visually. Photos included within the thesis have been selected to reflect qualitative findings, with the purpose of raising awareness of the health system realities and public health priorities. Where there is person photographed, the photos attempt to represent the subjects respectfully in a manner which does not further marginalise or stigmatise them personally [216].

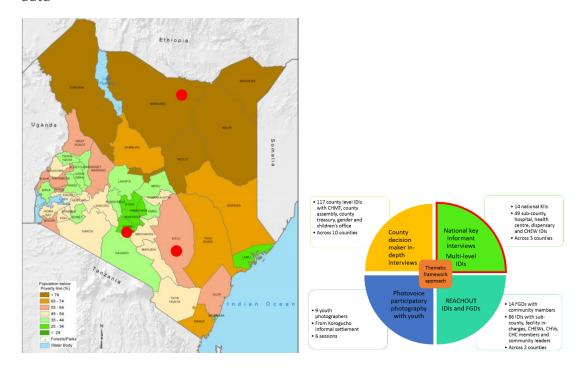
I conducted observation during a number of community health related workshops and meetings, including: a national community health policy writing workshop; a county policy collaboration meeting; a national advocacy workshop attended by representatives from four counties; national community health annual planning workshops and several community health operational research technical working groups. At times I took on a participant observer role, where I as the researcher also

occupied a role in addition to observation [201], in this situation when contributing to discussion and at other times I simply observed. Observation provided opportunity for "systematic watching of behaviour and talk in natural settings" (page 42 [201]) and was used to gain an understanding through observing people, places, processes, actions and interactions that occur naturally [217]. In addition, I visited health facilities where many of the health worker respondents worked and spent time with community health volunteer(s) in many of the counties visited, in order to gain greater understanding of their work, including benefits and challenges faced. These findings provided context and background in helping me understand and triangulate research findings, but were not used to gather data and hence data from these observations are not presented within the research findings. I documented reflective notes shortly after each meeting or period of observation.

3.3.3 In-depth interview across health systems level

After completing data collection with decision-makers at county level in ten counties the understanding of the priority-setting process developed was one-dimensional and there was need to triangulate and study the process with other stakeholders within the county. Three counties were selected to study the felt impact of devolution across the health system, with one urban (Nairobi), one rural agrarian (Kitui) and one rural nomadic county (Marsabit) selected as these are the three broadest divisions for populations in Kenya. This aspect of the study was limited to three counties due to time and resource constraints. Counties were selected in order to align with the two pre-existing REACHOUT counties (Nairobi and Kitui), with one rural nomadic county (Marsabit) added to ensure representation from the three main population groups. Marsabit County was selected pragmatically, due to strong pre-existing relationship within the county and the availability of strong logistical support to facilitate field work. Counties selected are shown in Figure 19.

Figure 19 Map indicating selected counties and related study method for multi-level data



Within Marsabit County, where no previous REACHOUT work had been conducted two sub-counties were selected one where the county headquarters were located, and a remote sub-county. Respondents were selected purposively and pragmatically, selecting respondents who worked across health systems levels and who spoke English. Unfortunately, this led to CHEWs being selected from community level, with CHW voices not represented. Within each sub-county I spoke with the sub-county Medical Officer for Health and the sub-county Community Health Strategy focal person. I then selected the health facilities within each sub-county to include county/ sub-county hospital and minimum one health centre and one dispensary. At each facility visited I spoke with the in-charge or acting in-charge and the community health extension worker (if there was one available).

Within the pre-existing REACHOUT counties I spoke with the in-charge and CHEW (if there was one) at seven/eight facilities originally selected for REACHOUT research (three/four in Kitui and four in Nairobi). It was not possible to reach one of the more remote dispensaries in Kitui due to heavy rains having made the road impassable and so this was replaced with another dispensary. In addition, I spoke with sub-county and hospital personnel as already described for Marsabit County (Table 7 describes

respondent demographics). Data collection tools used a modified and briefer version of the tool used with county decision-makers (see Appendix 2).

Table 7 Multi level respondent demographics

Job title	Male	Female	#respondents
Community health extension worker/ community health volunteer	6	6	12
Health facility in-charge	8	9	17
Hospital in-charge	6	0	6
NGO coordinator based at county level	1	0	1
Sub-county community health focal person	5	2	7
Sub-county medical officer	5	1	6
Total multi-level respondents	32	17	49

3.3.4 Study Methods: National level key informant interviews

14 key informant interviews were carried out with national government stakeholders, members of non-governmental partners supporting community health and others with key roles relating to community health or evidence-based decision-making at national level. Initial respondents were identified following discussions with colleagues in Kenya. LVCT health form part of the technical working group for community health and I was able to attend a number of meetings and build-up a relationship with members of the national Unit for Community Health and Development and invite members to participate in interviews. Following these initial meetings, a snowball approach was utilised to identify other suitable respondents (see Table 8 for respondent demographics). The data collection tool used to guide interviews was a modified version of the county decision-maker tool (see Appendix 3).

Table 8 National respondent demographics

	Male	Female	#respondents
County representative for county executive committee forum at national level	1	0	1
National Ministry of health	6	1	7
NGO/research institute/ donor	4	2	6
Total national respondents	11	3	14

3.3.5 Study Methods: REACHOUT data collection

REACHOUT Kenya conducted a quality improvement (QI) cycle during the period that the data for this thesis were collected. This QI cycle sought to strengthen supervision of CTC providers (CHVs and CHEWs). As part of this research cycle a baseline study was conducted. Findings from this baseline study, which explore health worker and community perceptions around health equity, will be presented within this thesis. Two counties were selected by REACHOUT Kenya for inclusion: Kitui and Nairobi, with two sub-counties (one remote and one more easily accessible) selected in each county and two community units identified in each sub-county. See Figure 20 for study counties selected.

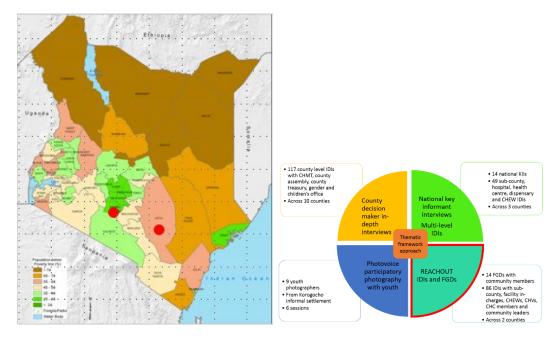


Figure 20 Map indicating selected REACHOUT counties and related study method

Data collection tools were prepared by the REACHOUT team (see Appendix 4 and Appendix 5). These were then reviewed, adapted to the Kenyan context and piloted in Ruaraka (non-study site) in Nairobi. Study participants for inclusion were identified including sub-county focal person, link facility in-charge, CHEW, CHV, community key informants, CHC members, community members (see Table 9 for study demographics). Participants from community to county level for all study components were offered a cash token in lieu of refreshment in appreciation of their time, in accordance with LVCT Health guidance.

Table 9 Demographics for respondents interviewed through REACHOUT

In-depth interviews						
	Male	Female	# respondents			
Community health volunteer	12	12	24			
Community health extension worker	4	2	7 ¹²			
Community health committee member	8	6	14			
CHV team leader	4	9	13			
Health facility in-charge	4	3	7			
Sub-county community health focal person	3	1	4			
Community key informants	11	6	17			
Total IDI respondents	46	39	86			
FGDs						
FGDs	7	7	14			

3.3.6 Study Methods: Photovoice research

Photovoice is increasingly used within international health research as a process through which people (usually those with limited power due to poverty, gender, class, ethnicity or other reasons), use photo images to capture aspects of their environment and experiences and share these with others [218]. In this study photovoice was used as a research method to aid in exploring power, equity and intersectionality. This study component sought to generate knowledge and understanding about health hazards and behaviours for youth in Korogocho informal settlement through photography and to increase their involvement in local decision-making by identifying responsive actions which can be taken within their community [218], [219].

Youth were identified as photovoice participants based on findings from the context analysis and the baseline for the REACHOUT quality improvement cycle, which identified youth and adolescents as often not engaging fully with existing community health services.

Discussions were held with colleagues within LVCT health who identified Korogocho as a suitable location to conduct the research, due to ongoing LVCT Health project activities within this community, with strong links and relationships with youth, village leaders and children's officers. Later discussions were conducted with LVCT health

¹² Unrecorded gender one respondent.

staff based in Korogocho, to discuss the research objectives and identify suitable participants. As part of these discussions we considered the potential limitation and risks associated with conducting photovoice research, including who used the camera, what the user photographed and what the photographer did not photograph. In response to these issues a number of measures were adopted to ensure safety of the participants. This included conducting photography with a facilitator and local security staff present, not taking photographs in areas deemed particularly insecure and ensuring that photographers seek consent prior to taking photographs. However, these safety restrictions, as well as the money for supporting activities being in the hands of the facilitators, rather than the participants, may have influenced the photographs taken. In the early sessions participants focused predominantly on negative features, such as rubbish heaps and blocked drainage channels. After discussion with the facilitators, we encouraged the youth to consider other issues which influence health. This led to fuller discussions and youth captured a range of photographs which included positive aspects, as well as a more comprehensive range of concerns, including high prevalence of rape, drug and alcohol misuse.

Following discussions with the facilitators, we determined to identify nine youth (one from each of the nine villages in Korogocho) aged 16-18 years, of these five were to be female and four male. Youth were to be school drop-outs who do not typically engage with health services. We discussed the possibility of recruiting youth from a local rubbish dump as many youth work at the dump site collecting rubbish. Figure 21 identifies location and related study method for photovoice research.

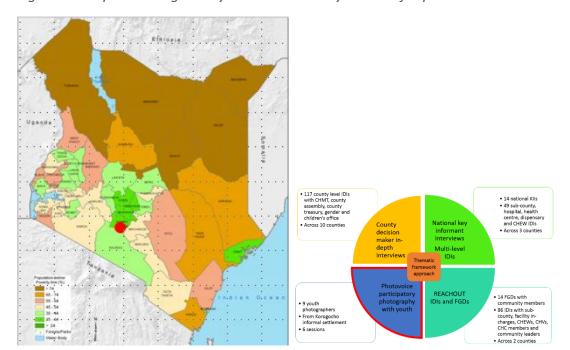


Figure 21 Map indicating county and related study method for photovoice research

A community entry meeting was held with community chief, elders, health worker and other key parties to introduce the research concept, seek advice and inputs from these community leaders and respond to their questions. Following this initial community entry meeting, it was determined not to recruit youth from the dumpsite, as youth from across the city travel to work there. Therefore, the nine youth were selected in a collaboration between the two facilitators and village elders, according to the remaining criteria.

Prior to commencing the research, I had participated in a three-day photovoice training. I subsequently conducted a two-day training with two research assistants (one LVCT Health staff and one children's officer as identified in section 3.1, see Photo 2) who facilitated the photovoice research. These two experienced research assistants already worked within Korogocho (one was a Korogocho resident) and were therefore familiar to youth selected to participate. This training covered introduction to photovoice, consent, how to use camera, confidentiality and facilitation.

Photo 2 Youth photographers with facilitators and one security staff



Six full-day sessions were held with participants during which we carried out initial introduction to photovoice, discussed group confidentiality, how to use cameras and consent. We also introduced the topic of health and discussed with youth what issues they wanted to explore relating to health through their photos. In accordance with the participatory nature of photovoice research, the participants determined to expand issues to include life hazards in addition to health, due to the strong linkages between life hazards and health. During sessions the youth went to the community to take photos. Following return from taking photos, the youth identified photos for discussion, these were then printed and discussed together during the next session. This discussion included questions such as 'Describe your photo? What is happening in the photo? Why did you take this photo? How does this affect us? What can we do about it?' These questions are in keeping with those commonly used during previous photovoice studies as identified in two recent systematic reviews [220], [221]. In addition, discussions with youth co-identified the next topic they wanted to photograph. During the final session held one week later, a professional filmmaker

produced a short documentary¹³ with the youth who shared their experiences with photovoice and the photos which they wanted to share. Youth identified actions which they would like to see happening within the community, based on the issues raised in their photos. With the support of the research assistants, youth discussed and identified community leaders and key stakeholders who they felt held the power to change issues arising from the photos. These stakeholders were invited to a film screening and photo exhibition during which youth photographers highlighted the subject they had previously selected of 'life hazards and health behaviours' through their photos with identified actions. The youth retained editorial control by selecting the photos printed for display. Figure 22 shows the main activities carried out as part of photovoice research.

Figure 22 Photovoice activities



Throughout the results section I have sought to include photographs taken by youth through the photovoice study (in addition to those taken by myself as identified in section 3.3.2), to provide the reader with a visual picture for some of the findings from the photovoice research. The photovoice youth photographers gave assent and parental consent for use of the photographs with captions including the

¹³ http://www.reachoutconsortium.org/news/co-constructing-knowledge-about-health-with-the-young-people-of-korogocho-informal-settlement/

photographer's name included, where appropriate. Verbal consent was sought from any model prior to taking the photograph, with written consent sought from the model in any photograph where the person is identifiable.

3.4 Data management all study components

Where consent was provided, interviews were recorded and later transcribed. A small minority of participants (five) declined recording of the interview. For these interviews extensive notes were taken by myself and typed up immediately after the interview. I conducted all county level, health systems and national level interviews in English. REACHOUT interviews and focus group discussions were carried out by the trained LVCT Health research team, involving eight research assistants in Kitui County and eight in Nairobi County, coordinated by Maryline Mireku. Some of these interviews and FGDs and all photovoice workshops were conducted in Kiswahili or Kikamba (local language in Kitui). Transcripts were translated into English, with a small minority checked for consistency and meaning in translation. A selection of all transcripts were checked against the original recording for accuracy. In addition to digital recording I took notes throughout all interviews, documenting key discussion points and additional features about the interview.

3.5 Data analysis

I used a thematic framework approach to analysis, in order to classify and organise data according to the key themes, concepts and emerging categories [204]. This included an inductive aspect, which allowed meaning to emerge from the data [202]. This consisted of familiarising myself with the data by reading and re-reading through transcripts. Due to the long data collection period (April 2015 –April 2016), I familiarised myself with the data after receiving transcripts from the first three counties. Following this I identified a thematic framework which drew on my understanding of the literature, the objectives of the interview, the themes within the data collection tool and issues raised by the respondents themselves during interviews. This initial coding framework was piloted and subsequently refined as coding progressed. Since I coded all data myself, any changes to the coding framework could be incorporated consistently as data coding continued (see

Appendix 6). The framework developed from the county level interviews was also applied for the multi-level and national level data. Nvivo 10 software was utilised to manage and code data. Following coding I conducted charting of the data in order to summarise data, while still retaining its context and essence [204], based on data from all ten counties. I then analysed the findings collectively, highlighting differences between counties or types of respondent where appropriate.

For data collected as part of REACHOUT QI cycle 1 baseline research, a generic REACHOUT coding framework was collaboratively developed by Liverpool School of Tropical Medicine and sent to partner countries for adaptation (see Appendix 7). In Kenya, a two-day data workshop was held with the REACHOUT team, to develop a modified Kenyan coding framework, using similar methods as described above. All researchers who conducted coding were involved in adaptation of the framework, to ensure common understanding and application of codes. All QI1 baseline transcripts were subsequently coded using the agreed coding framework (double coding where appropriate) in Nvivo10.

Data analysis occurred alongside the photovoice study with participants identifying the research findings which they wanted to present to community leaders and identifying captions to explain their photos as part of the process. Following completion of the study, data from the transcripts of the group discussions were coded following creation of a separate coding framework. As I had already left Kenya when transcripts were received this was developed independently, without collaboration from my colleagues with whom the photovoice study had been carried out.

The study adopts an intersectionality lens to analysis, by seeking to explore how power relationships have changed over time since devolution and to understand the implications of this for priority-setting at county level; the health systems performance; the availability, accessibility, acceptability, use and effective coverage of services as experienced by different individuals at the community level as a result of intersecting dimensions of social inequality. Data was analysed in light of four main frameworks (Walt and Gilson (1994); Barasa et al. (2015); Bossert (1998) and

Tanahashi (1978)), with overall application of the intersectionality lens. These frameworks are drawn together in the conceptual framework for the study highlighted in Figure 5.

3.6 Quality assurance

3.6.1 Trustworthiness

Trustworthiness of research has four main aspects according to Guba (1981): credibility; transferability; dependability and confirmability [222]. In order to strengthen the trustworthiness and to assure quality of the data collected, I employed a series of techniques.

A range of qualitative methods were adopted with respondents across health systems levels, in order to explore with respondents their reasons and motivations for priority-setting and to seek to understand the intricacies of power dynamics and relationships at play. This is in keeping with intersectionality principles, including a multi-level analysis; attention to power and inclusion of diverse knowledge, to learn from those not typically included in priority-setting [223]. Other mechanisms which sought to strengthen trustworthiness include:

- Data were collected at county level across ten counties which were sampled to reflect diversity of contexts, with a series of criteria.
- Respondents were purposively selected to choose those with most understanding of the topic.
- Continued sampling was done until saturation was reached, where no new insights would be obtained by further widening the sample [204].
- Triangulation of methods (in-depth interviews, key informant interviews, focus
 group discussions and photovoice participatory photography research) and
 sources both at county level (with gender and children's office representatives,
 technical decision-makers, politicians and representatives of county treasury)
 and across levels of the health system (national, county, sub-county, health
 facility and community) allowed for cross-checking the integrity of the data, by
 bringing forward different viewpoints and breadth to the analysis, thereby

accommodating a fuller picture to emerge [204]. This triangulation also sought to build up a multi-faceted picture of the intersecting power relationships at play and how they can influence health equity.

- Reflection on the research tool and emerging findings after several interviews in the first county and discussion of these with colleagues and supervisors allowed for some simple but effective modifications, to ensure that questions were phrased more appropriately to elicit meaningful responses.
- Presenting preliminary findings to fellow researchers engaged in health systems research in Kenya at an early stage in the data collection process allowed the opportunity to uncover gaps in my data collection at this early stage (it was after this meeting that participants with a stronger understanding of the budgeting process were included). Further presentation of findings with LVCT Health colleagues and with researchers from Liverpool School of Tropical Medicine provided opportunities to critique and refine the analysis.
- Prolonged engagement through ongoing role within REACHOUT, with continued interaction with LVCT Health colleagues through this.

3.6.2 Reflexivity

Reflexivity is crucial to qualitative research, particularly when using intersectionality approaches, by recognising my influence as a researcher on the choices and decisions I have made about the methods selected, data collected and analysis conducted as a result of my gender, ethnic background, profession, religion and social status [202]. In keeping with principles of intersectionality described by Hankivsky (2012) I will endeavour to be reflexive to my role as a researcher, acknowledging the influence of power and relationships I bring to the study. Having worked in clinical settings both within the United Kingdom and in low-income setting and from time spent working with CHWs in multiple countries, I have been interested and intrigued by the processes at play behind how and why decisions are made for delivery of health services, particularly community health care. Through the process of conducting a systematic review of the (in)equity of CHWs, I developed an interest in understanding how CHWs can increase access and use of quality health care for hard-to-reach

groups of people. I also came to appreciate more the potential role which they can play towards stimulating community empowerment to address underlying social determinants of health. However, despite evidence for their effectiveness and role in promoting equity I recognise that CHW programmes are often fragmented, NGO driven, with a disease-specific focus and limited integration into the formal health system [224]. This prompted my interest to understand more about the potential for change which a dramatically devolved health system would bring for health in general and more specifically community health.

From the outset this study sought to explore equity and fairness. This orientation towards equity has influenced the selection of methods and participants, for example the decision to use photovoice participatory research with youth living in an informal settlement and to approach analysis using an intersectionality lens. Researchers, policy makers, activists and others are motivated towards studying and influencing equity and social justice for a multitude of unique and personal reasons. My motivation comes in a large part as a response to my Christian faith. My experience of the grace of Jesus Christ, motivates and informs my belief that social justice, and within this, challenging and transforming the underlying structures of power which create inequities, is a fundamental aspect of our purpose in life [225]. Some people have the opinion that the church itself is one of the structures of power which creates inequity, and unfortunately this has been and remains true in many instances. In the Bible we learn that God has always cared for people who are the most vulnerable. This motivates me to study equity and undoubtedly influenced my decisions about data collection and how I have presented and interpreted findings.

As a trained medical doctor who has previously worked with CHWs I shared some degree of commonality with some respondents regarding our profession. Due to my embedded position with LVCT Health, some respondents may have considered me closely associated with them, which may have influenced our conversation to some degree. In several counties (particularly Kitui County, where REACHOUT was carried out and I had made multiple visits with LVCT Health colleagues as part of REACHOUT data collection), respondents would frequently refer to LVCT Health during

interviews. In other counties, where REACHOUT was not ongoing and my role within LVCT Health was not widely known, this was less of an issue and respondents infrequently referred to LVCT Health during discussions. Overall most respondents viewed me as an 'outsider' as a white female, trained in the UK and having recently moved to live in Kenya. Male participants (who formed the majority of respondents), would from time to time refer to my outsider status by questioning my ability to understand the situation given my recent transition to living and researching in Kenya. Despite this lack of commonality with respondents in some respects, I did not feel my outsider position to be a major disadvantage. While some respondents may not have opened up fully due to my outsider status, I believe that in other interviews I was able to ask blunt questions as a consequence of my 'informed outsider' position, since many respondents did not perceive me as a threat to their status or position and so perhaps felt able to open up more during our discussions [214].

As an outsider I was able to approach the research with limited prior assumptions and no loyalty for or against devolution. Over the 14 month period spent living and researching in Kenya and as a result of research, observation of meetings and workshops, building up relationships with some national respondents through ongoing attendance at meetings, discussions with friends and colleagues, reading of literature and media, I felt that my position transitioned from that of a full outsider to an 'informed outsider' allowing for deeper knowledge [226].

3.7 Ethical Considerations and Approval

Consent was sought from all participants, with full copies of all consent forms, including respondent information, included in ethics applications to LSTM and KEMRI. All respondents who participated in KII, IDI or FGD gave informed written consent. For the county and health systems IDIs consent was in English, for some of the REACHOUT FGDs and IDIs the consent was translated into Kiswahili and Kikamba (local language in Kitui). REACHOUT research assistants (eight in Kitui and eight in Nairobi) were trained by my LVCT Health colleague (Maryline Mireku) in how to conduct informed consent prior to carrying out the research. During the consent process the consent form provided the participant with information, explaining that

participation was voluntary, that the participant could decline or terminate participation at any time. Consent was also sought to record the interview, issues of confidentiality and anonymity were discussed. Written consent forms were stored separately from data collected and there were no codes on the consent forms which could link the consent to an individual's transcript.

For the photovoice research, because the participants were aged 16-18 years, informed proxy consent was obtained from the parent or guardian, with assent from each youth who participated. Consent was translated into Kiswahili and translation quality checked for meaning. Consent carried out with youth and their parent/ guardian prior to commencing the research included giving consent to recording of discussions. We also conducted training with the youth about the need to seek verbal consent from any photo subjects, explaining who they were, what they were doing, why they wanted to take the photo and how it would be used, before taking a photo of the person or their property. In any images where the photo subject was identifiable, informed written consent was sought from the subject. This was carried out by the research facilitator and was translated to Kiswahili. Following the photo exhibition, some local leaders made follow up to shut down places where illegal alcohol was brewed. No identifiable photos were included, in order to ensure the safety of the participants. In addition, follow up with youth beyond the end of the photovoice study continued with the female youth participating in an ongoing project led by LVCT Health. Photovoice research participants also gave informed consent to participate in the production of the film and consented to allow ten photos each to be used by Liverpool School of Tropical Medicine and LVCT health.

For both REACHOUT and photovoice FGDs it was explained during the consent process that while members of the research team commit to keeping confidential what is disclosed, other members of the FGD may disclose matters discussed. We encouraged participants to maintain confidentiality about what was discussed within the group, but also advised participants that they should not disclose anything which they are not comfortable sharing within the group. Transcripts were anonymised using a unique code, with removal of any names from transcripts.

The research proposal was approved by Liverpool School of Tropical Medicine (Research Protocol 14.007 and Research Protocol 14.044) and Kenya Medical Research Institute (KEMRI) (Non-SSC Protocol 469). In addition, the researcher received approval from the National Council for Science and Technology (NACOSTI) (NACOSTI/15/2058/4010). Upon arrival in each county I provided letter of introduction and sought approval from the County Commissioner's office, prior to commencing data collection within that county. Within Nairobi County a further research permit was required from Nairobi City County, in addition to the above permits and approvals. Permission was also sought from either the County Director for Health or the County Executive Member for Health prior to commencing data collection in each county.

During observation of meetings I introduced myself as a research student from Liverpool School of Tropical Medicine and linked with LVCT Health. I did not explicitly explain that I was observing meetings for the purposes of including data based on these observations within research results. As a result, these observations were used by me to triangulate with other study findings and to improve understanding of the context within which the findings are positioned. However, data from observations were not explicitly documented in the results, in keeping with principles of informed consent, which was not expressly sought.

3.8 Limitations

In some of the counties visited my host organisation had well-established working relationships with many members of the County Health Management Team, which allowed for a smoother process of introduction. However, in other counties the relationship was newer, which at times resulted in challenges establishing initial contact and permission to visit. In some instances, I felt that respondents disclosed more during discussions where there was a stronger pre-existing relationship with my host organisation, compared with counties with limited prior engagement.

A limitation with the study was the limited extent to which community voices from CHVs and community members were captured regarding their role in priority-setting following devolution. This occurred as a consequence of community data included

in the findings having been collected as part of the REACHOUT study on quality improvement and so the need for questions to explore the community role in priority-setting had not been identified at the time this data was collected.

A limitation with the photovoice research was that it was conducted in only one county (Nairobi), due to time and resource constraints. This may have led to distortion of presentation of community level findings from within an urban informal settlement, compared with other contexts. I felt however, that the merits and benefits gained from data collected through photovoice, by nature of the critical analysis skills developed with typically unheard voices, outweighed this limitation. In addition, many of the findings from the photovoice study reflected and triangulated findings raised by participants from other settings, e.g. lack of drugs and long queues. Where photovoice findings differed from other contexts I have sought to highlight these as context-specific to the informal settlement urban setting. limitation was the short engagement period (six sessions held over a six week period) and limited continued engagement beyond the duration of the study period, which may have undermined efforts initiated during the study to implement actions identified by participants. This is in keeping with previous studies, which tended to limit community participation to photographic data collection and photo-elicited interviews [220]. Other limitations are discussed further in section 5.5.

Chapter 4 Results: Priority-setting process and implications for health equity and community health

This chapter will provide an overview of how priorities are set at county level and the effect on implementation of these priorities and implications for community health and health equity. It relates these findings back to Figure 5 (the conceptual framework presented in section 2.3.2).

The findings reveal high levels of variation between counties for priority-setting processes and implementation of health services following devolution. These variations are due to the complex adaptive nature of decision-making, involving multiple decision-makers, with varying and evolving levels of power holding influence over the process and outcomes (green box Figure 5). This contributes to the performance of the health system, to provide services which are accessible, acceptable and effective (blue box Figure 5) and the extent to which the prioritysetting process empowers the community to demand for and use those services (yellow box Figure 5). Combined together these factors will influence the level of progress made towards (or against) universal health coverage (red box Figure 5). Devolution has transferred decision-making and budgeting authority from the national to the county level, which should beneficially allow county decision-makers flexibility to select the most context appropriate priorities. Thus, in the absence of clear roles and responsibilities for decision-makers and with limited technical guidance provided from national level, a vacuum has emerged which provides room for political power plays and potential manipulation.

The chapter is structured to provide a general overview of health in Kenya prior to and following devolution (section 4.1), introducing the key players for priority-setting (section 4.2), before summarising the current priority-setting process (section 4.2.6) and its influencing factors (section 4.3). A political lens is applied to probe the nature of power relationships within the priority-setting process (section 4.3.2) in response to objective 1 *Understand how process, power and politics effect equitable county level priority-setting processes*. Implications for health systems performance and community health as perceived by national, county, sub-county respondents, health

workers and community members are explored (section 4.4), in response to objective 2 *Explore felt impact of devolution for the health system, particularly delivery of community health services*. Finally, equity implications are explored combining findings from all sources (section 4.5) in response to objective 3 *Identify early successes and challenges for equity of health from community to national level following devolution* (see Figure 14).

4.1 Setting the scene

4.1.1 Context for health and equity prior to devolution

Pre-devolution health system: Kenya's health system before devolution held deeply ingrained inequities in health service availability, accessibility and effective coverage. Earlier donor driven de-concentration health reforms in the early 2000s had not adequately addressed these challenges. Districts (sub-national structures) were to coordinate primary health care, manage recurrent resources at a more local level and implement health activities. These decentralised activities, including setting priorities, developing workplans and allocating budgets, were carried out by a district health management team, led by the district medical officer, in conjunction with a district health management board which included community representatives who played a governance and oversight role.

"Health sector was probably one of the most decentralized sectors before devolution in terms of structures and arrangement and conduct of business."

National Respondent, Male11

These activities were carried out under the authority of the provincial level (which ceased to exist following devolution) before being forwarded to national level for approval (see section 2.4.5). National level maintained close links to these operations through the provincial medical officer and retained control of budget for development activities (such as infrastructure and equipment); human resources for health management (including recruitment, staff transfers, payment of staff salaries and supervision); drug and supplies procurement. However, the district retained funds for management of day-to-day expenses under the control of the district

medical officer, with hospitals able to use income generated from user-fees and to manage funds transferred directly from national to a district level office.

"Before devolution, hospitals at the sub-counties [which] were districts then, and they were able to manage their own resources." County Health Respondent, Female69

In addition, a health sector services fund, commonly referred to as HSSF, was introduced in 2010, to improve quality of services within the health facility. These funds were transferred directly from national government to each health facility's account. Once received the health facility would determine how best to use these funds, in consultation with the health facility management board. Health workers described that funds were typically used to pay casual labour staff, to carry out minor repairs, photocopy materials, conduct outreach and maintenance and to fill gaps for essential drugs.

"Before [devolution] every quarter we used to have; money is there in the bank, the AIE (authority to incur expenditure) has been brought, it was good. Money has been helping, even if we had small things to be done; we cannot do so much, but the small things that can be done, we do." Health Worker, Female 20

However, many county technical decision-makers felt that community health had been largely neglected by national government, with community health interventions largely being donor driven with little government investment.

"These [CHVs] were neglected people during the national [government]. They were too low in the system." County Health Respondent, Male22

Inequities persisted prior to devolution with resource allocation felt to be due to the strength of local politicians' ability to influence powerful central government officials (see section 4.5.5). As a consequence, areas with well-connected politicians received a high concentration of investment. Meanwhile entire regions within the country, where there was little central government interest, received extremely limited resources (infrastructure, funding or human resources) and became known as

'discipline areas' where poorly performing staff were relocated. As a consequence, service availability and coverage was minimal and quality of services deteriorated within these areas.

"Equity ...in fact that is one of the things why devolution was formed in Kenya, because there was a lot of concentration of resources or even health care facilities in some areas more than the others." County Health Respondent, Male20

Respondents across counties identified a number of common drivers for devolution of health services including the need to improve: equity; accountability; community participation; quality services and to increase the responsiveness to community needs.

4.1.2 Changing distribution of power between national and sub-national levels

Devolution led to a re-distribution of power for planning, budgeting and implementing health services, which resulted in changes at national, provincial, county and district levels (see Table 2). Considerable restructuring occurred simultaneously across the country, which resulted in recognition of two levels of government (national and county), with removal of the provincial level, which some respondents felt had resulted in confusion regarding communication between national and county levels. There was the new creation of the county level, including county executive committee (executive government) and county assembly (political government), with community insights now gained through public participation and county level stakeholder meetings, which include community representatives (fully explained in section 4.2).

"Decentralization has only recognized two layers of government; the national level and the county level, so now resources are only allocated to counties."

National Respondent, Male11

Many technical decision-makers perceived that within this new county government structure, decision-making power had shifted out of their hands and into the hands of policy makers.

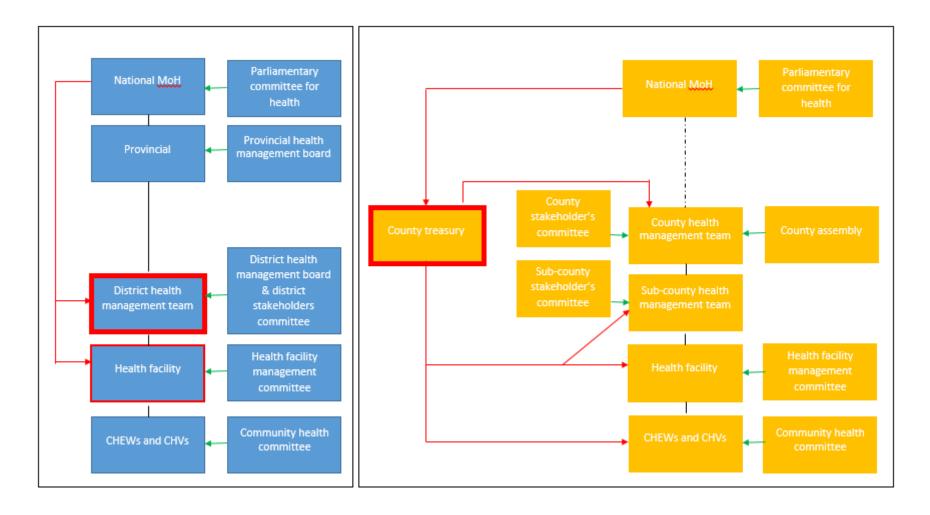
"The issue of health care in my view is no more in the hands of the health care providers, but rather in the [hands of] policy makers." County Health Respondent, Male24

The national role transitioned to one of providing policy guidance; capacity building and maintaining standards as outlined in the Constitution. In accordance with this, the national unit for community health and development re-structured around four sub-units: advocacy; monitoring and evaluation; capacity building and operational research in order to better fulfil its role.

"When you look at the 4th schedule of the Constitution it spells among other functions, that national government is responsible for capacity building and of course for setting policies." National Respondent, Male05

With creation of the county health management team (CHMT) came the need for new county organogram structures, outlining the key players in the technical decision-making team for health. This is presented visually in Figure 23 and described in detail in the text. The former district level has been re-structured to the subcounty level, with sub-county health management teams co-ordinating activities at this level. In most counties while workplans are made at sub-county level, the priority-setting and budgeting now occurs at the county level, with limited/ no budget control at sub-county level post-devolution (see 4.4.1). Structural changes are indicated in Figure 23, based on respondents' descriptions, where green arrows indicate governance, black lines indicate supervision pathways, red arrows indicate flow of funding. The black dotted line between national and county indicates the new relationship between national and county governments. Red box surrounding some boxes indicates structures which receive funding directly from national level.

Figure 23 Pre (blue) and Post (yellow) devolution health structures



The transition from national to county government was originally anticipated to occur gradually over a number of years, but instead occurred rapidly in a matter of months. According to one national respondent, this was felt to be due to the county level's demand for more power and resources.

"The county [drove rapid devolution], not the people themselves but the county management ... and the demand was just basically so they could have more power and more resources." National Respondent, MaleO1

Perhaps as a consequence of this rapid transition and/or due to reluctance to hand over power, national level was perceived by national and county level respondents not to have provided the support which counties required, particularly in supporting and ensuring the quality of health services throughout the transition.

"The fact that we devolved very quickly even the national government was not really prepared in terms of how it was going to influence that process and how it could assure some of the critical issues in health did not suffer, like quality for instance." National Respondent, MaleO1

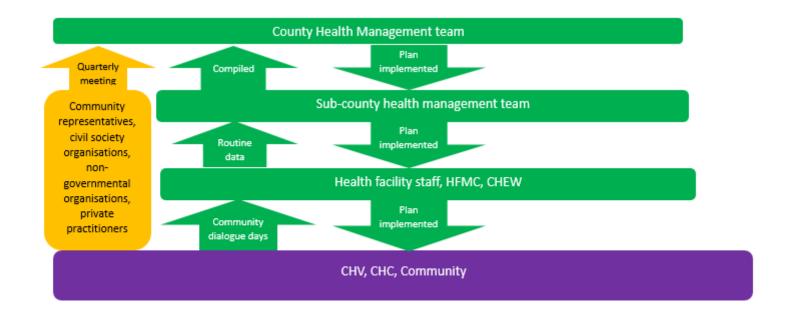
Budget management shifted from predominantly national (with some district) control to county control. In an attempt to prevent deepening inequalities, national government distribute funds to counties based on principles of fiscal need, using a combination of equality and equity within the allocation formula. National government have committed to sharing at least 15% of national funds with counties through these equitable funds based on the commission for revenue allocation formula (see section 2.4.6). Once funding reaches the county, decision-makers at that level are able to determine how those funds are allocated between departments and what percentage is allocated to health.

"Now when money goes to the counties we say it has no colour, so you actually don't know how much will go into health and so decisions are made at the county level to decide what money goes to health." National Respondent, Male05

In addition to the equitable share, the 14 most marginalised counties receive an equalisation fund from national government. Although, at the time of this study almost three years post devolution the fund had not as yet been received by the counties (see 2.4.6). Counties can also apply to national government for further additional conditional grants (for carrying out pre-determined and agreed activities, such as support for level five hospitals). In addition to the funds provided from national level, counties have locally generated revenue from taxes, user-fees, donor funding etc. The amount of locally generated revenue varies considerably between counties. In some counties, there were extremely limited locally generated funds, with the result that any delay in funding from national level created considerable knock-on delays within the county. However, in other counties, particularly Nairobi, the locally generated funds were described as exceeding those received from national level and so any delays in receiving national funding could be buffered by use of the locally generated revenue. Findings on the changes in the district (subcounty level) following devolution are explained more in section 4.4.1.

4.2 Who are the actors that set health priorities within a county?

Respondents identified five main actors who should play a role in setting priorities and making decisions for health at county level. Some of these actors play a decision-making role for non-health responsibilities as well, but health is considered an important piece of their decision-making role. The level of influence of each of these five groups varied widely between counties, relating to the differing degrees of power held and ability to influence decisions (see section 4.3.2). These five groups of actors and their interconnected relationships are built up in a step-by-step process as indicated in Figure 24 to Figure 27 and are colour coded as follows: Technical decision-makers (green); governor and county executive committee (CEC) (blue); members of county assembly (red); other county stakeholders such as NGOs, selected community representatives and other line ministries (yellow) and any community members (purple). Colour of arrows correspond to actions carried out by the corresponding colour of actor, i.e. green arrows indicate actions carried out by technical decision-makers.



4.2.1 Technical decision-makers

Technical decision-makers at county level (green boxes in Figure 24) were guided by national health policy, strategies and the Constitution formulated by national Ministry of Health staff and national law makers. The main technical decision-makers at the county level typically described by county level respondents included members of the county health management team (CHMT), including: director(s); deputy director(s); other CHMT members such as heads of health departments and other non-CHMT health workers in the county¹⁴. In some counties, county executive committee member and chief officer for health were also considered technical decision-makers, particularly if they had health-related background prior to working in these positions. However, CHMT members from other counties viewed them more in terms of their political negotiation role within the county executive committee (blue box in Figure 25). Each of these key positions will be described in more detail. The establishment of a team of technical decision-makers at county level to guide priority-setting processes occurred after devolution. Delays in recruiting key technical decision-makers were described by respondents at both national and county level, which hindered ability to fulfil responsibilities as intended. In some cases, there was a lack of clarity regarding roles and responsibilities for those in key positions.

County executive committee member for health: The county executive committee member for health plays a political role negotiating between the health team (green, see Figure 25) and the county executive committee (blue, see Figure 25). In addition, he/she is responsible for coordinating development of the annual workplan and budget for health, in collaboration with the county health management team in eight out of ten counties. In two counties (where there had been a relatively recent change in the county executive committee member for health and the chief officer for health) respondents identified the director for health as leading the planning process.

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¹⁴ The members of the CHMT varied between counties and not all counties had all respondents described here.

Chief officer for health: The chief officer was typically described as the main accounting officer for health, responsible for supporting development of the budget, including appropriate costing of planned activities. He/she supports the CHMT with budgeting (green box in Figure 24), and may be invited to join the county executive committee for meetings and discussions although he/she is not a member of this committee.

Director for health: The director for health is a member of the county health management team (green box in Figure 24) who provides technical insights to guide the health team while setting priorities. He/she was often supported by one or more deputy directors and a health administrator (although these roles were not present in all counties, where department heads reported directly to the director rather than a deputy).

County Health Management Team: The county health management team (CHMT) is composed of the various department heads and experts within health who provide guidance to the person leading the process (typically the county executive member for health).

"There is something called county health committee management team... in charge of the entire county. It's a group of different experts in the health sector with many representatives from malaria, HIV, public health, nursing officer in-charge, maternity department, almost every area. ... who sit down and they inform you that this is the way to go." County Health Respondent, Female60

Sub-county, health facility and community level health workers: The rest of the technical decision-makers included health workers at sub-county, health facility and community level who developed annual workplans for their respective sub-county, health facility or community unit. These respondents frequently described feeling excluded from the decision-making process at county level, regularly highlighting more limited participation than county level respondents.

"So in a way we are feeling there is a gap. It [decision-making] is happening at the county level but they are not involving the most important people... We

are not involved in decision-making nowadays in the name of system of the county government." CHEW, Male07

Officially, priority-setting for annual workplans and budgets for the health facility was guided by a template provided by the county and typically carried out during quarterly review meetings. These meetings were led by the in-charge and attended by the health facility management committee. The committee played a governance role (similar to the role held prior to devolution), providing guidance about community problems, assistance in problem-solving and oversight of budgeting and follow-up of planned activities. At community level, the community health extension worker (CHEW) was described as being responsible for setting priorities for community health activities along with the community health committee (CHC) and community health volunteers (CHVs). This was then shared with the health facility in-charge, who should include community health activities within the health facility plan and budget, following consultation with the health facility management committee. Once drafted the annual workplans for health facilities should be harmonised at sub-county and county level.

"They (county level) normally give us a template whereby we involve the healthcare workers in the health facilities and the sub-county health management team in various departments to make the annual workplan....We involve the in-charges; we involve them in making the annual workplan and then we consolidate for the sub-county." Sub-county Health Respondent, MaleO7

However, it was unclear the extent to which plans from lower levels were retained within the county workplan and budget. Respondents from these lower levels frequently described that the funds received did not match the budget which they had submitted, which created challenges for implementation of health priorities at community and facility levels and led to feelings of exclusion from decision-making processes (see section 4.4.1). This led to recommendations for decentralisation of annual planning and budgeting to lower levels.

"I think maybe in terms of decision-making in terms of the annual workplan and budgeting ... I think probably we just don't centralize and bring it nearby." Health Worker, Male13

4.2.2 Other county stakeholders such as NGOs, private providers and members of other departments

Technical decision-makers across multiple counties described calling together stakeholders for review and needs assessment (see yellow box in Figure 25). Typical invited stakeholders to these meetings were: Heads of divisions within health; NGO partners; private providers; heads of related line ministries in the county and community representatives. In some counties members of the county assembly who sat within the health committee for the county assembly were involved in stakeholder meetings. Most technical decision-makers within the counties described holding meetings on a regular basis (usually quarterly, although in some counties the frequency of these meetings has reportedly declined considerably since devolution). In contrast to the technical decision-makers' descriptions of regular stakeholder meetings, gender and children's office representatives across counties, frequently described far fewer interactions with the health team around decision-making postdevolution compared with pre-devolution. In some counties the gender and children's office representatives described having been invited to participate during the development of the County Integrated Development Plan or strategic plan, but were often not invited on an annual or quarterly basis. The majority highlighted the

4.2.3 Community members

need for strengthened collaboration.

The community were described by respondents from county and sub-county levels as playing a vital role in priority-setting in every county (represented by purple box in Figure 25). However, community members themselves did not commonly describe a priority-setting role when asked to describe their responsibilities relating to health. Mechanisms described to collect community inputs and public feedback included: routine community health activities such as community dialogue days; findings from routine supervision activities (although not all counties mentioned this as a means of

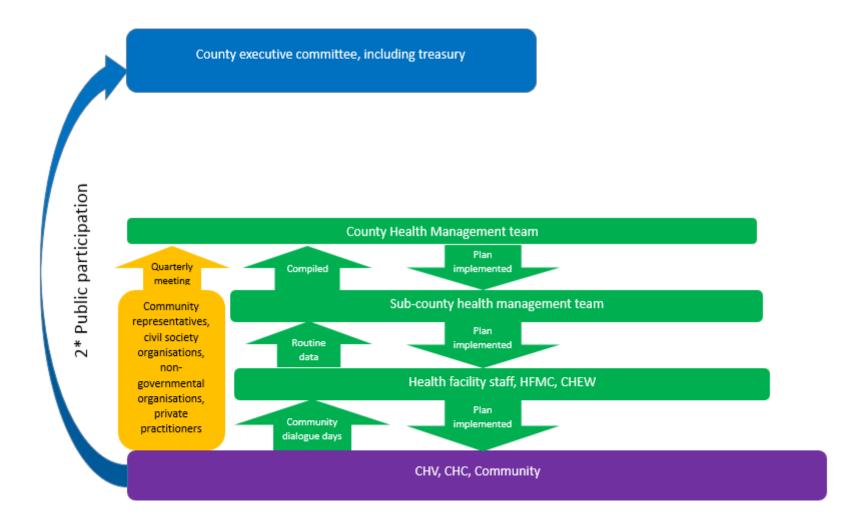
identifying priorities) and traditional *barazas*, where chiefs played a key role in mobilising attendance. Community representation in community health committees and health facility management committees was commonly described especially by technical health decision-makers (particularly facility level), with these committees playing a governance role in overseeing health facility finances and creating a bridge between communities and health facility staff (see 4.2.3).

"Basically their (health facility management committee) issues are one; arbitration between either the technical and the community, if there are issues they should look into and see how to solve them, they also look in the financial matters of the facility, they are also involved in the development matters of the facility." Sub-County Health Respondent, Male09

However, community health committees were not functional across all community units, as two out of eight of the community units where REACHOUT data was collected, did not have a functioning community unit at the time the QI baseline was conducted. Other forms of community participation described by county level respondents such as dialogue and action days, were reported by CHEWs and CHVs to have low community involvement or to have stopped completely.

Public participation meetings held by the county executive committee and county assembly as part of the annual planning and budgeting process were critical avenues for learning community needs and priorities. There were a wide range of benefits and challenges associated with the public participation process which will be more fully described in section 4.3.5.

Figure 25 Key players in decision-making process 2



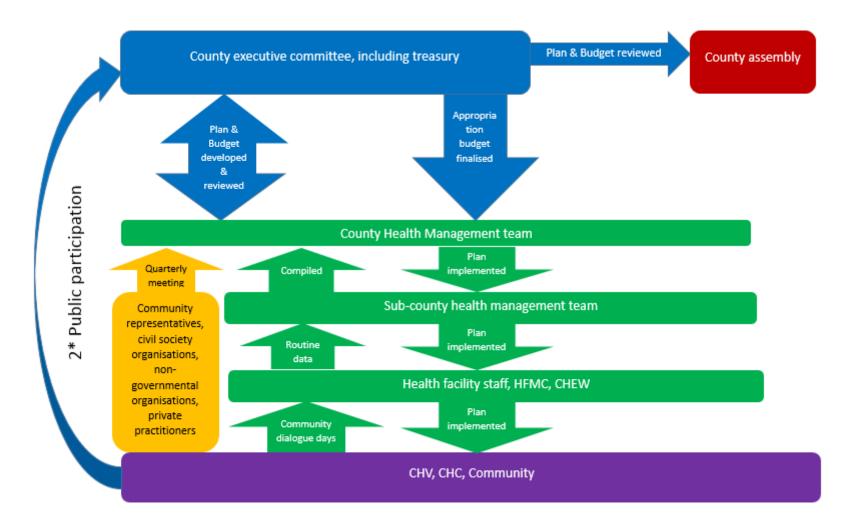
4.2.4 Governor and county executive committee (CEC)

The county executive committee (also referred to as the county cabinet), meet frequently to identify leading priorities for the county (they are indicated by blue in Figure 25). This committee is headed by the governor, deputised by the deputy governor and includes the county executive committee members for ten departments within the county, including health. The chief officer for health may also be invited to attend, although he/she is not a member of the committee.

The county executive committee is guided by the priorities identified in the county integrated development plan (CIDP), a five-year plan which outlines the vision and goals for the county, along with planned activities needed to achieve these goals. The county executive committee members for all ten departments, along with the governor (all governors at the time of the study were male) and his deputy, identify the leading priorities for the county for the forthcoming year. This follows presentation and justification of priorities and budget by the respective county executive committee members (including health) to the rest of the county executive committee. Based on these negotiations, the ratio for allocation of funds is identified between departments. The amount of funds allocated and the approval of priorities largely depends on the negotiation skills of the county executive committee member in presenting their case to the other committee cabinet members.

"Yes a lot depends on the CEC and the chief officer in charge ... for example we added more money to health after they (CEC and chief officer) argued their case that this amount is not going to be enough because of ABCD and then the governor was saying 'fine we understand, we want to move away from this to this, so can we look for money from other departments'." County Non-Health Respondent, Male45

Figure 26 Key players in decision-making process 3



The county executive committee member for finance was described as a critical member within the county executive committee, who estimated fund allocation from national level based upon previous trends. The county treasury also provides guidance and assistance to the departments in developing budgets. County treasury, along with other county executive committee members, were described as responsible for carrying out two public participation meetings with community members to report the previous year's progress and to identify community needs and priorities for the future year (see Figure 26).

4.2.5 Members of county assembly

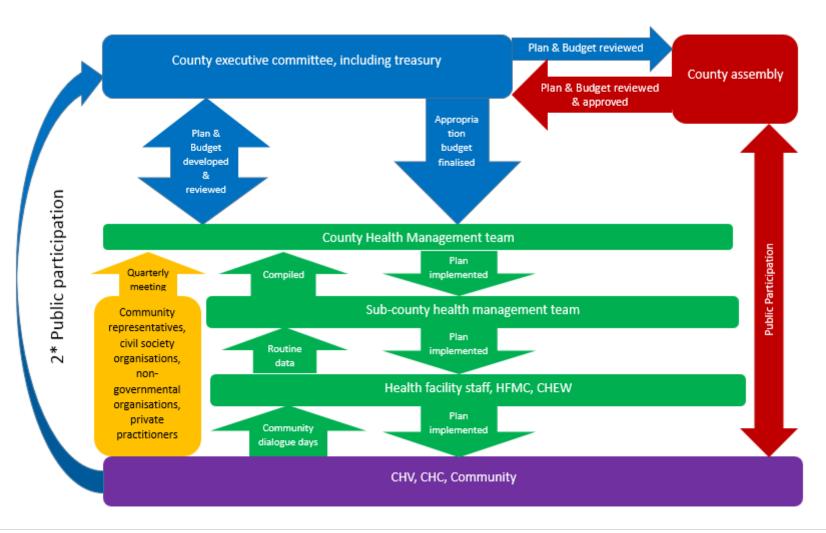
The members of county assembly, known as MCAs are locally elected politicians, each responsible for representing a ward (approximately 20,000 to 100,000 people) (indicated in red in Figure 27). Members of county assembly were termed as legislators and described three key governance roles associated with their position: legislation, oversight and representation.

"My role within the county as the member of the county assembly, I do legislature. That is making bills and policies which are suitable for our county and our people. I also do oversight to make sure that the money given to the executive is well used. There is no mismanagement of funds so that it's going to the normal citizen ... to do the job it's supposed to do. I also represent my people who have elected me because they cannot all come here to see the governor and to see the executive, so I normally tend to what belongs to my people in the ward and in this County so that we legislate what the people want. So I do the representation of the people, those are the three main roles." County Non-Health Respondent, Female46

There are a number of committees within the county assembly, each with a differing area of oversight. Regarding health, the health committee and budgeting committee were most commonly described as playing a health-related role for priority-setting. The health committee play an oversight role by visiting health facilities to monitor health activities on the ground. Although somewhat unclear, this generally includes visiting the health facility to check conditions and to ensure staff are in attendance

and identify challenges, such as drug stock-out. Some health workers felt these monitoring visits were problematic as some members of county assembly attempted to technically supervise health workers, who described feeling frustrated that members of county assembly without clinical knowledge were telling them how to do their job. Budget committees were involved in reviewing the health budget and conducting public participation to validate what was included within the county plan and budget. There were a wide range of challenges raised surrounding the influence of politics on the priority-setting process which will be identified further in section 4.3.2.

Figure 27 Key players in decision-making processes 4



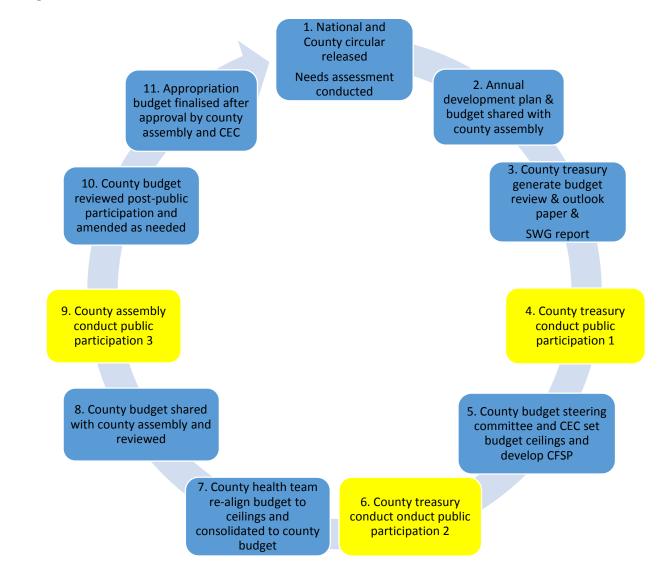
4.2.6 What are the processes for identifying priorities at county level?

The priority-setting process now happens at the newly created county level and is centred around the annual budget calendar, which starts on 1st July and ends on 30th June each year. This official process is carried out by the actors (identified in section 4.2), with health being one of ten departments included within the process. The available budget for counties to use is based on the equitable fund received from national level, locally generated revenue and equalisation fund (where applicable). Conditional grants and vertically funded donor activities are not included in the general budget-making process, due to pre-conditions associated with use of these funds. Respondents described twelve steps relating to development of the health plan and budget as they should be carried out. These are highlighted in Figure 28 and explained below (yellow boxes highlight the three public participation meetings which occur as part of this process).

- 1. Following issuing of guiding national and county budget circulars, the sectoral working group for health (includes members of the county health management team (CHMT), community and partner representatives) meet to conduct a needs assessment and develop an annual development plan (12 month abstract from the county integrated development plan (CIDP) a five year plan which outlines the overall vision and strategy for the county) and a sector working group report, which assesses progress made for health, including successes and challenges, during the previous 12 months.
- 2. The annual development plan and budget is shared with county assembly, who review it to confirm whether it is in agreement with the CIDP.
- 3. The county treasury generate the county budget review (for the past year) and outlook paper (for the next year). The outlook paper includes activities planned within the comprehensive five year CIDP vision and plan for the upcoming year and also carries forward those activities planned and budgeted, but not yet completed during the previous year. The county treasury shares this document with the county executive committee cabinet and then with the county assembly.
- 4. County treasury and other departments (including health) share the county budget review and outlook paper and the sector working group (SWG) report

- with the community through public participation to gain feedback on proposed outlook.
- 5. During February the budget steering committee and county executive committee cabinet meet to set the budget ceilings based on expected non-conditional funds and allocate the percentage of the county budget to each department. This is used to generate the county fiscal strategy paper.
- 6. County fiscal strategy paper shared with the community during a second public participation process, by the county treasury.
- 7. Following this the health department review their budget to re-align it with these ceilings, before it is consolidated by the county treasury in the county budget by 30th April.
- 8. The county budget is shared with the county assembly who typically divide the budget based on the department, with the health committee in the county assembly reviewing the plan and budget for health department. The health committee submit a report of their review to the budget committee.
- 9. The county assembly budget committee conduct a third public participation with the community, with the purpose of validating the plan and budget and identifying any community priorities which are not reflected in the budget.
- 10. Any disagreements regarding the plan and budget are resolved through meetings between the county assembly health committee, budget committee and the county executive member for health. Budget is shared and discussed by the full county assembly.
- 11. An amended budget is shared by the county assembly with the county executive committee. Once it has been approved by both the county assembly and the county executive committee, it is finalised as the appropriation budget for the following financial year. Ideally this should be completed by 30th June (the close of the financial year).
- 12. (Optional) In the event that the budget has not been approved by all parties by the end of the financial year, it is necessary to conduct a 'vote on account' with the purpose of ensuring that essential services can continue, while budget negotiations continue.

Figure 28 Annual budget calendar



4.3 What influences the selection of priorities?

County decision-making (Figure 29) is bounded by the national Constitution and county integrated development plan (orange), within the limits of the budget ceiling determined at county level and resources available (purple), provided minimum of 30% of funds are development focused, with use of conditional grants being used by the national level to encourage suitable investment in health priorities. Priority-setting should be guided by county leaders (pink), with priorities made based on local evidence generated through routine data, discussions with health workers, cost-effectiveness analyses to plan priorities which ensure the achievement of health targets within the county health strategy document (green). Public participation meetings have been introduced to seek citizen's opinions and priorities (blue) and accountability mechanisms established (yellow).



Figure 29 Factors which should influence selection of county priorities

However, there was a common acknowledgement that priorities were influenced by factors other than those described in the official process.

"...as technical people we always imagine that technical reasons would be so compelling to drive investment reasons, but that is not really the case. You know when you do your political economy analysis, it really tells you a different story, that there are different incentives for investing in health." National Respondent, Male05

Power and politics were discussed widely and animatedly during interviews, across counties and across health systems levels and were commonly acknowledged to influence priority-setting and budget allocation. Priorities need to be both politically and technically acceptable.

"Every decision you are making must meet the technical [point of view] and it has also to meet the political point of view." County Health Respondent, Female54

Priority-setting in Kenya takes place across contexts where graft and corruption may have become commonplace; where community opinions have been neglected for so long that citizens no longer feel participating in discussions will change anything; where leaders have been elected through patronage, leading to expectations of advantage for those politically affiliated with the successful leader. The new county authorities have differing values and levels of capacity, both within and between counties. There has been a lack of clear and transparent guidance and criteria from national level to guide the priority-setting process; a lack of clarity surrounding roles and responsibilities; unclear process for how priorities are weighed and compared; differing approaches to priority-setting and to managing the politics surrounding this; failure to provide communities with easily interpretable information about the benefits and challenges of potential choices; manipulation of the process by opportunistic actors and disregard for accountability mechanisms. As a result, power and politics can become more influential than technical knowledge and evidence, which adds to the complexity within the priority-setting process (Figure 30), leading

to selection of 'high-vote' priorities with misalignment of distribution of interventions in line with tribal and political affiliations (red) (Figure 30). Lines of accountability can become blurred and opportunities for manipulation increased. In some cases, this has led to limited support for health promotion and disease prevention at the community level, with distortion of the provision of health services along political or tribal lines. As a result, health promotion and public health benefits associated with community health are not fully realised, with the consequence that priorities are distorted and communities have not benefitted optimally from devolution. Seven key themes were identified by respondents, which influenced the selection of priorities (key documents and national influence, county leadership values and skill, use of targets, evidence and context, resource availability, community voice and sharing information, power dynamics and accountability mechanisms) which will now be outlined in more detail.

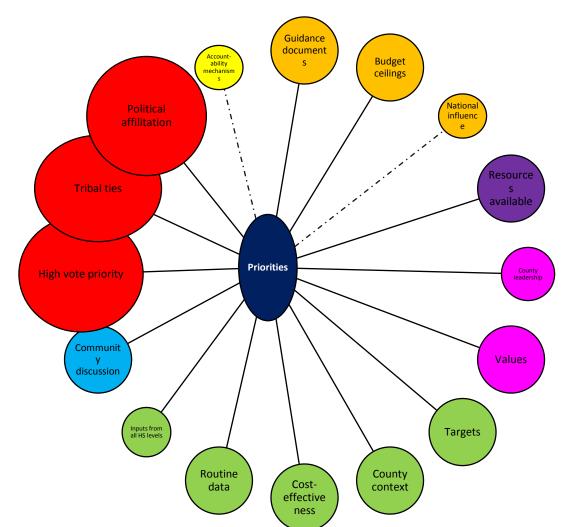


Figure 30 Factors which influence selection of county priorities in practice

4.3.1 Key documents and national influence

Guiding documents: The selection of priorities at county level was guided by a number of key documents from national level (health policy, free maternal health, Constitution) and county level (five-year county integrated development plan, county strategic plan for health). The county integrated development plan was written by county authorities in the first year after devolution (2013/2014) and should align with national policies and Constitutional standards. It outlines the leading goal and targets for the county which each annual workplan and budget should align with.

The governor holds overall responsibility for achievement of targets in the county integrated development plan, with the county executive committee member for health responsible to deliver health targets according to the health performance contract (see section 4.3.3). Many of the respondents described the process for development of the county integrated development plan and strategic plan for health as having been participatory in nature, involving community participation and involvement of stakeholders from other ministries within the county and partner organisations. Partner support for activities and vertical programmes was included within the county integrated development plan, with planned activities included in annual workplans, but excluded from general county budgets. Partner funding for vertical programming was typically tied to pre-specified activities, rather than entering the general county treasury budget for determination and allocation as identified by county authorities. By contrast to county level respondents, few respondents at sub-county and lower levels described using guidance documents to guide them in developing their annual workplan, although use of these documents was not explicitly probed. A number of respondents at these levels described using templates provided by county level to guide them.

National authority's ability to influence: National government's ability to influence decisions made regarding health services has shrunk considerably post-devolution. As one national respondent identified, their influence must now be mediated through financial means, such as encouraging investment in selected activities through conditional grants (which are designed to support national priorities and may act as a pooling mechanism for donor funding).

"Decision-making has been devolved to the 47 semi-autonomous county governments. So, in a sense the role of the national government has really been reduced to providing policy guidance on health... Now the national government cannot really influence so much what the counties do with that money. They can only influence if they have a separate pot of money and say ah 'we have this pot of money that is extra can you use this specific pot of money to influence this particular health outcomes?' And so it's been able to do that through the conditional grants." National Respondent, Male05

Communication channels between the two layers of government were felt to be unclear following the restructuring of the health system, by some respondents at both national and county levels. For community health the confusion which followed devolution was felt to have led to loss of earlier progress.

"... national level priorities and sub-national priorities. Getting that in sync is usually a challenge." National Respondent, Male05

National level's loss of ability to influence county government was identified as a challenge for community health following the recent development of a new scheme of service for community health extension workers, along with a revised community health strategy (see section 2.4.4). Many technical county level respondents described having introduced parts of the strategy, such as reducing the number of CHVs from 50 to 10 per community unit, as this was felt to be a much more manageable number to provide with stipends from county government budgets.

"As it was one community unit has fifty community health volunteers but as it is now it is being restructured such that one community unit can have ten community health volunteers with the purpose of the county government be able to give them monthly stipend." County Health Respondent, Male52

However, while reductions to the number of CHVs were made, no respondent from any of the counties described having increased the number of CHEWs from two to five per community unit. The high costs for CHEW salaries was highlighted as problematic by national and county respondents. Reducing the number of CHVs, without a concurrent increase in the number of CHEWs, may have a detrimental effect on the quality of community health services.

"HRH has become a very big issue, while the standards before were two community health extension worker; one between the facility, one between the community, that was hardly the case because counties don't have the salary to pay that. So it might become more challenging as we are moving to five." National Respondent, Female08

One area of uncertainty following devolution, regards the difference between adapting the strategy to the local context or abandoning the same. The degree to which counties must/ must not implement community health according to the national strategy remains unclear. Some counties have chosen to make extensive revisions which, while based on the community health strategy, also include changes to its fundamental structure, such as removal of the community health committee. In order to understand this more fully a case study (case study 1) will present findings regarding how one county has chosen to modify and introduce a new approach to community health.

Case study 1: A new approach to community health post devolution

County context: A rural agrarian county, with high levels of malnutrition, relatively low coverage of skilled delivery and immunisation compared with the national averages and higher than average poverty incidence.

Analysis: Following devolution, the county reviewed implementation of the community health strategy to date and found uneven coverage centred around urban areas, as a consequence of partner NGO preference. There was high attrition of CHVs following sudden partner withdrawal. In response, the county determined to develop a new approach which will seek to address these challenges.

New approach: This new strategy will seek to extend health service coverage, by ensuring that CHVs will be recruited from all villages, including the most remote areas. A multi-sectoral community level approach is planned involving a range of ministries. Stronger sustainability is expected through provision of stipends for CHVs. There are expectations that the new approach will bring improvements in services for vulnerable groups, through provision of funds to be managed by the CHV to ensure provision of necessary resources, such as wheelchairs etc. to those within the CHV's community.

Potential challenges: Some respondents from county level and almost all at lower levels felt excluded from the decision-making process, with no opportunity to raise concerns or seek clarification. Existing CHVs have become disillusioned, after promises of a stipend have remained unfulfilled. Potential future overwork for CHVs following reduction in the number of CHVs from 50 to ten (or less) per 5000 population. Recruitment of CHVs will be carried out by the public service board, not through community selection. This will mean that current CHVs may not be recruited as CHVs in the new approach, which has led to discontent among former CHVs who have devoted many hours to working as CHVs over the past years. Communities may have concerns about dismissal of CHVs they have previously selected.

Departure from national guidance: According to national guidance, a functional community unit must include CHEWs, community health committee and CHVs. However, respondents from sub-county level who hold responsibility for roll-out of the new approach expressed uncertainty about what (if any) role there will be for CHEWs under the new approach, whether those currently working as CHVs will be retained following introduction of the new approach and whether there will be any role for community health committee governance structure within the new approach.

National government's fulfilment of its role: The national level within Ministry of Health now have responsibility for capacity building, as mandated by the Constitution. However, several national level non-government respondents described inadequate provision of capacity building in decision-making by the national level, along with hostility to accept this at county level, who may not deem it a priority.

"...national government is responsible for capacity building and of course for setting policies, but you will see as we transitioned initially there was a lot of mistrust between the two levels of government [national and county], and I think what happened ...I think national government took a back seat ... So they've not done a great job, because they, by and large are supposed to provide guidance and some of this guidance would actually help in the decision-making process, and I think there are reasons for that. I think one, there are capacity issues at the national level itself ...So I have not seen an organized way in which national government wants to engage the counties to build their capacity." National Respondent, Male05

At the time of devolution national level community health respondents felt they did not have the needed capacity to advocate for community health approaches with county authorities. Needed community health specific policy and guidance documents either did not exist or were outdated at the time of devolution. However, in the years since devolution, respondents from national level felt their capacity has been built since attending training and new policy/ guidance has been developed. The national community health unit have conducted advocacy meetings with county technical decision-makers from almost all counties, to encourage counties to plan and budget for community health activities. Ultimately it is the county's decision whether they choose to invest in community health, which may relate to their level of capacity and level of political interest.

"So we expect the counties to actually take up this [community health] approach... [but] they are independent, you can't force them." National Respondent, MaleO2

Perhaps in response to the delayed advocacy for community health from national structures, the county executive committee forum, a platform for county executive committee members from all counties to meet together has provided an opportunity for county executive committee members with an interest in community health approaches to promote awareness with their counterparts around community health, with one respondent having perceived an increasing investment in community health in more recent times.

"We also have this community strategy as one of our priorities areas that we discuss every time we meet within the [CEC] forum." National Respondent, Male10

Opportunity for improvement: A new loan provided by Japan International Cooperation Agency (JICA) through national government may provide a potential solution to expanding community-based primary health services. It plans to use results based financing to encourage health workers to allocate funds to supporting CHV activities, which encourage uptake of key services such as immunisation and skilled delivery at the health facility.

"..facilities began to realize... they cannot perform against those indicators, if they exclude the community health workers. So they began to put a portion of their monies into support activities." National Respondent, Male07

4.3.2 Priority-setting, power, values and leadership capacity

The county government is an entirely new structure, created following devolution. As a result, authorities (county executive committee, county assembly and county health management team) within the county are largely operating in new territory. To further complicate this there is lack of clarity about roles and responsibilities for priority-setting.

Leaders therefore need to negotiate for power alongside the roll-out and enforcement of priority-setting and service implementation. Power to influence priorities was typically viewed as remaining in the grasp of a few key decision-makers — the governor, the county executive committee members, the chief officers, the

members of the county assembly and to varying degrees technical decision-makers at county level. In order to better consider how power was displayed within county priority-setting for health, Veneklasen et al. (2002) expressions of power was used as a framework to guide analysis of power for priority-setting at county level following devolution (Table 10).

Table 10 Forms of power and their expression in Kenya

Form of	Definition	Expression in Kenya
power		
Power	Power is viewed as 'zero-sum' where the more power one person has, then the less the other has. Having power involves taking it from someone else and then using it to dominate and prevent others from gaining it.	Power over was typically exerted by those at the top of the institutional hierarchy within the county, by the governor, the county executive committee member for health and the members of county assembly, with some county executive committee members for health adopting an authoritarian approach, limiting sharing of knowledge and information. Their sources of power included holding a position of authority, information and control over budgets forming a visible form of control of power. Patronage norms led to misuse of power in some settings, with resources channelled to voters/ citizens from similar tribe to the more 'powerful' leaders. Health workers and actors at sub-county level were often not invited to attend priority-setting meetings and access to knowledge was often limited as health workers were unaware of how the work plans and budgets submitted were received by county level and how differences in budget (submitted versus received) occurred. Community members were not informed of all the choices available to them, or of the benefits and disadvantages of those choices, due to limited access to knowledge. Hidden forms of power were exerted in some instances, e.g. in one county the county executive committee for health held public participation meetings at short notice in order to limit participation of actors and who is involved in making decisions (according to the perception of member of county assembly).
Power with	Based on mutual support and collaboration to build collective strength. It helps build bridges and promote more equitable relations	Mechanisms for power with have been introduced according to the Constitution, e.g. public participation meetings. However, failure to address norms which limit power within e.g. patriarchal norms, have led to limited active participation from many citizens, leaving these forums open to elite capture and limiting opportunities for power with. Overall, most county level actors have made limited attempts to share priority-setting power with actors at other levels. Exceptions include: one county where county level actors have shared power with actors at other levels by creating laws for the hospital to maintain control of facility improvement funds, with plans for broader decentralisation to lower levels beyond the county; in case study two the CEC sought to reduce the power imbalance by sharing knowledge with actors from community level to county level, finding common ground and understanding among the interests of actors from all levels.

Form of	Definition	Expression in Kenya
power		
Power to act	Refers to the potential of every person to shape their life.	Outside of county level technical and political actors, other potential decision makers such as health workers, sub-county actors and community members appear to have limited power to act, with limited meaningful participation. Particularly for sub-county and hospital actors there has been a disempowerment with loss of decision-making power at these levels.
Power within	Relates to a person's sense of self-worth, values and self-knowledge, having the capacity to have hope and affirming dignity and fulfilment.	Power within relates closely with the intersectionality analysis (see section 5.3.1) and how forces and structures, such as patriarchy and patronage remain unaddressed. As a consequence there has been limited scope for empowerment and increasing citizens power within to enable them to fully engage with priority-setting (see power with above).

Values: Priority-setting was guided by the values held by decision-making actors, who often mentioned the Constitution as guiding these, perhaps indicating that they were in some way moderating their response to align with what they felt was expected of them. The most frequently discussed values by county level respondents were equity, efficiency, accountability, transparency, integrity and rights-based approach. The members of county assembly tended to emphasise the need for an accountable rights-based approach to priority-setting, while the technical decision-makers emphasised the need for equitable, efficient and evidence-based approaches. To a lesser extent quality was also described as a priority, although it was not always considered when setting priorities and was not widely described by respondents.

Technical leadership style: While leadership styles have always varied, this has become more critical post-devolution due to the changing levels of power within the new county structures and lack of clarity surrounding roles and responsibilities and priority-setting processes. The county executive committee member for health was most frequently described as leading the priority-setting process and playing a key role in negotiating between decision-making actors when priorities differed (see 4.2.1). As a result, in a county where the county executive committee member for health has an authoritarian leadership style, it is likely that the priority-setting

process will be less participatory, compared with a leader who recognises the value of other actors' contributions. In three counties, respondents described a county executive committee member for health (either present or recent past) who adopted an authoritarian or dictatorial approach to decision-making, with staff feeling disrespected and demotivated as a consequence. In these counties other members of the county health management team had limited knowledge about what, how or why decisions have been made. There was little opportunity to question or challenge decisions, which in the worst scenario was felt to threaten the very delivery of services.

"I also think there is the power balance. There [are] also some powerful positions ... yet the decisions you (the person in power) make are not good, and I am below you and I know, we are supposed to do Y, yet you are saying we should do X and because of that power relations there is no way I am communicating with you without the fear of losing my job, then we make the wrong decisions." County Health Respondent, Female69

Technical leadership capacity: Technical leaders within the county need to have an understanding of health and appreciation for preventive, promotive, rehabilitative and curative services; skills in critical analysis, planning and management, political engagement, budget planning and cost-effectiveness analysis. Lack of capacity in these areas was identified as a potential risk to the priority-setting process by national and county respondents, with limited capacity felt to lead to selection of inappropriate priorities and to threaten accountability. In general, national level respondents were more critical of the capacity and leadership skills available at county level, than the county level respondents themselves. One formerly marginalised county self-identified a lack of capacity following devolution and has taken a pro-active approach by empowering technical health decision-makers through leadership training. However, this was an isolated example as county level respondents from other counties also identified capacity gaps, but limited actions to address these were described. Devolution was felt to have occurred too rapidly, with insufficient planning and capacity building by national level to prepare county leaders

for their new role, which in some cases was felt to have led to inappropriate prioritysetting.

"...the health sector which was devolved without any clear strategy or thinking; they just woke up and devolved. So decision-making there has been influenced in the sense that counties now have these big role of delivering health care services which is good, but are they ready? Often they are not ready. From what I hear the capacity is not there, their priority is wrong sometimes and so decision-making sometimes gets messed up; we are ending up with decisions that will not necessarily address the health issues that we have." National Respondent, Female 12

The level of health experience among key health decision-makers, including county executive committee members for health and chief officers for health varied widely, from no prior experience, to extensive public health experience, to purely clinical experience. Other technical county level respondents (such as directors and heads of health departments) considered prior health experience for the county executive committee member for health beneficial, with lack of experience felt to create challenges for ensuring technically correct priority-setting. Even those with a purely clinical background were at times perceived not to have adequate public health planning skills, leading to neglect of preventive health and overemphasis on curative services. For community health, the focal person and the county executive committee member for health were identified as the driving forces behind prioritisation (or not) for community health. However, given that not all county executive committee (CEC) members valued public health and/or community health approaches, the community health strategy focal person could be facilitated or hindered by the degree of support from this more 'powerful' decision-maker.

"You will find some counties who have very good focal persons. They really want to do work, but the CEC keeps on blocking stuff because maybe they are interested in other things." National Respondent, Female08

There was a need identified for capacity building those leading the process in critical analytical thinking, communication and strategic planning. In two counties the chief

officer, despite being the accounting officer for health, did not have appropriate budgeting skills resulting in inadequate budget allocation for recurrent costs.

"We do not have people who are very good at budgeting and you know in budgeting you have to test each and every programme and see ... does this one give us more value for money than the other one?" County Non-Health Respondent, Male45

Where budget allocation and cost-effectiveness skills were absent priorities were set according to values other than efficiency. For example, in one county a new dialysis unit had recently opened (which would benefit a small number of rich patients who could afford to travel to the county headquarters to pay for dialysis). Meanwhile no funds had been allocated for community health activities, which could potentially benefit everyone in the county.

"Basically the budget is basically skewed to favour curative, because in the recent past there has been a lot of talk about investing in hospitals, improving infrastructure within the hospital facility buying dialysis machine, ... and very little has happened to preventive." County Health Respondent, Male63

County assembly leadership capacity: Concerns were raised by national and technical county decision-makers, about the seeming mismatch between the limited level of education and capacity and the degree of power wielded by members of county assembly (red box Figure 27) in some contexts. On a few occasions it was even self-identified by the members of county assembly themselves. This was felt by some to be due to the fact that community members at times selected their politicians along tribal lines, rather than based on their capacity. At the community level one key informant acknowledged that at times leaders elected may be selfish and not have the needed health knowledge or decision-making skills.

"Sometimes we can choose somebody who is selfish and we didn't know when we were electing him/her." Community Key Informant, Male03

This was particularly problematic for community health, as county advocacy meetings held by national level engaged technical decision-makers (who were

typically knowledgeable but may lack power), but excluded local politicians (who may lack knowledge but hold power) (see 4.3.1). In a minority of counties members of county assembly were coming to recognise the value of community health strategy. However, despite this recognition county assemblies were often unable (perhaps unwilling?) to prioritise community health with the required funds to ensure it became successfully operationalised, instead favouring other more tangible interventions.

Political preference for 'high vote' priority: Politicians, including the governor and the members of county assembly, were perceived by county technical decisionmakers and national key informants to be motivated to a large degree by their own political aspirations. This focused around the desire to secure votes during election, or to repay promises made as a result of having used patronage to mobilise support during earlier election campaigns. This was felt to have led to preference and overinvestment in visible and popular priorities, such as ambulances and infrastructure, over less visible, but often more beneficial priorities such as public health interventions or quality improvement. As a result of the lack of clear guidance for how to resolve priority differences between actors and as a consequence of the high levels of power wielded by politicians, this often resulted in distortion of priorities (see Figure 30). Some senior politicians at times demanded changes, without providing justification or explanation to the public. As a result of power imbalance technical decision-makers in these instances described feeling unable to turn down requests, leading to review of budgets and workplans to accommodate the unplanned for intervention, threatening accountability (see Figure 30).

"Well just to be frank with you sometimes it is not easy for us to say no okay [to politicians]... my seniors here are politically appointed so at any time now they can change in the cabinet level of the county... sometimes is difficult for us to stand up and change this." County Health Respondent, Male45

The influence of political members of county assembly (MCA) on priority-setting was viewed as having both positive and negative aspects. From the positive side, politicians advocated for the needs of constituents within their respective ward.

However, members of county assembly were often described by technical decision-makers as unwilling for an intervention to be introduced in an area outside their ward (despite underlying difference in level of need) (see 4.5.5). This opinion was also voiced at community level.

"How finances are distributed say at the County level at times will depends on the person who stands for these people ...So when it comes to distribution of property he/she is biased and does not consider level of poverty or programmes in that area." Community Key Informant, Male03

As a consequence, some technical decision-makers felt that while political inputs were necessary and useful, the technical decision-makers ought to have greater power over decision-making. This was due to their perceived ability to be more objective in assessing the needs for the whole county, compared with the member of county assembly, who is accountable primarily to his/her constituents. This was summarised by national and county respondents as a political preference for equality rather than equity

"The other thing I have come to realize is the biggest problem in this country is politics; political world are not concerned about equity, they want to hear about equality." National Respondent, Male09

'Political interference' from the governor and/or the members of county assembly in relation to the priority-setting process was reported in every county. Politicians were perceived by other respondents at county and national levels, to have a bias towards prioritising visible curative interventions (e.g. infrastructure, ambulance, drug supply) over longer term public health activities (e.g. behaviour change). This was felt to be part of a drive to win votes, by demonstrating their ability to successfully respond to requests from their electorate, who often requested infrastructure as a consequence of poorly facilitated or manipulated public participation forums.

"The decisions might be subjected to a lot of political interference by the county, members of the county assembly who might not understand the importance of especially the health promotion and public health. Many of them see the importance of curative services but they do not see the strength

or the importance of the health promotion, public health activities, and therefore getting financial allocation to that department has been a challenge. Because ...they make decisions based on votes, will this get me more votes? So they do not tend to see that when we prevent malaria or prevent diarrhoea that you are going to get votes." County Health Respondent, MaleO2

Technical decision-makers at county and national level described that members of county assembly would refuse to pass budgets which they felt did not meet their needs, thus allowing them to demonstrate power to their electorate.

"You will find the MCAs are the group with very limited education. But somehow they have so much power; they hold the governor, it's like the governor is at their mercies." National Respondent, Female 12

This emerged as an issue in the media in June 2016 when county assemblies across multiple counties refused to approve budgets, creating delays to implementation (see Photo 3^{15} and Photo 4^{16}).

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¹⁵ **Source**: <u>http://www.standardmedia.co.ke/article/2000207154/mcas-fail-to-pass-</u>county-budgets-in-power-play

¹⁶ Source: http://www.nation.co.ke/counties/nairobi/Crisis-looms-in-Nairobi-as-
MCAs-refuse-to-pass-Budget/-/1954174/3274572/-/dlpjhv/-/index.html

Photo 3 Newspaper clipping members of county assembly and county budget



MCAs fail to pass county budgets in power play

Photo 4 Newspaper clipping members of county assembly refuse to pass budget



Governor Kidero in trouble as MCAs refuse to pass Budget

Budget and Appropriation Committee failed to table the Budget estimates for approval.

THURSDAY JUNE 30 2016

Corruption and patronage: Corruption and misuse of power was identified by a minority of respondents across health systems levels. County level respondents across several counties identified misuse of power through corruption and intimidation as being major challenges to the success of devolution.

"What most of our leaders have done, they have looted a lot of resources through shoddy procurement procedures, there [has] also been a lot of misuse of power by some offices harassing others, intimidating them." County Health Respondent, Male67

Meanwhile, county level and community respondents described corruption by health workers and public health officials relatively commonly, including missing drugs at public health facilities, bribing of public health officials/health workers to approve butchers' shops or to receive faster treatment at public health facility. While a minority of community members referred to corruption by county level leaders.

"Another factor is corruption. ... Do the math, even in the county right now we don't know what goes on. There are no developments that we know of... We elect them but when they get there they look for their own interests." Female community FGD04

Meanwhile in a range of counties equity of services was felt to be threatened as a result of power imbalances between members of county assembly, with the more powerful members of county assembly accumulating services within their ward (see section 4.5.5).

Community, county, sub-county, health facility and national respondents, described that politics were felt to be at play across all levels in the county. Political affiliations and tribal ties of individuals or communities to the governor or county executive committee member, were often felt to result in variations in priority-setting and service delivery, potentially having equity implications for the availability of services according to the conceptual framework, Figure 5.

"Of course there are challenges, you realise by nature, the ones in the executive position call the shots so sometimes our priorities tend to be influenced more by who is in the position of power so if this person comes from area x most of the resources are channelled in that direction." Sub-County Health Respondent, MaleO1

Patronage was described in various forms across multiple counties and by national respondents. For example, certain county executive committee members were felt to have been selected by the governor due to patronage rather than competence, skills or experience.

"The other thing that came with devolution is the issue of local patronage ...
because I am the governor I come with my cousin or a friend to my friend, or
somebody who I went to school with, I make them the CEC. There is that
disorganization of experienced people are pushed out of the management and
because of patronage, new people who are inexperienced are brought in for
patronage." National Respondent, Male10

Opportunities to align political and technical priorities

When technical decision-makers operate 'politically', engaging with and aligning priorities with those of more powerful decision-makers, this can lead to positive effects for implementation as a result of the power exerted by influential actors. For

example, in one county the governor became convinced of the importance of community health and requested it receive budget allocation.

Changing powerful agents' behaviour for fairer priority-setting: In order to address the uneven power balance, which has resulted in members of county assembly holding final power to approve or decline a workplan or budget, the technical decision-makers identified a series of measures to incentivise support for technical priorities. These incentives included building stronger relationships with politicians by involving them throughout the decision-making and planning process and providing regular updates on progress towards achieving indicators. A number of national respondents identified the need for technical decision-makers to learn how to engage politically and for politicians to learn more about health.

"I think, the technical arms have for a long time divorced themselves from politics they said 'no we will do our technical thing' and then when decisions are passed they get very frustrated, 'you know they didn't listen to us'. Yes, we've built our evidence, I think one of the things to do is really to build capacity of the technical arms of government at the county level, on politics....

The other one is really building the capacity of the political arm so that they can start understanding, why certain health investment decisions need to go in a particular way so that these two sort of meet half way." National Respondent, MaleO5

Other county level technical decision-makers described presenting cost-effectiveness analyses; strategic framing to present politically appealing aspects of interventions (such as increased employment resulting from community health intervention) or incentivising politicians by including items in the plan and budget, which were highly sought after by politicians (e.g. ambulances). In this way they sought to strengthen relationships, so that politicians would look more favourably on activities such as community and primary health care.

"It's (primary/ community health care) also good politically because you have created employment, you have encouraged someone so they show their appreciation where elections come. So politically it's a bonus." Non-Health Respondent, Male32

Among members of county assembly who formerly worked as CHVs, former CHV colleagues may try to hold them to account on a personal level.

"I have been a community health worker and they (CHVs), they usually call me and tell me 'now you've forgotten we were working with you as volunteers. What are you doing about it now that you have a chance? You have a stage to talk about it'." County Non-Health Respondent, Female15

Changing the institutional rules of the game for fairer priority-setting: In several counties technical decision-makers described having changed the 'rules of the game' for priority-setting, by working to ensure local county legislation (such as CHV bill) was passed for community health or which earmarked selected budget lines at county level, such as salaries for health workers and drug procurement, with the effect that politicians were not allowed to cut from these lines during budget review. In addition, one respondent proposed introducing a longer term framework, to ensure that successive governments build on the successes of what has gone before, rather than starting from scratch with each new term.

"The worry is that we might have a vicious circle where things are not improving because this leader during his period or so was trying to work out systems this way and you know now as a new way of working, five years were not long enough and this one is taken away by people and another one comes on board and starts a new thing... unless we have a framework; a framework which is cast on the same Constitution that this is the way things will be." Sub-County Health Respondent, Male09

4.3.3 Use of targets, evidence and context

Counties have set targets as identified in their county integrated development plan and county strategic plan for health. Respondents described the importance of using evidence to guide their priorities. However, in practice there were challenges with data quality and confusion about how to apply evidence to guide the priority-setting

processes, with respondents identifying the need to strengthen evidence-based decision-making through scientific approaches, that take efficiency and effectiveness principles into consideration.

"We need to get to know more of modern and scientific processes of identifying the priorities in terms of addressing the effectiveness and also the efficiency being used." County Health Respondent, Male61

In keeping with this finding, one national non-government respondent expressed the opinion that government is keen to use evidence-based decision-making, but lacks the capacity to do so. In response, a training to capacity build national decision-makers has been rolled out and there are plans in place to replicate this at county level.

"...the Kenyan government, they've bought into the idea that using evidence is a good thing in decision-making and they are really keen to use evidence in their work to improve their work. For them the issue is not just convincing them that using evidence is important, where the gap is right now is really the actual use of evidence; are they actually going out to look for evidence and appraise it and use it properly? That is where the gap is." National Respondent, Female 12

Targets: Health targets are outlined in the performance contract and annual workplan, progress against targets should be reviewed by all actors during stakeholder and public participation forums. The CEC member for health signs a performance contract with the governor, which sets targets for the department. Progress updates for activities conducted should be reviewed during stakeholder meetings on a quarterly basis, with an annual review of progress towards targets and activities described in the strategic plan. As part of the annual planning cycle, the county executive committee are required to report to the community on progress made, challenges experienced and justification for any change/ failure to attain planned targets during public participation meetings. Community members should be able to hold the governor and county executive committee to account through their elected member of county assembly. At sub-county and health facility level,

respondents described reviewing progress against targets with health facility management committees and supervisors, to identify gaps and develop actions when developing new workplans.

"...now we do our annual workplan and our supervisor follows it up. Before making the next annual workplan, in the meetings they inquire 'which facility have met one of their plans? Now where are changes? Which changes are we going to make? Mention the changes if there is changes?" Health Worker, Female04

Use of evidence and knowledge of context: Technical county decision-makers across all counties described being guided by data predominantly from county level sources, such as the county health information system or local research regarding the main causes of morbidity and mortality. However, they also used national sources where information was not available within county level sources, such as demographic health survey and Kenya AIDS indicator survey. Trends for selected diseases were reviewed to assess for improvement or deterioration and guide decisions. Respondents from seven counties identified challenges with use of data for identifying priorities due to: concerns regarding the quality of county data available; lack of county level capacity in data use; lack of adequate locally generated evidence and research; not enough data officers; lack of capacity for health facility staff in collecting data; priority for political or logistical ease rather than evidencebased priority. Some measures adopted to try to mitigate these challenges included trying to strengthen local research capacity, introduction of computing systems to strengthen data collection at facility level and use of partner research and surveillance systems. Members of county assembly typically described being guided by citizen's requests through public barazas and participation meetings (although county data and international standards were also described).

At the county level heads of department (e.g. head of department for maternal health) within the CHMT compiled leading priorities and costed activities, based on analysis of data and annual workplans developed by health facilities (preferably incorporating community activities). This was carried out under the guidance of the

director for health, with the chief officer for health providing budgetary support and in some cases, guidance on cost-effectiveness (although this was not frequently described). Once counties identified leading causes of morbidity or mortality or deteriorating trends in health service indicators, they frequently described using this information to identify underlying causes, with two counties having described using strengths, weaknesses, opportunities and threats (SWOT) analysis to assist with making decisions based on need. Other health systems data such as workload per health facility and geographic access to health facility were also considered. County level respondents highlighted that this local knowledge of the context and use of data led to counties being able to identify areas failing to attain targets/make progress. Decision-makers from some counties use data disaggregated to sub-county level to identify gaps in service coverage and high priority areas needing targeted interventions, in some cases identifying actions which would try to address the cause as well as the effect. A minority of in-charges from health facilities also described using local data and knowledge to identify context specific solutions to improve demand for services, for example mobilising CHVs to encourage mothers to attend for antenatal care and skilled delivery.

"We have the data and therefore with the data what we normally do we look at the trends. Are we improving or are we going down and in the case where we are not improving, what are the problems? ... Based on the data we have been able to do some decisions." County Health Respondent, Female51

4.3.4 Resource availability

The current availability of resources including budget, availability of infrastructure, distance between health facilities, functionality, availability of health workers and equipment were considered while identifying priorities. The funding available set the limits within which priorities were set and budget allocated. The availability of resources was perceived differently, according to the level within the health system (see section 4.4.1).

"There might be many issues but we prioritise according to the funds so that we are able to fit into the budgets and then we make a yearly plan." County Health Respondent, Female37

Priority-setting within the county was guided by budget guidance from national and county level. Budgets were described as having two main components – recurrent expenditure and development. National government specifies that a minimum of 30% of the budget must be spent on development activities. Typically, the recurrent budget (used to pay for salaries, supervision, drugs and commodities) was allocated by the technical decision-makers.

There is no prescribed formula to guide counties for allocating funds between sub-counties or wards. As a result, a variety of methods have been adopted, each with its own merits and challenges. The manner of allocation of funds within a county does not appear to relate to the type of county, with rural agrarian, and rural nomadic counties having selected to apply a variation of the national commission for revenue allocation formula, based on equitable share. However, it was felt to restrict equity as a result of the formula limiting funding to some marginalised areas, due to low population densities.

"You know as a department we know which area needs what, but because of these formula the area that need most of the services they are allocated little amount of money. Based on that formula, so most of the service need of that place is not met because of the little amount that is given to that place." County Health Respondent, Male47

While urban, rural agrarian and nomadic counties described having applied a formula which includes an equal (and equitable) share, which had its own challenges for those wards with high population or large land area.

"So we are now doing as if we are starting from zero for all the wards which might disadvantage other wards which are bigger and all that. So I think it can be improved in that if the members of county assembly can actually be able to look at the county at large and see, where do we have gaps? Where are people contented? So that we focus on the areas that there are many gaps.

Rather than spreading to all wards, irrespective of the status." County Health Respondent, Male41

In all counties, but particularly rural nomadic ones, there was felt to be a preference for development activities (such as infrastructure and equipment). This preference was even higher in those counties which were formerly marginalised, reported as a consequence of gross under-investment in infrastructure and equipment by the former central government prior to devolution. Ratios of up to 70% for development activities were described, which resulted in limited availability of funds for recurrent activities and challenges for ensuring that all required routine activities could be carried out. As a result of classification of community health as a recurrent expenditure, this created severe challenges to ensure funding for this, as recurrent budget had already been spent covering other essentials (salary, drugs etc.).

At sub-county and lower levels, there were major challenges described surrounding the availability of financial resources at sub-county level. This is described more extensively in section 4.4.1.

4.3.5 Community voice and sharing information

Community were identified by county level respondents as being involved in identifying priorities through community unit activities, such as community health committee meetings or dialogue days, representation in health facility management committee and stakeholder meetings and public participation meetings, briefly described in section 4.2.3. Although not expressly probed during the community FGDs, some community members across two counties (urban and rural agrarian) described not having been engaged by county authorities in decision-making or having opportunity to demand accountability.

"Those who have been given that responsibility to inform the government, they don't reach out to the citizens. If we elect a counsellor for our area or MP we don't get to meet with them. So who will you report all those challenges to?" Female community FGD04

Public participation was the most extensively described mechanism for gaining community guidance for priority-setting. It was described as a requirement for county government across all counties, providing an opportunity for the community to hold their leaders to account, demanding answers and explanations about poor services. Yet it was frequently identified as a common cause for concern by county level technical and political respondents, with a myriad of challenges experienced in its implementation and effectiveness. Community participation in identification of priorities is described as taking two key components –1) Public participation carried out by the executive, to share previous year's progress and identify community needs and priorities on two occasions (after sharing county budget review and outlook paper and after sharing county fiscal strategy paper). 2) Public participation carried out by the county assembly, to validate the priorities identified in the executive's workplan and budget and where necessary to raise appeal or request revision (see Figure 28).

Barriers to community participation at public participation meetings: Some of the major challenges commonly identified with public participation by county level respondents (technical and political) included reluctance of community to attend without provision for transport or stipend (particularly those living in hard-to-reach areas or far from the meeting location) and attendance of predominantly educated elite or those with political connections, rather than 'ordinary' citizens. In the urban county one respondent identified that street dwellers never attend public participation meetings, due to the illegal nature of their lifestyle. There was limited participation for many attendees, particularly women in nomadic communities. One respondent described that 100 people may attend, but only three or four people actually contribute to the discussion. Advertising of the meetings to be held was frequently described as inadequate, with adverts placed in English language papers, rather than in Kiswahili, with short advance notice limiting opportunity for participation. Seasonality was important in both rural agrarian (not during planting season) and rural nomadic areas (during the rains when people are more likely to be around major towns). Use of Kiswahili and/or the local vernacular for discussions was emphasised.

Community priorities: Through focus group discussion with community members in Nairobi and Kitui Counties, community members identified three main types of priorities (quality services, healthy behaviours and closer services).

These related to the need for quality services, highlighted by the need for availability of drugs and diagnostic equipment at health facilities (see section 4.4.3); lack of trained health workers 24 hours per day able to manage emergencies out of routine working hours; overworked health worker leading to patients queuing all day without receiving treatment; absence of health worker in the event of staff illness or absence and need for more CHVs within the community.

"As we speak I have brought my children here (health facility) twice and both times found no doctor. This past month has elapsed without there being a doctor ... We would kindly ask for another doctor so that if the previous one got sick, and they were two, we would still be receiving treatment." Male community FGD01

There was need identified for improved healthy behaviours within the community, such as clean water and collection of rubbish, with communities requesting for 'water guard' to safely treat water, bednets to prevent malaria; tools to clean communities such as gumboots and shovels and rubbish disposal.

"Our environment is very dirty. Dustbins should be put in place because litter is thrown everywhere. When you go to every street litter is thrown all over the place, so the litter should be taken care of because it affects our health." Male community FGD04

In more remote areas and in some informal settlements respondents identified that the nearest health facility was far away and that community lacked transport/ funds for transport and/or that the roads were impassable during rains to access health services when needed, creating barriers to care-seeking.

"You may fall sick in the house and when you think about getting help from a health care centre, the distance is long and it worsens your condition. Sometimes you have no money for fare and when you get to the hospital you

know that you had no other option. So you left home, you have no fare and the hospital has no drugs, that worsens your condition and that hurts." Female community FGD04

Capacity to identify priorities: There were challenges with identifying the real citizen needs and priorities, with county and national level respondents perceiving lack of understanding on the part of communities regarding their role (see section 4.4.6) and need to strengthen public participation. In some counties communities were frequently described by county level respondents as being passive during the meetings, often having low expectations that their participation would bring change. Although county level respondents from some counties did say that as the years progressed since devolution, communities were learning the value of contributing to public participation. The need for civic education and strengthening of the process was commonly described by respondents.

"...they (community) still have the perception that this is the government that has neglected them for all those years ...actually a lot civic education needs to be done if you want actually effective participation and effective process and actually have the kind of outcome that we expect from this public participation." County Health Respondent, Male48

At community level the community viewed their role and responsibilities for health in terms of keeping the environment clean; referring those who are unwell to the CHV or health facility; joining in community meetings such as dialogue and action days; contributing funds when a community member needed to travel to a health facility; caring for other community members and listening to the advice of CHVs. There was no description of a decision-making role. A minority of community members described a desire to be more involved and to know more about their rights and how to participate.

"If we got someone to unite us we could be progressing well [to participating in health responsibilities]." Female community FGD01

Public participation can bring a significant benefit to the priority-setting process, with politicians often described as keen to fulfil and approve workplans and budgets for

priorities identified by their electorates during public participation. However, health facility and sub-county level respondents often felt that citizens do not have a holistic understanding of health (in terms of health promotion, disease prevention and curative services), sometimes leading to requests for visible infrastructure, at the expense of ensuring quality comprehensive services. This contrasts with respondents from community level, where community members identified a mixture of both curative and preventive interventions as priorities and emphasised the need for quality services (although curative health priorities were described more commonly than preventive ones). County level respondents did not describe providing community members with information about the risks or benefits associated with differing priorities. At times priorities identified by the community and the technical decision-makers conflicted, which needed to be resolved prior to finalisation of priorities, workplan and budget. Sub-county and health facility incharges, highlighted that they were often not invited to attend the public participation meetings, creating a barrier which they felt prevented them from presenting the community with information about the technical health needs during the priority-setting process. The resulting inadequately informed health choices had critical effects on patient safety and quality of services, with one community having identified renovation of the facility to be a priority, while there was no working autoclave for sterilisation of equipment and insufficient equipment for conducting skilled deliveries.

"There is a time they go round collecting the projects the community needs to be implemented, this time my community requested their facility to be renovated so, the priority of the community is what the county implements... but maybe the community doesn't know whether there are not enough delivery sets. You know the community doesn't matter so much about sterility because they don't know; it's only the professional who knows what this is." Health Worker, Male11

Adding to the complexity of this process was the fact that members of county assembly were often described by technical decision-makers as being motivated to provide popular visible interventions or 'high vote priorities' in their attempt to

secure re-election (section 4.3.2). As a result, this led to the communities' new found power in decision-making actually working to their disadvantage, leading to the setting of priorities they may have requested, but which do not meet their health needs.

"...they (community) need to have a wider perspective of how [health is] not just a hospital." County Health Respondent, Male50

Community power to identify priorities: There was lack of clarity surrounding how to resolve differing community and technical priorities. As a consequence, in most counties preference was described as being given to community-selected priorities identified during public participation (perhaps driven by the politicians' desire to satisfy their electorate). At times technical decision-makers were able to propose technical priorities to the community, leading to harmonisation, but at other times community leaders were inflexible to revise priorities. This led to a sense of frustration and powerlessness by technical decision-makers (particularly at subcounty and health facility levels), who felt unable to implement activities according to technical need.

"Once they identify a need it might be not from the technical perspective the real need of that community. But since actually the law has given them that power to participate, sometimes our hands are tied as the technical people." County Health Respondent, Male48

By contrast in the urban county, senior technical health decision-makers disregarded the community's demands, instead implementing their own priority, without adequate justification to the community or county assembly and bypassing governance structures (by calling last minute public participation meetings so that motions were passed unchallenged). This was echoed by a health worker, who felt that lack of consultation with community and lower level health workers had resulted in selection of costly, inappropriate interventions such as the construction of operating theatres and X-ray unit at the health facility, when the need was rehabilitation of an existing, non-functional maternity unit.

"This [new theatre suite] is not what we needed; this would not have been a priority if the community or us at the facility level were involved." Health Worker, Female 22

In a number of counties, the public participation was described as a noisy meeting, with heated arguments as community members discussed different priorities and attempted to hold county leaders to account where services have not met community expectations. However, there were a number of challenges related to the political nature of the devolved government. Opponents to current politicians may use the public participation forum as an opportunity to oppose and 'water down' his or her plans. Community members participating in these forums may be subject to manipulation by local leaders.

"...some of the challenges are political because you realise politics plays in almost everything so if a person wants something you just go to the community and pressure them and these people the community come up with a wrong decision on health because of politics ... based on someone else's interest which is not good." County Non-Health Respondent, Male33

Public participation was extensively discussed in nine out of the ten study counties. However, in one rural agrarian county there was a marked lack of in-depth discussion about public participation. Although it was still described as occurring, it seemed to be perfunctory, in order to meet the standards of the Constitution only, rather than to genuinely find out community priorities and ensure ownership and participation over decision-making. There was apprehension expressed that politicians may be fearful to empower community members in setting priorities through this process, as they would not want to lose their own power.

"For other counties of course and even here our members of county assembly are not very comfortable with the system [public participation] because they believe it is empowering the citizen so much that they are losing the political grip and that has been the issue across the country." National Respondent, Male10

Approaches to redress the power balance at community level: When communities (purple Figure 27) are empowered with easily understood information about health and the merits and challenges of the choices available to them, then they can be a powerful governance force to ensure that political (red), executive (blue) and technical (green) decision-makers provide the services they are entitled to (see Figure 27). The need for civic education was commonly described across many counties, with the concept expressed that communities needed to know their rights and in turn hold leaders to account.

"...the Kenyan Constitution now gives us more rights to agitate for our rights and I think the more people don't get drugs, the more people are not served, the more people don't have a maternity they need to agitate for it. Put pressure on government so that then this pressure goes to the politicians, then the politician allocate money." County Health Respondent, Male24

One county stood out as having adopted a pro-active approach towards addressing power imbalances and ensuring fair use of power for decision-making. Priority-setting for health within this county was led by a CEC member for health (with advanced qualifications in public health), who adopted a participatory approach to priority-setting. Technical decision-makers across all levels of the health system and other stakeholders from county assembly, ward administration, partners, other line ministries and at community level were involved in the process. The participatory approach was described and appreciated by all respondents interviewed within this county. This will be presented as a positive deviant case, providing useful lessons for other counties (see case study 2).

Case Study 2: Community empowerment for informed decision-making

In response to differences between technical and community priorities this rural agrarian county sought to re-balance power by educating the community, ward administrators and members of county assembly (MCAs) to understand what holistic health and health care means, so that these key groups were better placed to make informed and educated decisions, which naturally aligned more strongly with technical decision-makers. The steps taken included:

- 1. Identified gap between evidence-based priorities (need for health promotion and community health) and priorities requested by community during public participation (request for ambulance, construction of facilities and mortuary)
- 2. Engaged with representatives who attended public participation meetings, to find out reason for differing priorities and discovered that community view health in terms of their proximity to health facility, rather than healthy behaviours
- 3. Engaged regularly with MCAs from health, water, infrastructure and agriculture committees in the county assembly throughout the planning and budget cycle to review progress and discuss plans
- 4. Held discussions at county level and identified need for advocacy to ensure community understand health, so developed plan to rollout education advocacy about health through existing community units
- 5. Wrote proposal and mobilised funding to hold sensitisation meetings
- 6. Held meetings with CHVs to share information about a holistic understanding of health
- 7. CHVs returned to share the message about health with their communities
- 8. Held 3-day meeting with ward administrators and sub-county administrators for county government (responsible for arranging public participation meetings) where they discussed 'what is development?', 'what is health?', experiences from planning and budgetary process so far
- 9. Invited CHVs to attend meeting to share their activities
- 10. Reviewed everything discussed during the meeting to identify gaps in planning and budgeting compared with earlier development and health discussions
- 11. Planned way forward together with ward and sub-county administrators to address gaps identified during future public participation meetings
- 12. Community identified community health activities and health promotion as priorities with fewer requests for ambulance and health facilities compared with previous years leading to budget allocation for the first time.

4.3.6 Mechanisms for and against accountability and trustworthiness

A wide and varied range of mechanisms for promoting accountability and transparency within priority-setting were described, particularly by county level respondents. Alongside these mechanisms a vast array of challenges have been encountered since devolution. Many of these have already been described within the text and so these will be summarised according to the person/group responsible for the mechanism in Table 11.

Table 11 County perceptions of accountability and transparency mechanisms and associated challenges

Stakeholder responsible	Mechanism in place	Challenge
National	Accountability mechanisms in Constitution – public participation, county executive committee members accountable to governor, leaders accountable to the public, accounting officer accountable to county assembly.	Delayed release of funds from national to county level, limits time available to implement all planned activities.
Governor	Accountable to public within the county.	Some county executive committee members felt to be recruited based on patronage rather than skill. Some governors make demands for interventions not originally included in planned activities, but perceived as 'high-vote priorities'
County treasury	Division of roles mean departments are required to provide justification for budget to treasury before receiving funding. Regular financial audits to investigate spending. Centralised procurement processes at county level, known as Integrated Financial Management Information System. Quarterly reporting from departments to treasury. Quarterly reporting by treasury to county assembly budget committee.	Forging of documents submitted to the treasury. Procurement systems (prior to introduction of Integrated Financial Management Information System) not sufficiently strong to eradicate inappropriate use of public funds, leading to sub-standard projects and allegations of corruption. Some departments reluctant to submit required reports to county treasury.
County executive committee	The county executive committee member for health signs a performance contract with targets on behalf of the health department. The allocation of funds to each department is identified following discussion and debate among the county executive committee. Documents including workplans and budgets available on county website for transparency.	In one county, six months into the new financial year there was no approved annual workplan or budget. Process for allocation of funds between departments is not transparent outwith the county executive committee. Many documents not available on county website. Community may not be able to access documents online.
County health management team	Participatory priority-setting with wide range of stakeholders. Wide range of stakeholders involved in regular review of progress.	Authoritarian leadership style which generated fear of dismissal limits accountability and participation.
Health workers	Health workers involved with developing annual workplan and budget. Supervision of health workers. Customer care desks at health facilities (established in one county).	Budget received by health facility often does not correspond with the plan and budget submitted to county, with no justification for difference. Theft of public resources (e.g. drugs) or illegal payments at facility level.

Stakeholder responsible	Mechanism in place	Challenge
County	Oversight role to ensure the executive plans according to county integrated development plan and public participation. Health committee for county assembly conduct visits at health facility and community level to follow up and ensure service delivery. Health department submit annual report to health committee for county assembly describing progress made and explain variance. Community members can enquire about services from their local member of county assembly (MCA).	MCA may seek to influence decisions made about budget allocation to fulfil personal objectives for re-election. In one county, health department failed to submit acceptable quality report to health committee. Some community members unsure how to meet and discuss issues with MCA.
Community	Public participation provides an opportunity for the community to learn more about progress and services delivered and challenges experienced. Community should be involved in identifying their needs and priorities during public participation which allows the county government to make context-appropriate needs-based decisions	Community may not be adequately informed or educated about their accountability role or what they should expect from county government. Local elite may dominate public participation forums. Remote or disadvantaged groups unable to attend public participation. Community not sufficiently empowered or informed to make an informed choice.
Health facility management committee	Should play a role in selection of priorities and ensuring delivery of those services. Pilot in one county to strengthen accountability at ten health facilities.	Health facility management committee may not be established. Community may not be aware of the funds which have been allocated to their health facility.
Media	Use of social media platforms to highlight gaps in services provided. Engaging with media to highlight when drug deliveries are made or if a health facility is opened to strengthen transparency (one county).	Use of social media to raise concerns may result in politicisation of an issue which could have been managed earlier had the appropriate measures been in place.

4.4 What are the implications of devolution on the delivery of health services?

As a consequence of devolution there have been considerable changes for health service delivery both in facilities and in the community. This section of the findings relates to how the process for priority-setting (see section 4.2.6) and the influencing factors (highlighted in section 4.3) affect the performance of the health system, with an in-depth focus on community health, indicated by the orange arrow (content of priorities set) in Figure 5. In turn the performance of the health system will influence the availability, access and effective coverage of health services provided, and will be highlighted in greater detail in section 4.5.

Devolution has also brought with it a series of opportunities and challenges for community health, creating either a benefit or a barrier to community health, depending upon how they have been embraced. Funding changes have resulted in sub-counties and health facilities experiencing increased challenges in gaining access to funding to implement their activities, compared with prior to devolution. Human resources were particularly topical as an area which many county governments have sought to invest in. However, there have been repeated controversies with recurring and ongoing health worker strikes as a result of delayed payment of salaries, slow career progression and lack of engagement with health workers throughout the devolution process, leading to disillusionment by many. Drugs and commodities varied hugely between counties, with some describing the improvement in drug supply chain as the county's greatest success. While in other counties supply chains deteriorated, leading to frequent stock-outs which affected client care-seeking practices. Infrastructure was a common area for investment, with rehabilitation of facilities across all ten counties and nine out of ten investing in building new health facilities. Infrastructure was a politically charged area for investment and at times this led to construction of facilities which lacked the staff, equipment and drugs to provide services. In some places, powerful politicians manipulated priority-setting to secure more infrastructure within their constituency. Governance and community engagement structures such as public participation forums have been described along with the challenges associated with these (section 4.3.5).

In order to indicate the variation in priorities described between counties Table 12 summarises the main priorities identified by respondents within each of the study counties.

Table 12 Priorities identified by county respondents

County	Priorities	
Homa Bay	Upgrading of county hospital to level 5, Health centre per ward, dispensary per	
-	location	
	Increase health workers	
	Community unit per sub-location	
Kajiado	Upgrade county hospital, three dispensaries per ward and strengthen referral -	
	ambulance for each sub-county	
	Increase health workers (recruit 100 new) and human resource management	
	Community health - expand community led total sanitation	
	Strengthen drug supply chain	
	Improve quality at existing health facility -staffing, equipment	
Kitui	Improve facilities, but new infrastructure not a priority	
	Improve immunisation, community led total sanitation, health promotion, disease	
	prevention, promote care seeking through new community health approach	
	Increase health workers	
	Improve drug supply	
Kwale	Upgrade county hospital – radiology unit and intensive care unit, build maternity wing	
	at dispensaries, staff housing and strengthen referral with ambulances	
	Community strategy to access health information, commodities, prevent disease,	
	referral	
	Ring-fence funds for salary and drugs	
Marsabit	Building new county hospital, construction of maternity units, supply equipment	
	Increase health workers	
	Disease surveillance through community health	
	Generate demand for services	
Meru	Upgrade of level 5 hospital; dialysis unit, cancer unit, CT scanner, trauma centre,	
	building new health facilities and strengthen referral – 6 new ambulances	
	Increase health workers	
	Strengthen immunisation	
	Enforce latrine use	
	Food fortification	
Nairobi	Hospital construction, rehabilitation of health facility, perimeter walls	
Nyeri	Infrastructure – new dialysis unit at hospital, buying MRI, building new dispensaries,	
	refurbishing existing health facilities and strengthen referral – ambulances and	
	equipment	
	Human resource – maintain and train	
	Strengthen immunisation	
	Expand community health - Community testing for non-communicable disease	
	Build capacity of health committees	
	Strengthen drug supply	
Turkana	Infrastructure – rehabilitate county hospital, blood bank, new dispensaries and	
	strengthen referral – 14 ambulances	
	Recruit health workers (facility and community level)	
	Strengthen immunisation	
	Promote uptake of skilled delivery	
	Collaboration with other ministries for nutrition	
	Expand community health	
	Strengthen drug supply chain	

County	Priorities	
	Provide health facility with funds in addition to HSSF	
	Management training for leaders, hospital board, county assembly	
Vihiga	Infrastructure – medicine store, rehabilitate county referral; hospital, add CT scanner,	
	intensive care unit	
	Expand services at lower levels – add dispensaries	
	Increase health workers	

4.4.1 Funding

The need for sufficient, timely funds and clear actionable plans for how to implement priorities was considered vital to ensure implementation by respondents from national, county, sub-county, health facility level and CHEWs.

"A priority that has not been tied to the budget will just remain a priority."

County Health Respondent, Male61

National: Funding gaps for certain programmes were described within national Ministry of Health structures, which limited the degree to which these national structures can fulfil their devolved role for capacity building county structures. For example, within the national Community Health and Development Unit, national government provide staff salaries, office space and utilities only. All other expenses, even down to vehicle maintenance and any implementation activities (including advocacy and capacity building), are funded by partners. This funding pattern was largely felt to be a result of misalignment between the national budgeting process and Ministry structure and hindered national staff from carrying out mandated activities.

County: In general, almost all county level respondents felt they have more funds available, compared with prior to devolution. In particular, respondents from counties which were formerly marginalised generally enthused about the higher budgets available, with funds based on the equitable share, rather than the strength of relationship with the ruling central government.

"Now the counties are getting more than what they used to get." County Health Respondent, Female01

Formerly marginalised counties had relatively low numbers of health facilities and were grossly understaffed. Devolution presents them with the opportunity to invest

in development through building infrastructure and to recruit health workers. However, county level respondents from all counties expressed the opinion that despite increased funds, these are still insufficient to deliver optimal health services. Decision-making processes placed limits on the decision space available regarding how these funds were used (minimum 30% for development), limiting their ability to implement activities as planned.

"The changes we envisioned we really wanted in our facilities, within our health centres, dispensaries, we cannot achieve them without money. So the money we are getting is little and we cannot really...the vision we have is big, but the resources to achieve the vision are less." County Health Respondent, Male05

Counties which were well-funded under previous central government were less enthusiastic as they had inherited large numbers of health facilities, high wage bills and other recurrent expenses. This in turn reduced their decision space and flexibility to respond to community priorities, or invest in innovations for prevention and promotion.

"There is a problem with the formula used to allocate resources has not favoured counties that were fully operational. But has favoured counties that had very little in terms of infrastructure, and operationalization. Yes, because the ones that are fully operational, much of the resources is just enough to go to human resource, just paying salaries and running recurrent expenditure. Very little is being left for development." County Health Respondent, Male15

County decision-makers often described delays in transfers of funds to county treasury from national level, and further delays in approval within the county. In counties with limited ability to raise local revenue, this increased the threat of health worker strike, due to delayed payment of salary caused by lack of funds.

"...we identify our priorities but we ... are not in charge of finances, we have to go to the governor's office to plead for finances to implement what we have." County Health Respondent, Male26

Further delays in approval of the workplan and budget were described at county level in the event of a disagreement between the county executive committee and the county assembly. In two counties, this was reported to have resulted in delays of over six months, with subsequent failure to conduct planned activities. Meanwhile, non-technical county level respondents from two counties identified capacity gaps as leading to underspends and waste.

Sub-county: By stark contrast to most county level respondents, almost all sub-county and health facility level respondents across all three counties included (Nairobi, Kitui and Marsabit) as part of objective 2, felt that the amount of funding and decision-making authority available at their respective level had reduced (or in some cases been completely eliminated).

"As I speak now, there are no resources that go to the sub-county. Sub-counties have to come to the county to scramble for what is left and in most cases they don't get." County Health Respondent, Male21

There had been a relocation of decision-making and ability to manage funds from the district (now known as the sub-county) to the county level. Sub-county level respondents highlighted the challenges when county administrators, who lack health training make health decisions, leading to increased bureaucracy, uncertainty and delayed implementation.

"Actually we have many challenges in the sense that the working of the county is very different from the working of the former Ministry of Health. [Formerly] the districts had power to make some decisions in terms of money, the subcounty now. But now the county system ... is that all the money is consolidated into one. So the decision-makers do not even understand health, they treat health like any other. So the buying of drugs and the buying of desks is [considered] the same, and because of that, it is very difficult to implement our priorities." County Health Respondent, Male30

As a result, sub-county community health focal persons and medical officers reported having no government funds available to carry out their activities. Respondents at this level described being unable to carry out activities and having to engage with

donors to seek funds. This lack of funds was intensely frustrating for sub-county medical officer respondents in particular, who were used to having been able to manage district budgets and to problem solve, but now felt they had been rendered impotent to tackle challenges.

"In terms of decision-making at my level previously, as a sub-county officer of health when we were under the Ministry of Health we were being facilitated; we had a fund that used to be called HSSF, we would use that fund in our day-to-day running of my office. Currently we are not getting any funds from the county, so you can imagine I have to run an office without funding." Sub-County Health Respondent, Female11

Likewise, for other sub-county level workers such as sub-county public health/community health strategy focal persons, funds generated were submitted to the county government, but no funds were returned to the public health team. This was in contrast to the pre-devolution system, when 70% of service charges generated were returned by national government to the public health team, to facilitate activities such as fuelling and maintenance for motorbikes etc.

Centralisation of procurement mechanisms to the county treasury has meant sub-county level respondents and in-charges now need to travel to the county headquarters for budget and procurement. In one remote sub-county this has created huge challenges, as the county headquarters is over a five hour drive from the sub-county headquarters, there is no vehicle and public transport networks are effectively non-existent.

Health facility: Following devolution there has been increased reliance of all health facility structures on the county government, leading managers and health facility incharges to request funds from the county treasury.

"Facilities now have to ask the county now for money for the things they need... So really we decentralized but we really centralized what essentially is the most important part of decentralization, you know if management is with the smallest units possible." County Health Respondent, Female69

Following devolution, all primary health facilities receive donor funding from DANIDA, the national health sector services fund (HSSF) and maternity reimbursement from national government for deliveries carried out after the introduction of free maternal health care, which precludes any health facility from charging user-fees for conducting skilled deliveries. The HSSF provided from national government and DANIDA donor funding should be paid quarterly to the health facilities. Following devolution payments to health facilities were described by health workers as infrequent and at times lower than expected. One dispensary in an extremely remote area described having received HSSF only once per year since devolution (although it should be provided quarterly). There was a lack of transparency and justification surrounding redirection of funds, with health workers unaware of reasons for this.

As a result of the lack of regular, adequate operational funding, respondents described a range of challenges, such as non-payment of casual staff, some of whom have quit as a result; inability to carry out minor repairs and maintenance of the health facility; inability to buy instruments or to supplement essential drug supply in the event of stock-outs; needing to pay for work-related transport out of their salary; lack of funds to support community health activities and needing to refer patients who could have been managed at the original facility.

This lack of operational funds was described as having severe implications for the quality of services and thereby limiting the effective coverage of services and hindering attainment of universal health coverage (see Figure 5). For example, in one dispensary lack of funds resulted in an inability to purchase gas to run the refrigerator where vaccines are stored. Although the in-charge described attempting to borrow a solar panel at the local school, these breaks in refrigeration may have resulted in a break in the cold-chain (see Photo 5).

Photo 5 Gas cylinder for refrigerator at remote health facility



"What we plan during the annual workplan [we don't receive], we are given another plan than that [in] which there are little finances for the facility. Like ... we might need to buy something like the gas for the fridge, but the funds are not available. You see we don't have solar

here, so if there is no gas then we have to send the fridge to the school where there is solar. You know sometimes if there is no power the vaccines have already been exposed meaning that there is lost potency for the vaccines." Health Worker, Male03

Meanwhile, another health worker described that lack of funds resulted in an inability to conduct maintenance of the ambulance, leaving critically ill patients having to search for other forms of transport. This was both a potential threat directly to patient safety and also consequentially, as patients who observed lack of quality would fail to use government health facilities in the future, with implications for effective coverage and a knock-on effect on utilisation.

User-fees at dispensaries and health centres had already been scrapped prior to devolution and fees for maternal health care were eliminated in 2013, shortly after devolution occurred. This resulted in a further loss of revenue for health facilities who previously charged patients for each skilled delivery. National government are meant to compensate health facilities 2500 shillings (approximately \$25) for each skilled delivery. However, some respondents from health facility level reported never having received any compensation for deliveries conducted, while others reported receiving a much lower amount than expected. Overall, this has resulted in a smaller and less reliable amount of funding at health facility level.

"The other challenge that [I] have seen since devolution, they said we have free maternity; they said they will be paying at least the dispensary after performing a delivery you are supposed to be paid 2500 shillings but that one [I] have never seen it here. I have been conducting I think every month I conduct at least three deliveries but no compensation." Health Worker, Male14

Finally, hospitals continue to generate revenue through charging user-fees (excluding skilled delivery). Prior to devolution these user-fees, known as facility improvement funds (FIF) were banked with the hospital which had authority to spend these, in coordination with the hospital management board. However, post-devolution, in many counties these FIF revenues raised are banked centrally with the county treasury. This has resulted in delays releasing funding back to the hospital and in some counties it resulted in lower amounts available to the hospital, if the county decided to use the revenue for a different priority. The lack of transparency regarding how county treasury uses these funds has the potential to undermine trust of health workers in county government.

"Previously the national government used to have what we call FIF, Facility Improvement Fund that is the money that hospital generate that year at the end of the quarter comes back to the facility for the improvement of that facility. But currently there's no such policy in place. That money comes back, we are at the mercy of the department of health. What we generate here doesn't come back." Health Worker, Male06

Community health services: In general, respondents from county level expressed mixed opinions surrounding the impact of devolution for community health, with some feeling it had brought many opportunities as a result of the decision space now open to counties to innovate and invest in community health. However, despite forming the first tier within Kenya's health system and being mandated by law, respondents across health systems levels identified challenges with raising adequate funds for community health programming both before and after devolution. Prior to

devolution, respondents agreed that community health activities were largely partner supported, with the exception of national funding for CHEWs salaries.

"A big part of the low coverage [for community health] has been lack of resources to actually establish the unit or to keep it going. Community health services right now is very partner driven." National Respondent, Female08

Post-devolution funding challenges continue, with respondents (particularly at subcounty and health worker levels, including CHEWs) from a minority of counties having received no funding whatsoever from county government for community health related activities (with the exception of payment of CHEW salaries). Respondents from these counties expressed reliance on partner support, which created sustainability challenges when partner programmes ended. However, respondents across many counties and at national level, highlighted that several years following devolution county governments had started/ or were planning to allocate funds to community health. This is highlighted in the quote below by a national respondent. What is interesting about this quote is that while it is indeed wonderful that counties are now investing in community health, it is considered noteworthy that only 50% of counties have decided to allocate some (not necessarily all required) funds towards this basic, essential layer of the health system.

"Moving to the counties ... one of the benefits of devolution, some counties have started allocating resources for community health which is wonderful ...I think we are going to see changes. Many counties, over 50% have embraced [community health]. They have invested in [it], they have put resources in their budgets." National Respondent, Male06

Even where commitments have been made to community health, the universal problem of delayed funds hampered implementation. CHVs and CHEWs commonly described lack of money to pay CHV stipends, leading to low motivation and high attrition; lack of monitoring supplies and CHV kits, including protective equipment such as gloves.

"At times this job becomes very hard ... because you are not paid anything and as you work you also have your children to think about and other chores, that way it becomes hard. Sometimes you just can't be happy." CHV Female12

CHVs identified that regular supervision from the CHEW was a source of motivation. However, there were gaps identified by CHEWs and at sub-county level, with lack of funds to support activities such as fuel for supervisors' motorbikes.

"We were given motorcycle but not given fuel allowance. So it was very awkward you are driving a government vehicle but fuelling it yourself." CHEW, Male04

Partner collaboration was commonly discussed by respondents across health systems levels. Many respondents at national and county level highlighted their dependence on NGO partners for implementation of community health services, but also raised a number of concerns surrounding partner support. Including the creation of a cycle of donor dependence, poor donor exit strategies and partner priority taking precedence over county priorities.

"Partners want to do it [community health], but government has not prioritized it enough to allocate money to it. Partners will come in and support the counties to implement and when the partners come in and support the counties to implement, the counties then see there is money; 'you have partners so why should we give you money?' So it becomes a cycle." National Respondent, Female08

Following devolution there were mixed opinions regarding the extent of partner involvement for community health post-devolution, compared with pre-devolution. Some respondents expressed the opinion that there was greater opportunity for partner collaboration, while others felt that many community health partners had withdrawn, due to corruption or challenges engaging with county government. At times these conflicting opinions were expressed even within the same county. The relationship between county government and partners varied, with respondents from some counties having described a productive symbiotic relationship with clear division of tasks and responsibilities between county government and partner staff.

The more pro-active counties recognised the opportunity which partner support could present, directing partners to provide added value, by supporting units in hard-to-reach areas. There was recognition of the need for wise implementation to ensure sustainability beyond a project lifespan. However, there were also major gaps in the coordination of partners within counties, with government not having set a common stipend for partners to provide CHVs. This resulted in implementation challenges at field level when partners provided different stipends or incentives. This was more commonly described as problematic by national level respondents. Other coordination challenges related to partners selecting where they support activities, which type of services to support (for example HIV services rather than the general community health service package) or supporting quality improvement rather than expanding coverage, regardless of the county government priority.

One of the strengths that partners supporting community health brought was their ability to innovate. County level respondents highlighted the need for partners to pilot lower cost interventions, which have the opportunity to be implemented at scale at reasonable cost.

"When you look at the cost of running it (pilot community health reporting intervention). It becomes very expensive... The challenge is that it is supported by partners and that is not sustainable... The best thing is to work out a system which is efficient in terms of resource... Then now the county department of health takes the lead." County Health Respondent, Male09

Perhaps the most commonly described challenge associated with partners was lack of sustainability and inadequate planning for partner exit and county government take-over of previously partner-supported tasks. In many counties respondents gave examples of sudden withdrawal of partner support, with no exit planning, resulting in abrupt discontinuation of stipends for CHVs, with high drop-out rates as a consequence. County respondents made recommendations to strengthen the partner-government relationship, such as the department of health directing partners, introduction of only affordable interventions, earlier withdrawal planning and better community ownership of interventions.

Examples of best practices: As a result of the challenges with the centralised system of funding, whereby every procurement needs to pass through the county finance office, some counties have identified solutions. Such plans include disbursement of funds to the county health management team directly on a quarterly basis, rather than going through the office of the county treasury. A small number of national and county respondents identified that steps have already been taken by some counties, to delegate authority for decision-making and budgeting to sub-county and health facility levels, in order to bypass the bottleneck within the county treasury. Where governance structures are in place, this presents best practice for extending decentralisation.

"Previously we could have our own funds doing those things, but now, even the ministry itself has realized that you need to see how they can devolve some funds to the sub-counties as opposed to having it centrally, because officers were always coming to the county level you know saying 'we want this, we want these activities.' So, the county management team have come up with a way forward that they are going to disperse even to the dispensaries, there are some funds for the dispensaries, to utilize at their level. The plan now is to decentralize it." County Health Respondent, Male41

In counties which have prioritised providing budget for community health, this was felt to have removed reliance on partners and allowed them to tailor and plan community health services according to their own context and disease burden, for example training CHVs how to screen for non-communicable diseases (NCDs).

4.4.2 Human resources for health

Human resource management was one of the most widely discussed and controversial of all the aspects of post-devolution health system delivery. It was recognised as a challenging aspect of devolution for counties, with a range of health worker motivations needing to be managed, including timely salary payment, line of command, responsibility for payment of staff pension, working environment with availability of needed resources and colleagues to effectively carry-out tasks, promotions, career progression, in-service training, inter-county transfers, staff

accommodation etc. As a result of poor management, including delayed payment of staff salaries and failure to promote staff (see 4.4.1), there have been a number of health worker strikes across multiple counties since devolution (see Photo 6¹⁷). The most recent of these, a doctors' strike which lasted over two months resulted in the issuance of sacking letters from county governments and the jailing of strike leaders (as reported in media), following failed negotiations between doctors and county government after government failed to implement the 2013 Collective bargaining agreement which outlines working environment and equipment, training research and remuneration [227](see Photo 7¹⁸).

Photo 6 News headline for health worker strike over unpaid salaries in October 2016



Nurses in Tharaka-Nithi issue strike notice over unpaid salaries

FRIDAY OCTOBER 14 2016

Photo 7 News headline for doctors' strike in January 2017



Doctors on strike to get sacking letters from this week

MONDAY JANUARY 23 2017

Following devolution, the recruitment and management of health workers shifted from the central national public service board, to 47 new county public services

¹⁷ Source: http://www.nation.co.ke/counties/tharaka-nithi-/Nurses-in-Tharaka-Nithi-issue-strike-notice/3370192-3416386-6158haz/

¹⁸ Source: http://www.nation.co.ke/news/Doctors-on-strike-get-sacking-letters-/1056-3783462-nvs4r1/

boards. Counties now have responsibility to hire, manage and fire health workers. This contrasts with the situation prior to devolution when national government could recruit or move staff, with no reference to the district level.

Decisions surrounding human resource recruitment and/or promotion are initiated within the county health management team as part of the annual work-planning and budgeting process and are subsequently shared with the county public service board via the chief officer. County level respondents from many of the previously marginalised counties in Northern Kenya have invested heavily in recruitment of health workers, with some more than doubling the number of health workers within the county following devolution. While the overall number of health workers in remote counties has dramatically increased, many of these counties experience challenges with recruitment of specialists. This is a result of low education levels in formerly marginalised areas leading to low numbers of 'local' specialists and perception of the county being a hardship area creating a barrier to 'non-local' specialists working there. As a result, some have adopted innovations such as recruiting specialists for one week at a time and trialling telemedicine.

"We have challenges on staffing, this is our challenge since devolution, there is a tendency for people to want to go back to their home counties, and so there is a disadvantage to arid areas as there are not enough locals who went to school. We can't get someone from central to work here, they will work for a few months and then will want to leave." County Health Respondent, Female37

Some county level respondents identified that the majority of new positions recruited were for curative health workers, with counties having neglected to recruit adequate additional public health staff, including CHEWs. CHEW staffing was particularly problematic in Nairobi County where respondents identified plans for the re-distribution of CHEWs to other positions with no clear plans to replace them. Although, several counties have taken the opportunity to invest in human resources for community health by recruiting new CHEWs.

"Like now the public service board is looking for additional health workers and if you look at the list of those they are looking for the priority is on the curative.

None is being employed for preventive services." County Health Respondent, Male57

Changing national and county level roles in human resource management: Some county level respondents felt that health worker strikes had been encouraged by national level, in order to undermine the county government as part of a play for power. County respondents typically blamed national level for delaying to pay the county government their funds, which resulted in delayed payment of staff salaries.

"The national government is fighting the counties by actually wanting to take this function [human resource management] unconstitutionally from the counties, by saying actually the counties are unable to ...look at the welfare of health care workers like say promotions, resignations and even capacity building and now they are using the unions actually to insist the health care workers [strike] so that now they use actually this kind of political rhetoric's so that now the health workers can [be] striking and all these kind of things ... to actually use as reason to back the function to the national government." County Health Respondent, Male46

Human resource management transitioned extremely rapidly (within months), with counties given insufficient time to put in place a new public service board. This created uncertainty and fear among health workers regarding their future under the county government. Due to the rapid transition, some counties described lack of needed capacity by the public service board to carry out the tasks they were responsible for, leading to challenges for health workers. Two and a half years post-devolution (when this study was carried out), there still appeared to be considerable gaps in the capacity of the public service board and human resource management within counties, with limited future planning for replacement of staff deaths, retirements, transfers etc.

"These public service boards are new and most of the people there don't have even knowledge on human resource issues." County Health Respondent, Male30

Many counties have inherited a health workforce from national government who were already disgruntled, as a result of not having received promotions for many years under national level. Continued delays to promotion as county governments try to put in place plans for managing human resources, with health worker files remaining at national level, rather than being transferred to county level add to health workers' sense of frustration. Delays in payment of salaries have only served to fan the flames of discontent.

Many county level respondents and health workers felt that devolution had brought improvements in accountability and staff performance as county governments were now closer to their staff and better placed to carry out supervision and monitoring visits and health workers could more easily contact their supervisor to discuss challenges, compared with the former national government. Although some county level respondents also felt that staff strikes were related to staff reluctance to have closer supervision under devolution.

One area with lack of clarity post-devolution has been in-service training. In general, most technical respondents from county level felt that opportunities for training were fewer post-devolution and some county level respondents highlighted that county governments were not supportive of training budgets (as not considered visible enough).

"Things like trainings sometimes you may not be able to do the training because training costs a lot of money and the county government does not see much [benefit] out of that, they would rather put up a dispensary of three million rather than train people." County Health Respondent, Female51

Changes for health workers: Many health workers re-located around the time of devolution due to reasons relating to tribe and fear surrounding working for a county government which was not their home county. Unfortunately, these fears appear to have been well founded in some instances, with descriptions of recruitment due to

patronage and better treatment of local health workers compared with health workers recruited from a different county, described by county level and health worker respondents.

There was a lack of uniformity in salary between counties with respondents from national, county and sub-county level describing challenges, such as disharmony among health workers and recruitment challenges associated with different remuneration packages. Furthermore, unique to Nairobi County were differing levels of compensation between staff employed by national and county government, which created discontent.

A number of counties spoke about trying to increase the availability of health workers in more remote areas, through additional recruitment or relocation of existing staff. While an extremely vital aspect of human resource management, some of the health workers complained that understaffing was more problematic in their facility post-devolution. This was a consequence of staff members having been removed (and not replaced) to go and work in newly opened health facility. Or as a result of increased demand for services but no increased staff (or drugs) to accommodate this. This was highlighted by community members and youth photographers, who identified the need to increase the numbers of health workers at facilities to reduce the long queues (see Photo 8 photographer Rufus Njoroge).

"Staffing is a challenge since devolution. You see health is a political gimmick, there are many facilities being opened, but the number of staff have not increased, so when a new facility is opened staff are moved from one to another, so where previously there were two staff at a facility now there is one at two facilities and so services go down." County Health Respondent, Female27

Photo 8 Long queues at government health centre



"The service is slow. When you ask for medicine it's like making a heavenly prayer or something. Instead of them giving you the medicine because they know your sickness the doctor tells you to go and make a line and you could stand in the line until you get tired. So you could be referred here but go back home tired for waiting on the line until 4:00PM for drugs. But for a private health centre the service is much faster because money talks more than your mouth. You are given medication and head back home." Male community FGD04

One health worker at a single-staff health facility identified that at times errors may be made as a result of tiredness or the health facility may be forced to close when

Photo 9 Health facility with single trained health worker

the health worker takes annual leave or attends a training (see Photo 9).



"We should be four nurses [working at this dispensary], because all things that I do even as a person you cannot work as a computer; you have mistakes, so if you don't rest and you work you will have a lot of mistakes and you work day and

night. It is usually a big challenge for us." Health Worker, Male14

Changes for close-to-community providers: Likewise, CHEWs were frequently described as overburdened, with one CHEW responsible for supervising and leading community health for a population of one million people! As a consequence of such an unrealistic workload, CHVs were unsupervised and unsupported, leading to low motivation, increased attrition and reduced service delivery.

"Right now we don't have community extension workers. In xxx for instance we have just one [CHEW], it is making very difficult to work in a population of about **one million people**... Since devolution those [CHEWs] who were there, they were devolved to go and work in another cadres. We have a shortfall of workers, we have a shortfall of support, and we have a shortfall of motivation. Once CHVs work with no supervision, they feel they are not working so population goes down. So since devolution we have a lot of change; our units are going down because there is no hope." Sub-County Health Respondent, Male12

High CHV turnover was felt to be related to lack of funds for CHV stipend, combined with a heavy workload. In one county recruitment of younger persons as CHVs, was felt to have resulted in high turnover, with youth working only until a better employment opportunity arose. In another, women were described as more likely to continue to work voluntarily, whereas men often dropped out when stipends finished. Meanwhile in a very remote county, failure to recruit CHVs from within their own community, resulted with higher attrition noted in those areas. In one county community members acknowledged experiencing coverage gaps in community health services after a CHV drops out and so expressed desire for more CHVs to be recruited. Where these challenges were widespread, a number of respondents from county, national and health facility level expressed the opinion that human resource management should have been retained at national level. Although this was not a universal opinion, with respondents from some counties preferring human resource management under county government.

Examples of best practices: One county prioritised human resource management by ensuring that staff were provided with accommodation close to the facility (see

Photo 10). This county also prioritised staff promotions and described a transparent relationship with health workers, whereby staff receive early knowledge if there is likely to be an unavoidable salary delay. They have also sought to earmark budget for salaries and to ensure that staff promotions are carried out.

Photo 10 New staff housing built post devolution



"What we have done ...is prioritize that every dispensary as you put a maternity wing we must provide a staff house so we have come out with a design of a staff house that can accommodate two nurses. So that at least at the middle of the night they can come from

the same compound. [If] the client knock that mother is in labour [the nurse] can respond quickly." County Health Respondent, Male50

In response to the challenge surrounding lack of stipend for CHVs, some counties have started to innovate with a range of possibilities to increase motivation. Ideas included: plans to introduce monthly stipend; income generating activities (IGA)

Photo 11 CHVs demonstrate soap making income generating activity



(such as soap making – see Photo 11, rearing goats and charging for NCD testing). Other counties were planning to support CHVs by covering their national hospital insurance fund (NHIF) fees. However, in the two counties where CHVs participated in

discussions, they described feeling demotivated as a result of the termination of stipend following partner withdrawal and no provision by the county government at the time of discussion.

4.4.3 Drugs and supplies

The consistency of drug supply at health facilities varied between counties, with some describing this as one of the greatest improvements for health following devolution and others describing more irregular supply, with frequent stock-outs. The consistent availability of drugs is crucial to the provision of effective coverage of services needed for universal health coverage. When drugs are not available it is the poorest people who bear the greatest burden, lacking funds to pay for drugs from an alternative source and in some instances forgoing treatment or seeking care directly from an unregulated drug seller.

Supply chain changes: Shortly before devolution occurred drug supply to health facilities shifted from a push (drugs sent from higher level with no input from receiving health facility) to a pull (health workers calculate and send request for drugs needed) based system. This has improved efficiency, with each health facility now identifying their need and submitting this to the county, who then combines and submits the request to the drug supplier. Respondents from nomadic and some rural agrarian counties who felt drug supply had improved following devolution, described the more consistent and reliable drug supply as one of the greatest improvements for health. One respondent identified it was part of the county's aim to ensure greater equity, by providing regular consistent drug supplies to all health facilities, no matter how remote.

"I'm seeing a lot of improvement because ... in the last few quarters we've had our facilities almost always having drugs... of course I am sure there will always be complaints here and there, but at least we've had significant improvement, in terms of getting our drug supplies on time." County Health Respondent, Male19

However, respondents at health facility and sub-county level in the urban and rural agrarian county felt that drug and commodity availability had deteriorated following **204** | Page

devolution. Drugs were provided less frequently (at times once per year rather than quarterly as expected) and in smaller quantities resulting in many more frequent stock-outs.

"We are supposed to order our drugs quarterly, but now since devolution, you find that mostly we get our orders once per year which is not adequate and what you order is not what you get." Health Worker, Female16

Reasons for stock-outs: In some instances, this was felt to be a result of lack of capacity by county procurement teams, who failed to understand the vital importance for ensuring drugs were available in a timely manner. This led to deprioritisation or failure to pay the drug supplier. These challenges were commonly described by health workers, but were also described by sub-county, county and community respondents in certain counties.

"So you (procurement officer) do what you think is appropriate for you. You don't understand when I say I need 2,000 of this, you say 20 is enough. Yes, or nothing at all. You are not seeing the urgency of having the anti-malarials. Yet I am saying 'it is rainy season we need to have this in place'. To you it's not an issue. You would rather buy a machine that may not be of benefit to the patient." County Health Respondent, Female56

County level respondents (technical and political) often described delayed disbursement of funds from national level, which created knock-on delay in payment for the drug supplier, with the result that at times supplies were not provided. Issues with corruption and theft of drugs within the facility were perceived to be problematic by county and community level respondents. Perhaps unsurprisingly, this was not described by health workers themselves.

Consequences of drug stock-outs: The potential consequence of lack of drugs described by respondents include: utilisation rates dropping; services become unattainable for the most poor, with those who have sufficient money buying drugs from the chemist. The poorest patients remain untreated as they are unable to buy drugs from a chemist.

"...so we give prescription to the patients [when there is stock-out]; some of them buy, some of them don't buy. You get some house girls who have come, so they don't have money to buy the drugs. They wait until they see the truck bringing drugs. That is the time you find them coming with prescriptions. Do you have this drugs? You ask them since then have you not felt well? You have not bought these drugs, what have you been waiting for?" Health Worker, Female 20

In one of the counties drug stock-outs are so common that it would appear the community may have adapted care seeking practices, carving out solutions whereby as soon as a health facility receives supplies, many people attend to 'stock-up' on drugs so that they can self-medicate at a future date when they expect the health facility will likely have a stock-out. CHVs, CHEWs and other community health focal persons also frequently reported not having been supplied with adequate kit, such as bicycle, identification badge, reporting and referral tools and first aid kit, despite having been promised this by county government.

Examples of best practices: Counties which had improved drug supply described a range of mechanisms which were introduced to ensure more consistent supply, including: having earmarked funds within the county budget for drugs; having searched to find a supplier which was more reliable (Mission for Essential Drugs and Supplies (MEDS) rather than Kenya Medical Supplies Agency (KEMSA)); politicising drug delivery within the county by creating media awareness when the governor received new stock to demonstrate the effectiveness of the health system during his time in office. Oversight visits carried out by health committee for county assembly identified stock-outs.

"Now let's go to the issue of drugs like the first time devolution started the health committee team went round some parts of the county and at that stage, it was like one year after devolution and we still had a lot of struggles with drug supply now this time round we went to the sub-counties, drug supply are quite okay that was a positive gain." County Non-Health Respondent, Female 25

4.4.4 Equipment and infrastructure

In contrast to other aspects of health system performance which varied considerably, all counties described having invested in infrastructure and nine out of ten had built new health facilities¹⁹. Additional infrastructure and purchase of ambulances were felt to increase communities' geographic access to health services. Infrastructure and ambulances were perceived to be politically favourable (see Photo 12 and section 4.3.2), with citizen's requesting it during public participation and providing politicians with a visible investment to generate support among their electorate.

Photo 12 Ambulances were a priority investment for many counties



"They are keen more in terms of short term and that is where the ambulance come in, they are easy to do; when they are having their rallies next year, 'let me talk about I have brought twelve ambulances, I've built ten other structures',

even if those structures don't have doctors or nurses." National Respondent, Female12

Infrastructure sustainability and functionality: Many counties described rehabilitation and opening dispensaries previously built but never opened (see Photo 13). The demand for infrastructure did not always correspond with underlying need for a new facility and at times, was felt to undermine accountability of priority-setting based on need. A threat looming on the horizon is the lack of future planning for new facilities, with many technical decision-makers across the counties and at lower levels highlighting that politicians and community simply do not appreciate the

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¹⁹ The one county which had not built new health facilities had a large number of unopened facilities built prior to devolution using constituency development funds.

Photo 13 Dispensary in Kwale County which will be rehabilitated by the county government



running and maintenance costs needed for every health facility, potentially impeding functionality or quality of services provided. This also has implications for future sustainability, if recurrent costs are not taken into account when planning new health facilities.

"Maybe last financial year we put up a health centre the physical structure and ...when we come back this financial year the community will say we want another health centre in a different location within the same ward. They don't have the knowledge

that actually this [building] that has been put up requires other things for it to function and deliver the service that they require." County Health Respondent, Male46

In Photo 14 (top left) theatre suite, which does not yet have the needed staff to conduct operations, (top right) empty post-natal ward, where there have been limited actions taken to promote use of services, (lower left) overcrowded dispensary store, (lower right) new health facility is being built just a few km away from an existing dispensary with no space for deliveries and lack of basic equipment, such as a delivery couch, a sphygmomanometer cuff for measuring blood pressure or adequate staff to provide services see Photo 14.

"Changes must come according to priority. Instead of creating a new heath centre, why don't they improve the one which is there completely to accomplish the mission of the first which is there, then they build another one, new one. No running water, no lighting, no delivery couch and you are told

how many deliveries have you had? How can you deliver? Even sometimes they don't have delivery kits." Health Worker, Female04

Photo 14 Health facilities with varied levels of infrastructure investment



Some health facility respondents gave examples where laboratory and community clinic infrastructure had been built by county government and the national First Lady's Beyond Zero campaign, but over 18 months later no equipment or staff had arrived to ensure the laboratory or clinic was providing services as intended (see Photo 15).

Photo 15 Laboratory constructed but not staffed or equipped after 18 months



"Since the County government came in, they put up a structure for our laboratory, we've not been having laboratory service so they completed it last year August 2014, and since then there was no equipment which was put at that structure, no laboratory technician employed, so it's

just a structure an empty building standing there." Health Worker, Male07

National government and equipment: A scandal over medical equipment erupted in April 2016 that detailed a large post-devolution procurement of specialist medical equipment (such as dialysis machines and CT scanners) by national government, without having consulted county governors, which created much controversy in the media (see Photo 16^{20}).

Photo 16 News headline surrounding medical equipment controversy



The governors initially refused to receive the equipment as national Ministry of Health were acting beyond their jurisdiction by procuring on behalf of the counties without their agreement. National government then agreed to lease it to counties. Controversy continued with governors' claiming to have been pressured into accepting unneeded equipment by national Ministry of Health, according to media reports. Equipment purchased was to be provided to two hospitals in every county, despite the fact that counties can have over a 30-fold difference in population (Lamu county approximately 100,000 and Nairobi county 3.1 million) and some counties already had the very equipment being purchased, leading to duplication of extremely expensive equipment, such as CT scanners. Meanwhile, in other counties infrastructure and staff needed to operate the equipment were not present, thereby forcing county governments to invest in building radiography department and employing new health workers or to leave equipment unused. The large amount of funds used to procure these equipment, which in some counties are lying idle due to lack of trained staff and in others are used by the minority in the county who are rich enough to afford to pay for more complex investigations, might have been better invested in strengthening community-based primary health care, which the

²⁰ Source: http://www.nation.co.ke/counties/meru/State-medical-equipment-deal-is-flawed-says-Munya/1183302-3180732-bf0mgsz/index.html

government is responsible to provide to everyone.

"Instead of being given finances to come and budget they (county government) were forced to take some equipment, that's what happened. You were to take equipment and you do not have the personnel who is able to run them and you were given. So they are lying all everywhere with no use... it's not good by the way because like us we were given the CT scan machines and we have no personnel." County Non-Health Respondent, Female46

Relevance of equipment: Two counties described having recently opened dialysis suites, which raised a host of concerns about equity, as dialysis units were introduced at expense of investment in other services which could benefit more of the population. Patients needing dialysis still have to pay for the services (and so only the relatively rich will benefit). Counties are experiencing challenges with ensuring trained staff and maintenance of machines, with one county describing breakdown of machines within the first year after opening. This may indicate a lack of accountability from the county government to provide health services which respond to genuine need and benefit the entire population, rather than those which look impressive to the electorate. There is an urgent need for community empowerment, so people are able to demand their right to receive timely, free community-based primary health care from their local dispensary or health facility, with referral as appropriate. This sentiment was shared by a national level respondent.

"Sometimes it's [priority-setting] not relevant. You know when you go to a county, and you find that county leadership decides okay we want a nice gate to our county hospital, and then you walk into the county hospital and there are no drugs. Then probably the workers have not been paid. What does that say? It's because the, the leader wants to say 'you see we know our hospital is shining'. So it may not necessarily be speaking to the needs and that's why, probably my suggestion would be ... We need to empower the communities to demand." National Respondent, Male07

Examples of best practices: In many cases expansion of infrastructure (particularly dispensaries) was entirely appropriate, particularly in formerly marginalised areas

where there was a huge deficit and extremely limited geographic access to services. Many counties described investing in infrastructure for primary care, such as dispensaries and health centres which typically benefit poor population more than rich.

"The health infrastructure, in terms of the dispensaries, and the health centres. Before the county government came in, we had a challenge, whereby facilities were 55 kilometres away from a settled community. So, it is our priority to make sure that at least, we reduce the distance which the community has to travel so that now we are at 35 [km]." County Health Respondent, Male41

However, this was an area which was open to manipulation and in many cases extreme care was needed to save counties from building infrastructure they would struggle to maintain.

4.4.5 Quality and functionality of services

Quality was not explicitly explored or defined by respondents, although it was identified implicitly in terms of staff time, attitudes, stock-outs, availability of quality data for evidence etc. This was a limitation with the study and is an important future area for research. The implied references to quality have already been highlighted throughout the results and so will not be repeated here. Further quality related findings are highlighted in section 4.5.8.

Quality of health facility services: In some counties there was the perception that the quality of services had reduced considerably following devolution, despite the introduction of quality improvement through the Kenya Quality Model for Health [228]. Health workers and community respondents raised concerns around the quality of services provided at government facilities as a result of lack of supplies (such as laboratory and drugs) and insufficient numbers of staff who are overworked as a result. This was felt to lead to poor staff attitude as a result of stress and demotivation; clinician error due to tiredness and lack of support; long patient waiting times, with health workers having to serve up to 200 patients per day without the needed resources and support prerequisite to providing quality services.

"I have a problem with the services the doctors give and I feel bad about it, because I came here one day and I was misdiagnosed. The quality of services in this health centre should be upgraded." Male community FGD04

In formerly marginalised nomadic counties in Northern Kenya service quality was felt to have improved. In these counties many county level and health worker level respondents described community perception of improved quality having led to increased utilisation of health services following devolution.

"The perception of the people on the ground they perceive, before the devolution that the hospital is idle there, it has no equipment, it has no medicine and nobody is asking... the perception has changed, people are going for the treatment in the hospitals." County Non-Health Respondent, Male24

Quality of community health services: Quality of community services was commonly discussed by respondents across counties, although it was referred to in terms such as ensuring 'functionality' or 'operationalising' community units. For a unit to be considered functional it ought to have an established community health committee; trained CHVs; trained CHEW working who is supported with transport and tools to carry out his/her tasks; linkage to a health facility with a trained health worker; CHVs' have kits and reporting tools; regularly meeting for dialogue and action days and submitting reports. Respondents often highlighted challenges with ensuring functionality of community units. The CHEW was considered a vital actor to a functional unit. However, even the most active and motivated of CHEWs are limited if CHVs are not motivated to work as a result of the lack of incentives. While respondents from many counties described expansion in coverage of community health services, very few described county government focus on maintaining the quality of community health services throughout expansion. In fact, many respondents described deterioration of quality (referred to as functionality), with failure on the part of most county governments, to recruit sufficient numbers of CHEWs for supportive supervision, limited availability of needed supplies and reporting tools and limited funding set aside to support supervision activities.

Functionality was often felt to be related to the presence of external partner support. Once partner support was withdrawn county respondents typically identified that sustainability became an issue and community units ceased to function optimally. In one county, quality has been neglected to such a degree that 50 new community units have been established, with no plans or budgets in place to train the CTC providers in those units to carry-out their intended functions. Nor was there mention of community health committees having been established, procurement of CHV kits or tools or recruitment of CHEWs to support these units.

Within the community health strategy CHVs should be supported and supervised by CHEWs. However, while many counties described expanding coverage with CHVs, only one described a concurrent rise in the number of CHEWs to maintain quality supervision throughout expansion. This is likely a result of the fact that in many counties new community units are established through partner support, while recruitment and employment of CHEWs falls within the remit of county governments. In fact, one county described that the number of CHVs had more than doubled while there was a reduction in the number of CHEWs.

"Human resource, so that is one area where we that problem. But the community health volunteers themselves have gone up. We have actually moved from about 500 to slightly above 1000... But for extension workers, it has remained the same rate, same or it has reduced." County Health Respondent, Male57

Different approaches by counties to the revised community health strategy, which recommends increasing the number of CHEWs and reducing the number of CHVs adds another layer of complexity for ensuring quality community health services, see case study 1.

Examples of best practices: Examples for best practices in improving quality of services at health facility or community level were limited. Only one county described having invested in refresher training for pre-existing units and seeking to ensure that existing units have the required kits, alongside having established a small number of new community units.

"The last two or three years, we have been focusing on training, now we have said 'okay let's try to functionalize the existing [community units]'." County Health Respondent, Male49

4.4.6 Governance and community empowerment

The Constitution describes that the community have the opportunity to participate in priority-setting and governance to review progress against plans, through public participation meetings and existing health facility management committees. However, as a consequence of inadequate engagement communities are not yet adequately informed to take up this role as intended. Community empowerment was deemed fundamental to successful implementation and to achieving health, as highlighted by national and county respondents.

"Basically for me without empowering the communities or having them engaged in their health, we in the health sector or the health ministry, we can't really give health to people." National Respondent, Male14

Some respondents at national and county levels felt more power had been brought to the general community, through greater accountability of the county to the community, see Table 11, with devolution presenting an excellent opportunity to strengthen community ownership, allowing community members to hold their leaders to account.

"The other thing that we've seen with devolution is unprecedented local accountability... There is that high level accountability from the locals to the top management in the county which can only help to improve service delivery." National Respondent, Male10

Public participation meetings were the most commonly discussed channel through which community ownership for health (and other services) was demonstrated. Other mechanisms included community representation during quarterly county stakeholder meetings and health facility management committee review meetings held to assess progress against targets and to identify solutions to challenges. As highlighted in section 4.2.3, there are considerable challenges to effective

community ownership of the process and apathy towards participation as a consequence of previous neglect under central government.

"The community also needs to be quite informed because many times they don't know that they have a role. In doing that, they need to be sensitized much more so that they understand that it is their right." County Health Respondent, Male23

Although, limited actions had been taken to strengthen community empowerment (outside of the public participation meetings), there was a common recognition of the need to strengthen community understanding and ownership for health, along with providing them with guidance for how to set appropriate priorities. The new Constitution was recognised as an opportunity for the community to demand more from their leaders and politicians.

Examples of best practices: Some excellent practices to empower the community to understand health, their role in decision-making and to understanding the choices available to them within the public participation process have already been highlighted in case study 2. Where implemented, community health approaches have promoted community ownership for health and encouraged utilisation of health facility services.

"The community are getting to know that health is their right and they are coming to seek the health service." CHEW, Female02

The benefits of community health approaches for building community ownership for health described by CHEWs, sub-county and county community health focal persons were many. The ability for CHVs and CHEWs to provide tailored health education to each household; to improve community members' understanding about health services and to feel more empowered to interact with the health system and use facility level services was mentioned.

"Some people have fallen sick and are afraid to go to the hospital when the CHWs come they [CHWs] approach you and talk to you, at least counsel and encourage you and bring you to the hospital and the person sees they are

cared for and they get the courage to go to hospital and to start treatment and there you'll find that the CHW will have saved a life" Female community FGD01

Respondents also highlighted the potential to expand coverage of health services beyond what is covered by the health facility, thereby including disadvantaged groups and those in hard-to-reach areas; to provide early targeted disease response; to empower the community to make informed choices and decisions about health, along with enabling them to identify risks and mitigate these and to identify public challenges and find community driven solutions.

"Community health if well embraced is the solution to many of these problems we are seeing because for one; people are having informed choices and informed decisions and they will make their own decisions." County Health Respondent, Male03

A tragic story from a CHEW explained how a new health facility opened, but had not yet engaged with the community to encourage attendance. A young mother delivered at home where she suffered post-partum haemorrhage and later died, without ever having sought care at the new health facility. The following quote from a health facility in-charge provides an example of how community health can change care-seeking practices, by promoting empowerment and understanding of health. It tells how a mother's life was saved during delivery of twins due to the revised traditional birth attendant role, which encouraged attendance at the health facility for delivery.

"So we encourage them, they are not delivering at home, they are to seek the health provider as required and visit the ANC clinics as required. That one has helped to improve on skilled delivery. We have reduced the mother and the neonatal mortality rate that was in the county. Like last week I had a case of a mother ...she had twins. ...So I educated her and told her and told her she had twins so, hers was to deliver in hospital. I gave a TBA that is one of reproductive health to take care of the mother. Once she reached labour she referred the mother [to the dispensary, where I] delivered the first twin and

the second twin delayed. So I referred her to the district and she received assistance and got her two babies and the mother is well and she is discharged now. So you see if the mother had stayed at home and delivered the first twin and the second delayed they would have lost their lives." Health Worker, Male09

In summary, changing power dynamics with the establishment of the county governments has led to increased funding availability at the county government level. This has resulted in investment in infrastructure and ambulances, at times at the expense of intangible preventive health services, including community health. There have been mixed implications for human resources for health, with counties often increasing the numbers of health workers, but struggling to manage staff, leading to unrest and strikes. Drug and supply chain management varied widely between counties. Sub-county and health facilities typically described having less funding available post-devolution, with implications for quality and functionality, as they do not have the resources needed to problem solve. Governance structures have been established through public participation forums and existing health committees at facility and community levels. However, further action is needed to empower all community members to appreciate and demand holistic health services.

4.5 What are the implications of devolution for health equity?

The following section will provide an overview of how devolution has influenced health equity, by covering the following issues:

- Overview of how equity was perceived and understood by the various groups of respondents, in order to better understand how this influenced later discussions surrounding equity, see section 4.5.1.
- Summary of social determinants perceived to influence a person's health, see section 4.5.2.
- How devolution has influenced (or not) these social determinants of health to effect a person's power to participate in priority-setting, see section 4.5.3.
- How devolution has influenced (or not) the health services made available by the devolved government, see section 4.5.5.

- How devolution has influenced (or not) a person's ability to access health services, see section 4.5.6
- How devolution has influenced (or not) a person's ability to use health services,
 see section 4.5.7
- How devolution has influenced (or not) the quality of services available, see
 section 4.5.8
- Finally, it will conclude with recommendations to improve equity as identified by the respondents, see section 4.5.9.

4.5.1 How is equity understood?

The most frequently described reason national and county respondents gave for devolution of health services was to improve equity of service provision. National respondents also tended to emphasise community empowerment as an objective for devolution. Health workers from sub-county, health facility and community level identified that inequity was a driver for devolution. However, health workers were faster than county respondents to temper this by saying that there have been 'teething problems' and challenges with the functionality of service delivery since devolution.

Improving equity was most commonly described in terms of improving access and bringing services closer to the 'ordinary person'. County and national level respondents placed a strong emphasis on re-distribution of resources, based on geographic and financial access to health services in their understanding of equity. However, one national level respondent highlighted this as a common weakness in the accepted understanding of equity within Kenya.

"For a very long time in fact we looked at equity from the lens of financial access and geographical access and a lot of the efforts were targeting that and ignoring other aspects ...But actually there is quite number of barriers to access which we haven't focused on and the policies have been very silent on that." National Respondent, Male11

By contrast, respondents at sub-county and health facility level, who also highlighted the importance of geographic and financial access, placed a much stronger emphasis

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on the dimensions of quality, such as the need for adequate drugs and staff in order to provide equitable and effective services. Community members, CHEWs and CHVs emphasised the need for a lack of prejudice, favouritism or tribalism, with services available for everyone. They also emphasised the importance of justice and receiving their right to health care, along with quality, respectful and timely treatment at a location convenient to them.

"[Fairness means] they should get high quality health services that reach everyone at the right time." CHV Team Leader, Female08

Interestingly, just a small minority of respondents identified the need to clarify that when pursuing equitable health care, governments should prioritise essential community and primary health services first.

"Health is complex in its needs; so we can only talk of equity for the primary services or services equating from primary services." Sub-County Health Respondent, Male09

Despite the majority of respondents understanding the concept of equity, a minority of county non-health respondents defined it as equal distribution of resources, rather than distribution according to need. This was considered by one respondent to be the understanding of politicians, which has led to challenges in ensuring resource distribution where most deserved, see section 4.3.2 and section 4.5.5.

"To me equity in health is a very thorny issue and more so after the county government because one thing is everybody is asking to have a share, which to me is not equity. To me equity is having the service where it's most deserved. That means in one of the counties you could have more dispensaries than another one, depending on the need." County Non-Health Respondent, Male47

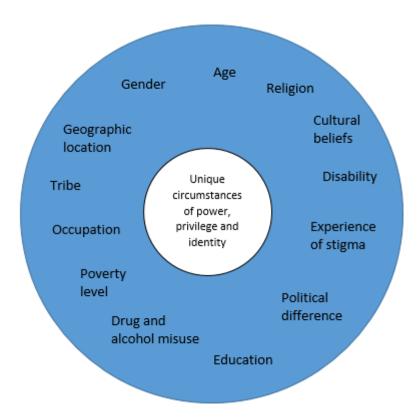
National policies were felt to have an influence on equity, by identifying selected groups who should receive services free of charge, such as children under-five, pregnant women and street families. However, while policy is in place there is an implementation gap as a consequence of unclear channels regarding the funding for

these 'free' services, so at times the patient has to pay for what should be provided free. Lack of the needed drugs and commodities was frequently described as undermining equity of services provided, particularly within Nairobi County. Fairness for health services should also mean fairness to the health workers, including CHVs by ensuring they receive adequate compensation and the tools needed to safely carry out their tasks.

4.5.2 How do power dynamics and social determinants of health influence vulnerability?

As described earlier in section 2.3.6, health equity goes beyond health and is a consequence of the privilege and disadvantage within society and the health system (described earlier in this chapter) intersecting with the dimensions of social inequality experienced in a person's life [3]. The following section will highlight which dimensions influence an individual's ability to engage with and use health services and will start to unpack how they intersect. This will be developed further in the discussion chapter. In order to understand more about the reasons for inequity and actions which have been taken to address inequities, respondents were asked to identify people who they considered vulnerable or who might struggle to use health services. Dimensions of social inequality which were described as influencing a person's vulnerability and/or ability to use health services included: age, drug and alcohol misuse, gender, geographic location, poverty level, experience of stigma, occupation, disability, political difference to local and/ or county leader(s), as indicated in Figure 31.

Figure 31 Intersectionality wheel as described by respondents



When two or more dimensions intersect in the life of an individual, a complex pattern emerges according to the level of power and privilege held by that person. This was influenced by larger forces and structures at work within the context and will be described more fully in chapter 5. The following section will identify for each dimension the perceived reasons why it was felt to contribute to a loss of power, increased vulnerability and challenge in using the health system by the person who experienced it. Photographs from the photovoice participatory research will be triangulated with qualitative data collected through interviews and FGDs from community to national level.

Age: Age was identified as a social circumstance which could influence a person's power and contribute to vulnerability and challenges using health services. The young and elderly were most commonly identified as being vulnerable. This was perhaps a consequence of limited power held by these groups, perhaps as a consequence of societal forces which prioritise the economically active population, rather than children, youth or the elderly.

Elderly people were identified as vulnerable across almost all counties. In particular, elderly people were felt to be vulnerable if they were alone or lacked social capital, perhaps if their children had left for education and employment elsewhere and did not return to support their parents. Other categories which intersected with advanced age to increase the challenges experienced in using health services included: geographic location, poverty level or disability, lived far from a facility, lacking in money for transport created challenges in accessing facility-level health services.

"So we leave our elderly people back in the villages, and that's a very vulnerable group." County Non-Health Respondent, Male06

Children were identified to be potentially vulnerable by county, sub-county and health facility level respondents when age intersected with other categories, such as poverty, being orphaned or having alcoholic parents who did not provide the care and love needed. Children who were orphaned, were felt to have lack of power and privilege and little ability to raise enough money to meet their basic needs, as described by county respondents and youth photographers. The premature burden placed on orphans and vulnerable children living in child-headed homes of raising resources to meet their needs may result in neglect of their health.

Photo 17 Community members recycling plastic in Korogocho – a job often carried out by children and youth.



"It's also in the slums that you'll get childheaded families. Yes, parents have died, but the older child assumes the responsibility of the parents. Yeah and also, so health may not be really a priority, why? Because that child is thinking about busy how to fend for themselves. So will he or she go to hospital when they are unwell when they can go and do some job somewhere?" County Non-Health Respondent, Female15

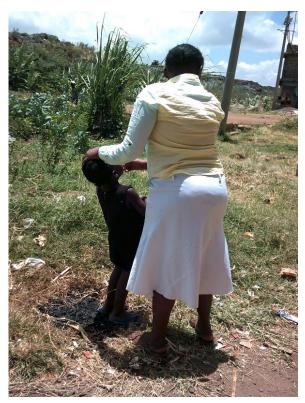
Youth photographers highlighted that within informal settlements, children and youth often scavenge for plastics to recycle in order to earn an income for the family (see Photo 17, photographer Rhonda Namwendwa).

Youth did not attend health education or health facility for services as frequently as needed, according to respondents from community to county level, when these services were not 'youth friendly'. This may have been due to the health system having been oriented around an adult population, rather than accommodating youth (perhaps due to societal norms). CHVs identified some challenges engaging youth. Perhaps as a consequence of youth's lack of engagement with health services, health facility level respondents described youth as being vulnerable, with girls and young women in particular at risk of teenage pregnancy, due to a lack of the needed health information and the need for youth specific sexual health education was highlighted.

"Youths shy away from attending normal processes that are there in our hospitals." County Non-Health Respondent, Male29

Youth photographers expressed appreciation for the work which CHVs carry out. One youth photographer acknowledged that youth often do not like to attend health facilities, but that CHVs are helpful in encouraging attendance (see Photo 18 Photographer Mary Wakjiku).

Photo 18 Staged demonstration of CHV giving polio vaccination.



"CHW, they have assisted the community in so many ways because my age mates really don't value visiting health centres yet they are the most with early pregnancy issues so they usually advise on the importance of visiting hospitals and at the same time they offer first aid." Youth photographer film.

Alcohol and drug misuse among youth commonly discussed, was community and CHVs in the urban county, as intersecting dimensions which contribute to vulnerability. This creates barriers to CHVs trying to

help them. Youth photographers acknowledged the challenges associated with drug and alcohol misuse among their age mates, relating it to peer pressure and unemployment. This was a frequent discussion topic and youth also chose to capture photographs of drug misuse²¹ (see Photo 19 photographer Mary Wanjiku).

Photo 19 Staged photo of drug misuse



"Most of the youth have joined the abuse of illegal drugs because of high cases of unemployment, peer from friends." pressure Youth photographer caption.

²¹ The photos were staged by the youth participants themselves, due to confidentiality concerns around 'real' photos of drug misuse.

Drug and Alcohol Misuse: Drug and alcohol misuse was felt to contribute to a person's loss of power and privilege as a consequence of intoxication increasing their exposure to sexual violence, risky sexual practices, feeding a cycle of poverty. Youth photographers highlighted that parents who are alcoholic may fail to care for their children as a consequence of intoxication. Poverty was felt to intersect with alcohol, with a lack of other employment options leading to brewing illegal alcohol (see photo 20 Photographer Irene Akoth). This was a topic of intense discussion during the photo exhibition with local leaders due to its illegal nature, who subsequently closed the chang'aa (illegal alcohol) dens.

Photo 20 Chang'a brewing.



"Chang'a makes parents forget their duties. The things that they do are harmful to our health. If someone gets used to those drugs he becomes idle. The people who cook and sell these things are in danger, if she is a girl she may be raped."

Caption youth photographer.

Alcohol or drug misuse may also lead to limited access or use of services, as community members often identified that a person with alcohol misuse may refuse to meet with the CHV or may reside in areas associated with crime, where the CHV may be fearful to enter due to security concerns.

"There are places known to be dens of brews, so people are afraid of going there, reaching out to them." Community Key Informant, Female13

Gender: Gender was identified to influence a person's power and level of vulnerability. Women were described as having primary responsibility for caregiving and raising children. County level respondents recognised that women experience a

combination of both biological and imposed risks. The biological risks described were those associated with pregnancy and childbirth occurring as a result of women's physiology. These risks intersected with other dimensions, such as geographic location or level of poverty, with the result that poor women living in hard-to-reach areas may struggle to access and use services, such as skilled delivery due to lack of funds for transport. This in turn may lead to inequitable morbidity and mortality among women. This was influenced by the extent to which the health system was designed to extend services (or not) to women who experience multiple intersecting dimensions.

External imposed risks occur as a consequence of women's lack of power in decisionmaking compared with men and are influenced by a number of other factors such as her age, tribe and geographic location, which are in turn influenced by the strength of patriarchal norms. Depending on the dimensions present in a woman's life at a certain point in time, this could lead to the occurrence of dangerous practices such as child marriage, female genital mutilation and gender-based violence. Gendered and patriarchal social norms led to loss of power and privilege among women, which resulted in their inability to own land, to control finances or make decisions about seeking health care or family planning, without first gaining her husband's permission. Gender intersected with geographic location and occupation leading to nuanced vulnerability among women as a result. For example, in one of the pastoralist counties it was described that during the dry season the men left with the cattle, leaving the women behind with no source of income to support their households. Meanwhile, in a lakeshore county there was increased vulnerability for women who were obliged to have sex in order to gain access to fish to sell due to falling fish stocks (this was not widely described in other counties).

Among nomadic populations, gender, age and tribe intersect, often leading to early marriage among girls and female genital mutilation (FGM). High illiteracy among girls and low economic empowerment for women were felt to further compound women and girls' vulnerability. In one of the counties one respondent described how activities to reduce the practice of FGM had been carried out among women. However, underlying patriarchal norms were not addressed and women were so

disempowered that this had no effect in countering the practice. Men demanded to marry a girl who had undergone FGM and girls still underwent FGM. In an attempt to stop FGM members of the gender team have now determined to engage with men as well as girls.

"The culture also disadvantages the Maasai woman. We have early marriages, we have FGM, we have high illiteracy levels. Low economic empowerment, so the women and the girl are more vulnerable." County Non-Health Respondent, Male03

Gender-based violence (GBV) was described in many counties as occurring commonly, particularly rape of adolescent girls in informal settlements. It was also commonly described by the youth photographers living in the informal settlements, who identified that toilets which are located outside a plot of houses and with no door presented an increased risk of rape for girls living within the community (see Photo 21, Photographer Verine Adhiambo). Solutions identified in response by youth were renovating toilets with a door and building toilets within housing plots.

Photo 21 Toilets without doors identified as high risk location for rape



"This is a toilet. I don't like the way it looks [because] it's built outside a plot. It doesn't make sense. A girl can easily get raped while going to the toilet."

Youth photographer FGD

While women were identified as being more

vulnerable compared with men, there were different vulnerabilities described for men, particularly by respondents at community level. Men were often away during CHV home visits, as a consequence of having an occupation based outside the home, therefore they did not benefit from the CHV's services. In addition, there was a

perception described by men that health services were primarily intended for women and children rather than men, which created a barrier to them seeking help when needed. Meanwhile within Nairobi drug and gang-related violence among young men was highlighted.

In addition to influencing access and use of services at community level, gender also plays a key role within the health workforce. This was reflected in our study as Table 13, which highlights a snapshot gender breakdown for a selection of respondents within this study indicates.

Table 13 Distribution of men and women interviewed within the workforce

	Male	Female	# respondents
CHV	12	12	24
CHV team leader	4	9	13
Mid-level health worker	32	17	49
County level decision-maker	85	35	120
National level policy -maker, NGO, academic	11	3	14
	144	76	220

Table 13 shows that women interviewed were equally represented with men as CHVs. Women interviewed occupied more of the CHV team leader position, a role with added responsibility but not necessarily extra (any) financial remuneration. Women interviewed were under-represented in mid-level health worker positions (which included a wide range of roles from CHEW and nurse in-charge to sub-county medical officer for health). At county level women constituted around 30% of respondents, which is largely in keeping with the two thirds gender rule (where no more than two thirds of the members of county assembly can be of the same gender, see 4.5.4), that women should occupy at least one third of county decision-making positions. Meanwhile, at national level women interviewed were grossly under-represented, with only three out of 14 respondents being women.

Religion and Cultural Beliefs: A number of other dimensions including religion and cultural beliefs were identified as contributing to a person's level of power (or lack thereof) by respondents at county and other levels. Those who adhere to certain religions were described as refusing to seek treatment or immunisations for their

children. Other forms of health services frequently denied or refused by those who adhere to certain religions, including use of family planning were also described.

"Some religions in the county ...do not go to hospital or do not want to listen to health care workers." County Health Respondent, Male02

Cultural beliefs were more commonly described by respondents at community, sub-county or health facility level than by county respondents. Due to cultural beliefs and practices intersecting with geographic location (rural), female gender and age some girls were exposed to certain dangerous practices, such as FGM as described earlier. Meanwhile, use of traditional medicines as an alternative to seeking care at a health facility was described, with observance of cultural practices felt to intersect with geographic location (remote areas), marital status (married) and education (illiteracy). These beliefs also had an influence over health-seeking practices such as skilled delivery, with women choosing to deliver at home in order to uphold these traditions.

Another challenge described in two counties was the community's resistance to certain healthy behaviours such as latrine use or lack of acceptance for the CHV, perhaps due to reasons of culture not having been adequately understood and addressed when introducing the community health strategy.

Geographic Location: Geographic location was found to influence a person's power, privilege and health through exposure to environmental risk, their (in)ability to access health services and to participate in decision-making to set priorities, see 4.5.3. Exposure to environmental risk was most commonly discussed in urban areas²², while geographic access to services was most frequently raised in nomadic and agrarian counties. Those in the most remote areas, particularly in nomadic counties, were described as experiencing the greatest geographic barriers to accessing and using health services, as a result of long distance and transport costs. This also creates a challenge to joining public participation meetings typically held in main towns. For those in urban informal settlements and in certain areas in rural

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²² This may have been as a consequence of the insights provided through photovoice research (only carried out in Nairobi).

counties, insecurity created a barrier which hindered use of services, particularly at night (regardless of the geographic availability of the service). CHVs were identified as workers who can extend the coverage of services to those living in hard-to-reach areas (see section 4.5.6).

In Nairobi and Kitui counties, some respondents identified that those living in certain areas, such as within informal settlements or in dry areas had higher disease burden of respiratory infections, diarrhoea and malnutrition as a consequence of lack of clean water and sanitation; poverty and lack of varied diet; exposure to raw sewage in their living environment or exposure to pollutants or toxic fumes from burning rubbish. These environmental risks pre-dated devolution. However, there were limited discussions by community members about changes to environmental risks brought about by devolution in urban areas. In rural areas, community led total sanitation was commonly described as a county government and partner collaboration to improve access to sanitation.

"Those people in dump sites they usually have many sicknesses, because of the working conditions they work in. Because you find every time it's burning and when they continue to inhale that smoke they catch chest related sicknesses." Community Key Informant, Male11

An interesting finding which emerged through the photovoice research was the variation in the level of poverty and exposure to risks, even within the one informal settlement. During the photovoice research the youth photographers visited five different villages within Korogocho informal settlement. In the subsequent discussions youth talked about the differences between the villages. Some villages were felt to be more dangerous than others if houses were congested, poorly constructed, located near stagnant water and if toilets were not built within the housing plot (see Photo 23 Photographer Rufus Njoroge). However, in other villages houses were considered safer if they have a private yard (see Photo 22 Photographer Rufus Njoroge), were kept clean and were located near the police station, which had recently been built and was felt to have led to a reduction in crime in the surrounding area. In addition, some houses had additional sources of food and/ or income with

a cow or sack-based kitchen garden within their compound. This therefore demonstrates how different aspects of geographic location can intersect to influence a person's position of privilege or level of vulnerability.

Photo 23 Unstable housing located overhanging river



Photo 22 Safe and clean enclosed compound



Inadequate sanitation was highlighted by youth photographers as a cause of ill health during discussions and photos, which related to the lack of adequate sanitation and toilets within the informal settlements. Again sanitation was not uniform throughout, with some villages considered to have much better sanitation than others.

"And in Kisumu Ndogo most of the plots had no toilet, first this area had only one toilet and there was poor disposal of human wastes all over." Youth photographer FGD

The rubbish abandoned in some villages within the informal settlements was highlighted by many of the youth photographers as a cause of ill health (see Photo 24 Photographer Rufus Njoroge). However, they also highlighted that there has recently been the introduction of rubbish collection, which is improving the general environment within the community (see Photo 25 Photographer Rufus Njoroge). This

intervention was described as having been facilitated by the youth, demonstrating agency and power in addressing a risk factor for ill health. Participants did not describe any link between this improvement and changes brought about by the

Photo 24 Rubbish dumped in the street.

county government as a result of devolution.

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"Under the rubbish you don't know whether there is still flowing sewage below them, and one can step on them and get into the sewage and maybe there could be some metallic objects that can injure you." Youth photographer FGD

Photo 25 Lorry collecting rubbish



"A lorry that collects garbage... I loved it, because the people collecting the garbage are the youth. The youth have come up with groups they go to every plot giving out plastic bags for garbage and they come for it on Saturday, if they don't come for it there is a

specific place where they keep then collect them on Monday using the lorry... [so] the community becomes clean." Youth photographer FGD

Poverty Level: Poverty as a dimension of social inequality was felt to commonly intersect with other dimensions, creating a barrier to accessing effective care and

contributing to malnutrition. It leads to limited power and lack of agency, where people who are poor have few options surrounding where they live (geographic location) and how they are employed (occupation), potentially resulting in increased exposure to environmental health risks, compared with people who are not poor. These environmental risks included: spread of tuberculosis in poorly ventilated thatched houses in rural areas. In informal settlements, wound infections from working in dirty water and respiratory problems from burning rubbish were commonly described. Lack of money to pay for child care, resulted in some children being left at home while parents worked.

Extreme poverty contributes to hunger and malnutrition, at times intersecting with HIV in Northern Kenya to increase vulnerability, as respondents identified up to 60% of HIV patients could not afford food and were unable to take their antiretrovirals on an empty stomach, leading to poor adherence. One respondent identified CHVs as a potential opportunity for identifying those patients in need of food support or cash transfer. There were no longer term strategies described to tackle the underlying cause of malnutrition and poverty, leaving the acutely malnourished patient at risk of recurring malnutrition and its associated health complications. This was also recognised by some respondents at national level, who identified the need for a community approach which sought to tackle dimensions of social inequality by ensuring stable income through agriculture, access to water and sanitation services etc. in addition to expanding health service coverage.

"The community approach, not now community health, but community approach in many things, security, agriculture... It is one of the elements in the social pillar which we must implement if we must change those inequalities. Because the inequalities won't be provided [for] by the many complicated things that we want in place." National Respondent, MaleO6

Occupation: Poverty, geographic location and occupation intersected, leading to limited power and agency, resulting in reliance on more dangerous occupations, such as scavenging on the dump site, brewing illegal alcohol, commercial sex work or working with pollutants. One respondent described that occupation was also felt to

influence the quality of care provided, with government officers being provided a higher standard of care than an 'ordinary' person.

"If an officer goes [to health facility] he is treated first. Then everything is paid for, high cost drugs are given on time, ambulance services are given, but if it's a normal person no medicine, some even go without medicine at all." County Non-Health Respondent, Female36

Education: Education was infrequently described by county level respondents, but more commonly discussed among those at sub-county or health facility level, with lack of education described as creating a barrier to seeking care at a health facility and to participating in decision-making. There is need for concurrent improvements in education and health.

"Health cannot stand alone and say 'I can do this one here without the support of education', if decision-making is a process that is hindered by the level of education then what do you need to do? Education department has to come [with] you that is the first part of it." County Non-Health Respondent, Female12

Low education and a failure to consider language barriers when planning training materials and resources created barriers during CHV training. In some geographic locations, where the majority of the population have limited spoken Kiswahili/ English language skills, the lack of training and reporting materials in mother tongue has created a barrier to the recruitment of those who don't speak English. In another remote community the CHEW identified that some communities did not have a resident CHV due to the high levels of illiteracy excluding residents from selection to be a CHV.

"Those who are far don't have community health workers. Because they are moving from one place to another and when we chose those communities health workers we targeted at least those who can write and talk English. So we saw those who are around town most of them understand. So those who are far there is a problem, there is a gap." County CHEW, Female02

Illiteracy was perceived by county and health facility level respondents as creating a challenge to understanding health education and lack of power contributed to limited confidence to seek care with a skilled health worker. Aligned with this, one national respondent outlined the need to address this and engage illiterate groups with community health services.

Disability: Mental and physical disabilities were identified as potentially leading to increased vulnerability by respondents across counties, health systems and community levels. Respondents from several counties and at community level identified that it may be difficult to reach and assist people with disabilities, as a result of stigma which means that people with disability are hidden at home. For those with mental illness stigma appeared to be even stronger, particularly described by respondents from more remote settings, where cultural beliefs associated mental illness with wrongdoing.

"Another reason is the hiding of the persons living with disability, done by their family members, out of shame... and so they don't get the health services they need." Male community FGD01

Stigma: Stigma was described relating to HIV status, sexuality or marital status, which could lead to loss of power and increased vulnerability. CHVs described the presence of stigma creating a barrier to HIV positive people engaging with services, particularly in rural areas where some people believe that HIV is a curse.

"Mostly you find that if a person is ailing from HIV or HIV AIDS, that person has a lot of challenges in the family because they think he is cursed and yet the truth is that it's not a curse; it's a disease like any other, and if one follows the appropriate treatment schedule he/she will live a desirable life. So you find that a person like that, within the family, will have a lot of challenges." CHV Team Leader, 01

In general community respondents identified that the CHVs often visit people living with HIV at home, leading to increased coverage with community health services compared with the general population. Although, if CHVs have not been adequately trained they may fail to visit that person. However, there were challenges with CHVs

visiting HIV positive patients, as some were fearful to disclose HIV status and accept help. CHVs themselves identified that they prioritised to visit households with a sick person living there more frequently than other households. Some community members mentioned that there are differences in the types of illnesses receiving community health services, stating that those with TB or HIV receive help, but children with epilepsy or asthma do not, perhaps because the CHV is uncertain how to help.

A small number of respondents across several counties identified that stigma towards gay and lesbian people may create barriers to their use of health services. This was identified by respondents across several counties, along with the need to introduce policies which safeguard their interests.

"So here we have actually quite a significant group of the gays and lesbians. Yeah, so you know those are vulnerable groups... given the stigma I think that is also quite high. So those are guys that we, you know we need to make sure that we create a very friendly system and even policies so that we safeguard their interests." County Health Respondent, Male19

Stigma was described regarding being an unmarried pregnant woman in a rural nomadic county. However, interestingly this stigma conferred a protective function for uptake of skilled delivery, with one nurse describing that the traditional birth attendant will not deliver the child for an unmarried woman and so unmarried women typically sought delivery care at the health facility.

Tribe and Political Difference: Conflict between tribes was described in three counties, all of which described that this conflict and potential resulting displacement could have implications for health of the affected populations, due to the displacement; fear of seeking care from someone of a different tribe; closure of health facility due to insecurity; lack of access to adequate food and conflict related injuries as well (see section 4.5.6). Fortunately in one of the counties it was felt that there had been reduced conflict between tribes since devolution, as a result of dialogue and peace building efforts by politicians.

However, a new emerging vulnerable group identified following devolution are those who did not vote for the elected governor or member of county assembly, described by several respondents at both county and community levels. People experiencing this dimension were described as receiving fewer services.

"Let me just say our village is among those that have been, what do you call it, neglect? I mean neglected. The leadership is also dismal. I mean general government leadership, and this is brought about by political differences. The councillor didn't elect me, they are not of my tribe. You find that village, because they are sure they did not choose that councillor or MCA, it's neglected." CHV Team Leader, 09

4.5.3 How can social determinants of health influence participation?

Gender, age, education, geographic location, disability, poverty level were all felt to influence a person's ability to attend and contribute during public participation, as already highlighted earlier in section 4.3.5. Many respondents felt that while representatives for women, youth and people with disabilities were invited, the public participation meeting was subject to elite capture, with those who hold most power within communities dominating discussions. Depending on the county context, those who are felt to hold limited power or to be stigmatised, such as the youth, street dwellers, women or those who are illiterate have limited involvement during public participation.

"Illiterate ones are never involved. They will not even know some of these processes [public participation]." County Non-Health Respondent, Male19

Those living in remote areas and/or persons with disabilities experience travel challenges to reach public meetings and community norms prioritise the opinions of elders over youth. Women, people with disabilities and youth are now required to be given an opportunity to speak if they attend the public participation. However, in some counties there are still major barriers to learning women's opinion during these meetings. Women were often considered too busy to attend a public participation or not permitted to attend by her husband in nomadic counties. Even where women

were present at public participation, in some settings they were often too fearful to speak.

"When people go to the fields to do public participation, the women are always behind doing other things, in the households, taking care of children, and so on. So they are hardly fully represented in those public participation things and what that entails is it is a woman who knows what she needs in a health centre. ...One they miss out of the quorums and number two even if they come up they may not be able to speak out. There are challenges where the real priorities can be captured." County Non-Health Respondent, Female 25

Perhaps as a consequence of the dominance of elites during these meetings, one respondent described public participation as meeting the requirements of the process, but not fulfilling the intended objectives for fairness.

Interviewer: "Do you feel that the decision-making process for health is just and fair?

Respondent: It is just but it is not fair (laughter)

Interviewer: Yes, so why that difference?

Respondent: It is just because the process is followed and people are involved in the decision-making. But it is not fair, because you go through that process and at the end of the day, you don't achieve anything." County Non-Health Respondent, Female34

4.5.4 Actions to address social determinants for health since devolution

A range of interventions was described to address social determinants for health. Respondents (typically gender and children's office representatives) from seven counties described the introduction of cash transfers for children from poor families, those with disabilities, the elderly and the poor as part of the national social protection unconditional cash transfer programme. In addition, some respondents described the conditional nature of cash transfers following completion of antenatal care visits or immunisation. In another county the children's officer described

working alongside health workers to provide comprehensive care for the poorest families.

Another area of change described across all counties is the two thirds gender rule. As a consequence, participants felt there are now more women in leadership positions. Of the 120 county level respondents interviewed for this study 35/120 are women, with 85/120 male respondents. However, while there are more women in leadership positions some of these women acknowledged that they were only in position, due to the two-thirds gender rule, rather than having been selected by the community. This indicates that this form of affirmative action which forcibly provides (some) women with the power to participate in county government (which has been traditionally held by men), is still necessary until women are viewed as equally able to take on these roles in decision-making as men. In fact, more action is needed to transform patriarchal forces if this action is to overcome tokenism and achieve its purpose.

Since devolution, respondents described some confusion regarding the provision of gender-related services. Typical activities described by gender representatives include social development, community mobilisation, gender mainstreaming and referral of cases of gender-based violence. Lack of clarity surrounding where responsibility for provision of these services lies following devolution has led to a significant funding gap and lack of clear roles and responsibilities. Gender is still considered a national function, but does not receive national funding. It has been moved to a new department, however those with the new responsibility for providing gender services (youth officers) are not trained to manage gender activities and so many former gender officers still continue to carry out unfunded gender activities. This was felt to be a consequence of misunderstanding by those who planned the restructuring. Gender representatives felt that gender was perceived as a programme only within the ministries, and was not recognised to be an outreach programme which starts at household level.

"For gender there is no allocation from the national government. For specifically gender issues, there is no allocation since devolution started." County Non-Health Respondent, Female34

4.5.5 What effect has devolution had on improving equitable availability of health services?

Since devolution the equitable availability of health services **between counties** appears to have improved following investment in infrastructure (see section 4.4.4), human resources for health (see section 4.4.2) and expansion of availability of services, particularly in formerly marginalised counties. However, political interference (most frequently described by technical county level respondents) was at times felt to have had a negative impact on the level of equity **within counties**, with powerful leaders having more services available within their ward, compared with others, regardless of need (see section 4.3.2). This led to the emergence of a diverse picture, with respondents from some counties painting an extremely positive picture, with multiple actions implemented to promote more equitable provision of health services based on need within the county.

Availability between counties: Respondents across levels discussed the difference in geographic availability of health facilities, favouring some counties more than others, with formerly marginalised counties having entered the devolution period grossly underserved in terms of infrastructure and skilled health workers. Respondents identified that after devolution there was increased funding available at the county level for health within these formerly marginalised remote counties (see section 4.4.1). County level respondents from many counties described investment to increase infrastructure and to ensure allocation of staffing so that all health facilities, including the most remote have at least one trained health worker (see section 4.4.4).

The equalisation fund was introduced in an attempt to remedy the ills created under the former centralised government, which had neglected to provide even basic services for huge swathes of their population. In addition, there has been expansion of service availability within some of these remote counties, as reported in the media

that Wajir and Mandera counties, have performed their first ever Caesarean section deliveries following devolution (see Photo 26²³).

"I think under devolution, there is more equity, communities that were previously marginalized; I'm talking about Turkana, Mandera, I'm talking about Wajir, Garrisa, Moyale, are receiving unprecedented development, things that they never imagined they would get. There is also the equalization fund which is also meant for these historically marginalized areas which is helping them also." National Respondent, Male10

Photo 26 News headline about introduction of caesarean section in Wajir County



Wajir County is among the leading in maternal mortality rates per 1,000 live births.

SATURDAY JULY 16 2016

Availability within counties: Improvements in service availability within counties were described with county governments being better placed to understand the needs of their population than national level and focusing new facilities and community units in underserved areas in response.

"In the past of course, the planning process was so centralised, that somebody making a decision about an area he does not know. So he could be talking about a facility one kilometre away from an existing one, but he will not know. But now ...we know where these facilities are and we know the places that are under served." County Health Respondent, Male58

However, not all respondents described positive changes for improving health equity since devolution. Many described persisting or worsening inequities as a consequence of devolved government. With the transformation from a single central government to multiple county governments many respondents described the

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²³ Source: http://www.nation.co.ke/counties/WAJIR--Habaswein-hospital-conducts-first-CS-delivery/1107872-3297206-sdhiv7z/index.html

introduction of biases and political interferences, as a result of the governor and/or member of county assembly wanting to provide for his/her own constituents (see section 4.3.2). This resulted in interference with the technical decision-makers' desire for provision of services based on need, versus the politicians' desire for equality of services among all wards.

"You know the clamour is usually for equal rather than equity. Yeah, so everybody wants the same size of the pie, rather than the size that they deserve based on the circumstances." County Health Respondent, Male15

As some respondents described in section 4.3.2, politics at times had a negative effect on the extent of equity demonstrated in health services provision, where self-interest by those in positions of power undermined equitable provision of services. Worsening inequities were often a consequence of an over-emphasis on construction of infrastructure, rather than seeking to identify and address underlying causes of ill health.

"Our problems are mainly in the communities that are in the low income levels. But now, when you look at our budget you find that we want to construct a very big hospital. These people might not even come to this hospital. The issues they have are very basic, maybe even just provision of supply of clean water. You supply clean water, and 50% of their issues are [solved], they don't need that hospital. So I believe when it comes to equitable distribution, we are not doing that." County Health Respondent, Male 30

In general respondents said that services were provided to everyone and were not withheld based on someone's tribe, although some respondents did speak out and identify that those who had voted for the governor and/or the elected member of county assembly may receive more services compared with those who had not, see section 4.5.2. In several counties where a minority tribe had formerly been marginalised, county level respondents described that county governments were taking actions to include these groups more.

Availability of community health services: Availability of functional community health services varied both within and between counties, depending on the degree

to which it was prioritised (or not) during decision-making (see section 4.4.1). However, expanding the availability of community health services to ensure full coverage to the whole population would provide an important step in transitioning towards universal health coverage. As counties develop health services which are designed to meet the needs of their population, some have already started to increase the availability of services by CHVs which seek to meet local health needs. For example, in several counties with high communicable disease burden respondents described that CHVs should provide treatment using community case management. In another county with a high NCD burden, CHVs have been trained to screen for hypertension and diabetes. While encouraging that these services are being introduced, there still exists a gap with ensuring the effectiveness of service delivery, due to supply chain gaps.

Availability of facility level health services: In response to the biological risks associated with childbirth many of the respondents described the importance of improving maternal and child health, highlighting the national policy for free maternal health care introduced in 2013 and describing measures taken to expand availability of skilled delivery services, such as building maternity wings at health facilities.

In one county respondents described that they have observed an increase in women reporting GBV. Alongside this there was a need identified in several counties to expand the availability for the delivery of comprehensive GBV services to more health facilities. There was also expansion in the range of services available. Within one county a health worker in a remote health centre, described that she was now able to provide antiretroviral therapy for HIV positive clients instead of referring them to another facility many miles away.

4.5.6 What effect has devolution had on improving equitable access and acceptability of health services?

Improving geographic access to health services has been an important priority for many counties. This has led to expansion of the number of health facilities and improved access to primary health care services for many living in remote areas.

However, throughout the expansion there has not been the same level of priority given to ensuring quality of services or addressing acceptability, with the consequence that effective coverage has been restricted. Access to community health and outreach services following devolution have been mixed, with some counties having prioritised context-specific community health interventions and others having neglected the same. All counties have received a mobile clinic through the First Lady's Beyond Zero campaign. Aside from the new mobile clinic, in general outreach services were felt to have suffered following withdrawal of partner support for these following devolution, but without the needed financial support from county government.

Access to community health services: In recognition of the role community health can play in expanding access to health services, county and sub-county level respondents identified that areas with unmet need were prioritised first for receiving a new community unit. Meanwhile, at the household level community members generally felt that CHVs prioritised attending the homes of those who were 'vulnerable', including those who were poor. For the most poor a home visit from the CHV may be the only health care they have access to.

"I wanted to report that those who are disadvantaged are the ones given priority. They (CHVs) care for them the most." Community Key Informant, Male02

Not only do the CHVs visit those more disadvantaged at home more often, but many CHVs also sought to respond to the basic needs of their clients (and neighbours) as evidenced by a number of examples given by community members, CHVs and CHEWs of CHVs providing financial assistance, from their own pockets, to help the most poor with transport, drug costs or basic essentials such as food. This was a challenge for the CHVs, who do not receive payment and may not have enough money for their own needs, thus deepening their own poverty.

"I do not have much income. Maybe if I visit and somebody tells me that they don't have fare and if I have 50 shillings I can give them. Sometimes I may not be able to help because they may say they do not have food and even I don't

have food or I have but it is a little that cannot even be enough for one day."
Female CHV12

In contrast to the norm that CHVs prioritise visiting their more disadvantaged clients, a small minority of community members in the most remote areas included in the study, felt that the CHV prioritised services to those in the community who are richer – those with a 'pot belly' or who have a tin roofed house, because "he (CHV) will go to that person because he will get something there." Male community FGD02





In several of the more remote communities in a rural county where community members participated in FGDs, community members and CHVs agreed that CHVs did not visit homes which were far from their own due to the long distance between

the CHV home and the client's home and a lack of transport to assist CHVs to reach more distant homes (see Photo 27).

CHVs and other health workers and decision-makers identified a number of challenges with coverage. At the time of the study only one agrarian county, which had high communicable disease burden (including extremely high HIV prevalence) and had received intense partner support to scale up community health, had achieved full county coverage with community health services. Due to the former reliance on donor and partner support for community health, coverage is still largely determined by where partners have supported the establishment of community units. Depending on the county and the partner this may have benefited the hard-to-reach or the easy-to-reach populations.

Some respondents from remote counties identified a preference for establishing new community units in more densely populated areas, which is logical as it will rapidly extend coverage for more people. A community unit should also only be established within the catchment of a working health facility, in order to ensure supervision, linkage and referral opportunities. However, this means that the most remote, low density communities will continue to be excluded from receiving any form of health services.

"We cannot open a community unit in areas which [don't have a health facility]. You know it has to be linked to a facility." County Health Respondent, Male47

Lack of variation in the number of CHVs for low density areas or hilly terrain created challenges for the CHVs, with some having to travel up to 20km between homesteads. Other geographic contextual factors also came into play and created challenges; including insecurity in informal settlements or very remote areas, with wild animals, including elephants, having created a challenge to providing services in one county. In one Northern nomadic county with vast distances between villages, the approach had been modified, so that CHVs were recruited even from within the most remote communities. Therefore, as the population group moves and migrates, even across country borders, so too the CHV moves with them. Satellite phones were distributed to certain communities for security reasons and CHVs were encouraged to use these phones to alert health services in the event of obstetric emergencies.

"So today you will find this group living in Kenya, tomorrow they have crossed the border to Uganda..., but you know you cannot find facility, health facility remains home. So we make sure that we get CHVs from those communities, so they move with these communities. Whenever there is an issue they communicate...to pass information in case for example there's obstructed labour, we can easily get that [information]." County Health Respondent, Male39

Even where community units have been established there were at times coverage gaps. Respondents from one nomadic county in Northern Kenya, identified that prior

to devolution CHVs had been identified during a community meeting held in the main town. Assumptions were made that each catchment village would have sent representatives to this meeting. However, due to distance and inadequate mobilisation there were few from the more remote catchment populations, with the result that CHVs were recruited predominantly from the main town. In order to ensure coverage of community health services in all villages, the county team were now returning to repeat the process.

The range of services provided by CHVs varied between counties. In some of the more remote counties, health facility level, key informants and community respondents identified the lack of curative services provided by CHVs as problematic.

Access to primary health care at facility: Most counties described trying to reduce differences in geographic access to primary health care by building new health facilities in the more remote areas (see section 4.4.4). However, devolution has also brought challenges with priority-setting bringing more resources to the geographical area where powerful politicians are from (see section 4.3.2).

The challenges of geographic access to health facilities were discussed in all counties, most extensively in those counties with nomadic populations, with health facility services designed for a fixed rather than a mobile population, which created challenges leading to lower utilisation of services at health facilities. Photo 28 shows nomadic populations in Marsabit County who live far from a fixed health facility. For those who lived far from the health facility (either in urban or rural areas) poor road infrastructure created a barrier, with community members obliged to carry patients on their backs to reach health facilities in some areas as a consequence of impassable roads. For patients who lived far from a health facility who were also poor and/or elderly/ disabled/ heavily pregnant women, transport costs could be a major barrier to using services at the health facility. Low community awareness about services also hindered access to the services. In these communities outreach services formed a vital part of routine service delivery.

Photo 28 Nomadic populations in Marsabit County





In addition, seasonal changes influence access to health facilities with respondents from several counties (both rural nomadic and rural agrarian) identifying that during the rainy season some communities were cut off and unable to access the health facility due to seasonal rivers (see Photo 29). Meanwhile in dry season those with nomadic populations found that catchment populations varied widely with populations moving in search of water sources for livestock.

Photo 29 Flooded road in Marsabit County, Kenya



"The county they should be ready to fund for an outreach because some places ... when it rains it's like they have been cut off in terms of transport." County Health Worker, Male03

Having access to 24 hour services was also discussed by community members and youth photographers as essential to equitable services, particularly within the urban county (see Photo 30 Photographer Mary Wamjiku).

Photo 30 Sign advertising free 24 hour maternity services at government health facility



"Free 24 hours, maternity services...This is one thing that helps our community because this is the only public hospital and has free maternity services. It has helped the community a lot since people can access those hospital services for free." Youth photographer FGD

Access to primary health care for patients with different abilities: In many counties respondents described ensuring that a ramp is available at any new health facility which is being constructed, to ensure access for wheelchair users after arrival at the health facility. However, just reaching the health facility was highlighted as a challenge for people with disabilities. Respondents from a few counties identified that CHVs were are an important means of identifying and assisting people with disabilities and ensuring their linkage to support services. There were no other discussions about how counties were seeking to help those with disabilities to reach the health facility in the first place.

"They [CHVs] are able to reach out to them, in fact we are able to get some out especially the disabled, the children with disability that used to be hidden, and nowadays we can see them being brought forward." Sub-County Respondent, Female 10

Having health workers trained in sign language at primary health facilities was an identified gap. Two counties had started or were planning to train health workers in

basic sign language, in order to improve access to services for deaf patients. Meanwhile in another county those with physical disabilities were given first priority in the facility and a sign language translator was contacted as needed to assist with translation.

Outreach health services: Outreaches were identified by county, sub-county and health facility respondents as a means of improving health service coverage for the most remote communities, who did not have easy access to receive these services at a static health facility. The most widely described outreach services introduced were the beyond zero mobile clinics provided to each county by the First Lady. These mobile clinics were felt to have contributed towards improved service access. However, there were still some challenges in how the beyond zero mobile clinics had been distributed, with all counties receiving one large bulky mobile clinic to achieve equality in distribution, regardless of level of need/ population size/ geography/ road terrain etc. (see Photo 31). As a result, the most marginalised remain unable to benefit from these mobile clinics.

Photo 31 Challenging road terrain in Turkana County, Kenya



"If you also look at what the first lady in the country is also doing under what we are calling Beyond Zero, is all about equity. It is only that for her it is so political because she says every mobile clinic in every county, but some counties do not require that mobile clinic... she's

combining both; equity and equality. She should have gone with a different support which is needed there." National Respondent, Male09

In addition to the Beyond Zero mobile clinic other forms of outreach services were also conducted. These were often supported by a partner organisation and provided integrated routine services, such as immunisation, growth monitoring and antenatal care. However, these were often vertical programmes which provided incentives for health workers (facility and community level), when donor or partner funding ended, challenges were described with allocation of government funding for these services following devolution. Some sub-county and health facility level respondents identified there had been no county government funding for outreach services received at the sub-county level. Thereby leaving the most remote community members completely unserved by any health service.

"We normally have integrated outreach where the preventive services, the promotive services, the nutritional services, the underweight children are [identified], so all these services have been integrated before. But that programme is no longer there and we expect the County government to be filling those gaps and it is not forth coming so we have a very big problem. So we can say there are totally no access." Sub-County Respondent, Male04

At the health facility level some respondents identified that they would try to allocate some of the facility funds for conducting outreach services. However, delays in receiving funds at the health facility level hindered their ability to consistently carry out these outreach activities. Even where outreach services are conducted patients were still unable to access and use health services in a timely manner, in the event of an emergency or for skilled delivery.

"There are communities that are hard-to-reach, and most of the times if you conduct these outreaches once per month. You have a mother or a child who is sick, this family has no means of transport, in my area 30 kilometres interior there are no roads. These people are not able to get these services although they are supposed to seek health services at my facility it is a bit difficult for them to reach. Only those who are closer to the facility [access health services]." Health Worker, Male08

Photo 32 Recently constructed birth waiting homes in Marsabit County, Kenya



the In most remote counties there were a minority of respondents who described the of introduction interventions to encourage use of health facility services, such as birth waiting homes for women from remote areas to wait during the late stages of

pregnancy to ensure they will be able to have a skilled delivery (see Photo 32).

Access to referral services and secondary or tertiary care: Within a county, major hospitals, breadth of services and more experienced health workers were typically centred in urban areas, rather than the more remote places. As a result, those living in more remote areas, who were poor were felt to experience a double challenge in reaching secondary level care. At one county hospital where there was a waiver scheme in place, one respondent acknowledged that while the scheme covers costs associated with medical bills it does not cover associated costs, such as transport or loss of earning. As a result, the most poor never even reach the hospital.

"The range of services are not evenly spread throughout the county. The county headquarter has got the county referral hospital, with almost 20 types of services. Somebody in a remote village, may only be accessible to the dispensary with very limited range of services." County Health Respondent, Male61

Many counties have invested in ambulances in efforts to strengthen referral services, but the study found limited evidence to suggest this increased referral equity (particularly for non-maternal health-related emergencies). Referral costs varied between counties, with no consistent policy regarding payment for ambulance referral. In one county, ambulance services were available free of charge for

maternal health related emergencies. However, any other emergency could not use the ambulance, as a result of which the patient and their family would be obliged to seek private transport to reach a hospital – often creating a barrier to patients seeking care in the event of an emergency.

"There is a lot of challenge in our transport; like I told you, many communities are at the outside so distance; we had only one ambulance. And that ambulance is only for maternal health. Purposely for maternal health. In case a mother want to deliver, when they call the ambulance fetches them. But the others, in case someone is sick they'll have to hire a vehicle. Of which everybody doesn't have all that money to hire a public vehicle, so there is a lot of challenges." CHEW, Female02

Within Nairobi, even when a patient reaches a primary health facility there was only one ambulance shared between three sub-counties, which resulted in considerable referral delays as a consequence of heavy Nairobi traffic.

4.5.7 What effect has devolution had on improving equitable utilisation of health services?

Devolution has provided counties with the opportunity to find new ways to increase service utilisation beyond simply increasing availability of health facilities that has already been discussed.

CHVs can promote service utilisation: Interventions described which can promote utilisation include: encouraging attendance through CHVs, defaulter tracing, CHV accompanied referrals, training traditional birth attendants as birth companions to accompany women to the health facility and providing mothers who attend for skilled delivery with a birthing pack, including shawl, khanga, soap and a basin.

"...triple number of patients coming in the facility (since devolution). You have seen the immunization the coverage has gone up because the mothers are able to come to the facility, we are also able to reach them, the community is well mobilized ..., and you can see a number of deliveries has gone up, our people don't like coming to the hospital to deliver. But because of this CHV is

impacting, they are able to come to the facility, now they are able to come to the facility, and then we have also improved the mother pack, the baby pack, so when they come to the facility they get a dignified delivery. They have at least a shawl to wrap their baby, they have a khanga for them to wear. They can get soap, they can get a basin, so that also motivates them to come to hospital." County Health Respondent, Female40

The community health strategy was identified as an opportunity for tackling inequity, as it would ensure that uncomplicated illness was identified and managed early, therefore reducing the burden at health facility level and ensuring that the number of cases at the health facility would be fewer, to allow for waiver coverage of all who needed it.

Facilitators and barriers to service utilisation: Respondents from many counties described the introduction of free maternity care and free health care at dispensaries and health centres, based on national policy. Although fees (non-maternity related) were still in place for services at hospitals. Among health facility level respondents, the introduction of these policies was often felt to have increased service utilisation.

"Following the free medical services; the work load has grown very, very high.

Services have been rendered available from high levels down, referral systems have improved." Health Worker, Male11

Despite having free health care for maternal health and free services at dispensary and health centre, respondents from county and lower levels all identified that poverty was still felt to lock the most poor people out of using health services, perhaps due to transport costs to reach the facility.

Respondents from many counties described a waiver system whereby fees (from hospital care) can be waived if a patient is unable to pay. However, several respondents described that there were often considerable delays in establishing whether someone was eligible for waiver or not. As a result of these delays there

have been reported cases of patients detained in hospital, as a result of inability to pay and long delays in the waiver system (see Photo 33²⁴).

Photo 33 News headline for detained patient in hospital



4.5.8 What effect has devolution had on improving quality of health services?

Quality of health services was infrequently described as a priority for health services by county level respondents. While there were examples given of improved quality, such as stronger supply chain in some counties, in general, much of the discussion surrounding quality happened at community and health facility level and tended to be critical, identifying quality gaps at public health facilities. Many of these existed prior to devolution, but there was limited discussion about interventions introduced by county governments to improve quality.

A range of respondents highlighted that Kenya has a very inequitable dual level system for health (which pre-dates devolution), where those who are rich pay for quality private care and those who are poorer receive perceived lower quality government services, where diagnostic tests or drugs may not be available.

"I think generally equity issues in Kenya are big because the whole issue of private-public dichotomy; if you have money you go to Nairobi hospital you get really good services, if you don't have money you end up in Kenyatta and

²⁴ Source: http://www.nation.co.ke/counties/mombasa/Damaris-Muema-hospital-bill/1954178-2911118-oa8he6/index.html

you get such bad services. So the whole issue of equity is vague, it just doesn't happen." National Respondent, Female12

While services at dispensary and health centre were meant to be provided free of charge, lack of adequate drug supply and funding to the health facility resulted in stock-outs, with patients therefore forced to buy drugs elsewhere. Community members identified that if they had enough money they would attend a private clinic, where they could get better quality treatment and receive the drugs needed. As a consequence of lack of drugs at public health facilities, the most poor may not have the needed funds to pay for drugs and so remain locked out of receiving quality health care, despite the presence of policy for free services at dispensaries and health centres. At times some community members even said they were unable to receive treatment if the health facility had no drugs, as they had no money to buy the needed medicines. This was described by youth photographers who described the challenge of lack of drugs at government health facilities and the ease of being able to purchase drugs directly from a chemist/ drug seller (see Photo 34 Photographer Joseph Owino).

Photo 34 Private chemist shop in Korogocho informal settlement



"You can go to the hospital and make lines (queue), when you get to the doctor, the tests are run on you and prescriptions given and maybe you have no money to buy the drugs; you went there knowing you will be given drugs then you referred to a chemist and

you don't have the money." Youth photographer focus group discussion

National respondents were aware of this challenge, with one respondent identifying potential future challenges with drug resistance as a consequence of patients bypassing government health facilities due to frequent stock-outs and buying drugs directly from the chemist.

"Every area you go to, you are told drugs are not here [government health facility]. They prescribe and you go buy outside. This has made the cost of treatment higher and not affordable ...Of course that tells you that only the people with resources will now be able to access services that are relevant. People who are wealthy will afford to pay in the private clinics. People who are poor will wait and seek alternatives, like going for traditional medicine or self-treatment, self-medication on the counter. That contributes to drug resistance or mismanagement." National Respondent, MaleO4

One county described having introduced simple changes to strengthen reliable service provision in more remote areas, providing them with larger and more infrequent funding and supplies, so saving the health worker from long and frequent journeys to collect funds.

Community health services experienced similar challenges to health facilities, with low functionality being a problem, which undermined the effective coverage of services provided (as highlighted in section 4.4.5).

4.5.9 Respondents recommendations to strengthen equitable priority-setting

Respondents' recommendations for supply of health services

A range of recommendations for more equitable priority-setting were proposed by respondents. These largely centred around building capacity of decision-makers (both technical and political), county human resource managers and procurement staff; ensuring a quality focus; developing strong collaboration with political decisions makers throughout the priority-setting process; more participatory priority-setting process; greater decentralisation of funding to lower levels (subcounty, health facility and community unit); exploring alternative funding sources; building community ownership and understanding of their role and rights for health and exploiting opportunities for innovation.

Building capacity: As has already been highlighted there were a range of challenges with priority-setting which include over-investment in infrastructure and underinvestment in community and primary health services. This was felt to be both due to the political nature of decision-making and a lack of understanding of health, in terms of both preventive and curative aspects. In order to ensure more equitable priority-setting which benefits all people, not just an elite few there is need for capacity building of decision-makers (technical and political) in understanding health and equity; strategic planning; cost-effectiveness approaches; proposal development; procurement mechanisms and human resource management.

"From the supply-side, I think there is definitely need to first build the capacity for the different decision-making, for allocation and for managing the resources but also we need more flexible policies to be able to adjust or adopt services to community needs and demands." National Respondent, Male11

Ensuring a quality focus: Quality has been a missed opportunity throughout devolution. Despite the prominence placed on quality improvement by national government, there has been a lack of emphasis on quality by county level decision-makers leading to policy-practice gap for equity-related policy, such as lack of regular drug supply to health facilities resulting in patients having to buy drugs from a private pharmacy, despite the presence of the waiver policy or free health services at dispensary and health centre level. It is important that moving forward quality becomes a central focus to ensuring equity.

"A mother comes with a child under-five years, who is seen for free because the policy says the child should be seen for free, but it is not free as there is a cost to the institution — for injection, syringe, drugs, gloves, or laboratory investigations. These are all free but in a real sense they are not free because someone has to buy the drugs etc., so as much as the patient doesn't pay, the government does not reimburse. So when a patient comes who is exempted under the policy but nobody has paid, so now if a facility doesn't have what is needed to offer services and can't pay so the mother then has to go and buy,

so this hampers the quality of the services." County Health Respondent, Female28

Strengthening political collaborations: A key recommendation to improve health equity was the need to engage with politicians. As highlighted above this needs to begin by building the understanding of holistic health by politicians. There is also a need to develop their understanding of equity as provision according to need, not equality. Section 4.3.5 develops more comprehensively approaches which may be used to promote improved priority processes while working within the political system.

"The recommendations I would give is actually to capacity build the politicians, to capacity build also the health professionals in understanding how to conduct the needs assessments so that they can offer services based on the need; that is capacity buildings especially to health professionals and politicians; national assembly, senate, you go down to the county assemblies." National Respondent, Male09

Greater devolution of funding: One of the main challenges highlighted by subcounty and health facility level respondents was the re-centralisation of funding to county level, which effectively removed their ability to make or implement day-to-day decisions at their respective level. It was commonly acknowledged by respondents across levels that devolving resources to lower levels is a much needed intervention, this was more fully explained in section 4.4.1. However, alongside/instead of this there is need for greater capacity-building for how to use existing funds, with reports of under-spending in certain counties.

"If you asked me resources should go down even to the health facilities, to the community units." County Health Respondent, Male21

Explore additional funding sources: While not widely discussed a small number of respondents identified the need to find additional funding sources, to ensure adequate availability of services. This included promoting uptake of health insurance, building opportunities for public-private collaboration, building amenity wards and proposal writing to engage with donors.

"...there should be wider engagement with other key players in health that is partners, that is the private sectors, the community itself." Sub-County Health Respondent, Male09

Generation of innovations: Devolution provides a platform for counties to identify innovations addressing the unique needs for their catchment populations. A range of innovations were identified. Some are already being implemented, such as the NCD screening carried out by CHVs in one county and others are still ideas held by forward thinking health workers, such as outreach mental health services carried out at the health centre once per month. There needs to be opportunity and encouragement for health workers and others to share their potential solutions with those at county level who finalise plans and budgets.

Recommendations to strengthen community empowerment and demand for equitable health services

Key emerging recommendations from the study were the need to increase community participation and the need for greater community ownership. Certainly, there were opportunities identified in many counties surrounding strengthening public participation, particularly for the most vulnerable, with an expressed need for mechanisms to be introduced to actively pursue the opinion of more vulnerable groups, who may be neglected as a consequence of current processes.

"And also the vulnerable they need to be included in the decision and policy making... hear their voices ...Not influencing what they have to say." County Health Respondent, Male43

Some respondents identified that there needs to be greater community understanding of health for priority-setting. Community also need sensitisation to know their role and responsibilities for protecting their health and their right to health services.

"From the demand-side which is the community side, I think we need more and more sensitization of communities to make them aware of their role and

the place they have in contributing in decision-making and improving the service." National Respondent, Male11

Well-funded community health strategy, with incentivised CHVs was viewed by many respondents as vital to building the community's ownership for health and tackling the root causes of ill health.

"For me community health is a way we can actually get almost the universal health coverage that we need in Kenya because people will understand that health is their mandate, health is their responsibility and they will take it as an important thing by themselves." National Respondent, Male14

4.6 Results summary

In summary, county-level priority-setting for health following devolution in Kenya is a complex web of inter-related factors, influenced by, and in turn influencing, the power dynamics working between actors at the same and different health systems levels. National and county guiding documents, county equitable budget share, locally generated revenue and conditional grants provide the official framework within which priority-setting takes place. Evidence and community priorities should drive the process. In the absence of adequately clear guidance and criteria, all too often politics and plays for power (a consequence of the influence of socio-political and economic factors) move into the newly created power vacuum at county level. This has undermined accountability mechanisms and led to distortion of the process. The implications of this have been shifting of priorities in favour of visible curative interventions over less visible public health services. Overall equity between counties has in general improved, but within county equity has at times been compromised by lack of understanding (from politicians and community members) and political aspirations of politicians. However, despite these challenges, many of which are to be expected after such a major change, there are encouraging signs and best practices emerging. Select county governments are carving out space to use their new agency within the objectives of devolution, by empowering and engaging with decision-makers from community level upwards to develop context-specific health services, which seek to expand community health approaches as the platform

from which to population.	build	and	extend	universal	health	coverage	to	their	whole	county

Chapter 5: Discussion

Discussion introduction: This study triangulates findings from different qualitative methods, including in-depth and key informant interviews; focus group discussions and photovoice participatory research methods to provide an in-depth understanding from a range of perspectives of the priority-setting process at county level (objective 1), and the implications of devolution for community health (objective 2) and health equity (objective 3) within the study counties (see section 1.2).

Findings reveal a high degree of variation in priority-setting processes between the ten counties studied in the first few years following the devolution of decision-making and budgeting authority to county governments. This variation is a consequence of the complex and political nature of priority-setting processes for health unfolding at county level at the start of the journey towards devolved governance. Multiple decision-makers, each holding their own values and motivations for setting priorities, with varied and evolving levels of power, interact together within the priority-setting process. In a context where patronage has long been normalised and in the absence of sufficient clear guidance about roles, responsibilities and processes, priority-setting can become distorted.

Overwhelmingly the findings from this study relate to power – changes in the levels of power held by central and sub-national authorities following devolution; power plays between actors at the county level (see Table 10); changes in power for health workers (both at health facility and community levels) and the implications of this for health service performance and changes (or lack thereof) at community level, including for vulnerable groups. This chapter will relate study findings to existing literature to analyse both process and power relations and their implications for county priority-setting using the conceptual framework presented in Figure 5.

As shown in Figure 5 an intersectionality approach to analysis will be combined with four main frameworks (Walt and Gilson (1994); Barasa et al. (2015); Bossert (1998) decision space mapping and Tanahashi (1978)), in consideration of the interactions

between process and power and the equity implications of this (see section 5.1 and section 5.3). The following intersectionality principles will be applied [153]:

- Consideration of how power influences priority-setting, including the processes and systems of power, resulting from the historical, social and political context within which priority-setting takes place.
- The importance of time and space in considering how historical factors have changed over time, leading up to the present day and how positions of privilege or disadvantage have changed since devolution came about.
- Multiple levels of analysis (across national, county, sub-county, health facility and community) to understand how priority-setting has influenced health system performance for community health.
- How intersecting social determinants of health (such as gender, place of residence, poverty level) contribute towards ability to engage with prioritysetting and to access and use effective health services.
- The study also seeks to apply principles of social justice and equity in considering how complex social and power relations following devolution have contributed for or against social justice and equity across different county contexts.
- Other intersectionality principles such as reflexivity and inclusion of diverse perspectives from photovoice participants, as identified earlier in section 3.2.

5.1 Devolution – Interactions between process and power

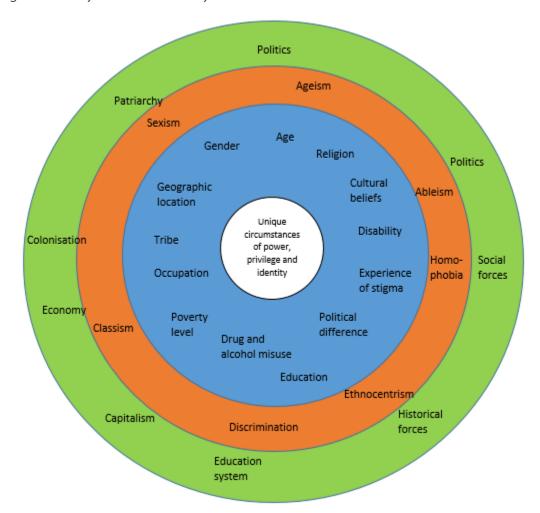
In this section study findings will be reviewed in light of intersectionality principles and Walt and Gilson's (1994) model for health policy analysis (see Figure 3) [53], drawing upon political economy analysis and drawing out key findings in relation to the four aspects of the policy framework (context, content, process and actors). For analysis of the process component, Barasa et al.'s (2015) framework will be applied.

5.1.1 Context for priority-setting following devolution

Our findings reveal that decentralisation in Kenya was driven by the desire to address and reduce inequities, which had arisen under the former national government, to reduce corruption and increase accountability and citizen's participation in making decisions (see section 4.1.1). In keeping with previous analyses of decentralisation, citizens wanted greater involvement and participation in making decisions about their development, amid growing frustration with inequities and inefficiencies [25]. Devolution has been viewed as the remedy to these challenges [26]. The motivations for Kenya's devolution are in keeping with those driving decentralisation reforms across sub-Saharan Africa and globally [37].

Intersectionality approach to understand the context: The attention paid to the structural relations of power through intersectionality approaches, provides a structured way to engage with the complexity of the political (and social and economic) context within which devolution in Kenya is taking place [208]. Local, regional, national and international systems form a complex web that combines to create and sustain social and health inequities [152]. Figure 31 in the results has already highlighted dimensions of social inequality described by respondents as influencing a person's power and privilege. In light of the literature, Figure 32 builds on those dimensions (blue) by referencing the hierarchies, types of discrimination (orange) and larger societal forces and structures (green) which work together to reinforce patterns of inclusion or exclusion from power and privilege. These forces (which include patriarchy and capitalism, legacies of colonisation such as tribalism, along with discriminations such as sexism, classism and ableism, among others) are useful to consider when examining the effects of policy decisions, such as devolution on a range of citizens, with varying levels of (dis)advantage within society, see section 4.5.2.

Figure 32 Kenya intersectionality wheel



Objectives for devolution in Kenya focus on citizens' empowerment, promotion of national unity and eradication of inequalities [26]. This was in part a response seeking to alleviate the effects of structural forces such as colonisation, which had led to the ethnocentrism fuelled violence during 2007 elections and long-standing inequities based on geographic location or tribe (see Figure 32). However, in keeping with two recent Kenyan studies [25], [179], our findings indicate that patronage norms (which often have tribal associations) have not been eradicated. Instead, in a minority of counties these norms have found ways to flourish within the devolved governance system, leading to nepotism during staff recruitment and distribution of services which aligns with patronage networks (see section 4.3.2).

Emergence of a new dimension for social inequality: Our study also revealed the emergence of a new potentially vulnerable and politically disenfranchised group -

those who had voted for someone other than the current elected leader (see section 4.5.2). If not urgently addressed the implications of these findings may lead to the continued cycle of division and inequity which were drivers for devolution in the first place, as was described in the Philippines when prior patronage norms remained unchallenged following devolution [229].

Lessons for Kenya from other contexts: Diverse contextual factors, such as the size of the economy, the degree of institutional and political development, population demographic, social characteristics, the extent of social capital, level of urbanisation, political economy factors (such as presence or absence of patronage culture) and degree of aid dependence influence the shape and performance of devolution within a specific country [230]. As a fellow East African nation and former British colony there are similarities between the context within which devolution took place in Kenya as in Tanzania, such as earlier de-concentration within Ministry of Health to district levels and previous challenges with mis-management of funds [231]. Meanwhile, as a middle-income country with vast socio-economic inequalities between sub-national levels there are certain similarities and opportunities to learn from experiences of Indonesia, the Philippines and Brazil, which are highlighted in Table 14.

Table 14 Lessons for Kenya from the Philippines, Indonesia and Brazil

Country, context,	Context, content, process and power for	Lessons for Kenya
devolution	devolution	
Philippines	Central guidance and capacity	Need for strong central
[29], [229], [232]	Lacks clear national standards	guidance in light of varied
	Varied ability of local government to be	levels of local capacity.
Devolved 1991	effective health managers.	Central government need
Local	'Soft approach' to non-compliance with	firm stance on non-
governments	local mandate to fund basic services before	compliance and corruption
given discretion	other projects, waste and corruption	
in financing and		
planning,	Governance and community empowerment	Need to ensure
determining	Health competes with other local	understanding of health to
which	programmes for funds, but politicians favour	avoid curative-heavy focus
programmes to	visible projects (infrastructure over health)	Need for stronger governance
fund	Politicisation of health services, with	mechanisms –
	curative emphasis	Creating public participation
History of	Patronage leads to continued dominance of	forum is not enough, it will
colonisation	local elite	just further empower
		politicians and elite if

Country, context, devolution	Context, content, process and power for devolution	Lessons for Kenya
Extreme former centralised government Political system characterised by patronage, elite entrenchment, corruption, non-	Local health boards in policy – but slow to operationalise and lack of meaningful community participation Devolution led to empowerment of the mayor rather than the community The corruption in the former context did not disappear with the new governance model	community not genuinely empowered
compliance with regulations Internal and external pressures to decentralise Wide disparities between regions prior to devolution.	Human resources for health Health workers lack of confidence in local government to provide services, to manage their salaries, benefits and advancement and fear of politicisation of appointments, leading to demand for re-centralisation of HRH management. CHWs receive payment during election campaign period.	Need for urgent engagement with striking health workers. Need for public service board capacity building
devolution.	Quality and equity Many local hospitals unable to run at predevolution standards, leading to closures. Potential increased inequity between local governments – some have devolved hospitals with greater expenses, some have fewer resources for income generation. Inequities in access to services, e.g. family planning depending on position of local government.	Inclusion of poverty level in equitable funds and conditional transfer for counties with level 5 hospitals will help to alleviate some of financing challenges.
Indonesia [233], [234] Devolved 2001 Big-bang devolution across the country Radical fiscal, authoritative and administrative decentralisation History of colonisation Former highly centralised, hierarchical	Central government and local capacity No national vision for next 20-30 years Wide variation in local leadership, vision, performance and resource utilisation between districts. Initial unrestricted block grants provided from the centre to districts and innovation encouraged - some districts innovated with delivering services responsive to local needs. Positive deviant case of politician improving quality and quantity of services – popular with citizens and therefore with politicians. BUT subject to central capture and MOH attempted to re-consolidate power at centre, with districts angered by take-over.	Clear national vision needed. Where local leadership is lacking central guidance is needed. However, central government acting beyond their jurisdiction likely to be poorly received by counties. National level should take care with how guidance is given to ensure not viewed as 'take-over'. Politically popular interventions likely to proliferate – care is needed to ensure clear central guidance provided as needed.
system Low public funding for health 2/3 of financing private Wide income inequalities and	Local decision space Central government maintain control of HRH and made contract staff permanent civil servants, limiting district ability to flexible respond to staffing needs Limited discretion over only 1/3 of public funds for health by district, with result that health centres have low autonomy.	Need for further decentralisation to health centre levels for greater problem-solving ability closer-to-communities

Country, context, devolution	Context, content, process and power for devolution	Lessons for Kenya
uneven access to services Pre-existing strong emphasis on maternal and	Funding Capitation payments from central government but delayed reimbursements leading to patients turned away	Reimbursements to health facilities for free maternal policy must be timely and according to work conducted.
child health	Evaluation Some districts innovated, but inadequate evaluation of the processes and outcomes following devolution meant lost opportunity to learn lessons.	Need rigorous evaluation to ensure sharing of innovation and best-practices
	Governance Politicisation of health as a vote buying strategy, but no vision beyond the next election term. Blame game between centre and district leading to low accountability to district population.	Need for overarching national vision for health and long-term county vision which extends beyond an electoral term.
Brazil [44], [235]	Central government Central government has clear aim and vision for health and improving equity.	Clear central government vision for health and equity is important for guiding
1988 New	Family health programme (team of health	counties.
Constitution	workers and CTC providers provide curative,	Initial vertical
1993 Devolution	preventive services at facility in home and in	implementation of PHC
operationalised	community) – initially introduced vertically	intervention can become
Gradual selective decentralisation	but now main strategy for municipal health systems.	county-led, if well planned and implemented.
Health sector	Primary care quota used to meet this with	Careful use of quotas, media
reform driven by	central MOH transfer to municipalities to	and gaining political support
civil society	finance primary health care.	can ensure implementation
Unified health system based on	Central government created support for community health approaches using media	of community-based primary health care approaches.
principle of	and community accountability.	nealth care approaches.
health as citizens	, 2222	
right and states	Governance and community empowerment	Strong community
duty	Councils and management committees at	governance mechanisms and
Three tier	each level of government.	involvement of 'marginalised
devolved	Managers at each government level sign	groups' promote
government	commitment to health goals. Greater number and variety of stakeholders	empowerment and accountability.
History of	take part in decision-making.	accountability.
colonisation	take part in accionen mannig.	
Former rigid	Equity	Equity interventions need to
centralised	Introduction of Bolsa familia to improve	include intersectoral actions
government	equity – which targets low income	to address underlying social
Huge 	households with:	conditions, as well as improve
socioeconomic	Actions to create employment and	access to services.
and health disparities	income generation opportunities 2. Access to public services	
uisparities	3. Income transfers.	
	Although, inequities still persist.	

Kenya's context in light of earlier de-concentration: Earlier health reforms in Kenya, introduced in response to global pressure such as structural adjustment reform and introduction of user-fees for cost-recovery, led to deterioration in health performance, a widening equity gap, decreasing overall coverage of essential health services and rising under-five mortality rates, see Figure 12 and Figure 13. Meanwhile, earlier moves to decentralise health via de-concentration were found to have mixed impact for health, with greater budgeting and annual workplan autonomy at the former district level, but limited connection between the workplan and budget submitted and the funds received [180], [181], [183]. Elimination of userfees at dispensary and health facility level was followed by subsequent increase in utilisation rates from 1.7 to 3.1 visits per capita over a decade [166] and saw underfive, infant and neonatal mortality begin to fall (see Figure 12). Although challenges persisted with insufficient compensation for lost fees, resulting in continued charging of user-fees [184]. Readiness to provide health services is limited at county level according to a Ministry mapping exercise carried out in 2013, where all study counties scored 65% or lower for health service readiness (see Table 4) [21]. These figures are worsened by large inequities in coverage and use of health services relating to geographic location, poverty level, education and gender [161], [198]. County-specific cultural behaviours, practices, differing disease burdens and changing disease aetiologies further add to the complex picture for health in Kenya prior to devolution [161], [22].

5.1.2 Content for priority-setting following devolution

This section will summarise the content of the reforms for priority-setting at county level, according to policy, following devolution. Meanwhile, section 5.2 will summarise the content of the priorities set and decision space available to county governments following these reforms (see Figure 5). Devolution resulted in the creation of 47 new county governments with changes to the roles and responsibilities for national and district/ sub-county levels, along with the removal of the provincial level and the creation of the county government level (see Table 2).

Big-bang approach: Kenya's rapid and sudden devolution of major functions and sharing of national resources to sub-national levels has much in common with Indonesia's 'big-bang' decentralisation of the late 1990s [230]. In Indonesia extensive political change occurred in a short space of time, following resignation of the former President who had held power for over 30 years. Similar to Kenya, this political change led to the handover of power from a highly centralised government to sub-national (district) authorities, changing the relationship between the citizen and government [233]. Other similarities include the presence of wide income and health service access inequities between sub-national units at the time of devolution (see Table 14) [233]. Yilmaz et al. (2008) highlighted that big-bang reforms initially place high emphasis on increasing discretionary powers at the sub-national level leading to relatively high decision space, but accountability measures often come later. Until strong accountability measures are established this can create perverse incentives for the new sub-national authorities, leaving them susceptible to elite capture or reckless decision-making [236]. There is early evidence of these implications from our findings, which will be analysed in section 5.1.4.

Official legislation for distribution between counties: Based on our study, priority-setting at county level is officially influenced by legislation from both national and county level, which creates the legal framework bounding priority-setting (see section 4.3.1). The formula for distribution of funds between counties (predominantly based on fiscal need with high basic equal share) applied in Kenya improves upon that initially adopted in the Philippines in the early 1990s, which was based only on population size and land area, thereby disadvantaging poorer local governments due to their limited ability to generate local revenue leading to the closure of many hospital as a consequence (see Table 14) [229], [237]. The strong redistribution of funds by central government to minimise inequities in financing is in keeping with positive health equity outcomes for decentralised health systems in two systematic reviews of health equity and decentralisation [67], [68].

In addition to the equitable share, counties can apply for conditional grants and raise their own locally generated revenue. However, there was wide variance between counties in terms of their capacity to generate revenue (see section 4.1.2). Given the vastly differing nature of counties capacity to generate revenue there is the potential for deepening inequities, which was also acknowledged as a threat following introduction of the 1996 basic operating rule for funding in devolved Brazil and identified globally following systematic review [67], [68], [238]. Brazil's introduction of per capita payment to municipalities for community-based primary health care has helped to address inequities and ensure more equitable provision of basic services (see Table 14) [235].

Absence of legislation for distribution within counties: There are high levels of inequality within counties in Kenya. For example, within Nairobi county the ward with the highest poverty rate is a staggering seventeen times poorer than the ward with the lowest poverty rate [239]. The lack of clarity surrounding how funds should be distributed within counties is in keeping with a recent report by Kinuthia and Lakin (2016), which found that Kenyan counties have adopted two main approaches from national level for intra-county distribution of funds - application of modified commission for revenue allocation formula and modified application of constituency development fund, based on large equal share (75%) with smaller equity share (25%)[239]. The example of Meru County included in both our study and Kinuthia and Lakin's study highlighted that 85% of 'ordinary revenue' funds are shared equally among wards, with just 15% shared based on need (population, poverty and infrastructure levels). Kinuthia and Lakin (2016) felt that too much emphasis had been placed on equality rather than equity [239]. This was in keeping with findings from our study (see section 4.5.1). Given the diversity of approaches already adopted by counties in this regard, this presents an excellent opportunity for county-tocounty learning, where best practices could be identified by national experts, with further recommendations provided (as Kinuthia and Lakin have done in their recent report) and shared between counties for adoption. However, national government will need to ensure strong monitoring structures are established in order to learn from Indonesia, where evaluation structures were not in place and opportunities to learn from innovations following devolution were lost [234].

Addressing inequities both between and within counties will be crucial if devolution is to attain its equity related objectives. Earlier studies of decentralisation in Canada found that inequities in access to health services was mainly driven by variations in use of health services between provinces. However, the distribution of self-reported health was found to be mostly due to health differences between the rich and poor within a province, rather than between provinces [240]. Policies and actions must address both central and county level to guide distribution of funds, both between and within counties, in order to ensure inequities and challenges are reduced.

5.1.3 Process for priority-setting following devolution

The process for setting priorities at county level as identified in the Constitution was in general consistently applied across counties, see Figure 28. However, while the process was followed, some of the steps were merely perfunctory in nature – fulfilling the requirements but not striving towards attaining the objectives specified in the Constitution. All seven concepts (stakeholder involvement, stakeholder empowerment, transparency, revisions, use of evidence, enforcement and incorporation of community values) outlined by Barasa et al. (2015) as key conditions to consider when evaluating priority-setting processes were described by respondents, with varying levels of application within the priority-setting process.

Stakeholder involvement: Our study findings identified five main groups involved with decision-making at the county level – technical decision-makers, governor and members of the county executive committee; members of county assembly, community and other county stakeholders (see section 4.2). These groups are engaged through a variety of forums including stakeholder forums, public participation, community dialogue days and public *barazas*.

In contrast to other settings, health worker involvement in county decision-making was limited, with few health workers invited to attend public participation meetings and lack of similarity between annual workplan submitted and budget received at health facility level. As a result, priorities set following public meetings often did not take into consideration the health worker's technical understanding of needs and

challenges experienced when providing services (see section 5.1.4). Exclusion from public participation meetings was not described by CHVs, perhaps because of their embedded position as members of the community. Unfortunately, because this was not explicitly probed with CHVs it is not possible to tell the extent to which CHV voices were heard during these meetings. The isolation of health workers from the priority-setting process has implications for motivation of workers. There have already been multiple (ongoing) strikes by health workers, due to poor human resource management practices. The continued exclusion of health workers from decision-making could lead to health worker demands for re-centralisation, as occurred in the Philippines [29].

Who is and isn't involved with priority-setting is more fully captured when considering the actors and power dynamics according to Walt and Gilson's health policy analysis model (see section 5.1.4).

Stakeholder empowerment and incorporation of community values: There was perceived lack of community knowledge of their roles and responsibilities for health governance, which hindered their ability to effectively participate in priority-setting. In the absence of strong accountability mechanisms and clear guidance to resolve differing opinions, manipulation and power plays came into effect. This echoes similar findings from Tanzania, where a lack of guidelines at facility level and low awareness of roles and responsibilities by health facility governance committees led to poor participation in planning processes [241]. Lack of clarity surrounding the meaning of community participation has previously been noted elsewhere and contributes to challenges with citizen's expectations and its subsequent implementation [242], [243]. A study in Tanzania revealed that simply creating forums for community participation in the absence of capacity building and support may not lead to more responsive priority-setting. Instead effective community participation needs effective mobilisation of both the community and the health system with ongoing guidance through written directives and management [242].

A range of challenges to ensuring effective engagement of actors within prioritysetting processes were experienced, due to inadequate mechanisms to minimise power differentials between actors. This resulted in variation surrounding who does and who does not have a place at the table for priority-setting in practice, compared with policy. 'Elite capture' resulted where the predominant voices heard during public meetings were those of the local elite (see section 4.5.3). Marginalised groups such as street dwellers, those who are poor, people living in hard-to-reach areas or women from nomadic counties experience barriers to attending or participating in discussions due to strong financial, geographic, cultural or societal norms (see section 4.5.3). This is in keeping with systematic review findings, which revealed that intended beneficiaries were excluded from decision-making processes even at local levels, with social norms acting to exclude marginalised groups from participating [244]. Similar challenges with participation have previously been described in other devolved settings, such as Mali and Tanzania [241], [245].

Elite capture was a threat recognised prior to devolution in Kenya by Nyanjom (2011). In response, legislation was introduced to ensure that if a woman, youth or disabled persons' representative is present during a public participation meeting, they must be given the opportunity to participate. However, this mechanism has proved inadequate in ensuring full active participation from all members of society, leading to official policy for their inclusion becoming mere tokenism, with meetings still dominated by more powerful voices. Social participation, especially of marginalised groups is an important way to gather evidence to understand social determinants for health and barriers to effective coverage with existing health services [44]. It provides the means to act on social conditions and factors which influence ability to access and use health services through community mobilisation. information from marginalised groups, setting priorities to provide health services becomes guess work, lacking insider knowledge. De Andrade et al. (2015) conducted a study of reforms introduced in Latin American countries and found that in Brazil deliberative mechanisms of participation were institutionalised disadvantaged populations, to ensure their active involvement to enhance equity [44]. There, the Constitution created space for participation through health councils where half of counsellors specifically represent health system users (not providers) [246].

Alongside increased community participation by marginalised groups, there is the need for new commitment to create disaggregated databases, which reflect equity indicators for monitoring and planning for health service uptake in county data sources. This will need fresh commitment and capacity building, as data in Kenya has not been disaggregated for gender, despite the launch of the Women's Bureau to promote gender awareness over 40 years ago [17].

Transparency: There was a lack of transparency surrounding the procedures and justifications for priority-setting. While the steps to be followed in the prioritysetting process were widely known (see Figure 28), the process for how values were considered and how differing values or priorities were resolved was unclear and not reflected in the steps identified (see section 4.3). There was no common set of criteria described and a lack of clarity regarding roles and responsibilities for the different actors. In the absence of clear guidance some counties had invested in high cost services which would benefit a small minority of the population, such as dialysis services. Those involved with the priority-setting process had little clarity regarding why this had been prioritised above other services which were more cost-effective and equitable (see section 4.4.4). This contrasts with recommendations from a recent study of the position of renal dialysis within universal health coverage, which recommended that every government should implement actions to prevent chronic kidney disease, to screen and ensure early treatment of patients with diabetes and/or hypertension [247]. Whereas governments should only consider programmes that subsidise renal dialysis depending on available resources and other competing priorities [247]. While one of the counties which was introducing renal dialysis within the county was expanding community level screening for diabetes and hypertension, the other was not. As the accountability for reasonableness framework acknowledges, establishing a fair process for priority-setting is easier than agreeing on principles or values and makes it possible for all stakeholders to learn about the process [80]. Therefore, all decision-making actors should have a common understanding of the reasons for why a priority has been selected, even if they disagree with the selection of the priority itself.

Revisions or appeal mechanism: Previous study of the views of decision-makers across Canada, Norway and Uganda revealed that a fair process for priority-setting should have "provision for people to express their dissatisfaction with the decisions and revisions based on the available evidence and the public's reactions to the decisions" (page 769 [79]). Opportunity for revision is already built into the prioritysetting process in Kenya through public participation. However, once this stage has been passed and the budget approved there is extremely limited opportunity for appeal. This creates challenges for health workers, CHVs and community members who may not have attended public participation meetings. When the health workers and CHEWs finally find out their approved budget from county level, it may not align with the workplan which they had submitted to sub-county managers, but there is no opportunity for them to appeal this. These findings are largely in keeping with an earlier priority-setting study prior to devolution in Kenya, which found challenges were described for patients to appeal against poor treatment, with no clear description for mechanisms for health workers or community members to appeal priorities set [192]. The implications of a process which does not include adequate opportunity for appeal and revision is perception of the process as unfair, thereby undermining its perceived legitimacy [79].

Use of evidence: County level decision-makers reported using data from county level health information system and national sources to guide their decision-making (see section 4.3.3). Service coverage data was used to identify low coverage areas in need of more intensive intervention in some counties. However, there was a lack of clarity about the use of evidence to select priorities and a recognition of the need for a more scientific approach. There were concerns raised about the quality of data available to guide decision-making, in keeping with previous evidence which identify challenges with the availability and quality of basic data needed for making informed decisions at local level [37], [248]. Recent systematic review of the use of data at district level for decision-making identified three needed features – timely, relevant and good quality data, a structured decision-making process which includes steps to help build consensus and well-defined community role [248]. The need for a close relationship between data producers and data users to ensure the relevance of data

for decision-making and capacity-building for decision-makers to use data was also highlighted [248].

In addition to the use of data at county level, there was some discussion of presentation of data using the chalkboard by CHEWs and CHVs during community dialogue days. However, data presented in the form of numbers without a denominator limits the opportunity to truly appreciate the health context at a local level. Simple changes to how data is presented could lead to greater community understanding and ownership over their data. Studies from Uganda (using community-based scoring of primary care providers) and Ethiopia (using community assessment and planning for maternal and child health) provide examples where community level assessment and planning have been used successfully [249], [250]. Within these processes data collected and presented was easily understood, ongoing supervision and support was provided and there was recognition of existing power relationships with attempts made to avoid 'elite capture' by identifying and involving the most vulnerable groups [249], [250]. These methodologies have been adopted and used in other settings, including Kenya, where the chalkboard has been introduced as a method to use during community action days, where the aim is for the CHEW and CHVs to present and discuss simple data with community members and identify community-led actions to take in response. However, an earlier REACHOUT study has revealed challenges, with their implementation in Kenya being dependent on partner support and community lack of awareness of their role limiting Devolution presents the opportunity to embed these participation [251]. innovations within community accountability structures, if backed by local political will.

Enforcement: Respondents described a wide range of accountability mechanisms which have been established within the county (see Table 11) in order to seek to compel those in decision-making roles to respond to the demands of locally elected officials, community and central government. Similar mechanisms have previously been shown to play a key role in ensuring success for devolution [27], [31]. In keeping with a study in Pakistan we found variance in the degree of accountability to locally

elected officials (politicians) between counties according to the degree of accountability demanded for those choices by the community and other stakeholders [54].

Mitchell and Bossert (2010) highlighted the difference between whether a governance or health systems perspective to devolution is adopted, see section 2.1.3 [37]. The combination of 1) downward accountability to the community through public participation, 2) horizontal accountability to locally elected members of county assembly through reporting and follow-up by budget and health committees for county assembly and 3) upward accountability through performance contracts provide a range of mechanisms through which accountability should be enhanced, see Table 11. However, there were challenges with lack of transparency and accountability within counties, as mechanisms are only effective in so far as they are respected and adhered to by each of the actors. In certain instances, accountability was challenged by actors who held excess power, and appeared to consider themselves 'above the law' with the result that they no longer felt bounded by the official accountability mechanisms. This finding is in keeping with earlier results from a study of central annual operational planning in Kenya, which found that individuals who wielded significant technical power, had a high degree of independence from and minimal accountability to hierarchy structures [195]. These findings concur with Yilmaz et al. (2008) who highlighted that following sudden devolution the strength of accountability mechanisms often lag behind the devolution of powers [236].

In summary, according to policy, Kenya has introduced all seven conditions recommended for evaluation of the process for priority-setting by Barasa.et al. (2015). However, as this section has highlighted there are considerable gaps between the policy and practice of these conditions. Ultimately, meaningful community empowerment is needed to ensure citizens know their role and rights, to ensure their voice is heard at the decision-making table, to provide them with the skills to use and understand their local health data and to re-address power structures, to ensure demands for accountability are respected.

5.1.4 Power dynamics between actors for priority-setting following devolution

We find Kenya's transition towards devolution is transforming the former centralised balance of power, leading to greater ability for influence at the county level, with reducing power at national and sub-county (district) levels and varied change at community level. Within these changing power structures, politicians are felt to play a greater role in priority-setting for health. The interfaces and tensions between politicians, technical actors and the community has at times, been felt to undermine the suitability of priorities set. While power has changed drastically at the national and county levels, there has been varied and typically limited change at community level. We found limited consistent community empowerment for meaningful participation in priority-setting (although positive exceptions are presented, see case study 2). Underlying social structures and discriminations generally continue unchanged, leading to the continued exclusion of those most vulnerable from priority-setting processes, see section 4.5.3. Gaventa's power cube [49] (see Figure 2) with consideration of Veneklasen's (2002) expressions of power [47] provide a helpful framework to use for analysing the places, spaces and forms of power.

Places of power: Priority-setting for health has brought changes to the places and levels where power operates, bringing reduced power formerly enjoyed by national authorities, who have in turn failed to provide adequate capacity building for county level decision-makers. This is in keeping with other contexts where national actors sought to undermine sub-national levels, if not incentivised to work cooperatively[46]. In keeping with findings from Philippines and Indonesia[29], [252], health workers from sub-county and facility level in Kenya have experienced a loss of power and are often excluded from community public participation meetings. This has at times led to the setting of priorities which do not always meet urgent technical needs.

Spaces of power: Since devolution, policy has sought to emphasise the 'invited spaces' for identifying priorities, through the public participation forums[26]. In practice however, we found that the spaces where power operates and priorities are set appears to be heavily influenced by the leadership style of the county executive

member for health (who typically leads the health priority-setting process). Where the CEC for health has an authoritative style, many decisions were made behind closed doors, with only select few involved with these decisions, see section 4.3.2. This typically reinforced a 'power over' approach [47] (see Table 10), which was by far the most commonly described expression of power. County level technical and political actors often appeared resistant to share power with actors from other levels within or outside the health system, although several exceptions were described. By contrast, where the CEC for health encouraged a more transparent and participatory style, priority-setting took place in a more participatory manner with greater use of the 'invited spaces' (see case study 2). This encouraged a 'power with' approach to decision-making and encouraged community members, health workers, politicians and others to work together to understand health and generate the 'power to act' in selecting priorities [47].

As yet, there were limited descriptions of discretionary use of power to forge new claimed spaces. Although, some mentions about the use of social media platforms were mentioned (see Table 11). This may be as a consequence of the short timeframe for devolution to date and that as time progresses actors from community, health facility and sub-county levels will explore and forge more opportunities for discretionary use of power. It may also have been as a consequence of the study focus, which primarily sought to explore county level priority-setting processes and participation of actors from other levels within this, rather than processes at other levels.

Forms and visibility of power: Priority-setting at county level demonstrates all three dimensions of power first described by Lukes (1974) [50] and later work by Veneklasen (2002) and Gaventa (2006) as visible, hidden and invisible forms (see section 2.1.4). Visible power is demonstrated through the process as identified in the Constitution (2010), which includes opportunity for citizen participation through public participation forums, actors within executive and legislative arms of county government and county laws and policies. As a consequence of the rapid roll-out of devolution, however, additional guidance surrounding priority-setting processes and structures (including accountability mechanisms), county laws and policies and

recruitment of needed staff had not yet been put in place when the reforms started. This created a vacuum at county level, which allowed 'hidden power' to have a disproportionate effect, with certain powerful actors able to control the extent to which other actors are included (or not) in identifying priorities, the content of the priority-setting agenda and ultimately the priorities set [47]. 'Invisible power' and the norms and structures which have contributed to the marginalisation of certain groups prior to devolution have generally not yet been addressed (see Figure 32), limiting opportunity for active participation of all citizens within priority-setting processes and limiting the success of devolution to date.

Leadership capacity: Lessons from other contexts suggest that in the absence of a clear national vision and strategic direction county decision-makers will set priorities of varied suitability, depending on their pre-existing capacity and local internal politics. This occurred previously in the Philippines and Indonesia, where lack of strong central direction to guide weak district authorities resulted in wide variation in performance and resource utilisation between districts (see Table 14) [229], [234].

Analysis of our data highlighted a number of leadership gaps among technical decision-makers at county level. This limited capacity by technical decision-makers to carry out the needed evaluations for wise evidence-based decisions can undermine priority-setting processes [85]. Previous studies have shown that in low-income countries local officials may make choices in ways which are ill-informed or poorly carried out [54], which places constraints on their ability to carry-out effective health management and may lead to sub-optimal decisions as occurred in Tanzania and the Philippines [253], [229], [231]. Recommendations from the Philippines' experience included conducting decentralisation reforms in a phased manner with considerable capacity building at both central and local levels [254]. These recommendations have not been acknowledged in Kenya during the push to devolve. If not addressed this will undoubtedly lead to deterioration in health system performance and ultimately health outcomes. While some steps have been taken to build national government capacity in evidence-based decision-making, it is important these skills are transferred to county level, including both executive and

legislative arms of county government and to community based structures and CTC providers acting in their interface role between community and the health system.

In addition, limited capacity by politicians to understand and engage with health decision-making and of technical decision-makers to think politically were common gaps. Previous research in Pakistan revealed that in districts with lower capacity there was greater reliance on historical budgets with limited innovation for service delivery [54]. Formerly marginalised counties have the potential to become further disadvantaged by the capacity gap, as a consequence of historically lower education levels leading to unwise decision-making by ill-prepared decision-makers [27]. However, the data from our study revealed one of the formerly marginalised counties recognised their limited capacity at the onset of devolution and ensured all technical decision-makers underwent appropriate training (see section 4.3.2). This intervention to build local capacity is likely to have the effect of encouraging local decision-makers to take more advantage of the decision space available to them [54].

Majority voting model and patronage norms: The exploitation of the priority-setting process to secure votes is in keeping with the 'majority voting model' outlined by Goddard et al. (2006). This paper highlights that politicians are not purely motivated by benevolent ideals to further social welfare, but will also be motivated by their own self-interests, including consolidating political support and maximising their voter base [55]. In some counties (typically rural ones) limited employment opportunities contribute to limited agency and loss of power by community members, with subsistence farming the main form of employment. As a consequence of limited employment options some governors used patronage to mobilise support, with promises of employment in civil service (and other benefits) for those from a similar tribe who supported and voted for the governor during his election. Reinforcement of local patronage over staff following decentralisation has previously been recognised as a potential implication for human resources [255]. These practices continue the colonial legacy and the misuse of power which emerged from this [179]. Respondents from some counties described that communities which were not politically affiliated with the governor had not benefitted to the same degree as communities which had been supportive, or which were the 'home area' for the governor.

Local members of county assembly want their own constituency to be given high priority, or at least equality for health systems investment, disregarding underlying inequities and differing needs, in keeping with findings following decentralisation in Tanzania, which revealed political interference with priority-setting [231]. In both Kenya and Tanzania, this has led to construction of health facilities with no/limited consideration or planning for other associated needs, such as staffing and operational costs [231]. In some counties the members of county assembly effectively hold the county executive committee to ransom, by refusing to pass the budget until their own personal needs (sitting allowances) or their constituents needs (typically for visible infrastructure objectives) are met [178]. When the budget is not approved the county is forced to operate using an emergency budget, thereby scaling back service delivery to a bare minimum, having implications for quality and timeliness of implementation of planned and budgeted activities. Once the budget is approved, which meets the politician's objectives, he/she is favourably portrayed as having provided for his/her constituents, which can be expected to lead to more votes during the next election.

In other counties it is the governor who holds huge power over the process, forcing the county health management team to budget for interventions, which he (all governors were male at time of research) has already promised to the electorate perhaps as part of the patronage mechanisms used to mobilise for support during his election campaign [25], regardless of the findings from the evidence or public participation meetings. In a democracy, political parties tend to move towards the position of the median voter in order to secure (re)election. This may explain why policy-makers seek to direct resources towards certain population groups at the expense of others, regardless of the efficiency or equity implications of those decisions [55]. It has previously been observed following decentralisation in Tanzania [231]. This is likely to lead to the neglect and further marginalisation of smaller population groups such as hard-to-reach or sparsely populated nomadic areas, while

resources are focussed on heavily populated areas (where there are a lot of votes) [165].

Within Kenya, this may explain the political preference for infrastructure, as a consequence of how former national politicians encouraged citizen's to evaluate their leader based on his/her ability to fund projects, including infrastructure, for certain groups in local communities [179]. Meanwhile, public health interventions which may be more equitable and cost-effective were not popular priorities with politicians, as the community was not sufficiently informed or empowered to recognise their value. It also explains why political affiliation and tribal ties are important features following devolution, with politicians seeking to reward and retain support from those viewed as likely future voters. The fact that devolution of health has become highly politicised should hardly be surprising, given that devolution is the product of a political process which influences actors' access to the policy-making process [238], [255].

While the technical decision-makers may not have been elected, they too are political actors in their own right who have personal objectives for career advancement and institutional interests [46]. Application of incentives for the technical decision-makers is also of importance for selection of priorities and the degree of success in their implementation.

Corruption: This may have been a contributing factor to the strong preference for infrastructure. Corrupt leaders wanting to benefit personally at the expense of their electorate were described as 'looting resources' through shoddy procurement processes (see section 4.3.2). The contracting process as a source of returns for corrupt officials and suppliers has been highlighted in previous study in Latin America [256]. While it is often challenging to gain direct and specific evidence of corruption, qualitative work from previous studies have found that knowledge and strong perceptions of petty theft provide a sense of its importance and lend credence to allegations of theft [256]. Ultimately, this may lead to deterioration in utilisation of services, as occurred in the Philippines where corruption was found to reduce immunisation rates, delay newborn vaccination, reduce satisfaction and discourage

use of public services and increase waiting time at health clinics, with the impact borne most heavily by the poor than the wealthy [257].

Majority voting model without using patronage norms: While Kenyan citizens have to some degree been conditioned to evaluate leaders against provision of infrastructure and patronage norms, there is opportunity to strategically re-frame the manner in which leaders are assessed. Brazil provides an interesting example within a decentralised governance system, where central authorities introduced a community-based primary health care programme, which incorporates provision of services by CTC providers known as health agents. In order to ensure success and support for the programme, which was dependent on agreement from sub-national mayors, the central government created pressure by generating high media coverage and encouraging communities to demand these services from their local government through messaging such as "Simply don't vote for your mayor if he doesn't provide you access to our health programme" (page 1775 [258]). In addition, high numbers of newly recruited CTC providers (health agents) who wore visible uniforms and kits, visited households on a daily basis forming an extremely visible public sector presence within a constituency. As the health agents became more established they sought to 'educate' decision-makers about the need for further public health initiatives, such as cholera campaigns. In the end, the programme was popular with citizens and as a consequence political leaders (mayors in Brazil) were rewarded politically for supporting the programme, leading to replacement of the former patronage dynamic with a more service-oriented one (see Table 14) [258].

Community empowerment: Meaningful social participation needs a willingness to transfer real power to communities and as a result to deal with the consequences of people's demand for transformative change [246]. However, many governments can obstruct or resist community participation which raises concerns about living conditions or proposes solutions [246]. This was acknowledged as a challenge in our study, with some members of county assembly fearing empowering the community due to loss of their own 'political grip' (see section 4.3.5). There has been limited progress to develop 'power within' for community (and in particular vulnerable

groups), due to failure to address underlying social norms and structures [47]. In addition, opportunities to develop 'power with' community members, have often not been inadequately seized, as community members do not seem to have been informed about their role (see section 4.3.5), the choice of interventions available to them or provided with the data which would allow them to make informed decisions, similar to findings in Tanzania [231]. As a result, community members have limited opportunity to demonstrate meaningful 'power to act' to select needed priorities. Instead, community members were described as often requesting new infrastructure, even when existing infrastructure was not yet operational. County decision-makers and health workers described communities as having 'unrealistic expectations' and failing to make wise decisions, in keeping with findings from Tanzania where health workers felt that planning was the responsibility of health experts, rather than community members [231].

In a recent report by Lakin and Nyagaka (2016) similar challenges with current public participation in Kenya were identified, including that decisions were made and justified with a vague explanation, without providing adequate additional details [259]. In their review of county budget documents, they found most fall short of providing the information needed to meet the standards of deliberation. They identify that public participation is a 'vague and indeterminate concept'. In response, they propose that public participation should be refined and replaced with the concept of public deliberation. Thereby, placing exacting standards on governments and creating conditions for "deliberation by providing information, reasons for decisions, and space for choices to be discussed" (page17 [259]). This means the public should be provided with the choices available and the reasoning behind those choices so they have sufficient information to allow them to question it, particularly for preventive versus curative health interventions. Likewise, public deliberation recognises that not all public inputs to the priority-setting process are equally reasonable. As a result they highlight that there must be an explanation of the process by which public inputs are filtered and selected [259]. While, not all participants will eventually agree on the priority set, they should agree that the process used for reaching the decision was fair and legitimate. This is in keeping with the principles of accountability for reasonableness and three of the outcomes from Barasa et al. (2015) framework (stakeholder empowerment, transparency and incorporation of community values) [77], [80], [259].

FGD findings from community members identified a mixture of curative and preventive interventions (see section 4.3.5), which contrasted with county respondents' perspective which emphasised that community often prioritised infrastructure. Community findings were in keeping with a study by O'Meara et al (2011), which reviewed community level priorities in Kenya prior to devolution. At that time the main priorities identified included heavy emphasis on preventive priorities such as health education, sanitation, clean water. Other priorities included low use of antenatal care or skilled deliveries, malaria and malnutrition. Distance to the health facility was raised as a challenge in only 8/15 health facilities studied [193]. While still deemed a moderate priority by the community, distance to a health facility was described by many county level respondents in our study as being one of the greatest priorities for health following devolution, contrasting with this earlier study. A further follow-up study to review minutes from community public participation meetings, rather than responses to a researcher during FGD, would provide insight to identify whether distance to a health facility was in fact raised as the predominant key priority by community members attending. Another potential reason may be a change in priority as a consequence of devolution with community members now demanding more infrastructure as a result of the change or as a result of how facilitation of public participation meetings occurs.

In Kenya, the community voice was generally held in high esteem in official policy, with the formalisation of the need for public participation (see section 2.1.3). However, in practice many counties have not provided adequate resources for public participation, thereby undermining participation efforts and failing to address barriers to attendance experienced by many citizens (see section 4.5.3). Respondents from marginalised counties often spoke about the reluctance of citizens to attend public participation as a result of their previous negative experiences under central government. Highlighting the need to first address the political and historical

legacies from the former centralised government, before citizens will accept to attend and contribute [246]. Finally, participation requires stakeholders to understand the process, to have a clear vision for what can be achieved and access to interpretable evidence. The most disadvantaged citizens need to be identified in advance, with a plan developed to overcome barriers to attendance to ensure their representation. This may include options such as female-only meetings, use of social media platforms for engaging with youth, ensuring transport for those with limited mobility and attention to language and cultural appropriateness for ethnic minorities [246].

In order to avoid public participation becoming simply 'tokenism', it is important that decision-makers realise the value and importance of community participation in using local data to track progress and identify priorities, using principles of public deliberation [246].

Health worker and technical decision-maker disempowerment: Throughout this process technical decision-makers at health facility and sub-county levels (see section 4.4.1 and section 4.4.2) appear to have much lower influence and power in setting priorities compared with before devolution. The role played by CTC providers and health facility management committees in development of the annual workplan and budget for facility and community unit activities was undermined by the little relation between the workplan submitted and the funds received, making service delivery highly challenging (see section 4.4.1). This has potential implications for trust relationships between these health workers (facility and community level) and county level decision-makers. Recognition of CTC providers by trained health workers as collaborators, involved with regular meetings and planning and implementation of programmes is felt to lead to better implementation of activities, as demonstrated by study of village health volunteers in Thailand [260].

In some settings, health workers were excluded from community public participation meetings, leading to the setting of priorities which did not meet urgent technical needs. For example, in one health facility the community prioritised superficial rehabilitation and repainting of the facility, when the health worker identified that

the genuine need was purchase of a steriliser and new delivery kits. This contrasts with Tanzania, where the health care priority-setting process was dominated by health professionals and community members were excluded from meetings held to identify priorities [231], [261]. However there are some similarities with findings from Philippines where health workers felt excluded from the process of devolution and Indonesia where local health officials and volunteers are not involved in prioritysetting processes (despite policy which recommends this), leading to planning which does not accommodate for local needs and health problems [29], [252]. In contrast to the findings from Indonesia, CTC providers in our study did not describe having been excluded from public participation meetings, although this was not expressly probed and their role within priority-setting needs further study. This may have been due to the fact that as embedded community members they were included within community level meetings. This provides opportunity for CTC providers to forge a new, stronger role in presenting their community's health needs within this forum and demanding accountability, particularly from former CHVs now elected as members of county assembly.

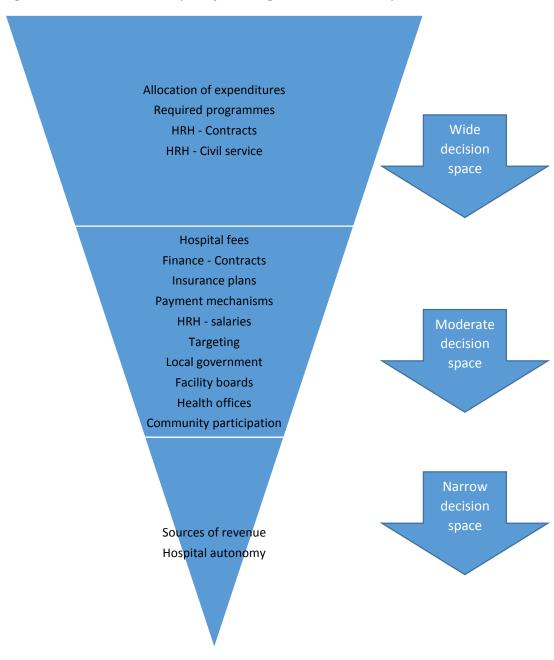
5.2 Use of decision space and changes in health systems performance

Our study found that devolution resulted in considerable changes regarding where power is located. There was a downward shift in power for making decisions about planning and budgeting for health services from national to county level, alongside an upward shift in power from district/ sub-county and hospital to county level. At community level mechanisms for participation have been established, but there was limited evidence for genuine empowerment of the community in priority-setting within our study. Even between counties the distribution and use of power varied considerably. In almost all counties, findings revealed innovative use of power, resulting in considerable changes for health service delivery. We found limited evidence for strategic application of directed change by central government so far.

Application of Bossert's decision space approach provides scope to review the space open to county level decision-makers (see Figure 33). This allows the opportunity to compare the 'de jure' decision space of official choice allowed over functions,

compared with the 'de facto' informal decision space which explains the powers actually used (or not) in practice [54]. In general, following devolution there is moderate to wide decision space at county level. However, we found that decision-space available to actors at sub-county, hospital, health facility and community unit level has narrowed since devolution.

Figure 33 Bossert decision space following devolution in Kenya



5.2.1 Finance: Mixed decision space and limited central guidance may create challenges with budget allocation

There were mixed findings for finance, with narrow decision space for sources of revenue, due to heavy reliance on central transfer of funds. However, limited central guidance or restrictions led to relatively wide decision space regarding allocation of expenditures.

Reliance on central funding: In general, counties were heavily reliant on transfer of funds from central government, with limited capacity to generate local revenue (e.g. through taxation) described, although this varied considerably between counties. This has been described in many other devolved settings, including the Philippines, Tanzania and Indonesia, where central funds constituted up to 90% of funds received at sub-national levels [231], [237], [262]. Funds were often transferred late, as a result of delayed finalisation of the appropriation budget, due to disagreements and power dynamics between the two arms of county government and delayed transfer from national level. In Tanzania similar high dependence on delayed central transfers created difficulties with implementation of planned activities [231].

Few central directives for spending: Despite increased funding available at the county level following devolution, there were felt to be some limitations on decision space as a consequence of national directives for minimum spending of 30% of funds for development activities (in some counties this was increased up to 70%) and high pre-existing salaries for health workers. This feature is in keeping with findings from Indonesia, where despite doubling of public funding for health services at district level in the five years following devolution, there was little increased discretion for managing funds for health due to high personnel expenditure [262]. However, in Kenya there are few other central restrictions or earmarking of funds by central government, in contrast to many countries, including Indonesia, Uganda and Columbia where key decisions surrounding funds are made by central government [28], [29], [262]. These limited central restrictions for how funds are used at county level (except minimum spend on development activities) is more in keeping with the Philippines, where central authorities place few restrictions on central transfers [37].

Implications of limited spending directives: In the absence of guidance prescribing how funds should be used, decision-makers are open to pressures, which may lead them to make inappropriate decisions. This has led to emphasis on curative over preventive health services, which is at odds with the direction provided in the Vision 2030 document [169], but is in keeping with findings following decentralisation reforms in the Philippines and Indonesia [254], [263]. There in the absence of clear national guidance and capacity building ideological differences at local government level led to the neglect of priority services, such as family planning [254]. It is therefore important that central government in Kenya monitors the performance of the health system to ensure that public health interventions are maintained, taking action to ensure their continued delivery if needed. For example, in response to early experiences under decentralisation, where municipalities refused to invest in public health, the central Bolivian government introduced earmarking of funds for public health activities [37]. Meanwhile, Chile and Brazil earmark and distribute per capita funds for primary care services, which is felt to contribute to achievement of health systems goals with improved equity for health spending at sub-national level [37], [107]. Conditional grants were described by some national level respondents as a possibility to guide county priority-setting to align with central objectives, although it was not commonly described at the county level and does not appear to have been widely applied to date in Kenya. This is in contrast with Uganda, where conditional central grants constitute up to 85% of district level budgets [37].

Kenya's national government introduced free maternal health care around the time of devolution, which specifies services which local governments are required to provide free of charge. Many interventions have been introduced by county governments in response, such as building maternity units and, in some counties, provision of incentives to encourage mothers to attend for skilled delivery. Counties are free to determine the user rates for hospital fees in collaboration with the local hospital board. However, national policies such as the free maternal health policy and free primary health care at dispensary and health centre, mean that there are restrictions prohibiting user-fees at these levels.

Freedom for procurement: Counties are responsible for ordering drugs and supplies and arrange payment for these, but must order from a list of pre-specified suppliers outlined by national government, in order to maintain economies of scale and the benefits accorded through this [37]. There were no guidelines described regarding the percentage of funds to be spent on pharmaceuticals. In the absence of clear guidance and adequate capacity some counties have struggled to maintain regular drug supplies. A recent systematic review revealed negative effects on the availability of medicines due to increased bureaucracy and lack of the needed management skills for procurement at local levels following decentralisation [64].

5.2.2 Service organisation: Limited spending for community health may have equity implications

The changing roles and responsibilities between national and county levels has created challenges. For example, the national unit for Community Health and Development revised the community health strategy (a national function) early in the devolution process (2014). At this point counties were gaining new autonomy for priority-setting, planning and budgeting, with roles, responsibilities and communication channels between the various levels still to be clarified. As a result, what ought to be a complementary process with national level leading the development of policy guidance and counties choosing to adapt and implement within their context as appropriate, has instead appeared contradictory in nature. This has led to uneven uptake of the revised strategy by county governments (based on our study findings), with some counties taking up parts of the strategy, some continuing unchanged and some introducing an entirely new community health approach, with little reference to national guidance (see case study 1).

New central government role towards service organisation: The role of national government in providing guidance to sub-national levels following devolution needs careful planning and negotiation. Lessons can be learned from Indonesia, the Philippines and Brazil for national government's role in guiding sub-national authorities (see Table 14). Central government in Indonesia issued instructions to districts to provide free in-patient care for poor patients, which angered districts who

viewed the instructions as a deliberate move to take back devolved powers [233]. At the other extreme the Philippines adopted a 'soft approach', where central government refused to investigate sub-national corruption or failure to provide basic services [229]. Finally, in Brazil central government used a combination of approaches to ensure provision of community-based primary care services including use of quota funding, promotion through the media, generating community and political support [235].

Functions maintained at national level include central procurement of vaccines²⁵; HIV service delivery; disaster and outbreak response; ports and borders in order to benefit from relative economies of scale for procurement and "substantial positive inter-jurisdictional externalities and have little variation in efficient levels of local output" (page 677 [37]).

Implications of service organisation choices: Coverage with some key health services became more equitable in Kenya over the last decade. Multi-country study has shown that in middle-income countries vaccination coverage levels were lower in decentralised countries than in centralised ones [31]. It will be important to monitor coverage with key services, such as vaccination, to ensure there is not a deprioritisation of immunisation following devolution due to political preference for curative services over preventive ones (see section 4.3.2 and section 5.6).

Immunisation falls within both national and county responsibilities (national level procure vaccinations; counties procure syringes and conduct immunisation). This joint national and sub-national responsibility for immunisation was previously adopted in Indonesia following devolution. There immunisation rates stagnated in the period following devolution and recent evaluation revealed no significant association between fiscal decentralisation and immunisation outcomes [264]. However, where districts had invested in the number of village health posts (which

²⁵ Drug procurement determined at county level must be bought through suppliers pre-specified by national government.

provide promotive and preventive health services, often by CTC providers within villages), immunisation status was higher [264].

Wide freedom in allocation of funds for community health, primary health care, public health interventions or tertiary interventions gives counties autonomy to determine which programmes are implemented and their level of financial backing. While allowing a high level of choice, all counties do not yet appear to have the needed capacity to make these decisions. Limited decision-making capacity has been widely described as a potential threat associated with devolution in Tanzania, Uganda, Pakistan and India [29], [37], [231]. However, in Mali considerable efforts were made to strengthen sub-national capacity prior to the roll out of devolution with positive effects for decision-making [245]. Early signs of poor decision-making in Kenya, includes no allocation of funds for community health activities by some counties studied (excluding the payment of CHEW salary). It may be wise to study the spending of the best performing counties and use this as a means of providing some form of guidance for use of funds by counties. For example the positive deviant case study 2 provides an innovative example of best practices for engaging with communities and other stakeholders to build capacity to understand health (including preventive and curative aspects).

Choice for service organisation at hospital level: County authorities have a wide degree of autonomy over decisions made at the hospital. However, the hospital itself has more narrow decision space for use of facility improvement funds following devolution. In most counties studied the county treasury collected facility improvement funds generated from the hospital and determined the percentage of these to be returned for the hospital to use, with the hospital required to request and seek permission for all expenditures from the county treasury (see section 4.4.1). Although, in some counties the local authorities have recognised that the hospital's decision space is too narrow and have decentralised further, so the hospital has autonomy to manage their own budget, in collaboration with the hospital board. These findings are in keeping with previous study in Kenya which found reduced hospital autonomy, due to county health departments having taken over former hospital managed roles [265]. This has led to hospital managers feeling

disempowered, inefficient service delivery due to increased bureaucracy, reduced staff motivation, limited scope for community participation, due to the limited role for hospital management committees and compromised quality of care [265].

The changed funding in hospitals, where locally generated facility improvement funds are not retained for use by the hospital, but instead are returned to the county treasury, reflects findings from Indonesia. There hospitals were put under pressure to generate revenue by the local government and around 75% of revenue created at public hospital went to the local government [263]. If not quickly addressed this will likely contribute to a widening gap between rich and poor patients. A recent study conducted of priority-setting in hospitals in Kenya has already shown that revenue maximisation was a dominant priority-setting criteria, where departments which generated revenue were prioritised over those which did not, such as services for children under-five which do not generate user-fees, leading to inequitable budget allocations [197]. Although not expressly probed for hospitals in our study, there are echoes of this through the data, with stories of counties prioritising dialysis units which will generate revenue, while no funds were allocated to community health approaches which have no revenue generation potential.

Counties have the choice to expand insurance plans and some described having expanded insurance coverage for selected groups such as CHVs and certain vulnerable groups. However, no county described designing their own insurance plan (although this was not expressly probed). The equity implications of varied introduction for selected groups are highlighted in section 5.2.4.

5.2.3 Human resources: Increased recruitment but challenges with management

Human resource management is crucial as it accounts for such a large proportion of the health budget, similar to other devolved countries such as Pakistan, where 70% - 80% of fiscal transfers were earmarked for salaries [37]. Our study found moderate to wide decision space for human resources at county level, with local freedom to hire new permanent and non-permanent staff and fire poorly performing health workers as well as determining remuneration (within broad limits). However, unlike Pakistan, central authorities in Kenya did not specify or earmark funds for salaries at

the county level [37]. While county authorities have the freedom to earmark funds at their level, respondents from only one county government reported having earmarked funds for salaries. This means that while counties have the space to hire/ fire and manage staff, they also have the space to decide to reduce funds for salary, to be spent on another priority instead. This allows counties the opportunity to distribute lower cadre workers within the county in a more realistic and needs-based manner than under central government, similar Tanzania and Mali [245], [266].

Counties (particularly those considered marginalised) now experience greater degree of freedom to innovate in order to recruit and retain needed staff, with some counties having invested in renovating or building staff accommodation, others introducing higher salaries to attract health workers (see section 4.4.2). The increased local authority and flexibility in hiring practices can increase competition between counties. The implications of this may lead to increasing health workforce distribution inequities between counties, as occurred in other countries as a result of limited effective mechanisms to attract and retain staff [266], [267].

One possible threat associated with the counties' capacity to recruit new health workers is the preference for curative health workers. This was acknowledged in Indonesia where local government priority was for medical officers, rather than public health professionals, due to the general perception that "health is a medical matter" (page 78 [268]). Similarly in China, limited guidance and capacity building to support managers after decentralisation reforms was felt to have led to unwise management practices, resulting in over-treatment and neglect of preventive care [269].

Implications for CTC providers: Recent national community health strategy revisions have led to variation and ad hoc implementation of parts of the strategy by county governments. A recent survey of CHVs and CHEWs in Kenya found that 96% felt the county governments were not doing enough to support their work, due to lack of compensation. This dissatisfaction has increased from 86% among CHVs and 84% of CHEWs who felt the national government had not done enough historically to support community health [270]. In the absence of guidance surrounding the limits

to adapting national strategy to local context, there is wide opportunity for innovation such as new CHV NCD screening role. However, there is also the threat that health workers, particularly CHVs who have undergone limited training will experience an increasingly heavy workload without the supervision and ongoing training needed for good performance [10]. Given the withdrawal of financial support for CHV stipend by many donors and county discretion to provide stipends (or not), this creates inequitable working conditions for CHVs between counties, depending on the stance adopted by each county government.

Implications for skilled health workers: A number of challenges have arisen with human resource management post-devolution, with many counties struggling to ensure timely payment of staff, blamed on late transfer of funds from national level, in keeping with similar findings in Nigeria and Tanzania [231], [271]. Other challenges include limited future planning for human resources in some counties; perception of exclusion from decision-making processes by many health workers and lack of clarity for transfer of staff between counties. Increased reporting of nepotism and political interference was a cause for growing concern in some counties, in keeping with findings from other decentralised countries [266], [267]. Another problem within Nairobi was the differential in the pay scale between national and county health workers. This contrasts with Uganda, where pay scale differentials were harmonised prior to devolution [29]. If unaddressed this may lead to distortion in the numbers of health workers employed by national and county government as staff seek to pursue better employment conditions, as occurred in Nigeria [271]. There local government was responsible for employing primary health care workers but delays in funding transfers led to late and irregular salary payment. Meanwhile secondary and tertiary health workers were employed by higher levels of government where salaries were higher and more regular. As a consequence primary health care workers were attracted to leave their posts and seek employment where conditions were better [271].

The possible implication of failing to address these challenges and discontent among staff, include health worker strikes, which have recurred in many counties since devolution began. The most recent being the doctors strike which lasted two

months. Some respondents expressed the opinion that human resource management should have remained under central government control due to inadequacies with human resource management by their local county authorities (see section 4.4.2). This finding was in keeping with the transfer of health workers from national to local government in the Philippines, which brought adverse reaction among the staff, as a result of having been excluded from the decentralisation policy. In the Philippines, devolution initially brought a deterioration in employment conditions for devolved health workers, with lower salaries relative to central workers and unclear career progression [29], [237]. As a result health workers protested and lobbied for recentralisation of human resource management, which led to extensive changes in how human resources were managed and reduced local decision space for human resource management, and is a potential risk for Kenya [29].

5.2.4 Access rules: Mixed effects for health equity

Since devolution has previously shown mixed effects for influencing health equity [67], [68], it is important that the equity of effective service coverage is monitored, with positive incentives and sanctions introduced by national level to encourage county governments to ensure that health needs of the most vulnerable are met.

Availability: National and county government are seeking to increase service availability by removing financial and geographic barriers, such as free maternal care, removal of user-fees, increasing insurance coverage for vulnerable groups and building infrastructure. In addition to removal of user fees, there are pre-specified key populations identified by national government, who are entitled to 100% coverage with Kenya Essential Health Package (KEPH) services to be provided by county governments. These groups (people living in congregate settings, children, youth, health workers, commercial sex workers, women, persons with disability, elderly, marginalised and religious/cultural communities, those living in hard to reach areas [22]) were largely reflected in our study when respondents were asked to identify dimensions which may increase someone's vulnerability or ability to use health services (see section 4.5.2). However, while the national health policy specifies that they should receive 100% of KEPH services it does not identify how it

should be provided. This provides opportunity for innovation, but also carries with it the risk that the Essential Package of Health will only be loosely enforced, as occurred in Uganda [29]. There conditional grants were introduced to encourage primary health care spending and these could be considered in Kenya to guide decision-making which ensures provision of community-based primary health care [29]. However, it is still too soon to tell whether central measures to encourage primary health spending are needed.

As a result of the lack of clarity, each county authority defines their own priority populations and specific interventions to target and address the needs of these groups. Varied introduction of insurance coverage for selected groups has the potential to extend health coverage for the most poor. Lessons could be learned from Switzerland, where a central ruling outlines that sub-national authorities should provide financial assistance for insurance premiums for those unable to pay them, but the sub-national authorities define the criteria which determine access to this assistance, leading to considerable differences in the economic burden of seeking healthcare [272]. Given the differences between Kenyan counties where poverty levels vary between 22% to 88% living below the poverty line [198], careful review and evaluation of insurance coverage provided by county governments, is needed to ensure that the benefits of being able to identify the most vulnerable within each county does not lead to exclusion of certain vulnerable groups. Care is needed to avoid widening gaps, as formerly marginalised counties may struggle to extend geographic coverage (through construction of facilities, investment in facility level health workers and CHVs), meanwhile trying to improve financial access for the large percentage of their population living below the poverty line.

Utilisation: While infrastructure expansion and refurbishment was almost universally described, there was limited description about investment in demand generation activities to promote the utilisation of these services. While outpatient attendance was typically described as having increased, many health facilities continued to experience low uptake of skilled delivery as a consequence of inadequate community engagement. In areas where community health approaches

had been adopted, respondents described the benefits of increased utilisation of facility services following CHV led demand generation (see section 4.5.7).

This remains a relatively untapped area of opportunity which could be used to the mutual benefit of citizens, health workers and politicians. County governments now have wide scope to innovate and experiment with increasing the acceptability and use of health services for all citizens, including the most vulnerable. Lessons could be learned from a positive-deviant case in Indonesia, where one sub-national leader (similar to the governor) convinced the local parliament (similar to the county assembly) that "their interests would be best served by providing decent services to the local population, rather than pandering to party elites" (page5 [233]). Strong leadership with a clear vision for improving health services led to increased quality and quantity of health services which improved health outcomes. The improved services were hugely popular, leading to a landslide victory in the next election and providing impetus for other politicians to provide constituents with similar services thereafter [233].

Quality improvement and quality: Differing national and county priorities

Quality was notable by its absence in our study. It was rarely described as a value for priority-setting and infrequently described as a priority which counties were seeking to address.

Quality improvement: This lack of focus on quality of health services following devolution was highlighted as a challenge by many respondents, despite increasing national focus on quality improvement mechanisms for health, as outlined through Vision 2030 and national health guidance documents, including quality improvement specific guidelines which identify the need for quality improvement teams within every county [228]. This contrasts with an earlier study of priority-setting in Kenya by Bukachi et al. (2013) conducted at district level prior to devolution. In that study quality was considered the most important value held by decision-makers, along with other values which may be considered part of quality services such as honesty, patients dignity and openness [192]. Interestingly, equity or fairness were not described at that time as being important values (unlike in our study where these

were the most commonly held values). It would be interesting to explore this in more depth, including reasons for why the emphasis has shifted from quality to equity in the values guiding decision-making, if this is the case. Potential implications of limited identification of quality as a guiding value include possible deterioration in the quality of services over time, see below.

Quality: Quality of services provided does not appear to have improved since devolution, with new infrastructure lacking the needed staff and supplies to function, increased drug stock-outs, long queues, insufficient numbers of health workers significantly threatening quality of services in a number of counties. Although many of these issues pre-date devolution, there have been limited measures to address these gaps (with the exception of recruitment of more health workers in many counties). There does not appear to be any monitoring of the effective coverage of services available at new health facilities by national level. Our finding of mixed (or in some cases deteriorating) quality of services in the first few years following devolution has been described elsewhere, with variation in service quality described between sub-national authorities in Zambia and the Philippines where quality of hospital care deteriorated alongside improving quality for other health services [29]. Meanwhile in Indonesia, service utilisation at public health facilities remained static, due to low quality of services provided by both public and private providers, which remained unaddressed, due to failure to monitor quality and lack of incentives for improvement [234]. It is important that quality improvement measures introduced by national government are adopted by county health management teams to monitor the quality of services as devolution progresses.

5.2.5 Governance: Mechanisms for accountability and transparency established but not always respected

One of the driving forces for decentralisation was demand for greater citizen participation in decision-making. Following devolution, there appears to be moderate governance space, but with a number of missed opportunities for including stronger community voice and participation.

Mechanisms for accountability and transparency: In keeping with Brinkerhoff and Bossert (2008), the types of accountability mechanisms present in Kenya relate to the relationships between the three main groups of actors — state and citizens, provider and state and provider and citizen [42]. These mechanisms and challenges experienced relating to these mechanisms, are highlighted in Table 15.

Table 15 Accountability mechanisms and challenges for health priority-setting since devolution

	Mechanism	Challenges
State and	Community votes for	Community not adequately informed of their health
citizen	leaders during election.	rights and governance role relating to health.
	Public participation	Inadequate funding for public participation limits
	meetings.	attendance of poor.
		Failure to address underlying norms and beliefs, e.g.
		patriarchy, limits women's participation in priority-
		setting.
State and	Provision of budget to	Limited relationship between budget submitted to
provider	health facility.	county and budget received at health facility level.
	Provider participation in	Limited opportunity for provider participation in
	priority-setting.	priority-setting processes.
Provider and	Community and health	Committees not functioning in all areas.
citizen	facility management	
	committee.	

Cleary et al. (2013) identified a range of mechanisms for promoting internal and external accountability. Many of these mechanisms have been established in Kenya, both before and since devolution (see Table 11). Cleary et al.(2013) highlighted that accountability mechanism are influenced by resources, attitudes of actors and values, beliefs and culture of the system [43]. In keeping with these conclusions our findings reveal that accountability mechanisms introduced, have experienced a number of challenges (see Table 15). In summary, these mechanisms can only be effective in so far as they are respected by all decision-making actors (actor attitude); that current limited investment in public participation meetings limits the opportunity for participation by marginalised groups (resources) and that failure to address the underlying beliefs and norms of the system, limits participation by marginalised groups, for example limited attendance and participation of women in areas with strong patriarchal norms (values, beliefs and culture).

Three public participation meetings have been introduced within each annual planning and budget cycle. However, we found limited community empowerment

to understand health, their decision-making role and to make informed decisions about health services. These findings are in keeping with study by Lakin and Nyagaka in Kenya (see section 5.1.4) and studies from Tanzania and Philippines, which found that genuine community participation in health planning at the health facility level was hindered by lack of awareness among community members, with poor communication between levels, lack of clear roles and responsibilities, lack of management capacity within governing committee and lack of financial resources to implement identified activities [241], [232].

In other countries such as Mali, local governments took on an intermediary role between the community and the service provider, with communities communicating their needs or complaints regarding health services through their elected councillor, who then negotiated with providers and the technical decision-makers [245]. There is some evidence of this role for local government emerging in Kenya, with members of county assembly describing this as one of their main responsibilities. Other mechanisms for raising awareness include the media (such as a public information campaign in Uganda), with public access to information found to be a strong deterrent to corruption [273].

Our study found challenges with ensuring the most hard-to-reach and 'vulnerable' members of the community were included in public participation meetings, with discussions often led by local elite. This was in keeping with findings from a systematic review of health facility management committees, which acknowledged the influence of social hierarchies, economic and political division on participation in committees and "not infrequently health facility committees reflected these hierarchies and patterns of power and patronage" (page 457 [274]). Likewise review of community health committee minutes from Nigeria found that committees function and operate within existing social, cultural and religious norms. Existing power asymmetries limit committee capacity to influence the government's provision of health services [275].

Introducing community governance structures, such as the new public participation forums occurs within the local political context. As Rifkin (1986) identified any

decision which now involves people who "traditionally have not been included in that decision is a question of power and control" (page244 [276]). This means that those who hold the power are now asked/ forced to agree to transfer this power. Naturally this is likely to result in a range of conflicts.

Barriers to accountability and transparency: Devolution brings with it the fear that local elites may capture and redistribute resources through patronage systems [245], potentially leading to deepening inequities within counties. Our data revealed evidence for this occurring in some study counties. A recent study which assessed the newly elected governors in Kenya, found that candidates used existing patronage networks to consolidate support by emphasising their track record in delivering patronage, such as jobs. This suggests the entrenchment of existing elites and patronage networks [25]. This was also reflected in Mali, Tanzania, Philippines and elsewhere, where after decentralisation patronage in the selection process for health workers was common [229], [245], [255], [266]. Political interference in health decision-making by local authorities, to obtain spurious benefits has been described both within our study and previous studies elsewhere [64], [241].

Study in the Philippines and Brazil, highlight the need for careful and thorough consideration of the context, including longstanding norms such as corruption, patronage networks and paternalism before changing governance systems [232], [277]. Key recommendations applicable within Kenya include: Activities to raise community and health committee awareness about their rights, governance and public participation; identifying and sharing key policies and guidance, building capacity and expertise for local governance institutions to monitor health expenses, ensure involvement of marginalised groups and training local governance institutions on negotiation strategies [232], [277].

5.3 Implications for health equity

Equity was commonly described by respondents, both technical and to a lesser degree political, as both a driver for devolution and one of the values which should underpin the priority-setting process (see section 4.1.1 and section 4.3.2).

Discerning how equity is understood by different actors affords perspective to find out the reasoning behind decisions and why some priorities are favoured over others. National and county respondents tended to define improving equity in terms of increasing geographic and financial access to health services (see section 4.5.1). This may in part explain the promotion of free maternal health, the building of new health facilities and purchase of ambulances to strengthen referral services topping their list of priorities. In other counties strengthening community health approaches to reach more remote communities has been a top priority. At health worker and community level, the need for effective coverage was identified – community respondents recognised that the available health services were not much use if they were ineffective (see section 4.3.5). This was in keeping with findings from Tanzania following decentralisation, where users were concerned about both the availability and quality of services which were delivered [278]. Devolution reforms in Kenya have increased the availability of health facilities, through construction of new infrastructure, in keeping with similar reforms in Tanzania following decentralisation [278]. However, despite increased availability of services, a number of community members still experience considerable challenges and barriers to using these as a consequence of intersecting dimensions of social inequality, such as geographic location, poverty level, religion, or disability (among others).

5.3.1 Intersectionality approach to understanding power dynamics at community and household level and implications for health equity

Applying aspects of intersectionality based policy analysis as outlined by Hankivsky et al. (2012) allows us to consider how people experience different social locations, which are created by the intersecting of different dimensions of social inequality and the societal structures which reinforce these (see Figure 31 and Figure 32). Paying attention to how people experience different social locations permits us to consider how they benefit (or not) from the changing power dynamics, how they contribute their voice within health priority-setting (or not) and how they benefit (or not) from services following devolution in Kenya.

The following sections will seek to illuminate how various forces intersect with gender and other dimensions of social inequality to create barriers to full effective coverage with services by using examples from the results. Where devolution has brought change which seeks to reduce inequity this is highlighted.

Gender-related intersectionality analysis

Gender roles and needs are key to achieving equity through decentralisation, as they affect men and women's access to healthcare, health-seeking behaviours, health status and the way policies and programmes are designed and delivered [278]. Women's roles and needs are central to decentralisation processes, but have largely remained unstudied [278].

Role of gender in leadership: In Kenya, mechanisms have been introduced alongside devolution to address gender imbalance and inequality among county leaders, such as the 'two thirds' gender rule for county government leadership. In our study this rule would appear to be followed to some degree, as some of the female politicians interviewed described (without probing) having been elected as a consequence of this rule. Yet the fact that they were elected purely because there is a law which mandates their participation would indicate that their communities still view men as the best choice for leadership. In an earlier study which assessed selection of governors in Kenya, no women were elected for governor, thought to be a consequence of women's exclusion from existing patronage networks [25]. Clearly, there is still some way to go before women are considered equal to men in making decisions and participating in discussions about health, both at the county level and within their community, particularly for women who experience other intersecting dimensions such as geographic location, tribe and age. This is in keeping with earlier study in Kenya, which found that while women were represented on committees for determining spending of Constituency Development Funds, they often held general positions rather than influential ones, such as the chair or secretary [17]. The implications of these findings reveal promising gender developments, with the introduction of the 'two thirds' gender rule, but need for development of guidance for promoting gender equity in health at the county level.

Role of gender among health workers, including CHVs: "Gender plays a critical role in influencing the location of women and men in the health labour force and their subjective experiences" (page 75 [279]). How men and women's contributions are recognised and valued has consequences both professionally and personally [279]. Women typically carry out more of the non-institutional care of the sick [280], [281]. Even within the health workforce gender differentiation and hierarchies are common, with women being less likely than men to occupy senior professional, managerial or policy-making roles [281]. This was reflected in our study as captured in Table 13, where women occupied more of the low/ unpaid CHV/ CHV team leader positions compared with men and fewer of the mid-level to senior national positions. Given the withdrawal of financial support for CHV stipend by many donors and county discretion to provide stipends (or not), this creates inequitable working conditions for CHVs, particularly women, who were acknowledged to be more likely to continue working voluntarily after stipends finished, compared with men. This is in keeping with previous study of lay health workers in South Africa, which found that most care work is done by women [282].

Gender was found to intersect with other dimensions such as geographic location as Table 7 indicates that for mid-level workers (including CHEWs and facility in-charges to sub-county officers) there were largely equal numbers of men and women interviewed in Nairobi, whereas in the more remote counties of Kitui and Marsabit, there were far more men than women in these positions interviewed. Given that patriarchal norms were more commonly described in rural counties, particularly within nomadic communities in Marsabit, this has implications in terms of cause and effect for this imbalance, with gender imbalances in education and willingness to work in a more remote area leading to more men occupying these positions. In terms of effect there may be potential barriers to women seeking care from a man, as a recent study among women from pastoralist communities in Kenya found that there was a sense of shame associated with being exposed during delivery, particularly if the nurse or doctor was male. In that study some women described experiences of returning home without treatment in the event they found a male skilled birth attendant at the facility [283]. During discussions about human resource

management with county decision-makers, gender imbalance in the health workforce was not raised by respondents (neither was it explicitly probed).

Gender and use of services: Counties in Kenya are broadly classified as urban, agrarian or nomadic/ pastoralist, although some include both pastoralist and agrarian populations. Pastoralist societies are patriarchal and women do not generally make major contributions to decision-making at community level, typically having limited power or control over assets or money [283]. At community level, we found limited evidence for changes to existing gender inequalities since devolution. Gender was found to intersect with a woman's geographic location and occupation, for example women living in pastoralist settings were left behind, with no known source of income during dry season when the men left to seek pasture. Societal and cultural norms and forces, such as patriarchy, which disempowers women and girls led to FGM, early marriage, low education for girls and low economic empowerment among girls from certain tribes and pastoralist communities. This perpetuates a cycle where less empowered women and girls are at increased risk of complications during delivery, as a result of scarring from FGM and teen pregnancy as a result of early marriage.

Deliveries to women who have undergone FGM are significantly more likely to be complicated by need for Caesarean section, post-partum haemorrhage and to need resuscitation of the infant with higher perinatal death, compared with deliveries to women who have not had FGM [284]. The increased likelihood of a complicated delivery and need for infant resuscitation may lead to neonatal morbidity and long term disability. Intergenerational disempowerment may continue as respondents discussed, particularly within nomadic communities, where persons with disability encountered more stigma and greater barriers to joining public participation and receiving the healthcare they need, compared with persons without a disability. For poor disabled persons living in remote areas opportunities to seek healthcare when they are unwell are further complicated by poverty, long distance, limited public transport and limited mobility, intersecting to erode their power and ability to seek medical care. Although not discussed by respondents in this study, employment

opportunities for persons with disability are lower than persons without disability. In high income settings, women with disabilities earn considerably less than women without disabilities [152]. Within our study patriarchy was so strong and women so disempowered in selected communities, that the introduction of gender interventions among women to reduce occurrence of FGM were unable to change practices, as they failed to engage with men who continued to hold power and demanded that girls undergo FGM prior to marriage.

Dimensions of social inequality such as gender, age, education, culture, poverty level, religion, geographic remoteness interact leading to a person's unique social location which varies according to time and place. These interactions and their effects may lead many pregnant women to continue to deliver at home with an unskilled attendant in some nomadic counties, despite heavy investment in new health facilities by county governments. This is in keeping with a recent study of delivery practices among pastoralists in Kenya, which found that distance, poor roads, lack of funds for transport, difficulty obtaining transport, perception of disrespectful treatment at health facility, shame of delivering with male skilled birth attendant, lack of education, local cultural values associated with home delivery and supportive, respectful traditional birth attendant (TBA), interacted to explain why many pastoralist women continued to deliver at home, despite health services becoming more geographically accessible [283]. In some cases, the county government have improved accessibility in terms of financial and geographic aspects, but have not yet addressed the acceptability of skilled delivery by engaging with cultural and religious beliefs and community perception of health workers. By contrast, counties studied which have introduced demand generation strategies, such as community health approaches, where CHVs and TBAs encourage pregnant women to attend have seen encouraging results, with one respondent in a nomadic county describing skilled delivery rates having increased from 8% to 42%.

Gender norms at community level: The photovoice research with youth provided a range of additional insights and the opportunity to learn more from those not typically included in health priority-setting, in keeping with the 'diverse knowledge'

principle applied within intersectionality based policy analysis [223]. Gender-based violence was commonly discussed, particularly in urban informal settlements, although it was also discussed in rural counties as well. It was a common source of discussion among youth photographers in the informal settlement, where rape has unfortunately become commonplace, with participants commonly identifying places where girls would be at risk of being raped (see section 4.5.2). A recent study of high school girls aged 14 – 21 years in Korogocho (where photovoice was conducted) and Kariobangi informal settlements, found that 24.5% reported having experienced sexual assault in the previous year [285]. Solutions identified by youth in our study dealt with the symptom of gender-based violence, such as building toilets within housing plots, rather than seeking to address the cause, by addressing women's empowerment and perpetrator's attitude towards women. Addressing the complex interaction of risk and protective factors, relating to the individual, relationship, community and society [286] is necessary. This will need to address factors such as level of education among both victim of violence and perpetrator; alcohol abuse; challenging societal acceptance of violence and weak community sanctions in response to violence; challenge traditional gender and societal norms which may support violence and combatting poverty [286]. Findings from our study reflect the social factors which increase risk of experiencing gender-based violence. It was most frequently discussed by participants who experienced many of these risk factors adolescents, who were school drop-outs, living in an informal settlement with high levels of poverty and alcohol misuse in the community. A possibility for girl's empowerment may be self-defence, with a recent pilot in informal settlements in Nairobi finding that a six-week self defence programme with high school aged girls was found to reduce incidence of sexual assault from 24.6% at baseline to 9.2% at follow up [285].

Broader intersectionality analysis: Poverty within the informal settlement interacts with a vast number of other dimensions of social inequality to compound exposure to risks for ill health and is a factor in determining where someone lives. In Nairobi this resulted in the poorest people living within informal settlements. The oppression generated by certain geographic contexts have previously been shown to be further

compounded by extent of remoteness, unfair geographic access to services, lack of public transportation, environmental matters such as pollution and weather [152]. Poverty is also known to be connected with limited education, as lack of money creates barriers to attending school and drives the need for an additional wage. According to the 2014 DHS, net attendance ratio for primary school attendance was 71% for the lowest wealth quintile and 92.2% for the highest quintile [161]. Lack of education has been shown to negatively impact employment, which in turn impacts food and housing security [152].

Employment is a marker for family and community wellbeing, with regular meaningful employment potentially providing a pathway out of poverty [152]. However, within the informal settlement unemployment rates are high, with only 42% having wage employment [287]. Scarce and inconsistent employment opportunities compound poverty and limit choice and power for those seeking work. Limited education, age and living within an informal settlement interact to produce limited employment opportunities which can lead residents, including OVCs and others to undertake jobs with negative health implications, such as brewing 'chang'aa' illegally, which was considered by respondents to be associated with dangers, such as alcohol abuse and risky sexual behaviour increasing potential exposure to HIV (see section 4.5.2). Alcohol abuse is another risk factor for genderbased violence, as described above. Scavenging on dump sites was associated with health implications such as respiratory infections through burning of rubbish, wounds and wound infections, as a result of working without needed protective equipment (see section 4.5.2). Previous study of air pollution, in part caused by burning rubbish in informal settlements in Nairobi (including Korogocho), found that respondents expressed sentiments of fatalism when asked about air pollution, demonstrating a lack of agency to be able to respond and address the air pollution where they live [288]. The low pay received from scavenging – enough only for the day, would compound any illness, as a result of lack of time or money to attend the local health facility in the event they were unwell. This intersection of poverty and lack of education was highlighted in an intersectionality analysis of violence in Mexico, where lack of alternative opportunities led men (in this context gendered expectations meant that men were obligated to provide financially for their families), to take jobs which placed them at increased risk of exposure to violence [158].

However, as photovoice respondents highlighted, living in an informal settlement did not result in standard exposure to risk factors for ill health. There was myriad variation between and within villages, even within the one informal settlement. Respondents highlighted variation in income, levels of nutrition (with some households owning a cow or a sack-based kitchen garden), standard of housing, access to amenities such as latrine, access to schools, levels of (in)security within the same informal settlement. This variation in exposure to risk factors within a single informal settlement and their impact on an individual's vulnerability, highlights how multiple dimensions intersect together within the lives of residents, leading to varied social location and levels of vulnerability and resilience. This variation is in keeping with an intersectionality analysis of HIV and disability [156], which found that the manner in which these two determinants intersected in the lives of respondents, resulted in a range of outcomes for their access to health services. Some experienced negative outcomes, as a result of oppression and stigma, but some had positive experience due to receiving supportive treatment from health workers, with their disability acting as a "catalyst for better health-promoting behaviours" [156]. Implications for action are described in the next section.

Use of photovoice participatory photography as a research method allowed for a more in-depth consideration of health behaviours and life hazards among youth in Korogocho informal settlement. Through use of this method the youth photographers were able to develop skills of critical analysis in considering their environment. This was visible as images captured and discussed progressed in tackling issues of power as the research continued, with youth initially sharing photographs of rubbish and sewage and later sharing photographs which highlighted issues of power imbalance. Some of these photographs included images which highlighted locations where girls may be at risk of rape, images of community members scavenging rubbish, due to lack of other employment options. In addition, the photovoice research drew out dimensions of social inequality and how they

intersect. Findings generated through this method highlighted the variation in vulnerability and power experienced by citizens living within the same informal settlement, providing a depth of understanding which would not have been achieved without its use. Further discussions would be useful to explore more about the underlying reasons for power imbalances highlighted by the youth photographers.

5.3.2 Opportunities to address forces which lead to exclusion through intersectoral approaches

The social justice principle within intersectionality emphasises "the transformation of social structures in equitable ways" (page118 [208]). Social determinants for health are inter-related and intersect in the lives of individuals and communities. Changing one dimension may well affect others (even more in the fast moving context following devolution) and so integrated health, social and economic actions are needed within the design of health and social systems, to achieve equitable health and welfare [44]. In considering which interventions can improve participation and the degree to which people of varying social locations (resulting from multiple intersecting dimensions of social inequality) benefit from health services, intersectoral approaches employed in Latin American countries have shown some degree of success. This success has contributed towards improving population health outcomes and addressing equity (see section 2.3.3) [44]. Within our study there was limited discussion about adoption of these approaches employed following devolution so far, with the exception of one county which was seeking to overhaul the community health approach and integrate it with other services such as agriculture, to provide integrated community level services which can tackle underlying social determinants (see case study 1). Devolution provides the chance for revitalisation of Kenya's approach to service delivery. The three main opportunities presented by devolution and examples from Latin America are highlighted in Table 16.

Table 16 Opportunities for intersectoral action and lessons from Latin America

Opportunity presented by devolution		Lessons from Latin America [44]
1.	New governance structures which are closer to the community to identify community needs and priorities	Social participation is essential for mobilising political support for policies and sustaining changes brought about through the redistribution of power, for example in Brazil where social participation is central to health system governance. It also strengthens democracy as decision-makers take into account citizens' views, e.g. in Cuba and Venezuela (with socialist regimes) social participation in the development of public policy is encouraged. Inclusion of marginalised groups is crucial.
2.	County scope to tailor- make community- based primary health care services which benefit all citizens	Sustained investment in promotion and prevention measures that address the social determinants of health are needed, along with stronger community level monitoring and use of data about health and social inequities. Brazil's community-based family health programme provides an excellent example of this (explained more fully in section 5.3.3.
3.	The ability to identify marginalised groups and in collaboration with other departments to plan actions which not only increase their access and use of health services, but also change their social determinants for health.	The importance of addressing demand-side (such as providing cash transfers), as well as the supply-side of interventions is crucial to uptake of services. Targeted measures for marginalised populations similar to 'Bolsa Familia' seeks to create employment opportunities (through actions that create employment and income generating opportunities, including access to means of production, technical assistance to increase production and access to markets), to increase access to public services and provide income transfers for families in poverty in Brazil. Increased support and links to social programmes for more disadvantaged households with children under-five years in Chile or nutrition and child care for children from poor households in Colombia.

However, despite the positives which have resulted from intersectoral action in Latin American countries, there is still room for improvement. Lessons learned which could be applied in Kenya include the need for involvement and strengthened capacity for managerial processes at sub-national and community levels and flexibility within budgeting to enable empowerment and freedom for local actors to jointly address problems and find solutions [44].

5.3.3 What are the implications for access, utilisation and effective coverage?

Interestingly throughout discussions with those involved with setting priorities, there was much discussion about the fact that equity was a driver for devolution and the importance of equity when setting priorities. However, there was a dearth of discussion about how decisions which promote and extend universal health coverage and equity are made. Some counties are seeking to extend community and primary care services for all, and are attempting to ensure that vulnerable and disadvantaged

groups are not left behind. Meanwhile, other counties have lost sight of the strategy identified in the World Health Report for realising UHC, that services should first be categorised into priority services, with expansion of high priority services for everyone first and a focus on ensuring that vulnerable groups are not left behind [7]. The following section will consider our study's findings in light of the access, utilisation and quality/effective coverage components of the Tanahashi framework (see Figure 5).

Accessibility – availability and affordability: In the push to address geographic access, many counties have sought to build new health facilities and extend curative services, but public health and population measures such as promotive, preventive and rehabilitative services, which are all necessary for universal health coverage have been neglected to varying degrees [7], [92].

Investment in infrastructure and equipment have been focused across both primary health facilities and hospitals. While primary health care has previously been demonstrated to be pro-poor, public hospitals in Kenya have historically been primarily used by the rich, with the richest quintile benefiting from two thirds of all hospital outpatient services [289]. Hospitals can quickly absorb vast amounts of money. In Kenya they have previously consumed 50% of the health budget [289]. It is therefore crucial that hospital construction and refurbishment which will primarily benefit the rich, does not undermine community-based primary health care services which can benefit all.

While a minority of counties have sought to build demand for services, this has commonly been neglected, with underinvestment in community health approaches, including CTC providers, limited health worker in-service training to build quality care, weakened supply chain in some areas, limited community empowerment to understand health and increase knowledge, attitudes and care-seeking practices and address social determinants within the home. Emphasis on infrastructure over quality, as perceived by users, was demonstrated following decentralisation in Tanzania and Indonesia [278], [290]. There local leadership were poorly informed

about health, lacking the understanding to recognise the benefits of public health services [290].

Acceptability and utilisation: As Figure 5 indicates, in order to attain universal health coverage services must also be acceptable to the population if they are to be utilised. Demand-side barriers including cultural and religious barriers, decision-making and gender autonomy and access to knowledge and information about health and services are all barriers which must first be addressed and overcome if health services are to be used [8]. Similar to other countries, devolved counties have generally been slow to approach these barriers [104]. In one nomadic area a new health facility had opened, but the community had not been engaged and so when a pregnant woman started bleeding she did not seek care at the health facility and instead died at home, without ever attending (see section 4.4.6). Community health approaches can address and reduce many of these barriers [9], alleviating and reducing the forces which reinforce exclusion and thereby helping to improve acceptability and use of services.

Many technical decision-makers across counties have recognised the benefits of community health approaches, but in the absence of adequate political and community demand, there has been limited investment and hence limited action to expand and strengthen quality community health services. Brazil's central government had the vision to introduce a community-based Family Health Programme, providing preventive and curative care through a multi-disciplinary team including one doctor, one nurse, one nurse assistant and six CHWs [107]. Each Family Health team works in a specific geographical area, right down to the household level, where they are responsible to enrol and monitor the population's health status providing primary care and referrals to other levels of care as needed [107]. While these services initially started in the poorest areas, they have consistently expanded to cover over 90% of the population over a fifteen-year period. Similar to community health in Kenya, while it was originally conceived as a national programme, the responsibility for implementation now rests with the subnational level [107]. The success and improved health equity resulting from the programme, has been the result of collaboration and co-ordination between central

and sub-national levels. The central government provide a per capita payment for community-based primary care services, paid directly to the sub-national municipalities, while sub-national municipalities defined and implemented their own context appropriate model. They hired the work force and maintain management of the programme, including co-financing the programme, collecting and analysing information and evaluating and supervising the family health teams [107].

Effective coverage: Quality was rarely described as a value for priority-setting and infrequently described as a priority which counties were seeking to address. Instead, quality gaps such as limited functionality of community health services, lack of consistent drug supply chain in some counties, lack of funds to support supervisors for transport to carry out their tasks were described. As a result of the perceived lack of quality at public health facilities a 'rich-poor' divide was evident (see section 4.4.5). The less poor seek care at a private facility and those who can't afford this, use public health services, seek informal treatment from a traditional healer or informal drug seller or are simply unable to seek medical assistance at all. While this is not a new phenomenon since devolution in Kenya, county governments have so far demonstrated little commitment to improving the quality of health services at public health facilities. In fact some of the interventions introduced prior to devolution to promote quality, such as transferring funds directly from the national treasury to health facility bank accounts [289], have potentially been undermined as a result of the control of funds at county treasury level, leading to delayed and lower transfers to health facility bank accounts. If not addressed, this may lead to similar outcomes as Indonesia, where following devolution there was a greater divide between rich and poor, with rich patients attending private health facilities and poor patients attending public health facilities, where the service quality was perceived to be poor as a result of doctors having moved to private practice following devolution and limited stocks of drugs at public facilities [263].

In summary, actions to expand primary health infrastructure and strengthen referral systems will lead to improved availability and geographic access to health services. The free maternal health policy and free services at dispensary and health centre will promote affordability and increase financial access to services. When wisely

implemented these are needed improvements to attaining universal health coverage and will strengthen the supply of health services. However, three additional features should be considered if acceptability, use and quality of services are to be improved.

- Ensure full coverage with a community-based element to primary health care
 with CHVs, CHEW and facility nurses working in collaboration to provide
 comprehensive preventive and curative services at the health facility, in the
 home and in the community, similar to the Family Health Programme in Brazil
 [235].
- 2. Strengthen community understanding of health, their role in priority-setting and governance, building capacity for genuine engagement and ownership for health.
- 3. National government to monitor service coverage and quality, by keeping track of county health management team's achievement of performance contract indicators, drug availability, client satisfaction etc. and implementing sanctions as needed, rather than the 'soft-approach' adopted in the Philippines, where deteriorating service quality and failure to provide basic services remained unaddressed [229].

5.4 Choice of frameworks

In approaching the discussion I have chosen to adopt four different frameworks, to create a new conceptual framework within which to analyse the study findings (see Figure 5). Given the importance of power dynamics within the findings an intersectionality lens was applied, to consider changing power and privilege following devolution. Multiple frameworks were selected and combined, in order to provide the means within which to analyse the differing facets of the study of priority-setting processes for health over time. In this section I will briefly highlight some of the reasons for selection of these frameworks and limitations associated with their use.

5.4.1 Reasons for selection and limitations

In order to analyse the actors and the process for devolution I quickly became aware of the highly political nature of the priority-setting process and the importance of the changing power dynamics in the early years since devolution commenced. After

initially considering one of the more traditional forms of political economy analysis, I instead selected the framework by Walt and Gilson (1994), due to its wide application for evaluating health policy and its strong commonality with political economy concepts [53], [244]. I found it most useful when applied to analysis of the process of reforms. While the accountability for reasonableness framework was used to guide development of the topic guide, the proceduralist conditions within Barasa et al. (2015) framework were used to evaluate the process of priority-setting. This selection was made because study findings were more closely reflected by this framework (based on systematic review) than by the accountability for reasonableness framework. The second half of the Barasa et al. (2015) framework for consequentialist outcomes was not applied as some of these had not been the focus of data collection. Bossert's (1998) decision space mapping approach provided scope to examine the consequences of decentralisation's reforms and the resulting degrees of choice afforded to the various actors, by evaluating the sub-national government characteristics, ability to innovate and performance of the health system [28]. While there is some degree of overlap with the health policy analysis framework in examining how incentives provided by central national actors can influence behaviour by sub-national actors to bring about positive outcomes, the analysis of the performance of the health system adds further perspective. Finally, given the focus of this thesis on health equity and community health there needed to be a robust analysis of how power played out through priority-setting in terms of the effective coverage of health services. However, equity is inadequately considered through the Bossert framework (1998), which only seeks to assess targeting of priority populations by sub-national authorities. Nor is it explicitly described in the Walt and Gilson framework. The Tanahashi model (1978) was selected to analyse the equity implications following devolution, given its ability to analyse the various aspects of coverage (availability, accessibility, acceptability, first contact, effective coverage) and to identify potential bottleneck areas which can impede effective coverage [99].

The role of the CTC provider was not expressly included in any of the frameworks selected. I made the decision not to introduce a further framework to specifically

assess community health-related findings as I felt that CTC providers are already positioned within the frameworks described. I therefore sought to highlight their position as an actor in the Walt and Gilson (1994) and Barasa et al. (2015) frameworks; implications of devolution for community health performance through the Bossert (1998) framework and the mechanisms through which they can improve effective health coverage through the Tanahashi (1978) framework. However, to some degree the latter half of the second objective 'Explore felt impact of devolution for the health system, particularly delivery of community health services' may be less comprehensively analysed than the other objectives. This may be as a consequence of the decision not to add an additional community health specific framework or as a result of the limitations in the methodology. It may also reflect a gap in the design of devolution and the thinking of county decision-makers, resulting in CTC providers not yet adequately included in priority-setting in such a way that realises their potential role in empowering their community and strengthening linkages with the health system. It is therefore not a surprise that they are somewhat silenced in the findings.

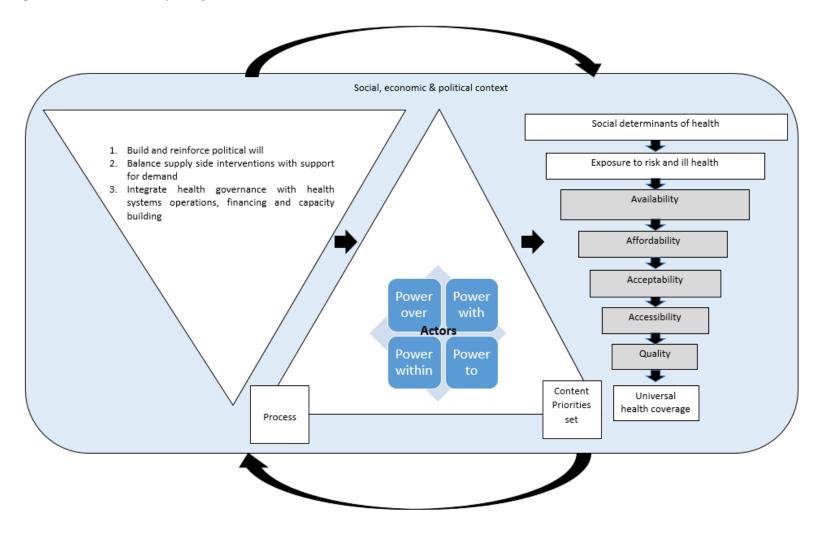
5.4.2 Reflections on conceptual framework

Reflecting back on the conceptual framework, having now completed the study, there are a number of limitations. Firstly, the framework as originally presented demonstrates a linear relationship between the process, the content of priorities set and the degree of equity within the health system. As this study has indicated priority-setting is a complex and adaptive process, just as the process influences the priorities and equity, so changes occurring following implementation of priorities can influence community empowerment, which in turn can influence equity, the priority-setting process and priorities set. In addition, this study has highlighted the importance of an analysis of the expressions and forms of power at play during priority-setting (section 4.3.2.), the leadership capacity (section 5.1.4.) and governance and accountability mechanisms (section 5.2.5.) between state actors, health providers and citizens. In response to these reflections, I have modified the original conceptual framework to better accommodate and reflect upon these findings (see Figure 34). The revised framework seeks to link together

- Three governance principles necessary for successful reforms, as identified by Brinkerhoff and Bossert (2008), namely: build and reinforce political will for reform; balance supply-side interventions with support for demand; and integrate health governance with health systems operations, financing, and capacity building.
- 2) Acknowledgement of how the socio-economic and political context impacts social determinants of health, accountability mechanisms and the priority-setting process, the content of priorities set and actors expressions of power in line with Walt and Gilson (1994) model for health policy analysis as included within the original framework. In addition, after reflecting on the central importance of power the framework now includes the four expressions of power as identified by Veneklasen (2002).
- 3) Identifications of how these factors combine to influence the availability of health services, along with an individual's ability to afford, accept, access and use these services and ultimately the effectiveness of services provided in line with Tanahashi framework (1978) as identified in the original framework.

In addition, due to the dynamic nature of the process arrows have been added to highlight how changes to community empowerment to demand services, can influence uptake and use of services and vice versa.

Figure 34 Revised conceptual framework



5.5 Study limitations

The limitations for this study relate to three key areas, including generalizability, community and CTC provider insights and position as a foreign researcher. With the benefit of hindsight, I would ensure that questions and probes which explored the role of CTC providers and community members were included during interviews or discussions with respondents at these levels. In addition, I would plan to include observations and review of minutes from public participation meetings, to learn more about the extent to which CTC provider and community members are involved and lead priority-setting discussions at these meetings. Along with the extent to which priorities identified during these meetings are included within county annual work plans and budgets.

Generalizability: The 47 counties in Kenya are extremely diverse with a wide range of demographic, geographic, social, cultural and economic differences, leading to possible limitations with the generalizability of findings. Given the extent of diversity, ten counties were purposively selected in order to try to ensure as much diversity of findings as possible. While no two counties are the same, the inclusion of such a breadth of counties seeks to ensure that the net for learning lessons has been thrown over a wide area, allowing for learning of best practices and challenges.

Another limitation has been that while county decision-makers from ten counties were interviewed, sub-county and health workers from only three counties and REACHOUT community level data from two counties were included as a result of time and resource constraints. However, despite the reduced number of counties included for greater depth of investigation, the three counties selected ensured representation according to rural agrarian, nomadic and urban, with varied levels of poverty and diversity regarding approaches to community health following devolution.

Photovoice research was carried out in one informal settlement in one county only, thereby having limited generalizability of findings. However, while some of the issues photographed and discussed were context specific, such as illness relating to rubbish

collection, many of the findings were triangulated by respondents across health systems levels across multiple counties, such as challenges with drug stock-outs and insufficient health workers.

Community and CTC provider insights to priority-setting: A leading limitation of the study was that community and CTC provider insights into the priority-setting process and their role within public participation and other community meetings were not directly sought, as questions and probes relating to this were not included within topic guides. This was as a result of the community data having been collected through the REACHOUT study baseline, prior to the rest of the study and before identifying the need to include questions and probes in this area. However, perspectives were sought directly from other levels and some community respondents discussed priority-setting to some degree, even though not directly probed. This would be an important area for future research.

Position as a foreign researcher: As a foreigner, respondents may have felt more or less able to share openly their true opinions and feelings about devolution as reflected upon in section 3.1. Due to the sensitive nature of some of the discussions about devolution, respondents may have been hesitant to share their true opinion. Respondents were advised that all findings would be anonymised and data would be kept confidential in order to try to allay some of the fears which they may have held. Further, as a foreign researcher from the former colonising UK, perhaps some respondents may not have wanted to discuss possible factors which influence priority-setting, such as impacts of colonialism which impacted the importance of tribe in priority-setting in some counties.

I found that in general most respondents were extremely accommodating. They found time in busy schedules to meet with me and demonstrated a genuine willingness to share their opinions and experiences. Upon reflection it is unclear to what extent this may have been influenced by my position as a foreign researcher, or whether there was a degree of power which I held by nature of my 'outsider' status, in gaining access to meet with a considerable number of elite decision-makers. Or whether it was predominantly a genuine interest in research and desire

to contribute to improving health, after devolution from the respondents. Many respondents were keen to receive feedback about the study findings and so disseminating research findings will form an important study component. Community dissemination of photovoice findings was carried out as part of the study and plans are underway to share findings with national and international actors at a conference to be held in Nairobi, to produce policy brief and to meet with national level community health actors through REACHOUT symposium and to explore opportunities to disseminate with county executive committee members for health. Preliminary findings were also considered during development of the SQALE research project which seeks to embed a culture of quality improvement by strengthening leadership and coordination at national, county and community level.

As a foreign researcher from a position of privilege in a high income country, whether I should in fact be researching and studying priority-setting in the context of a middle-income country, has been a subject of much consideration for me. While presenting at a recent international conference, my foreign status presenting research from Kenya was pointed out as less than ideal by an audience member. Would it be more suitable for a local Kenyan researcher to conduct this study instead? While there are benefits which I as a 'neutral' outsider, able to travel to multiple counties across the country can bring to the research, do these justify my having carried out this study? And to what degree will stakeholders be open to acknowledging recommendations from this study? Ultimately, I have not yet reached a conclusion surrounding the value (or not) of my position in conducting this research. However, from a reflexivity and intersectionality position I have sought to acknowledge and make this explicit.

5.6 Recommendations

This thesis approached priority-setting for health at sub-national (county) level in Kenya by applying an intersectionality approach and framing findings according to the study conceptual framework (Figure 5). Since this study has been conducted during the early years in the process of devolution, there is ample opportunity to maximise the opportunities provided by devolution through introduction of timely interventions. As a result, 12 recommendations are identified.

National Level Recommendations

- 1) Collaboration between national and county level governments to identify clear processes for the filtering and selection of priorities, including categorisation of services into priority classes (high, medium, low), budget and other guidance, cost-effectiveness, priority for most vulnerable, financial risk protection principles. These processes should be shared with the full community.
- 2) Monitoring of key public health indicators (such as immunisation and family planning) by national departments, with introduction of measures to ensure adequate funding towards public health, community-based primary health care services, such as:
 - a) Targeted capacity building for wise decision-making
 - b) Use of conditional grants to encourage public/community-based primary health approaches
 - c) Consideration of quota or earmarking of funds for public/community-based primary health interventions, as and where needed to ensure counties fulfil their mandate to provide essential health services for their constituents.
- 3) Working together with counties to integrate community health approaches within primary health care, generating more integrated community-based primary health care. National level to craft an advocacy plan to promote community and political demand for community-based primary health care services, such as media campaign and introduction of uniform to increase CHV visibility within communities.
- 4) Encouraging innovation within counties (for example from case study county 2 or training CHVs to screen for NCDs) by monitoring and encouraging county-to-county sharing of best practices. National level to provide clear guidance about what aspects of services are non-negotiable and must be provided and which are open for re-invention to better meet local communities' needs.
- 5) Clarifying roles and responsibilities for county, sub-county level workers, health workers at facility and community level and community members, including those considered 'marginalised' in priority-setting for health. Counties to ensure

- capacity building is carried out for all decision-making actors to understand role, priority-setting processes and negotiation skills.
- 6) Collaboration of national and county levels to harmonise central and county salaries, establish clear career progression and promotion guidance (for facility level and close-to-community providers) and clarification surrounding intercounty transfers. Celebrating and supporting strong county level transparency and collaboration between technical and political decisions makers throughout the priority-setting process.

County Level Recommendations

- 7) Build capacity of decision-makers (both technical, political actors and at community level) to understand health holistically, maintaining health, through community health approaches, equity and universal health coverage principles. Involve CHVs throughout the process to share their experiences with politicians and clinical decision-makers and to build capacity at community level. Building capacity of community and CHVs to understand the promotive and preventive aspects of health care in order to develop their 'power to' hold political actors to account by demanding holistic health care, in order to resolve the current emphasis on politically appealing infrastructure and ambulance services.
- 8) Ensure governance and accountability measures, such as public participation are meaningful, by introducing public deliberation concepts such as providing community members with easily understood information about the range of choices available to them, the reasoning behind those choices and the process for filtering choices. Reducing the knowledge imbalance can contribute to developing 'power within' and encouraging 'power to' participate in priority-setting by community members. This could be monitored by reviewing meeting minutes for the priorities identified by community against technical priorities and related budget allocation. Innovative approaches to ensure participation in priority-setting from those considered 'marginalised', such as women only meetings in certain contexts or use of social media platforms with youth.
- 9) Ensure a quality focus at each level within existing accountability mechanisms, so that as coverage extends functionality is maintained. For example, county

decision-makers should seek to incorporate community feedback about the effectiveness of services provided in priority-setting processes. This could include feedback collected through established channels, such as community dialogue days, complaints box at health facility or member of county assembly feedback from constituents. New opportunities should be explored including monitoring of local news reporting of concerns or establishment of a quality platform through social media.

- 10) Recruitment of trained and experienced human resource managers within county public service boards, with earmarking of funds for staff salaries within the county. Build county procurement capacity. Build stronger platforms to engage health workers (community and health facility level) in priority-setting and in demanding fair treatment from county public service boards, in order to build 'power within' and encourage their participation and sharing of 'power with' other actors in priority-setting. Ensure that health worker involvement in public participation meetings is included as part of their job description. Establish two-way feedback platforms for health workers to confidentially report and receive feedback about unfair treatment to county level management.
- 11) Counties to consider further partial decentralisation to sub-county, health facility and community unit level, with needed governance mechanisms in place, to accommodate local problem solving and ensure funding for needed activities currently neglected in many places under devolution, such as funding for travel for supervisors.
- 12) Ensure that equity is a focus when tracking service coverage and uptake, by expanding high-priority services for everyone and ensuring that vulnerable groups are not left behind. County government to identify vulnerable groups within their county and then to build capacity for data collection and use, such as community score cards/ barriers to service uptake by close-to-community providers, who should be tasked with ensuring participation of vulnerable groups. Prioritise sharing and use of community level data to develop tailored approaches at community, health facility, sub-county and county levels in planning; track locations of new health facilities built and operational; build skills of health workers to monitor percentage uptake of services such as skilled

delivery, by calculating estimated target for health facility catchment population groups.

5.7 Further research

Over the course of this study I have identified a number of key areas for further research. In response I recommend:

- 1. Further study of community and CHV role within priority-setting during public participation and other forums, combining observation of these meetings with qualitative interviews and discussion to explore how community members and CHVs are involved (or not) with priority-setting, how these meetings are facilitated and how this influences the selection of priorities. This should include a particular focus on observing the presence and participation (or not) of vulnerable groups, along with discussions to explore their participation.
- 2. Tracking county budget spending towards community-based primary health care. This will need break down of the county budget to provide this detail, which is not currently available in most county budgets, in order to allow researchers to track spending towards this fundamental health service as time progresses.
- 3. Triangulation of this broad outsider perspective with deeper insider perspectives on devolution, health and equity.
- 4. Study of leadership practices adopted by key county level actors involved with guiding the priority-setting process. This study could include observation of how meetings are facilitated, in-depth interviews with leaders and other decision-makers about leadership approach used.

5.7 Contribution to new knowledge

This thesis is the first study of post-devolution priority-setting processes in Kenya of this scale. It seeks to triangulate findings across multiple counties and between respondents from national, county, health worker, close-to-community provider and community level. By using qualitative methods to explore priority-setting processes, with application of participatory photography to explore equity it also provides insights through the eyes of those considered 'disadvantaged' to how social

determinants of health effect day-to-day life in an urban informal settlement. This thesis is the first known study to apply an intersectionality lens to interpret how changing power dynamics following decentralisation intersect to influence how and why priorities are set, who is involved (or not involved in the process) and how this influences the access, use and effective coverage of health services. It brings a unique approach to analysis following health systems reform.

In addition, it has progressed conceptual framing of power, politics and process surrounding health reforms and their equity implications, leading to development and progression of a conceptual framework. This is the first known framework to bring together lenses for power, politics, governance, priority-setting, decision-space, equity and intersectionality. It is potentially of use for other researchers seeking to conduct holistic health systems reform research. Combined together these insights provide contemporary and multi-faceted findings, analysis and recommendations about priority-setting and its implications for health equity.

5.8 Conclusion: How might devolution influence Kenya's progress towards UHC?

The rationale for the Kenyan devolution process was driven by the need to ensure responsiveness to county contexts and has had positive ramifications for health equity in previously neglected counties. However, the rapidity of the process combined with limited technical capacity and guidance has meant that decision-making and prioritisation have been captured for political and power interests. Mitchell and Bossert (2010) point out the need to consider two questions for decentralisation—'are you doing the right thing?' and 'are you doing the thing right?' They suggest that provided conditions of good governance exist, then decentralising the health sector is the right thing to do [37]. The findings from this study would suggest that by devolving health services, Kenya is doing the right thing in the long term, by bringing decision-making closer to communities and increasing opportunities to reduce inequities, improve efficiency and responsiveness of county development. Governance mechanisms have been established through the two arms of the county government—county executive committee and county assembly. With channels for community participation and governance through existing health

facility boards and management committees and the new public participation meetings in place. However, in response to the second question 'are you doing the thing right?' the findings from this study conducted in the immediate post-devolution era would suggest that considerable improvements still need to be made. Devolution has presented a myriad of opportunities - some have already been grasped, but many have yet to be fully realised. In light of learning from other contexts we identify key recommendations for how to address inadequacies and build on early successes.

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Appendices

Appendix 1: Priority-setting, Devolution and Community Health Topic Guide

Many thanks for agreeing to the interview, I would like to start by asking you about how decisions are made and priorities set in this county

Priority-setting

- 1. Please tell me more about your role, relating to health within the county
- 2. Who are the main people involved with making decisions/setting priorities about health services in this county
- 3. What are the health priorities specific for this county?
- 4. How are priorities set for health in this county?
- 5. How do you make decisions about service provision for health priorities in the district?

Relevance/criteria

- 6. What kind of information is used for priority-setting?
- 7. What factors/criteria/values are taken into account when setting priorities?
- 8. In your opinion do you think the process is relevant to the needs and challenges of your county?

Implementation

9. Please describe how your priorities are implemented

Communication

- 10. What happens after a decision is made?
 - a. How do you disseminate the priorities set?
 - b. Do you think that the process you have described is publicly accessible?
 - c. How do you communicate with the recipients of priorities?

Equity

11. What is your understanding of equity/fairness?

12. Do you think that the process for setting priorities is fair/equitable? Please explain

Accountability

- 13. What is your understanding of accountability?
- 14. Do you think that the process for setting priorities is accountable? Please explain

Transparency

- 15. What do you understand by transparency?
- 16. In your opinion do you think the process is transparent?

Appeals and revision

- 17. Please tell me about opportunities for appeal and revision within the process?
- 18. How do you resolve disagreements on a priority?

Leadership

- 19. Who leads the process of priority-setting?
- 20. Tell me more about leader's initiatives to ensure implementation of the priorities identified?
- 21. How would you describe the skills of leadership?

Now I would like to ask you more about devolution

Devolution

- 22. What do you think is the purpose of devolution for health services?
- 23. What are the main changes which you have seen since devolution?
 - a. What changes have you seen in decision-making for financing and setting budgets?
 - b. What changes have you seen in decision-making for service delivery?
 - c. What changes have you seen in disease surveillance and response to disease outbreaks?
 - d. What changes have you seen in decision-making for human resources?

- e. What changes have you seen in supply chain for drugs and supplies?
- f. What changes have you seen for equipment and transport?
- g. What changes have you seen for infrastructure?
- h. What changes have you seen for health and management information systems?
- i. What changes have you seen in decision-making for governance and community participation?
- 24. What is the most significant change? Why?
- 25. What are the benefits and challenges of these changes?
- 26. What indicators do you think should be used to measure progress or performance for health since devolution?
- 27. Has how you set priorities changed since devolution? Please explain
- 28. Do you feel you have the space to make all the decisions needed within the county? Please explain
- 29. Who are vulnerable groups?
- 30. Has how you provide services for vulnerable groups changed since devolution?
- 31. Is health and service provision for vulnerable groups being tracked through devolution? Please explain

Now I would like to discuss more about the community health strategy

CHS progress to date

32. Please tell me about how the community health strategy has been rolled out (in this county)?

CHS indicators

33. What do you think are the most important indicators to measure performance of community health?

Decision-making for community health

- 34. What are the mechanisms for CHWs and CHEWs to feed into policy and practice?
- 35. How are decisions made about where community units are established?

- 36. Do you feel that devolution has influenced provision of community health services?
- 37. What would you say is the ratio for allocation of the current budget for curative vs preventative services within the county?
- 38. Is data from dialogue days used in making decisions for community health? How?

CHS Equity

- 39. Can you tell me how equitable you think the community health strategy is?
- 40. What would equitable community health services look like?
- 41. To what extent do you feel that community health services in this county addresses the needs of vulnerable people? Why? How?
- 42. Are there any other groups of people within the county who don't benefit from community health services? Who are they? Why don't they benefit?
- **43.** Do you feel that CHWs are representative of the members of their community?

CHS Sustainability

- 44. Can you tell me more about how sustainable you feel the community health strategy is? Please explain
- 45. What is the county's role in ensuring sustainability of the CHS? How can this be improved?

Suggestions

- 46. Do you have any additional suggestions about what else would help make the provision of community health services more equitable?
- 41. Is there anything else which we have not discussed but you feel is relevant to this topic?

Appendix 2: Topic guide for health workers and community health personnel

- 1. Please tell me more about your role and responsibilities in your current position
- 2. Please tell me what your role is for making decisions about health
- 3. Please tell me your feelings about devolution for health
- 4. Can you tell me more about what changes you have seen since devolution?
 - a. What changes have you seen in how you make annual workplans and set your budget?
 - b. What changes have you seen in how you manage finances and manage budgets?
 - c. What changes have you seen in service delivery?
 - d. What changes have you seen in disease surveillance and response to disease outbreaks?
 - e. What changes have you seen in staff availability? Staff turnover? Staff performance? Supervision of staff?
 - f. What changes have you seen in supply chain for drugs and supplies?
 - g. What changes have you seen for equipment and transport?
 - h. What changes have you seen for infrastructure?
 - i. What changes have you seen for health and management information systems?
 - j. What changes have you seen in governance, community participation and relationship to community?
 - k. Do you feel that devolution has influenced provision of community health services?
 - I. Probe Benefits and challenges
- 5. Who do you feel owns these changes for health?
- 6. Please tell me more about if/how your role has changed since devolution
- 7. What does equity mean to you?
- 8. Who do you think are vulnerable groups?
- 9. To what extent do you feel that the (community) health strategy addresses the needs of vulnerable people?

- 10. Have you seen any changes to how health services are provided for vulnerable groups since devolution?
- 11. To what extent does this sub-county/ health facility/community unit have flexibility in responding to local needs?
- 12. Do you receive feedback on decisions made and on your progress and equity of this?
- 13. Do you think that the current structure for decision-making during annual planning and budgeting for health is relevant to your needs and challenges? Why? Why not?

Community health specific

- 14. How are decisions made about where community units are established?
- 15. Please tell me more about the benefits devolution creates for community health
- 16. Please tell me more about the challenges devolution creates for community health
- 17. Any other comments on how to improve?

Appendix 3: National Level Priority-setting, Devolution and Community Health

Priority-setting

Topic Guide

- 1. Please tell me more about your role, relating to health
- 2. What role do you/ your department play in guiding decision-making for community health/budget/ general health?
- 3. What have been the benefits/ challenges associated with your role?

Devolution

- 4. What do you think is the purpose of devolution for health services?
- 5. Do you feel that this purpose is being achieved? Why?
- 6. When was the handover of health service delivery from national to county governments made?
- 7. What are the main changes for health which you have seen since devolution across the country?
 - j. What changes have you seen in decision-making for financing and setting budgets?
 - k. What changes have you seen in decision-making for service delivery?
 - I. What changes have you seen in disease surveillance and response to disease outbreaks?
 - m. What changes have you seen for immunisation?
 - n. What changes have you seen in decision-making for human resources?
 - o. What changes have you seen in supply chain for drugs and supplies?
 - p. What changes have you seen for equipment and transport?
 - q. What changes have you seen for infrastructure?
 - r. What changes have you seen for health and management information systems?
 - s. What changes have you seen in decision-making for governance and community participation?
 - t. What changes have you seen for community health services?
- 8. What is the most significant change? Why?

- 9. What are the benefits and challenges of these changes?
- 10. What indicators do you think should be used to measure progress or performance for health since devolution?

Relevance/criteria

- 11. How should counties be setting priorities for health?
- 12. What kind of information should counties be using for priority-setting?
- 13. What guidelines are available to guide counties in decision-making?

Implementation

14. How effective do you feel implementation of health service delivery is following devolution?

Communication and guidance

15. What happens after guidance document is developed?

Equity

- 16. What is your understanding of equity/fairness?
- 17. Please tell me about policies which have been put in place to promote equity for health within Kenya
- 18. How effective do you think these policies have been in practice? Why?
- 19. What are the main challenges to health equity? Why?
- 20. Do you think that devolution is more or less fair/equitable? Please explain
- 21. How has devolution influenced health equity?
- 22. How can health equity be improved?

Accountability

- 23. What is your understanding of accountability?
- 24. Do you think that the process for setting priorities is accountable? Please explain

Transparency

- 25. What do you understand by transparency?
- 26. In your opinion do you think the process is transparent?

CHS/ budget/ general advice

- 27. Please tell me about how the community health strategy/ budgeting/ general health has been rolled out across the country (since devolution)?
- 28. What support/guidance does national level provide for CHS/ budget/general health?
- 29. Who is this support for?
- 30. How much money was allocated to CHS before devolution? Why?
- 31. How much money was allocated to CHS after devolution? Why?
- 32. How has community health changed since devolution? Why?
- 33. How has provision of CHS services changed since devolution?
- 34. Which counties have embraced CHS? Which have not?
- 35. What do you think are the most important indicators to measure performance of community health?
- 36. How are decisions made about where community units are established?

CHS Sustainability

- 37. Can you tell me more about how sustainable you feel the community health strategy is? Please explain
- 38. What is the national role in ensuring sustainability of the CHS? How can this be improved?

Suggestions

- 39. What are your current recommendations for county governments about community health/budget/ general health?
- 40. Is there anything else which we have not discussed but you feel is relevant to this topic?

Appendix 4: Quality Improvement In-depth Interview Guide: Community Health Worker

Baseline Evaluation

1. Work Background

- a. Please tell us about your daily tasks and activities
- b. What do you enjoy about your work as CHW?
- c. How happy/ unhappy do you feel to do your work as a community health services provider?
- d. How long/ how many years do you intend to work as a community health services provider?
- e. What recognition do you receive for your work?

2. Supervision

- a. Please describe the supervision you receive.
- b. What do you feel about the supervision you receive?
- c. How do your different supervisors work together to coordinate your work within the program and outside the program?
- d. How could the supervision be improved to motivate you further?

3. Referral

- a. How do you conduct referral from the community to the facility?
- b. What are some of the reasons for community going or not going for referral?
- c. How do you think referral could be improved?

4. Community Engagement

- a. How do you interact with the community in your work aside from visiting them at home?
- b. What do you feel about how the community thinks about your work?

- c. What is your role in enhancing community participation?
- d. What challenges do you face in carrying out the role and what could be the reasons?

5. Fairness in service provision

- a. What does fairness in providing health services mean to you?
- b. Who are those people who find it difficult to seek health services in the community you work in? (Or which groups of people in the community you work in mostly need health services, but you face challenges in providing them with community health services)
- c. How are the people you have mentioned above able to get help for any community health needs they have (e.g. referrals, health education)?
- d. To what extent do you feel that you as a community health service provider meets the community health needs of these people within your catchment area?
- e. Is there anything that helps you to provide health services for everyone, including the people mentioned above in the community you work in?
- f. Are there any local initiatives that you are aware of which have been successful for ensuring that everyone in the community gets the community health services that they need?
- g. Do you have any ideas or suggestions about what would help ensure that everyone gets the community health services which they need?

Appendix 5 Focus Group Discussion: Community level - English

BASELINE EVALUATION

1. Problem description

- a. What are the main challenges of getting health care in the community you live in?
- b. What are the main challenges with health services provided by CHWs in the community you live in?
- c. Who are there people in your community who don't have regular contact with the CHWs? How come?

2. Supervision of CHWs and CHEWs

- a. What kind of supervision do CHWs receive?
- b. How do you think CHWs should be supervised?
- c. Who supervises the supervisors of CHWs?

3. Referral

- a. In what circumstances do CHWs make referrals?
- b. How do people feel if the CHW refers them to a health facility?
- c. Whose advice do you trust or take when making decisions about seeking health care?
- d. How do you think referral for health services should be improved?

4. Community Engagement

- a. What role do you as community members play in the provision of community health services?
- b. How is your participation as community members facilitated in the provision of community health services in your community?
- c. What hinders you from participating in the provision of community health services in your community?

5. Fairness in service provision

- a. What does fairness in service provision mean to you?
- b. Who in the community you live in uses the services provided by the CHWs?
- c. Who are the people who face the most difficulties in seeking health services in the community you live in? (Or which groups of people in the community you work in mostly need health services, but community health service providers face challenges in providing them with services)
- d. How are the people you have mentioned above able to get help for any community health needs they have (e.g. referrals, health education)?
- e. To what extent do CHWs meet the health needs of these people within the community you live in?
- f. What challenges do you face in accessing and using community health services? Why do you think these challenges exist?
- g. Has anything changed in the community you live in since the community health service providers started working there?
- h. What would make it easier for you and for vulnerable people in the community you live in to use community health services?

Appendix 6: Coding Framework

- 1. Priority-setting
- 1.1 Persons involved
- 1.1.1 MCA
- 1.1.2 CEC and governor
- 1.1.3 Persons consulted
- 1.1.4 CHMT
- 1.1.5 community
- 1.2 Role
- 1.2.1 Decision-making
- 1.3 Leadership
- 1.3.1 Leaders
- 1.3.2 Leadership in priority-setting
- 1.4 Health Priority
- 1.4.1 Curative vs preventive
- 1.4.2 health conditions
- 1.5 Priority-setting process
- 1.5.1 Public participation
- 1.5.2 Politics and priority-setting
- 1.5.3 Budgeting and cost-effectiveness
- 1.5.4 Context consideration
- 1.5.5 National
- 1.6 Relevance
- 1.6.1 Information
- 1.6.2 Values
- 1.6.3 Guiding documents
- 1.7 Implementation of priorities
- 1.8 Budgeting
- 1.8.1 Emergency budget
- 1.9 Publicity
- 1.9.1 Who with
- 1.9.2 Process for communication
- 1.10 Accountability
- 1.10.1 Accountability definition
- 1.10.2 Accountability in priority-setting
- 1.11 Transparency
- 1.11.1 Transparency definition
- 1.11.2 Transparency in priority-setting
- 1.12 Appeals and revision
- 1.12.1 Opportunity for appeals
- 1.12.2 Disagreement resolution
- 2. Devolution
- 2.1 Purpose for devolving health
- 2.2 Changes in health system

- 2.2.1 HRH
- 2.2.2 Supplies
- 2.2.3 Service delivery
- 2.2.4 Finance
- 2.2.5 Infrastructure
- 2.2.6 Governance
- 2.2.7 Information
- 2.2.8 Community empowerment
- 2.2.9 Disease control
- 2.3 Most significant change
- 2.4 Benefits of change
- 2.5 Challenges of change
- 2.5.1 Tribalism
- 2.6 Priority-setting and devolution
- 2.7 Decision space
- 2.8 History before devolution
- 2.9 Transition authority
- 2.10 Partner
- 2.11 Changes in health indicators
- 2.12 Provincial issues
- 2.13 National
- 2.14 corruption
- 2.15 changes to sub county
- 2.16 change to health facility
- 2.17 recommendations
- 3. Community Health Strategy
- 3.1 CHS process
- 3.2 CHS benefits
- 3.3 CHS challenges
- 3.4 CHS performance indicators
- 3.5 CHW and policy
- 3.6 CU coverage and location
- 3.7 Devolution and CHS
- 3.8 Partners
- 3.9 Dialogue day data
- 3.10 CHS sustainability
- 3.10.1 County role
- 3.11 CHS and national
- 3.12 CHS innovation
- 3.13 CHW representativeness
- 3.14 Quality CHS
- 3.15 CHS budgeting and advocacy
- 3.16 Reason for CHS
- 4. Equity

- 4.1 Equity definition
- 4.2 Priority-setting and equity
- 4.3 CHS and equity
- 4.4 Vulnerable groups
- 4.4.1 Who are vulnerable
- 4.4.2 Vulnerable groups and devolution
- 4.4.3 Tracking vulnerable groups
- 4.5 CHS unmet need
- 4.6 PROGRESS
- 4.6.1 Place of residence
- 4.6.2 Religion
- 4.6.3 Occupation
- 4.6.4 Gender
- 4.6.5 Race tribe
- 4.6.6 Education
- 4.6.7 Socio economic status
- 4.6.8 Social capital
- 4.6.9 Disability
- 4.6.10 Sexual orientation
- 4.6.11 Culture
- 4.6.12 Age
- 4.6.13 Other
- 4.7 Recommendations
- 4.9 equity actions
- 4.9 stigma
- 4.10 equity and devolution
- 4.11 Quality
- 5. Background
- 5.1 Respondent role
- 5.2 County context
- 5.2.1 Children issues
- 5.2.2 Gender issues
- 5.3 HS structure

Appendix 7: REACHOUT coding framework

- 1. Community
- 1.2 Community problem solving
- 1.3 Community accountability or ownership and responsibility
- 1.4 Local politics
- 1.5. Community meetings
- 1.5.1 Dialogue Days
- 1.5.2 Action Days
- 1.6 Community support of CTCP
- 1.6.1 Presence of support
- 1.6.2 Lack of support
- 1.7 Advocacy
- 1.8 Health promotion
- 1.9 Desire for curative services
- 1.10 Empowerment
- 1.11 Community attitude to CHW
- 1.12 NGO involvement
- 1.13 corruption
- 2. Community behaviour& attitudes
- 2.1 Health seeking behaviour
- 2.2 Health related decision-making
- 2.3 Social influences on health
- 2.4 Community needs& problems
- 2.5 Change in behaviour
- 2.5.1 Changes after intervention
- 2.5.2 Changes for other reason
- 3. Coordination and organization
- 3.1 Coordination activities processes
- 3.1.1Training
- 3.2 Communication
- 3.3 Partnership
- 3.5 Work environment
- 3.6 Support received
- 3.7 Effectiveness of services
- 3.8 Political issues
- 3.8.1 Negative consequences
- 3.8.2 Positive consequences
- 3.9 Efficiency
- 3.10 Devolution
- 4. Motivation of CTCPs
- 4.1 Extrinsic

- 4.1.1 Financial
- 4.1.2Non financial
- 4.2 Intrinsic motivation
- 4.3 How to improve
- 4.4 Demotivators
- 4.5 Motivation+ Organizational Commitment
- 4.6 Motivation + Conscientiousness
- 4.7 Motivation + Satisfaction
- 4.8 Motivation + Community Commitment
- 5. Equity
- 5.1 Identifying vulnerable or marginalized groups
- 5.2 Access to services for vulnerable groups
- 5.3 Use of services by vulnerable groups
- 5.4 Quality of services for vulnerable groups
- 5.5 Community empowerment and advocacy
- 5.6 Stigma and discrimination and confidentiality
- 5.7 Devolution and equity
- 5.8 Understanding of equity
- 6. Referral
- 6.1 Reason for uptake
- 6.2 Reason for non-uptake
- 6.3 Reason for referral
- 6.4 Access and quality
- 6.5 Referral tools
- 6.6 Referral Process
- 6.7 Follow up
- 7. Supervision
- 7.1 Types of supervision
- 7.2 Outcome of supervision
- 7.2.1 Potential usefulness & results
- 7.2.2 Actual impact
- 7.3 Approach
- 7.4 Training
- 7.5 Reporting and feedback
- 7.6 Checklists and other tools
- 7.7 Frequency of supervision
- 7.8 Functions of supervision
- 7.9 Supervisor skills and quality
- 7.10 Supervisory structure
- 7.11 Who supervises
- 8. Intervention design
- 8.1 Understanding of intervention design and purpose
- 8.2 Opinion of REACHOUT
- 8.3 Suggestions about design & implementation

- 8.4 Intervention sustainability
- 9. Provider issues
- 9.1 Competencies and skills
- 9.2 Problem solving
- 9.3 Quality of care
- 9.4 CTCP Tasks
- 9.4.1 Health promotion disease prevention
- 9.4.2 Curative tasks
- 9.4.3 Additional tasks
- 9.5 Attitudes towards community
- 9.6 Accountability
- 9.7 other work
- 9.8 Career
- 10. Sustainability of CHS
- 11. Fabulous quotes