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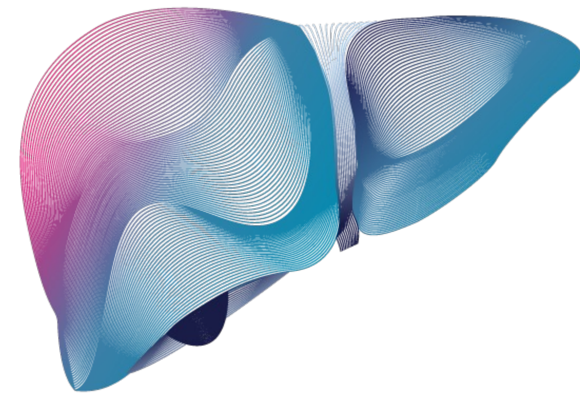

# Mersey Multi-morbidity Metabolic Community Liver Clinic: pilot data

NHS Liverpool University Hospitals NHS Foundation Trust

MILLBROOK MEDICAL CENTRE

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## Introduction

association with multimorbidity.
community.
risk of liver events (cirrhosis,
d cardiovascular disease)
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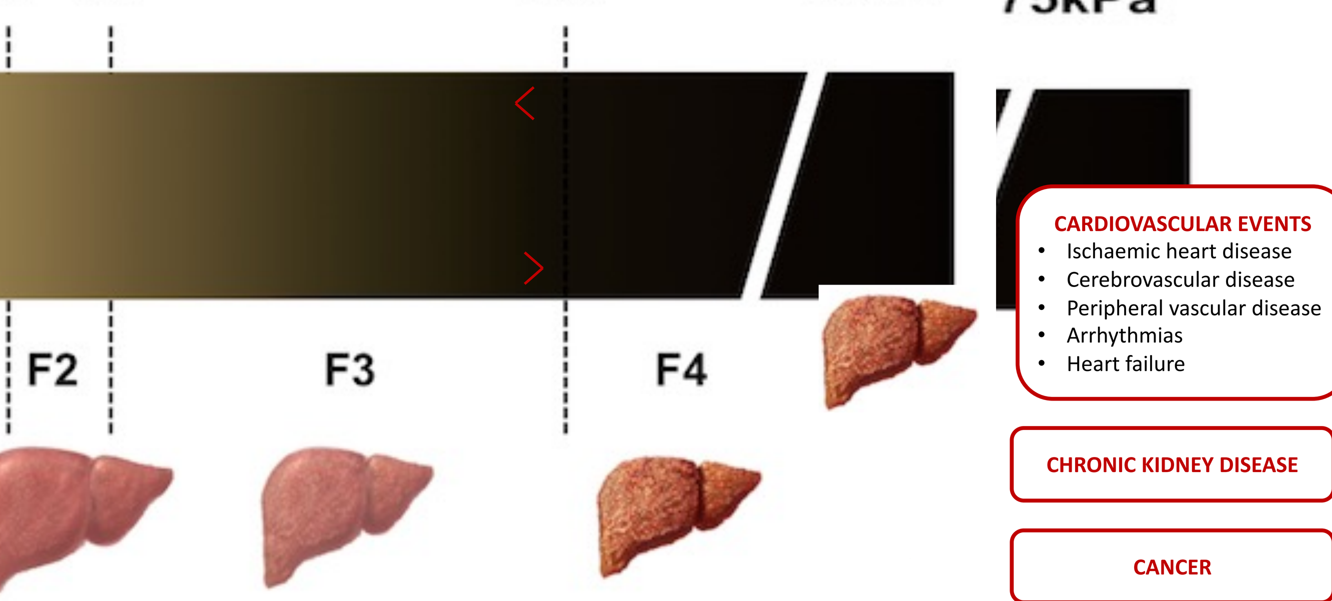



y, burden of undetected disease
and the potential for meaningful intervention (lifestyle/pharmacological).

## Method

- Adults who had **type 2 diabetes** or a **BMI >30 kg/m²**, were invited via text message to book a clinic appointment and attend for bloods.
- The clinic proforma was designed by a **multidisciplinary team** (general practitioners/hepatologists/diabetologists/patients) The clinic proforma consisted of an **assessment** (**history / anthropometrics / fibroscan / review of bloods**) and **management** section (**education / lifestyle / pharmacological**).
- **Personalised written feedback** using traffic light systems and lifestyle recommendations were integrated into the proforma which was uploaded to the primary care electronic medical records and shared with each patient.
- Any complex cases were reviewed in a **virtual multi-disciplinary team meeting**.
- Patients were followed up at 6 months via electronic health records

## Conclusions

- A thorough cardiometabolic assessment for patients with, and at risk of NAFLD, can be performed within 30 minutes in a primary care setting and generates high levels of intervention which is likely to impact future clinical outcomes.
- A combined form for medical assessment and personalised feedback of individual risk and management is associated with high levels of patient satisfaction.
- This model leads to improvements in metabolic health
- Our next steps are examine the feasibility of nurse-led clinic and to examine the cost-effectiveness of this model

## Acknowledgements

We would like to acknowledge the administrators at Millbrook Medical centre who helped support this project

## Results

### (1) Feasibility

- 19/24 attended (2x cancellations, 3x DNAs) = 79.2%
- The clinic took 30 min + 5 min admin time

### (2) High burden of cardiometabolic disease in clinic cohort

| Patient demographics | |
|---|---|
| Age (years), median (range) | 67 (38-85) |
| Gender (male), n (%) | 8 (42.1) |
| Deprivation, highest 2 deciles multiple deprivation, n (%) | 15 (78.9) |
| Smoker / ex-smoker, n (%) | 11 (57.9) |
| Audit C score ≥ 8, n (%) | 3 (15.8) |
| **Metabolic disease** | |
| BMI > 25, n (%) | 15 (78.9) |
| BMI > 30, n (%) | 12 (63.2) |
| Waist circumference men >102cm, women >88cm, n (%) | 17 (94.4) |
| Diabetes, n (%) | 18 (94.7) |
| HbA1c > 48 mmol/ml | 13 (68.4) |
| Hypertension, n (%) | 14 (73.7) |
| Clinic blood pressure > 140/90 | 11 (57.9) |
| Triglycerides > 150 mg/dl, n (%) | 9 (47.4) |
| HDL < 40 mg/dl men, < 50 mg/dl women, n (%) | 5 (26.3) |
| **Cardiorenal disease** | |
| QRISK > 10 or acute coronary syndrome, n (%) | 18 (94.7) |
| Chronic kidney disease, n (%) | 2 (10.5) |
| Urine albumin creatinine ratio >3mg/mol, n (%) | 5 (26.3) |
| **Liver steatosis** | |
| Controlled attenuation parameter > 275 dB/m | 14 (73.7) |
| **Liver fibrosis** | |
| Fibrosis-4 score >1.3 (>2.0 if > 65 yrs): | 2 (10.5) |
| Fibroscan ≥ 8 kPa (significant liver fibrosis) | 6 (31.6) |

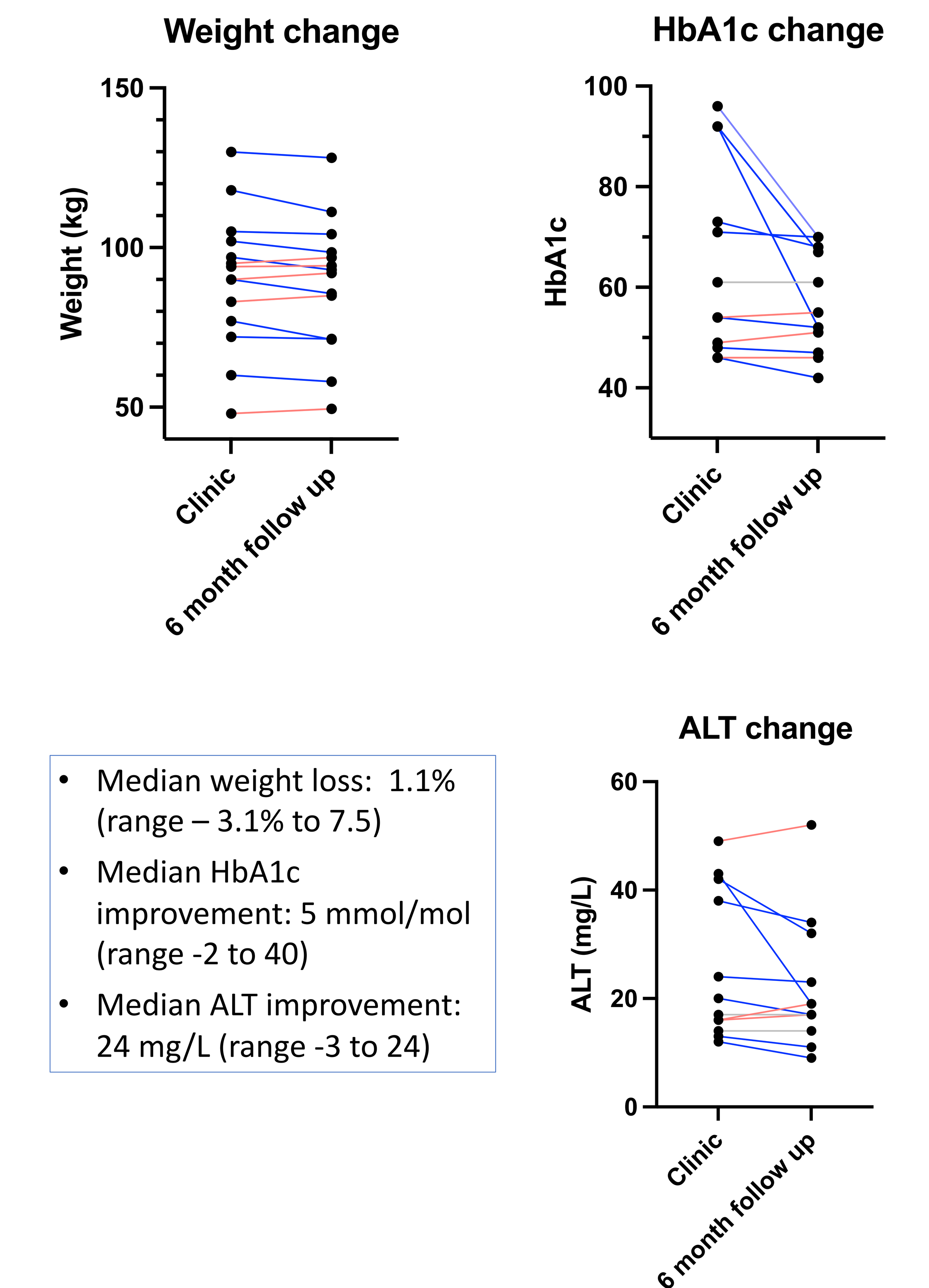
### (3) Outputs generated from the clinic

**(i) Lifestyle intervention**
- Brief alcohol intervention 15.8%
- Smoking cessation advice 5.3%
- Community lifestyle hub referral (leisure centre pass / slimming world vouchers) accepted by patient 26.3%

**(ii) Onward referral**
- Diabetes secondary care clinic 5.3%
- Hepatology secondary care clinic 31.6%
- Health care assistant hypertension clinic 57.9%
- Enhanced weight management services 10.5%

**(iii) Pharmacological intervention**
- Escalation of glucose-lowering therapy 57.9%
- Statin initiation or dose titration 10.5%

### (4) The Mersey Metabolic Community liver Clinic leads to improvements in metabolic health




### (5) Written patient feedback

- 100% thought the clinic was useful
- 100% said the clinic and written information helped them better understand their results and health conditions
- 93% said the clinic and written information would prompt lifestyle changes.