

**An Independent Quantitative Process Evaluation of the National Fire and Rescue
Service Response to the COVID-19 Pandemic**

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EXECUTIVE SUMMARY

This report presents the findings of a quantitative process evaluation of the national fire and rescue service (FRS) response to the first 18 months of the COVID-19 pandemic conducted by Dr Sara Waring and the University of Liverpool (UoL). Consultation with Chief Fire Officers (CFOs), the National Fire Chiefs Council (NFCC) COVID-19 Committee Lead, and COVID-19 Recovery Lead highlighted four outcome areas of importance for demonstrating the effectiveness of the FRS response: i) partnership approaches; ii) operational response functions; iii) staffing levels; and iv) access to PPE. Drawing on data recorded on the NFCC Data Portal, we examined what organisational and contextual factors affected how well the FRS performed in relation to these outcomes. Findings show the following:

Partnership approaches:

- All FRSs provided a wide range of support to partner agencies and communities during the first 18 months of the pandemic, with support being provided by at least one FRS for each activity listed under the tripartite agreement at some point.
- Unlike the initial activities negotiated under the tripartite agreement, some of the later activities that were negotiated under alternative arrangements were bespoke to a small number of regions rather than having wider uptake across several FRSs. Given the amount of time taken to negotiate amendments, it may have been quicker to negotiate these activities at a local rather than central level.
- Many FRSs subsequently (on the demise of the tripartite approach) provided support for activities not listed under the tripartite agreement, including mass testing, mass vaccination and conducting welfare checks on the vulnerable.
- Range and level of support provided changed over time, with larger FRSs having a greater capacity to provide support.
- It was not possible to examine the extent to which FRSs met support needs and how quickly as data was not recorded centrally about what support requests were made and when, either by Local Resilience Forums or directly.

Operational response functions:

- More objective data relating to appliance availability, response times, and involvement in prevention, protection, and response activities was not centrally available on the NFCC Data Portal.
- BRAG statuses were reported on the NFCC Data Portal, which indicated that services were able to maintain core operational responses across the first 18 months of the pandemic. However, the subjective nature of BRAG statuses affect ability to draw conclusions and examine what organisational and contextual factors affected ability to maintain operational response functions.

Staffing levels:

- Both general and COVID-19 related staff absences remained relatively low and were best predicted by National COVID-19 infection figures.
- Despite many members of the FRS workforce working on the frontline to maintain operational response and undertake support activities, COVID-19 related absences remained at a similar level to the general population. This indicates that protective measures introduced by FRSs helped to prevent staff from being at greater risk of infection compared to the general population.

Access to PPE:

- Data relating to PPE stock and use within each region was not initially captured centrally until September 2020, but mechanisms were introduced to improve this data reporting nationally through the development of the new NFCC Data Portal and the Procurement Hub adopting oversight of PPE distribution.
- Whilst it was not possible to examine PPE access during the initial six months of the pandemic or the impact of the Procurement Hub taking oversight of PPE distribution, figures show that FRSs consistently had enough PPE in stock for their usage needs from September 2020 onwards.

Recommendations are provided for improving future response to incidents of national significance and capturing the data needed to inform decisions and fully demonstrate the effectiveness of this response.

BACKGROUND

By the end of September 2021, the UK had recorded 9.97 million COVID-19 infections, resulting in 555,000 people being hospitalised and 160,800 fatalities (UK Health Security Agency, 2021). A public health emergency was declared in March 2020, with a series of restrictions being implemented to reduce virus transmission, including 2.2 million clinically vulnerable people being advised to shield, working from home where possible, non-essential businesses being forced to close, maintaining social distances, and wearing face masks in public places (Flynn et al., 2020). The scale, complexity, and sustained nature of this pandemic has created exceptional challenges that require extraordinary efforts to address. Frontline responders from health and social care, emergency services, and community supply chains continue to go beyond their usual roles to support partner agencies and communities, whilst often facing greater risk of contracting the virus (Thielsch et al., 2021).

Amongst others, one agency to quickly provide support to partner agencies and communities was the fire and rescue service (FRS). In March 2020, the NFCC, National Employers, and Fire Brigade Union began negotiating a tripartite agreement of support activities, with subsequent amendments made during the following months for additional activities (Crennell et al., 2020). The outcomes of those discussions were mixed, with feedback indicating that whilst intentions were noble, in practice the tripartite agreement process resulted in lengthy delays that were not suited to dynamic situations such as a national public health crisis (Levin, Owen, & Waring, 2020; Waring et al., 2021). FRSs were under no obligation to provide support for activities if it was not needed or requested by their Local Resilience Forum (LRF), and if doing so would affect their capacity to maintain core operational functions (Crennell et al., 2020). Nevertheless, both the range and duration of support that has been provided across FRSs is unique, including activities such as driving ambulances, setting up temporary mortuaries, delivering food, medical supplies and PPE, fitting facemasks in health and social care settings, mass testing, and mass vaccination (NFCC, 2021).

In January 2021, HMICFRS published the findings of their inspection into how FRS authorities in England responded to the initial COVID-19 outbreak up to November 2020¹. The report notes strong multi-agency working across regions, with the sector coming together to provide mutual support. FRSs were able to maintain their ability to respond to fires and other forms of emergency. However, the HMICFRS also commented that prioritisation of response had sometimes been to the detriment of protection and prevention activities. In addition, the report concluded that whilst the tripartite agreement was sensible, it was too prescriptive in practice. HMICFRS praised the service for demonstrating their value in supporting the COVID-19 response but there were variations in how well-prepared FRSs were for the pandemic.

In July 2020, acting on behalf of the NFCC, Phil Garrigan² and Andy Bell³ commissioned Dr Sara Waring and UoL to conduct an independent evaluation of the FRS response to the COVID-19 pandemic, and the NFCC strategic coordination of this response. Adopting a realist approach, we sought to identify “*what works, for whom, in what respects, to what extent, in what contexts, and how?*” (Pawson & Tilley, 1997). This is important because, despite operating under the same national guidance, organisational variations exist between FRSs and the local contexts they operate in, which means that one approach to pandemic response may not be equally appropriate or feasible for all. This work has been presented across a series of four reports. The findings of the first two reports, produced in December 2020 (Levin, Owen, & Waring, 2020) and October 2021 (Waring et al., 2021), parallel those of the HMICFRS, highlighting CFO and stakeholder perspectives on what aspects of the initial six months of the response in England and Wales worked well, challenges, and how these were overcome. The third reports the findings of a process evaluation focused on the NFCC strategic coordination of the FRS response during the first 16 months of the pandemic (Waring & O’Brien, 2022).

¹ <https://www.justiceinspectors.gov.uk/hmicfrs/wp-content/uploads/responding-to-the-pandemic-fire-and-rescue-service-response-covid-19-pandemic-2020.pdf>

² CFO Merseyside Fire and Rescue Service, NFCC COVID-19 Committee Lead

³ AC London Fire Brigade, NFCC COVID-19 Recovery Lead

This fourth and final report in the series presents the findings of a quantitative process evaluation of FRS response across England and Wales. It moves beyond the findings of HMICFRS and other sector reports that highlight variations in how well-prepared FRSs were, to examine what organisational and contextual factors affected the success of the first 18 months of this response. This evidence is important for informing sector decisions about what mechanisms are essential for facilitating an effective response to events of national significance and evidencing this.

METHOD

Process evaluation attempts to examine how a program of activities was implemented and whether this corresponds with what was intended. It is important for understanding how program outcomes were achieved, identifying good practice, challenges and how they were overcome (Griffin et al., 2014). This quantitative process evaluation focuses on the first 18 months of the pandemic response, drawing on secondary data stored on the NFCC Data Portal that was developed during the pandemic as a platform for all FRSs across England and Wales to record service data. Whilst the evaluation focuses on key response outcomes, it should not be viewed as an outcome evaluation because it does not test the impact of any formal intervention. Instead, the quantitative data provided by FRSs has been used to examine what organisational and contextual factors affected the FRS response.

The evaluation framework was designed in consultation with 47 CFOs or their equivalents from across England and Wales, and the NFCC COVID-19 Committee and COVID-19 Recovery Leads. During interviews conducted between July and September 2020, CFOs were asked to highlight what core outcomes were important for demonstrating how well the FRS was responding to the pandemic. This process of consultation is vital for ensuring the relevance of findings to end users (Shannon & Schaefer, 2013). Feedback highlighted the following four key outcome areas:

- i) The effectiveness of the partnership approach, including level of resource investment and range of support provided by the FRS to partner agencies.
- ii) How effectively the FRS maintained core operational response functions, including appliance availability, response times, and frequency of prevention, protection, and response activities.
- iii) The ability to maintain staffing levels, including considering differences in COVID-19 related staff absences across workforce groups.
- iv) The ability to maintain appropriate PPE levels, including whether the introduction of the PPE Procurement Hub had improved PPE access.

Feedback from CFOs was also used to identify what organisational and contextual factors may impact these core outcomes, which included:

Organisational Factors: i) *Local governance structure* (Combined, County and Unitary, Metropolitan, PFCC, Board, Mayoral); ii) *Geographical region* (East Anglia, East Midlands, Isle of Man, London, Northeast, Northwest, Southeast, Southwest, Wales, West Midlands, Yorkshire and the Humber); and iii) *Size of FRSs* (as indicated by the number of fire stations).

Contextual Factors: i) *Time period* (months); ii) *National COVID-19 infection rates*; and iii) *Staff absences* (percentage of staff in each FRS absent each month).

By using data already reported to the NFCC Data Portal for this evaluation, we were able to minimise the additional burden placed on FRSs, which was important given that they were responding to an unprecedented state of public health emergency. However, there were limitations with the data captured through the NFCC Data Portal, including data needed to demonstrate core outcomes not being centrally reported and inconsistencies in how metrics were reported across regions (reliability and validity issues). There were also inconsistencies in how frequently data was reported, with some regions providing weekly or fortnightly updates, whilst others reported data monthly. Accordingly, data has been aggregated at the monthly

level for consistency. Table 1 provides a brief indication of whether data was available to address core outcomes. Table A in Appendix A provides a more detailed overview of the evaluation framework, including data needed, whether this was available and implications for addressing evaluation questions. Nevertheless, we were able to conduct analysis (Multiple Regressions and ANOVAs) to examine what organisational and contextual factors affected level of support provided to partner agencies, and staff absences. Descriptive feedback is provided for maintenance of core operational response and PPE.

Table 1.
Summary of Data Availability in Relation to Each Core Outcome

Core outcome	Indicators	Data Availability
Effectiveness of partnership approaches	The range and frequency of additional activities undertaken by each FRS	✓
	The number and frequency of requests for support made by partner agencies, either through LRFs or directly, and when these requests were made	x
Maintaining core operational response functions	Appliance availability	x
	Response times	x
	Frequency of core prevention, protection, and response activities	x
Maintaining staffing levels	The frequency of overall and COVID-19 related absences for each region broken down into workforce groups (wholetime, support, fire control, on-call) across the evaluation period	✓x
Maintaining appropriate levels of PPE	Level of PPE units in stock each week across the whole evaluation period (including before the introduction of the PPE Procurement Hub)	✓x
	Level of PPE units that would be considered appropriate each week for each region across the whole evaluation period	✓x

Key: ✓ = data available; ✓x = data partially available but with some issues; x = data not available

FINDINGS

Findings are presented in relation to the four areas identified by CFOs as important for demonstrating effectiveness of FRS pandemic response. Where data was available, we tested what organisational and contextual factors affected how well FRSs responded.

i) Effectiveness of the partnership approach

Details for which activities listed under the tripartite agreement each FRS provided support for, and level of engagement (i.e., how much of an activity was undertaken / level of resource invested) can be found in Appendix B (Table B). Whilst not all local partners asked FRSs to provide support for each activity, data regarding what support requests were made in each region and when was not captured centrally on the NFCC Data Portal or through any other system. Accordingly, we cannot determine the extent to which FRSs met requests for support, nor how quickly (responsiveness).

What data shows is that all FRSs provided a range of support to partner agencies across the first 18 months of the pandemic. Additional feedback provided by FRSs also indicates that support went beyond activities listed in the tripartite agreement in many regions, with activities such as mass testing, mass vaccination, and conducting welfare checks on the vulnerable also being undertaken (see Table C in Appendix B). There were variations in the range of activities undertaken by each FRS and the level of engagement. We conducted multiple regression and ANOVA analysis to test what organisational and contextual factors affected how many activities FRSs supported, and level of engagement with these activities (see Table 2). Findings were as follows:

National COVID-19 infection rates: As national COVID-19 infection rates *increased* the range and level of support provided by FRS for activities *decreased* in relation to packing food supplies and

delivery of essential items to vulnerable populations, face fitting of masks, delivery of PPE and medical supplies, ambulance driving instruction, ambulance service assistance, number of hours providing mass testing support, number of hours providing mass vaccine support and number of vaccination doses administered. This inverse relationship appears at odds with what would be expected (i.e., that demand for support would increase as national infection rates grew). These differences may relate to differences in requests made by partners (need) rather than capacity (response), but we cannot examine this as data relating to requests made was unavailable. One possibility is that local need for FRS support decreased for some activities that could be undertaken by members of the general population who had greater opportunity to volunteer during times of peak infection due to becoming furloughed from work. Feedback provided by Chief Fire Officers and stakeholders in previous reports in this evaluation series (Levin, Owens, & Waring, 2020; Waring et al., 2021; Waring et al., 2022) also suggested that advice provided by Fire Brigades Union to their members affected volunteering for activities. However, these potential explanations cannot be tested with the data available.

Staff absences: Increases in COVID-19 related absences did not impact the range or frequency of activities supported and, in fact, were related to an *increase* in packing food and delivery of essential items to vulnerable populations and providing ambulance service assistance. This highlights the resilience of FRSs in being able to maintain support for partner agencies and communities, even when there was a decrease in staff.

FRS size: Larger FRSs supported a wider range of activities and were more likely to pack food supplies and deliver essential items to vulnerable populations, provide ambulance service assistance, and provide more ambulance shifts. This is likely a function of larger FRSs having greater capacity and there being a higher demand for support in these larger, more densely populated areas. However, FRS size was inversely related to number of PPE units delivered, with larger FRSs delivering fewer units.

Time points: The range of activities FRSs supported varied over time, particularly for movement of bodies, face fitting of masks, delivery of PPE and medical supplies, single use face shield assembly, packing food supplies for vulnerable populations, ambulance driving instruction, non-emergency ambulance driving, transfer of COVID-19 and non-COVID-19 patients, IPC packages to trainers and care homes, number of hours mass testing and mass vaccine support. These differences may relate to differences in requests made by partners (need) rather than capacity (response), but we cannot examine this as data relating to requests made was unavailable.

Geographical region and governance structure: Level of support provided varied across geographical region and governance structure for most activities with the exceptions of ambulance driving instruction and delivering IPC packages to trainers and care homes. Antigen testing samples and number of staff providing mass testing support were unaffected by governance structure. However, there were no specific regions or governance structures that provided a greater level of support across all partnership activities, which lends weight to the argument that there were regional differences in needs.

ii) Ability to maintain the effectiveness of core operational response functions

Most BRAG statuses remained Green throughout the first 18 months of the pandemic (see Table 3). Although Amber statuses were recorded during times of higher infection rates, neither Blue nor Red were ever recorded, suggesting FRSs were able to satisfactorily maintain core functions throughout this period. However, because of its subjective nature, the BRAG rating may not be a realistic reflection of the actual status of the operational response. More objective data relating to appliance availability, response times, and prevention, protection and response activities for each FRS was not reported centrally on the NFCC Data Portal. Whilst such data is available through GOV.UK⁴, it is aggregated at the national rather than regional level, and is currently only reported up to March 2021, preventing such data from being used within the current evaluation.

⁴ <https://www.gov.uk/government/statistics/fire-prevention-and-protection-statistics-england-april-2020-to-march-2021>

iii) Ability to maintain staffing levels

Across all FRSs, general staff absences remained low, typically below 6.5%. COVID-19 related staff absences typically remained below 2% across FRSs during the first 18 months of the pandemic, in line with national figures (see Tables 4 and 5 below). This indicates that prevention measures introduced by FRSs helped to ensure that staff were not at greater risk of infection compared to the general population.

There were differences in both general and COVID-19 related staff absences between working groups in some regions, with Fire Control staff reporting a higher percentage of absences. It is important to note that only a small number of Fire Control staff were absent at any point in time, but when there are a small core number of staff able to undertake a specialist role, this has the potential to substantially impact a service.

We conducted statistical analysis (multiple regression and ANOVA) to test what organisational and contextual factors affected staff absence levels (see Table 6). Findings show the following:

National COVID-19 infection rates: The best predictor of staff absence was national COVID-19 infection rates. As national infection rates *increased*, general and COVID-19 related staff absences also *increased*.

FRS size: FRS size significantly predicted general but not COVID-19 related staff absence, with greater general staff absence in larger FRSs. These findings indicate that, even in FRSs with a larger number of stations, prevention measures introduced were beneficial for helping to minimise the spread of COVID-19.

Time period, geographical region, and governance structure: General and COVID-19 related staff absences significantly varied over time, geographical regions, and governance structures. However, the difference in absences across geographical regions and governance structures was small. The moderate difference in absences over time was linked to national COVID-19 infection rates, with higher infections during winter months compared to summer months when restrictions were eased.

iv) Ability to maintain appropriate PPE levels

A comparison of PPE units used against PPE units in stock shows that usage did not exceed stock for any type of PPE in regions that recorded this data (see Table 7 for summary). However, data relating to PPE within each FRS was unavailable centrally prior to September 2020. Accordingly, it is not possible to examine whether FRSs had appropriate access to PPE during the first six months of the pandemic or the impact of the Procurement Hub adopting oversight of PPE procurement and distribution.

Table 2.
Contextual factors affecting partnership approaches

	National COVID-19 infection rates	FRS size	Staff absence COVID-19	Staff absence general	Time periods	Geographical region	Governance structure
Range of activities undertaken	▼	▲	✓	✓	✓
Delivery of essential items	▼	▲	▲	..*	..	✓	✓
Movement of bodies	✓	✓	✓
Face fitting of masks	▼	✓	✓	✓
PPE/medical supply delivery	▼	✓	✓	✓
Antigen testing samples	✓	..
Single-use face shield assembly			✓	✓	✓
Packing food supplies	▼	▲	▲	..*	✓	✓	✓
Ambulance driving instruction	▼	✓
Ambulance service assistance	▼	▲	▲	..*	..	✓	✓
Non-emergency ambulance	✓	✓	✓
Transfer COVID patients	✓	✓	✓
Transfer non-COVID patients	..				✓	✓	✓
IPC packages to trainers			✓
IPC packages to care homes	▼	✓
Patient shifts	✓	✓
Units of PPE delivered	..	▼	✓	✓
Ambulance shifts	..	▲*	..	✓	✓
No. COVID tests administered	..**	..	✓	✓
No. hrs mass testing support	▼	✓	✓	✓
No. staff mass testing support	✓	..
No. vaccine dose administered	▼*	..	✓	✓
No. hrs mass vaccine support	▼	✓	✓	✓
No. staff mass vaccine support	✓	✓
Key:							
Approach increased	▲	Relationship		✓	No relationship		..
Approach decreased	▼	Relationship (simple only)		..*	Data not entered (outliers)		



Table 3.

Percentage of Blue, Green, Amber, and Red Statuses Reported Across Time Points, Geographical Regions, and Governance Structures

Factors		Blue	Green	Amber	Red
Time Period	March 2020	0	100	0	0
	April 2020	0	100	0	0
	May 2020	0	100	0	0
	June 2020	0	100	0	0
	July 2020	0	100	0	0
	August 2020	0	100	0	0
	September 2020	0	100	0	0
	October 2020	0	100	0	0
	November 2020	0	100	0	0
	December 2020	0	100	0	0
	January 2021	0	71.70	28.30	0
	February 2021	0	76.10	23.90	0
	March 2021	0	78.70	21.30	0
	April 2021	0	84.40	15.60	0
	May 2021	0	86.70	13.30	0
	June 2021	0	93.30	6.70	0
	July 2021	0	71.10	28.90	0
	August 2021	0	80.00	20.00	0
Geographical Region	East Anglia	0	95.60	4.40	0
	East Midlands	0	84.40	15.60	0
	Isle of Man	0	94.40	5.60	0
	London	0	88.90	11.10	0
	Northeast	0	90.70	9.30	0
	Northwest	0	100	0	0
	Southeast	0	98.10	1.90	0
	Southwest	0	81.50	18.50	0
	Wales	0	72.20	27.80	0
	West Midlands	0	87.80	12.20	0
	Yorkshire and the Humber	0	97.20	2.80	0
Governance Structure	Combined	0	89.30	10.70	0
	County and Unitary	0	92.70	7.30	0
	PFCC	0	97.20	2.80	0
	Mayoral	0	94.40	5.60	0
	Metropolitan	0	87.80	12.20	0

Table 5.

Mean Percentage of General and COVID-19 Related Staff Absences Across Geographic Regions, and Proportion of COVID-19 Related Absences Due to Testing Positive, Suspected COVID-19, and Self-Isolating

Region	General Staff Absences				COVID-19 Related Staff Absences				Reason for COVID-19 Absence		
	Wholetime	Support	Fire Control	On-Call	Wholetime	Support	Fire Control	On-Call	Positive COVID-19	Suspected COVID-19	Self-Isolation
East Anglia	7.58	2.28	6.88	5.75	2.85	1.23	2.45	2.35	27.53	18.38	54.09
East Midlands	4.88	3.97	6.97	5.65	1.68	1.83	3.68	1.58	34.48	6.97	58.56
Isle of Man	4.90	11.02	.00	6.20	2.32	.81	.00	1.35	14.75	9.51	50.74
London	8.20	4.14	7.65	.00	3.59	1.51	3.31	.02	34.11	.00	65.90
Northeast	4.70	4.05	7.41	4.83	1.65	2.26	2.79	1.17	34.88	6.52	54.44
Northwest	4.63	3.46	.85	1.54	2.32	1.19	.36	.76	36.71	6.56	54.23
Southeast	5.23	2.22	4.76	3.67	1.82	.88	1.86	1.23	25.13	3.74	71.14
Southwest	5.44	2.40	4.88	4.36	1.54	.92	1.70	1.34	27.74	7.92	62.25
Wales	5.37	4.44	15.72	6.14	.63	.44	.64	1.03	28.11	12.18	59.71
West Midlands	5.93	3.17	7.50	4.95	2.35	1.29	2.38	1.57	27.58	8.96	60.96
Yorkshire and the Humber	4.98	4.51	8.98	7.16	1.81	1.00	2.26	2.15	27.27	4.92	67.80
<i>Total</i>	<i>5.50</i>	<i>3.34</i>	<i>6.11</i>	<i>4.58</i>	<i>1.98</i>	<i>1.20</i>	<i>2.03</i>	<i>1.44</i>	<i>29.24</i>	<i>7.84</i>	<i>61.28</i>

Table 6:

Contextual factors affecting staffing levels

	National COVID-19 infection rates	FRS size	Time periods	Geographical region	Governance structure
Staff absence	▲	▲	✓	✓	✓
COVID-19 related staff absence	▲	..	✓	✓	✓

Table 7.
Level of PPE Items in Stock and Level of PPE Items Used Each Month

Region	Attrition	Stock	Attrition	Stock	Attrition	Stock	Attrition	Stock
	September 2020		October 2020		November 2020		December 2020	
East Anglia	3 181	448 362	59 854	2 410 177	61 041	2 335 129	77 429	2 359 994
East Midlands			9 111	447 544	27 742	365 742	23 654	376 309
Isle of Man					72	13 667	144	13 167
London			27 528	472 298	84 036	345 261	62 719	577 469
Northeast			13 785	930 255	47 280	939 442	28 218	921 683
Northwest			30 277	1 500 672	89 289	1 613 113	55 583	1 184 961
Southeast	4 752	336 938	17 442	1 314 670	85 718	1 166 331	83 773	1 053 705
Southwest	152	162 301	8 261	1 037 686	23 009	800 313	11 503	1 017 714
West Midlands	4 006	667 845	13 386	972 790	66 354	974 748	54 440	969 697
Yorkshireand the Humber			8 656	420 066	62 650	659 309	53 404	638 711
	January 2021		February 2021		March 2021		April 2021	
East Anglia	14 002	2 327 043	105 193	2 385 887	37 042	2 434 417	60 254	2 413 144
East Midlands	57 497	415 944	42 854	479 572	14 805	512 653	35 858	444 724
Isle of Man	288	10 737	288	10 787	72	8 914		
London	111 223	591 542	73 922	552 428	39 096	503 454	24 713	468 780
Northeast	97 334	1 685 654	72 266	1 000 467	70 142	2 709 385	32 160	1 148 485
Northwest	94 168	1 243 821	69 877	1 241 119	23 901	1 199 380	57 884	1 238 587
Southeast	214 140	1 436 944	98 695	1 320 538	30 930	1 360 298	84 551	1 489 247
Southwest	60 687	953 623	39 407	970 571	6 570	826 069	10 695	767 634
West Midlands	142 147	996 586	96 631	1 013 428	20 489	1 051 620	56 769	1 085 475
Yorkshireand the Humber	154 914	706 979	79 786	722 547	54 657	688 870	12 838	659 575
	May 2021		June 2021		July 2021		August 2021	
East Anglia	51 472	2 426 066	139 128	2 319 040	64 038	2 272 905		
East Midlands	15 963	419 987	15 304	396 415	14 276	359 709	3 032	79 923
Isle of Man			72	9 184				
London	20 082	461 876	18 903	472 516	25 962	362 548	27 918	376 948
Northeast	38 093	1 358 200	35 451	1 363 632	30 806	1 395 790		
Northwest	48 355	1 236 020	62 618	1 142 633	82 428	1 124 107	1 319	34 097
Southeast	82 537	1 310 617	92 601	1 177 617	74 664	1 246 999	25 437	110 431
Southwest	13 767	743 525	20 973	1 393 673	11 027	635 555		
West Midlands	113 356	1 188 169	62 238	913 309	129 187	1 378 777		
Yorkshireand the Humber	40 772	697 018	22 471	643 290	30 577	508 050		

SUMMARY

Drawing on data reported by FRSs to the NFCC Data Portal, this quantitative process evaluation examined what organisational and contextual factors affected how well the national FRS responded to the first 18 months of the pandemic. These findings should be viewed in conjunction with the first two reports (Levin, Owen, & Waring, 2020; Waring et al., 2021), which draw on CFOs perspectives and experiences to understand how well FRSs responded to the first six months of the pandemic and factors affecting this. Consultation with CFOs identified four key outcomes of importance for demonstrating the service response (level of support provided to partner agencies, ability to maintain core operating functions, staff absence levels, and access to appropriate levels of PPE), each of which is discussed in turn below.

In relation to *partnership approach*, all FRSs provided support for a range of activities across the first 18 months. All activities outlined in the tripartite agreement were undertaken by at least one FRS at some point. Most FRSs undertook activities that formed part of initial tripartite agreement negotiations, such as delivery of essential items, movement of bodies, face fitting, delivering PPE, and driving ambulances. This indicates the types of activities that required widespread support during the first 18 months of the pandemic and may be likely to do so again during a public health emergency of national significance. However, some activities included in later tripartite agreement amendments, such as delivering infection control packages, were undertaken by few FRSs, indicating that need for this type of support was specific to a small number of regions. Rather than undergoing national negotiations for these activities, adopting a more flexible system that supported negotiations at a local level may have been quicker and more appropriate. Findings from the other three evaluation reports in this series support this, with feedback from across CFOs, NFCC representatives, and stakeholders highlighting that whilst the intention behind the tripartite agreement was noble, in practice the process was often delayed and lacked the flexibility and responsiveness needed for dynamic situations such as a national public health crisis (Levin, Owen, & Waring, 2020; Waring et al., 2021; Waring & O'Brien, 2022). Additional feedback indicates that many regions did have mechanisms for making local agreements as they provided support for other activities outside of the tripartite agreement, including mass testing, vaccinations, and conducting welfare checks on the vulnerable.

Whilst all FRSs provided a range of support to partner agencies and communities, there were variations in level of support provided. Larger services provided a greater range and level of support for activities, which is likely to be a function of having larger capacity and there being a greater need in these regions with higher population density. Level of support provided for some activities also differed across geographical regions and time, which again may reflect differences in needs. Higher national infection figures were associated with less engagement, but this was not due to greater staff absences as activities such as packing food, and driving ambulances increased with COVID-19 staff absences. This suggests there was resilience within the service, allowing support to be maintained even in the face of staff absences. It is also important to note that services maintained low COVID-19 staff absences, typically below 2% on average, which is also likely to have contributed to ability to maintain support. Nationally, a trigger system had been put in place so that if any FRS had staff absences above 20%, national support would be offered. Whilst this was not needed within the first 18 months of the pandemic due to staff absences remaining below this threshold, it is a beneficial mechanism to maintain for future events of national significance.

Though there are indications that support needs varied across regions, data was not centrally captured on the NFCC Data Portal or any other system about what requests were made and when by either Local Resilience Forums or directly. Accordingly, we were unable to examine the extent to which variations in support provided were the result of variations in requests for support. We were also unable to examine the extent to which FRSs met support requests, and how quickly they did so (responsiveness). In the first two evaluation reports in this series, feedback from external stakeholders indicated that not having a central system for recording LRF requests impacted ability to know what activities to prioritise in tripartite negotiations because of widespread need across regions (Levin, Owen, & Waring, 2020; Waring et al., 2021). Recording these requests centrally may also have been useful for providing

evidence to demonstrate the need to move away from national negotiations (which CFOs and external stakeholders noted as taking a long time to agree) to more agile local level negotiations.

In relation to maintaining *core operational functions*, more objective data on appliance availability, response times, and prevention, protection, and response activities was not recorded on the NFCC Data Portal. Whilst Government figures for these activities are publicly available, they are aggregated at the national level and are only available up to March 2021 at present. This prevents their inclusion in this evaluation, and examination of what organisational and contextual factors affected ability to maintain core operational functions. What was available were BRAG status reports. Most regions reported green statuses across the first 18 months of the pandemic, indicating ability to maintain core operational functions, in line with findings detailed by HMICFRS in their inspection report. Where amber statuses were reported, this tended to coincide with periods of higher COVID-19 infection. However, it is difficult to draw firm conclusions from BRAG statuses. Based on conversations with the NFCC COVID Committee, it appears that interpretation is subjective rather than standard, which creates problems for making comparisons (e.g., one service may rate the same level of operational response as Green whilst another may rate it as Amber).

As previously noted, COVID-19 related *staff absences* generally remained low throughout the evaluation period. Most COVID-19 absences related to self-isolation rather than staff testing positive for COVID-19. The biggest predictor of COVID-19 absences was national COVID-19 figures. Although some FRS moved to working from home, many remained on the front line, maintaining operational response, and engaging in support activities. Despite this, COVID-19 infection figures were in line with the national average, suggesting that protective measures introduced in FRSs helped to prevent the FRS workforce from being at greater risk of contracting COVID-19 than the general population. The first two evaluation reports in this series provide details of prevention measures introduced by FRSs, including use of PPE in line with public health guidance, forming shift bubbles, having staff work from home where possible, regular cleaning of communal facilities, and social distancing.

In relation to *PPE*, data was not captured centrally on stock levels and usage across FRSs prior to September 2020. Accordingly, data relating to the extent to which FRSs were able to access the PPE they needed during the early phases of the pandemic is unavailable. During interviews conducted for the first three evaluation reports in the series, Home Office representatives noted initial limitations in information on PPE stock and whether each region had what it needed. Some CFOs and union representatives also mentioned initial difficulties with PPE supply chains but emphasised that FRSs had quickly stepped in to provide mutual support to one another to facilitate access (Levin, Owen, & Waring, 2020; Waring et al., 2021; Waring & O'Brien, 2022). It is also important to note that new mechanisms were quickly introduced that improved the capture of data centrally relating to PPE access and usage across FRSs, including the introduction of the NFCC data hub and the Procurement Hub taking oversight of PPE procurement and distribution. Since September 2020, figures indicate that FRSs have had access to the PPE they needed. Whilst we cannot examine the extent to which the Procurement Hub taking oversight of PPE procurement and distribution improved PPE access, figures show all FRSs using the Hub have had access to the PPE they needed, and the reporting of this data centrally has improved.

Overall, findings indicate that FRSs provided a wide range of support to partner agencies throughout the first 18 months of the pandemic, alongside maintaining relatively low COVID-19 staff absences, and appropriate PPE stock levels since the Procurement Hub adopted oversight of PPE procurement and distribution. However, as previously noted, there were some data issues that affected the extent to which the service was able to fully demonstrate the effectiveness of its response. This may be partly due to decisions regarding what data to capture being made during an unprecedented emergency, with little time for initial reflection. The service is now able to reflect and learn from this and have demonstrated improvements to recording of data during the pandemic. One key example of this has been the introduction of the NFCC Data Portal, which provides an important platform for centrally recording data from across FRSs. This system has been developed and quickly rolled out nationally during a state of national public health crisis, showing the commitment of the service to use evidence to inform practice. The NFCC Data Portal not only has the potential to give a sector wide overview of performance, but it

can also support each FRS with examining trends in their service over time and use this to inform decisions.

Another issue that is likely to have affected data reporting is the number of requests being made by different audiences, including the NFCC, Home Office, and HMICFRS. During interviews, some CFOs highlighted that smaller FRSs did not have the capacity to meet these demands, impacting how frequently and completely data was being reported (Waring et al., 2021). Consideration is needed as to how best to reduce the burden on services for collecting and reporting data whilst increasing the reliability and validity of what is reported. Given that each audience is largely asking for the same types of data, having one data reporting platform that different audiences can draw on would be beneficial for reducing the burden. One suggestion would be to adopt the NFCC Data Portal as a single platform for reporting all data to provide a picture of how the sector is responding, both during national threats and periods of business as usual. Different permissions for viewing data can be granted to different audiences to ensure that data is only accessed by those that need to view it. Alongside this, consideration is needed as to what metrics should be reported moving forward to fully demonstrate service performance. Clarification is also needed as to what units to report for each metric and how frequently this should be reported to ensure consistency within and between services.

RECOMMENDATIONS

Drawing on the findings of this quantitative process evaluation, the following recommendations are made for improving response to future events of national significance, and ability to demonstrate the effectiveness of this response:

- **Implement a system to centrally record support requests.** Having a central record of what requests for support have been made and when, either by LRFs or directly, will be beneficial for informing operational decisions. Regardless of whether the same system for negotiating agreements for support activities is maintained in future, or a different system is introduced to improve the speed of these decisions, maintaining a central record of requests will be beneficial for showing how widespread the need for each activity is. It will also be beneficial in minimising duplication of workload for developing risk assessments and training cross regions, by highlighting where it would make sense to distribute work. This would also allow the service to demonstrate ability to respond to requests and how quickly (responsivity).
- **Implement a national data collection and analysis platform for all UK Fire and Rescue Services.** FRSs may be required to report data on core operational functions and other aspects of service response to several audiences, which poses resource implications. This can be particularly demanding for smaller FRSs. To reduce burden on services to produce, collate and share data with different audiences, it would be beneficial to introduce one single data collection and analysis platform for reporting, storing, and analysing all data relating to core operational functions and other aspects of service response to provide evidence for informing decisions. Different permissions may be granted to different audiences to ensure only those with legitimate grounds to view data had access for the period they needed it. This would also allow a wider range of analysis to be conducted to understand what mechanisms affect FRS response, both during events of national significance and periods of business as usual, providing evidence to inform decisions.
- **Strengthen the central data analytics capability of the NFCC.** Investing resource into strengthening the central data analytics capability of the NFCC would be beneficial for enhancing ability to analyse local and national data sets. It would also be beneficial for allowing the NFCC to act as a single point of contact for other partner agencies to better share and interrogate datasets beyond the FRS that would inform our work and utilise our data to inform others, and joint partnership working.
- **Establish a clear set of data definitions to improve data quality and consistency.** Whilst the NFCC Data Portal provides a useful platform for reporting and aggregating data to inform decisions, there have been differences across regions in how measures were interpreted, and therefore the units being reported. For example, in relation to support provided with driving ambulances, units reported could have included number of shifts, hours or days, number of firefighters involved in the activity,

or number of callouts. The units that are reported need to be standardised across all FRSs to be able to make comparisons and examine changes over time. Accordingly, it is important that clarification is provided for each measure being requested to ensure standardisation and validity of measures (e.g., Please record the total number of ambulance driving shifts that were undertaken by staff in your fire and rescue service this week).

- **Clarify how frequently to report data.** There were inconsistencies in how frequently different regions reported data to the NFCC Data Portal, with some reporting weekly or fortnightly, whilst others reported monthly. This affects ability to make comparisons and to understand what factors are affecting response. Differences in reporting frequency were likely due to level of capacity to manage reporting demand, which would be reduced if services are only required to record data on one platform. For this evaluation, to standardise data it was aggregated to the monthly level but doing so affects how nuanced findings are, which is particularly important for dynamic events where there would be several changes across four weeks. A sector decision is needed about where the trade-off in frequency of reporting should be made between improving ability to discriminate changes over time and resource required to do so. Clarifying when and how frequently to report data will also improve its reliability (e.g., Please record data on a weekly basis, providing reports on a Monday. For reporting purposes, data for each week should be recorded from 12am on Monday through to 11.59pm on Sunday.)
- **Engage with the sector leadership to prioritise and define which measures, metrics, and data points would help them to build trust in using data to make actionable decisions.** Data needs to be accessible, comprehensible, and useable by non-technical specialists. Data that is actionable is an essential and critical asset that should be discussed by leaders in every FRS and the NFCC to understand what data is needed to inform service delivery. Such an engagement and prioritisation exercise would help to define what the key strategic goals are that the service is seeking to achieve, and what data would be needed to achieve them. Table A in Appendix A provides an evaluation framework that details what types of data would be needed to demonstrate all four of the core outcomes identified by Chief Fire Officers as being important for demonstrating effectiveness of response. However, these relate to the management of a public health emergency that is respiratory in nature. Whilst many of these core outcomes are likely to be relevant across all types of events of national significance, sector wide discussion is needed to clarify whether additional measures should be introduced to the NFCC Data Portal to demonstrate the value added and return on investments of other aspects of service delivery.



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APPENDIX A

Table A. Evaluation Framework.

Core Outcome	Indicators	Data Availability
i) Effectiveness of partnership approaches	<ul style="list-style-type: none"> The range and frequency of additional activities undertaken by each FRS. The number and frequency of requests for support made by LRFs. 	<ul style="list-style-type: none"> Data on the range and frequency of additional activities was available. However, the frequency of reporting this information was inconsistent across regions; data was aggregated at the monthly level to standardise measures. There were inconsistencies in measurement units across regions for the different activities. For example, while some regions reported the number of firefighters engaging in ambulance driving, some reported the number of shifts undertaken by firefighters, whilst others reported the number of ambulance callouts firefighters attended. Accordingly, it is not possible to make reliable and direct comparisons between regions in relation to activities. However, it has been assumed that the measurement units remained the same within regions across the evaluation period (e.g., if a region reported number of ambulance shifts undertaken in March 2020, we assumed that they continued to report number of ambulance shifts undertaken across all other months rather than switching to number of callouts firefighters attended). Data was also available for involvement in the Mass Testing and Mass Vaccination efforts, in terms of number of tests/doses, hours and staff involved. These were also aggregated to the monthly level. Details regarding what requests for support were made to FRSs by partner agencies (whether through LRFs or directly) were not available. Accordingly, it is not possible to determine the extent to which FRSs were able to meet the support requests that were made, whether FRSs did not provide support for activities because they were not asked to do so, nor to make direct comparisons between regions.
ii) Maintaining core operational response functions	<ul style="list-style-type: none"> Appliance availability, response times, and the frequency of core prevention, protection, and response activities. 	<ul style="list-style-type: none"> Data on the extent to which FRSs were able to maintain prevention, protection, and response activities, appliance availability, or response times, was not available on the NFCC Data Portal. What was available, however, was a 'BRAGstatus' record. The status reflects whether action is complete (Blue), action is not on track with major issues (Red), action is mainly on track with some minor issues (Amber), or action is on track (Green). However, based on conversations with the NFCC COVID Committee, it appears that interpretation is subjective rather than standard across FRSs, which creates problems for making comparisons (e.g., one service may rate the same level of operational response as Green whilst another may rate it as Amber). Accordingly, this limited the level of evaluation feedback that can be provided on the extent to which effective operational response was maintained. As there were inconsistencies in the frequency of reporting BRAG status between regions, the data

		<p>was aggregated to monthly reports of the highest status recorded by each service that month—for example, if a service recorded three Green and one Amber status in a month, that month is marked as Amber, to reflect the service experiencing some minor issues at some point during that period.</p>
iii) Maintaining staffing levels	<ul style="list-style-type: none"> The frequency of overall and COVID-19 related absences for each region across the evaluation period, and across workforce groups (Wholetime, Support, Fire Control, and On-Call Staff). 	<ul style="list-style-type: none"> Data on staff absences was available for some regions but this was not consistently reported by all regions until September 2020 onwards. To take into consideration different regions having different workforce sizes, we have calculated the percentage of staff who were absent within the workforce for each FRS. There were inconsistencies in how frequently each region reported staff absences (some reporting figures weekly, whilst others report fortnightly or monthly). Accordingly, all data was aggregated at the monthly level to standardise measures. Few regions reported their staff vaccination levels, and at best, this data was patchy. Accordingly, we have not examined the impact of staff vaccination levels on COVID-19 related staff absences.
iv) Maintaining appropriate levels of PPE	<ul style="list-style-type: none"> The levels of PPE in stock for each FRS throughout the evaluation period, and what levels were considered appropriate for that period. 	<ul style="list-style-type: none"> Data on the level of PPE for each FRS was available only from September 2020 onward, following the introduction of the PPE Procurement Hub. PPE access was known to be especially problematic across many agencies during the initial pandemic response period. However, data has not been captured for FRSs during this period on the NFCC Data Portal. Therefore, analyses could not be conducted to examine the extent to which the introduction of the PPE Procurement Hub had improved PPE access. There was no standard metric for what constitutes ‘an appropriate level of PPE’ for each service – this would differ depending on a host of factors, including guidance in place at the time, activities the service was engaged in, whether the region was sharing its stock with other agencies, and so on. Accordingly, analyses could not be conducted to examine what factors affected the extent to which FRSs were able to maintain appropriate PPE levels across the course of the pandemic. However, we can present descriptive data to demonstrate whether FRSs had more PPE in stock than they used from September 2020 onward, which provides an indication of whether the service had the PPE they needed. Due to inconsistencies in frequency of reporting levels of PPE in local central stock, ordered, used, and distributed across service stations, we have aggregated this data at the monthly level.

APPENDIX B

Table B.

Activities listed in the tripartite agreement that each fire and rescue service provided support with during the first 18 months of the pandemic

Fire and Rescue Service	Delivery of Essential Items to Vulnerable People	Mass Casualty: Movement of Bodies	Face Fitting of Masks	Delivery of PPE and Medical Supplies	Sampling for Antigen Testing	Assembly of Single Use Face Shields	Packing/Repacking of Food Supplies	Ambulance Driving Instructions	Ambulance Driving and Support	Non-Emergency Ambulance Driving	Transfers of Known /Suspected COVID Patients	Transfers of Non-COVID Patients	Infection Prevention Control Packages - Care Home Staff	Infection Prevention Control Packages - Train Teachers	Patient Shifts	PPE Delivery	Ambulance Shifts
Avon				✓					✓	✓	✓		✓				✓
Bedfordshire	✓	✓		✓			✓	✓	✓								✓
Buckinghamshire	✓								✓								✓
Cambridgeshire			✓					✓	✓								
Cheshire	✓	✓	✓	✓	✓											✓	
Cleveland	✓			✓	✓								✓				
Cornwall	✓		✓	✓			✓	✓	✓		✓						✓
Cumbria	✓		✓	✓	✓		✓										
Derbyshire	✓		✓	✓			✓		✓	✓							✓
Devon & Somerset			✓						✓								✓
Dorset & Wiltshire			✓						✓								✓
Durham	✓			✓													
East Sussex	✓			✓													
Essex		✓		✓			✓	✓	✓								✓
Gloucestershire	✓	✓		✓	✓		✓		✓				✓	✓		✓	✓
Greater Manchester		✓	✓	✓	✓												
Hampshire		✓	✓						✓								✓
*Hampshire & Isle of Wight																	
Hereford & Worcester		✓	✓	✓													
Hertfordshire	✓																
Humberside	✓			✓					✓				✓		✓	✓	
Isle of Man																	
Isle of Wight		✓							✓								✓
Kent	✓		✓	✓		✓							✓				
Lancashire	✓	✓	✓	✓													
Leicestershire	✓		✓	✓		✓			✓	✓					✓		✓
Lincolnshire	✓	✓		✓			✓			✓					✓		
London Fire Brigade	✓	✓		✓		✓	✓		✓		✓	✓				✓	✓
Merseyside	✓	✓	✓		✓		✓										
Mid & West Wales										✓					✓		
Norfolk	✓	✓	✓						✓								
North Yorkshire	✓			✓		✓											
Northamptonshire	✓	✓					✓		✓	✓					✓		✓
Northumberland	✓	✓		✓												✓	
Nottinghamshire	✓	✓		✓			✓		✓	✓	✓				✓		
Oxfordshire			✓						✓								✓

Table C.

Qualitative Feedback from Fire and Rescue Services to Indicate Additional Activities Not Listed in the Tripartite Agreement They Also Supported.

FRS	Comment
Avon	<i>Vulnerable People:</i> Delivering Christmas food parcels <i>Ambulance Service:</i> Assisting with Retrieve Critical Therapy Unit Ambulance transfer <i>Mass Testing:</i> Locally targeted delivery of testing kits <i>Mass Vaccination:</i> Supporting the establishment of Mass Vaccination sites
Bedfordshire	<i>Vulnerable People:</i> Assisting Council in contacting shielding and vulnerable residents <i>Mass Casualty:</i> Assisting the running of a temporary mortuary facility <i>Ambulance Service:</i> On-Call staff and Fire Support (Prevention Department) Staff carrying out Emergency Medical Response duties (co-responding) at two stations. <i>Mass Testing:</i> Assisting with testing at educational establishments <i>Local Resilience Forum (LRF):</i> Providing LRF command support for two councils <i>Other Support:</i> Providing Principal Officer support for the COVID-19 National Foresight Group (NFG) <i>Sharing of Premises:</i> Providing the use of premises for flu vaccination efforts for vulnerable people; Providing a purpose-built resource centre at one fire station for bariatric patient response capability; Providing shelters for Mass Vaccination sites <i>Requested by Council:</i> Providing the use of premises to facilitate Mass Vaccinations <i>Requested by LRF:</i> Assisting in resourcing five Mass Vaccination centres
Buckinghamshire	<i>Vulnerable People:</i> Assisting with welfare checks <i>Mass Vaccination:</i> Providing Project Managers to assist setting up the infrastructure and provide essential logistical support for the management and coordination of Mass Vaccination centres; Assisting recruitment interviews for NHS roles within Mass Vaccination centres; Assisting vaccination booster programme <i>National Health Service (NHS):</i> Assisting the Test and Trace ground crew; Assisting Test and Trace administration; Delivering Test and Trace letters <i>Staff:</i> Operational Managers detached to support the establishment of Mass Vaccination centres <i>Protection and Prevention Activities:</i> Providing advice for MQS sites
Cambridgeshire	<i>Vulnerable People:</i> Assisting transfer of people aged over 80 to Mass Vaccination sites <i>Ambulance Support:</i> Staff seconded to drive ambulances on bank contracts with the Ambulance Service <i>Mass Testing:</i> Leading and resourcing Operation Eagle surge testing <i>Mass Vaccination:</i> Providing vaccination coordination <i>LRF:</i> Writing plan for Variant Surge Testing
Cheshire	<i>Vulnerable People:</i> Assisting welfare checks and identifying the needs of shielding and vulnerable people; Delivering free school meals and education resource packs to vulnerable and eligible households; Facilitating bulk food collections <i>Mass Testing:</i> Assisting in transferring COVID-19 test kits from hospital to a local prison <i>Mass Vaccination:</i> Assisting booking vaccinations; Transferring vaccinator to homes of individuals unable to attend a vaccination centre <i>Other:</i> Assisting the delivery of blood via the volunteer blood bike service <i>Deliveries:</i> Delivering PPE to educational settings and care providers for children
Cleveland	<i>Mass Testing:</i> Providing the Brigade's Mobile Welfare Unit to testing sites; Undertaking temperature testing of the public in a local shopping mall <i>Other:</i> Assisting with COVID-19 During Performance inspections of Public Houses; Delivering face masks and advice leaflets as part of Home Fire Safety Visits
Cornwall	<i>Vulnerable People:</i> Free school meals; Laptops to school children <i>Mass Testing:</i> Assisting testing in schools <i>Infection Control and Prevention Training Packages:</i> Delivering 'train the trainers' training to businesses and organisations <i>Other:</i> On-Call staff temporarily employed by Council as Town Marshals <i>Deliveries:</i> Delivering PPE to schools
Cumbria	<i>Mass Testing:</i> Advertising recruitment for team leaders and operatives <i>Mass Vaccination:</i> Providing marshal roles; Assisting setting up vaccination centres
Derbyshire	
Devon & Somerset	
Dorset & Wiltshire	<i>Mass Casualty:</i> Providing mortuary support <i>Mass Vaccination:</i> Unloading the vaccine
Durham	<i>Mass Testing:</i> Filling of water-filled barriers at mobile testing unit sites

	<i>Other:</i> Assisting the completion of COVID-19 compliance audits; Assisting Track and Trace visits
East Sussex	<i>Other:</i> Assisting command and control at Newhaven Port
Essex	<i>Vulnerable People:</i> Assisting welfare checks <i>Other:</i> Assisting a hospital with increasing patient capacity <i>Protection Activities:</i> Assisting with fire protection measures in vaccination centres
Gloucestershire	<i>Vulnerable People:</i> Assisting welfare checks; Logistical support for delivering testing kits <i>Mass Casualty:</i> Assisting Mortality teams in operating temporary chapel of rest <i>Mass Testing:</i> Providing mobile solutions for local outbreaks or areas with high infection rates <i>Mass Vaccination:</i> Facilitating clinics at Fire Stations; Delivering medical items to vaccination sites; Providing logistical support to deliver medical supplies to vaccination sites <i>Other:</i> Supporting Track and Trace activities; Installing and removing roadside COVID-19 awareness signs <i>Deliveries:</i> Packed and stored for educational settings
Greater Manchester	<i>Vulnerable People:</i> Assisting welfare checks <i>Mass Testing:</i> Supporting schools with the testing process and building capacity; Door-to-door testing and encouragement to get tested <i>Mass Vaccination:</i> Local Authorities requested Centre Marshals, Administration staff, Operations Managers, Data Analysts, Transport Coordinators, and volunteer drivers; Assisting Vaccination Engagement activities in areas of low vaccine uptake; Taking vaccination bookings by telephone <i>Other:</i> Assisting Track and Trace activities; Assisting Community Engagement by providing Street Marshals to engage, explain and encourage residents and businesses to follow COVID-19 measures
Hampshire	<i>Patient Support:</i> Providing support within hospital Intensive Care Units <i>Mass Vaccination:</i> Providing station premises for vaccinations; Leading the 'Zero Waste Statement', offering surplus vaccines to LRF partners <i>LRF:</i> Supporting compliance, mass vaccination, media and logistics cells
Hampshire & Isle of Wight	<i>Mass Vaccination:</i> Providing station premises for vaccinations
Hereford & Worcester	
Hertfordshire	<i>Vulnerable People:</i> Assisting with signposting to Welfare and Safeguarding officers; Assisting welfare checks <i>Mass Testing:</i> Providing station premises for community testing; Assisting handing out test kits to the public <i>Mass Vaccination:</i> Assisting the setting up of vaccination centres <i>Other:</i> Providing logistical support to Police and local environmental health enforcement teams to analyse community compliance of self-isolation; Assisting Outbreak Tactical Coordinating Group with managing local outbreaks and isolation compliance
Humberside	<i>Other:</i> Deliveries and collection of items from Airport
Isle of Man	
Isle of Wight	<i>Patient Support:</i> Assisting hospital Intensive Care Units <i>Mass Vaccination:</i> Providing station premises for vaccinations
Kent	<i>Other:</i> Transporting midwives on blue lights to home births; Assisting ambulance breakdowns; Assisting emergency call handling; Assisting Track and Trace activities
Lancashire	<i>Vulnerable People:</i> Assisting welfare checks <i>LRF:</i> Leading a group that quality assures sites; Building community safety strategies
Leicestershire	<i>Other:</i> Assisting COVID-19 compliance inspections
Lincolnshire	<i>Mass Vaccination:</i> Supporting setting up vaccination centres
London Fire Brigade	<i>Other:</i> Assisting foodbanks, NHS Blood Donations, and Homeless charity
Merseyside	<i>Mass Testing:</i> Providing station premises for testing; Coordinating the collection of postal testing kits; Assisting 'Test and Release' programme <i>Mass Vaccination:</i> Assisting vaccination bookings
Mid & West Wales	<i>Vulnerable People:</i> Assisting transfer to and from vaccination centres <i>Mass Casualty:</i> Providing mortuary assistance
Norfolk	<i>Mass Testing:</i> Assisting strategic planning <i>Other:</i> Assisting snow clearance from vaccination centres
North Yorkshire	<i>Other:</i> Assisting Test and Trace programme
Northamptonshire	
Northumberland	<i>Mass Testing:</i> Providing mobile testing unit at service premises; Assisting setting up community testing sites



	<p><i>Mass Vaccination:</i> Supporting schools with vaccination boosters <i>Other:</i> Delivering school meals to a school where kitchen was closed due to COVID-19 among staff; Assisting delivery of furniture to improve the ability of Local Authority staff to work from home</p>
Nottinghamshire	<i>Mass Vaccination:</i> Assisting Fire Safety Advice at vaccination sites
Oxfordshire	<p><i>Vulnerable People:</i> Delivering laptops to support home learning for disadvantaged children <i>Mass Testing:</i> Assisting administrative and management support for surge testing</p>
Royal Berkshire	<i>LRF:</i> Running the PPE Logistics cell; Providing contingency arrangement for the management of the mass casualty function of LRF
Shropshire	<i>Vulnerable People:</i> Assisting welfare checks
South Wales	<i>Other:</i> Assisting helicopter landings at hospital; Assisting Test and Trace programme
South Yorkshire	<p><i>Vulnerable People:</i> Assisting welfare checks <i>Mass Vaccination:</i> Assisting inspections of vaccination sites; Assisting translations at vaccination sites; Delivering vaccination appointment letters; Assisting marshalling at vaccination centres <i>Other:</i> Providing canteen and porting support at hospital</p>
Staffordshire	<p><i>Mass Casualty:</i> Assisting setting up a temporary mortuary <i>Mass Testing:</i> Leading, coordinating and providing resources for dropping off and collecting home test kits</p>
Surrey	<p><i>Vulnerable People:</i> Assisting welfare checks <i>Other:</i> Assisting de-icing of essential oxygen supplies</p>
Tyne & Wear	<p><i>Mass Testing:</i> Assisting mass testing of football supporters on return to stadiums <i>Mass Vaccination:</i> Hosting a mobile vaccination unit on service premises; Assisting community engagement teams to encourage communities to get vaccinated <i>LRF:</i> Organising a Surge Testing Exercise <i>Other:</i> Delivering food parcels to University students living in privately rented accommodation; Supporting safety communications; Providing service premises for (non-COVID) vaccination of children</p>
Warwickshire	<i>Other:</i> Providing COVID-19 street advisors
West Midlands	<p><i>Vulnerable People:</i> Leafleting community to offer help with shopping, picking up prescriptions, food deliveries, advice on financial support, and reassurance calls/befriending; Assisting welfare checks <i>Other:</i> Assisting Test and Trace programme <i>Protection and Prevention Activities:</i> Providing remote Safe and Well visits; Providing online resources to support home learning</p>
West Sussex	<p><i>Vulnerable People:</i> Assisting welfare checks <i>Mass Testing:</i> Door-to-door testing at local outbreaks</p>
West Yorkshire	<i>Vulnerable People:</i> Assisting collection and delivery of donated clothes for vulnerable children