

# PRINCIPLES FOR PROMOTING RESILIENT HEALTH SYSTEMS IN THE CONTEXT OF COVID-19 RESPONSE:

## LEARNING FROM MERSEYSIDE UK



### Summary of recommendations

- ✓ Flexible sourcing and local partnership are critical to developing local resilience and securing continuity in medical supplies.
- ✓ Cultivate new and existing relationships to promote community involvement in pandemic planning and new interventions.
- ✓ Maintain consistent information across the entire organisation; break down hierarchies in communication and promote staff feedback.
- ✓ Promote compassionate leadership and staff mental wellbeing.
- ✓ Systematic monitoring and evaluation of new initiatives; create systems for reflective and learning practices across the organisation.
- ✓ Provide managers with flexible budgets to take timely action.
- ✓ Advance pandemic preparedness based on participatory and inclusive planning process is essential for building resilience for future waves.
- ✓ Promote staff consultation and participation in internal decisions and create dedicated bodies for coordinating COVID-19 response activities.

### Overview

The response to the COVID-19 pandemic has led to wide-reaching changes in health systems. Our study “**Optimising COVID-19 adaptations for ethical, equitable and quality delivery of essential health services and more resilient health systems**”, aimed to research the impact of COVID-19 in UK and Liberia and learn lessons to promote strong future health systems. The Foreign, Commonwealth and Development Office (FCDO) in collaboration with the National Institute for Health Research (NIHR) recently identified eight key principles for promoting resilient health systems in the context of COVID-19 response<sup>1</sup>. Data from our study (from Merseyside and Liberia) were analysed thematically against these principles, with two additional principles (principles 9 and 10) included to respond to key findings on pandemic preparedness; and governance and leadership respectively. **This policy brief describes the findings from the UK study. It is targeted at local healthcare managers and decision makers involved in COVID-19 response in health and social care sectors.** The Liberia findings are written up in a sister brief<sup>2</sup>.

The North West region of England, which includes Merseyside, has been one of the regions worst affected by the COVID-19 pandemic, with the second highest rates of infection in the country to date<sup>3</sup>. Merseyside metropolitan county, comprising five boroughs including Liverpool city, has recorded huge COVID-19 related hospital admission across the different phases of the pandemic (Figure 1). The period between March and May 2020 (the first ‘wave’) saw a rapid restructuring of the delivery and use of health services in Merseyside, with most routine services oriented towards the use of telemedicine and virtual consultations due to the urgent need for infection control. The response also had profound implications for leadership and governance of health services, patient access to care, and the wellbeing of health staff.

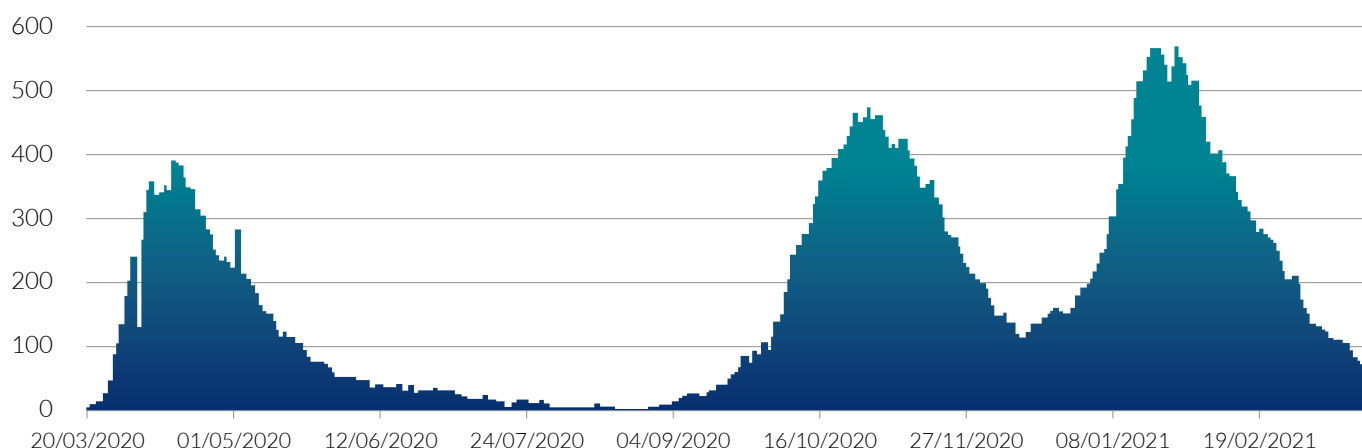
<sup>1</sup>Department for International Development (DfID). Principles of Health Systems Resilience in the Context of COVID-19 Response [Internet]. 2020. Available from: [https://assets.publishing.service.gov.uk/media/5ea2b33de90e070498c5538c/Principles\\_of\\_Health\\_Systems\\_Resilience\\_in\\_the\\_Context\\_of\\_COVID\\_Research\\_Brief\\_April\\_2020.pdf](https://assets.publishing.service.gov.uk/media/5ea2b33de90e070498c5538c/Principles_of_Health_Systems_Resilience_in_the_Context_of_COVID_Research_Brief_April_2020.pdf)

<sup>2</sup><https://www.redressliberia.org/wp-content/uploads/2021/02/Principle-Comparison-Policy-Brief-Proof-2.2.pdf>

<sup>3</sup><https://www.statista.com/statistics/1102151/coronavirus-cases-by-region-in-the-uk/>

**Figure 1: COVID-19 in-patient admissions at Royal Liverpool University Hospital and Aintree University Hospital across the three waves of the pandemic**

● LUHT - COVID-19 patients



We conducted in-depth interviews with key informants in the post-surge period of the first wave between June and September 2020, to explore the response to the first wave of the pandemic in Merseyside. Forty-three respondents were purposively selected from hospitals, general practices (GP), care homes, NHS laboratories, and the local public health authority based on their involvement in the COVID-19 response as health workers or decision makers.

Against each principle we are reporting health professionals' perceptions of how local (county-level) health services performed in the first wave, the successes and shortcomings, and making recommendations for future local health systems strengthening in light of the literature.

## **Principle 1: Develop flexible pathways for medical supplies:** *Resilient health systems secure continuity of provision through the capacity to source supplies flexibly (DfID, 2020).*

- There was failure to ensure continuity of the provision of medical supplies in facilities at the local level. Health and social care professionals reported a shortage of PPE, diagnostic equipment, oxygen and respirators, which affected several areas of healthcare: critical care in hospitals, testing turnaround times in NHS laboratories, and care homes.
- Reasons proffered for this failure included disruptions to global supply chains, inadequate pandemic preparedness, and poor procurement management at national and hospital levels. Buffer stocks maintained at local level were limited, and national pandemic stockpiles of PPE were designed for influenza rather than COVID-19. The central government decision to contract testing to private laboratories was identified to have reduced the availability of testing raw materials for NHS laboratories in the county.
- Local healthcare providers demonstrated some capacity to source supplies flexibly to secure continuity of provision through parallel and crowd sourcing. Partnerships among providers enhanced peer-to-peer support, which was leveraged to alleviate the shortage of PPE and testing capacity.



Delivery of 90 sets of scrubs from local seamstresses at Royal Liverpool University Hospital in March 2020

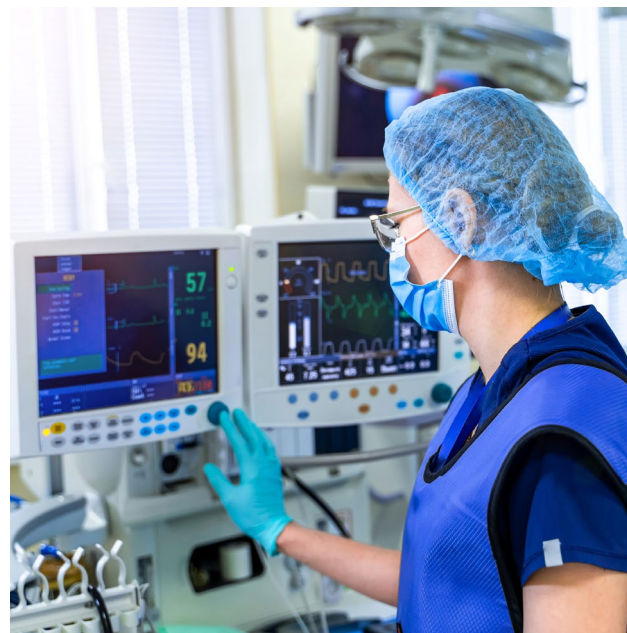
**Recommendations:** Promote flexible procurement strategies by exploring alternative supply sources and diversify suppliers; monitor stock levels and communicate with relevant actors; foster partnerships with local providers and systems to develop local resilience in essential medical supplies; and maintain buffer stocks for future pandemic preparedness.

“With regards to PPE, there was national guidance about what we should do and there was a huge amount of fear amongst nurses and medics and everyone else understandably. Everyone was scared. I was scared. If someone said they weren't scared, then they're lying or they're a fool. The national guidance was confused, and availability of PPE fluctuated. Procurement here [NHS hospital] did a very good job, but sometimes it just wasn't delivered nationally. And we went through other supply chains...”

LIV014, Hospital decision maker

**Principle 2: Prioritise a list of essential health services [and continued provision of quality and equitable routine services]:** *Resilience of the health system will depend on the capacity of healthcare managers to re-allocate existing resources to the essential and most needed services, using transparent and clear criteria (DfID, 2020).*

- With the availability of a functioning package of essential health services in the UK, a key challenge during the pandemic was how to maintain these services while ensuring infection control and the delivery of COVID-19 services amid existing healthcare capacity shortfalls. As a result, most 'elective' (non-urgent) routine services were discontinued with resources redirected to COVID-19 care. The affected elective services included chronic disease monitoring, phlebotomy service and health checks in primary care; non-urgent outpatient clinics, diagnostic and treatment activities in hospitals; and routine public health work such as drug and alcohol services and health promotion.
- The prioritisation of services in local NHS hospitals and GPs was mainly based on central government directive, with limited local influence. In contrast, the local authority had greater autonomy over decisions of public health teams, which facilitated the development of initiatives to address local priorities and health needs. Guidance on what represents an 'elective' health condition was noted not to be nuanced enough and did not adequately account for long-term risks. Hospitals lacked advanced planning and protocols on how suspended services will be restored in the post-surge period, resulting in unnecessary delays.
- Significant changes were made to the delivery of essential routine services. Digital technology was widely deployed for triaging and delivering medical consultations in GPs and hospitals, and for monitoring residents and maintaining communication with relatives of residents of care homes. Other innovations in the healthcare sector included social prescribing; increased duration of dispensed prescriptions; early hospital discharge; selfcare and community-based service delivery.
- Service delivery changes led to several equity challenges. There was a drastic reduction in the uptake of routine services, reflecting a significant drop in hospital admissions and GP referrals as well as an increased backlog of elective services and long waiting times. Respondents expressed major concern over the shift to telemedicine restricting healthcare access among vulnerable populations with limited access and/or ability to use digital technology, especially amongst the elderly, homeless, and people with disabilities. An increased demand for ICU capacity for COVID-19 care often led to the criteria for admission to be raised and access restricted, especially among non-COVID-19 patients.
- Several quality issues were identified with the service modifications. Telemedicine was felt to be unsuitable for certain health conditions, such as mental health, and often led to misdiagnosis and suboptimal care. Patient data security issues were identified with the use of digital technology for clinical consultation. The discontinuation of outpatient clinics and phlebotomy services hampered optimal monitoring and management of chronic illnesses, with most NHS laboratories receiving fewer samples and operating below capacity. Many clinicians had to make treatment decisions based on limited clinical information which hindered quality of care. Further, restrictions of face-to-face contact and family visitations in hospitals deprived patient psychosocial support to enhance their recovery.



“I think a lot of patients feel that access still isn't there now... So many patients were just frightened to come in. I think the stay at home was taken too literally by a lot of patients. And actually, there's a lot of patients that should have been coming into hospital and it was actually, you know, quite a safe place for them to be in A&E. The way that they triage the patients through and the wards... I think we are building ourselves up for a bit of a health disaster just because of the way we've shut down the health services for six months effectively.”

LIV059, Lab decision maker

**Recommendations:** Develop a transparent protocol for the rapid suspension and restoration of routine services and patient visiting; regular review and changes to lists of essential routine services should be prioritised during the pandemic to reflect changing local needs; need to prioritise services for mental health, cancer and chronic diseases; minimise barriers to care for vulnerable populations by providing technical support for elderly patients where possible or prioritise face-to-face consultations for vulnerable groups; strengthen patient data security relating to the use of digital technology for medical consultation; and improve community phlebotomy services.

### **Principle 3: Building trust with local communities:** *Trust between communities and the health system is crucial, shaping health behaviour and outcomes (DfID, 2020).*

- There was increased social solidarity and goodwill towards the local healthcare system, as demonstrated by the gesture of “Clap for the NHS” and increased donations to hospitals and care homes. Many patients became more accommodating of compromises in routine services, although it is not clear that such attitudes will continue through subsequent waves or post-pandemic. Regular and transparent communication with community members may help to sustain social solidarity and goodwill.
- Engagement of community members with the local health system was diminished by concerns about potential risk of infection during health seeking. Many elderly patients with comorbidities stopped presenting at healthcare facilities due to widespread perception of facilities as COVID-19 ‘super-spreaders’.
- There was no evidence of active engagement by hospitals and GPs with local communities on pandemic planning, although local authority providers reported leveraging existing community networks to engender community participation. Respondents described outreach activities that were co-created with religious leaders to help promote testing uptake and enhance understanding of funeral guidelines among ethnic minority groups in Liverpool. There was consensus on the need for local healthcare providers to strengthen trust and partnership with local communities to learn from their insights and to promote greater acceptability and uptake of pandemic-related initiatives.
- The need for transparent communication, culturally sensitive messaging, and dignity and respect for service users was highlighted.

“We actually very deliberately did it as a community-led approach. ...[Using] culturally sensitive messages led by community leaders. ...and then using all that community knowledge and insights to help us with the interventions, like where should the testing site go?... What languages do the people speak? And then actually using our community to translate the messages themselves, so that they're part of the solution and owning the solution, which was brilliant.”

LIV010, Regional public health decision maker

**Recommendations:** Build on existing links with communities through proactively engaging with relevant community leaders and involvement in pandemic planning and new interventions; actively seeking to understand patient/community needs and concerns; strengthen infection control within facilities to improve public confidence in their safety.

### **Principle 4: Foster good communication at all system levels:** *Crises can create confusion and it is important to strengthen communication structures and guidance between health systems levels, with strong supervision and linkages between hospitals, health centres and community health (DfID, 2020).*

- Several communication shortfalls were identified in the local healthcare systems. Rapid changes to central government guidelines led to difficulties in health workers keeping up to date, often creating inconsistencies in service delivery. This was complicated by additional reliance on other, sometimes conflicting sources of guidance including from professional bodies. Some health workers lamented over the ‘wordy’ and ‘voluminous’ nature of COVID-19 emails and a lack of opportunity for staff feedback on central government directives. Several hospital respondents identified a disconnect between how leaders felt they had communicated and staff perceptions of this.



- Local communication structures were adapted, and new ones created to enhance staff information on rapid changes in service delivery and COVID-19 guidance. Excellent communication was noted within departments and teams across health service organisations, with messages cascaded through team meetings and informal inter-personal chats. Staff meetings became more regular and frequent. Social media platforms and virtual meetings were widely adopted and enabled staff to share ideas across organisations. Virtual meetings were particularly noted to enhance networking and partnership building and allowed for the effective coordination across service delivery sites.
- Hospitals and care homes employed digital technology such as Facetime to facilitate engagement between patient/residents with family members amid suspension of family visitation.
- Communication with local communities about changes in service delivery were noted to be inadequate. Many providers failed to adequately inform potential service users about crucial changes such as changes in service location, service suspension, and when services were likely to be restored.

**Recommendations:** Maintain consistent information across the entire organisation; break down hierarchies in communication and feedback to facilitate trust and transparency; maintain regular and effective communication with community members; and communicate clearly on expected roles and responsibilities among staff.



“There’s so many different sources of information that say different things from what people hear in the hospital... you’ve got to come out with a consistent message. And I think it took longer than was ideal to get a central source of information... And sometimes the messages are things that people don’t want to hear, but it’s better to hear what the situation is rather than second guess what it’s going to be. And there was a lot of anxiety about PPE and shortage of PPE at different times. But people need to be told what the situation is rather than try to be falsely reassured.”

LIV04, hospital decision maker

**Principle 5: Support, recognise and encourage staff:** *Peer support, teamwork and supportive supervision through remote channels should be fostered, alongside securing continuity of payment of staff (DfID, 2020).*

- Several strategies were adopted to optimise human resource (HR) capacity in local NHS hospitals and laboratories. These included redeployment of medical health professionals (including doctors, nurses and laboratory scientists), fast tracking of final year medical students and nurses, re-employment of retired doctors and nurses back into the health system, overtime working, and changes in shift patterns. HR measures were disproportionately focused on escalating capacity for COVID-19 service, often limiting the ability to maintain essential routine services.
- Due to restrictions in face-to-face-contact, digital technology was widely deployed to train staff, although they were noted to be inappropriate for certain subjects such as PPE donning and doffing which are practice oriented. There were delays in providing PPE training in many facilities, and several redeployed staff felt that their training was inadequate. Remote-working and redeployment often disrupted staff accountability and

“So workload feels huge. And I only work part time, but actually it feels that I’m working continuously. The trouble is if you work remotely you can work almost longer hours. So, for example, I think it was last week on Wednesday. I logged off at 11:30 at night and started work at 6:30 in the morning. ...it was a bit crazy, really, but that’s what seems to be happening.”

LIV034, Health worker, community

support structures and impacted negatively on learning and development, especially among junior health workers.

- Initial lack of adequate PPE created anxiety among health staff and impacted on service delivery through increased staff absenteeism and diminished confidence and engagement with patients. These were compounded by limited availability of staff testing. There were perceived disparities in staff safety and access to PPE, with lower cadres and non-health staff (such as cleaners and caterers) noted to be less prioritised.
- There were mixed views about the impact of COVID-19 related service adaptations on staff workload and wellbeing. Among staff in routine service areas, the suspension of elective activities freed up time to allow for the implementation of new ways of working and to catch up on backlog of training and administrative work. Some healthcare workers felt virtual consultation increased their workload due to additional time spent to set up calls and difficulties involved in remote patient examination. The effects of redeployment on staff capacity to provide routine services was often offset by the significant decline in service utilisation, which also enabled staff to cope with COVID-19 related absences.
- High rates of COVID-19 infection and signs of exhaustion, burnout and PTSD were noted among health staff, especially those who worked directly with COVID-19 patients. Poor mental health among health staff was partly related to lack of indemnity and fear of making treatment mistakes; stress over patient escalation decision-making; anxiety over potential COVID-19 infection of self and family; trauma over high rates of COVID-19 infections and deaths; and diminished psychosocial support from staff due to remote-working. Women were disproportionately affected due to their greater representation in the nursing workforce who were working directly on COVID-19 wards, compounded by shortage of national pool of nurses.
- Strong teamwork and solidarity were instrumental in mitigating challenges in health workforce during the pandemic. There was strong team cohesion with exceptional willingness among staff to support one another. Peer support was identified to be particularly useful in engendering staff mental wellbeing.
- Several notable interventions were adopted by healthcare providers to promote staff wellbeing, including counselling, reflective therapy, peer support and mentoring, and information on available local support services, although staff uptake was noted to be lower than desired. In some primary care facilities, deliberate efforts were made to redress the psychosocial impact of the limited staff face-to-face contact, through virtual social activities such as Zoom tea, coffee mornings and evening quizzes. Risk assessments were carried out and measures taken to mitigate risks among vulnerable staff. Daily 'thank you' messages were sent by some provider leadership to enhance staff morale, which were generally evaluated positively by staff. However, a few staff felt that their efforts were not recognised, and their work often appropriated by their superiors.

“It's a good team to work in. I feel that we are very supportive of each other. People are more than happy to take time out to talk to you know, we've got a lead nurse. Here we have weekly meetings. And again, if she needs to she will email us she's been to a meeting... But it's good, because she tells us what's going on. So yeah, I think we're lucky in this department that we have got people to go to...”

LIV053, Hospital health worker



**Recommendations:** Promote compassionate leadership by attending to staff feelings and challenges, and taking appropriate action to relieve suffering, including techniques for staff to develop self-awareness and self-efficacy<sup>4</sup>; celebrate success and support teamwork and staff recognition; strengthen mental health support for health staff; create an environment for supervision and support including exploring opportunities for remote supervision; Explore and address low uptake of support services amongst staff; learning and self-efficacy through continuing with teaching/ encourage learning; good HR management and advance planning – e.g. clear rotas and timely payment for additional shifts, building flexible working, allow leave; promote regular communication and transparency; and provide space for staff to discuss their concern and feedback on decisions.

<sup>4</sup>Compassionate Leadership in the NHS during COVID-19 by Hannah Evans.  
<https://blogs.bmj.com/bmj/leader/2020/07/27/compassionate-leadership-in-the-nhs-during-covid-19-by-hannah-evans/>

## Principle 6: Facilitate rapid resource flow and greater flexibility in its use:

*Local managers need to be empowered and have some flexible resources to allow adaptation and innovation. Finding the balance between flexibility and accountability is essential (DfID, 2020).*

- Rapid and flexible funding was critical to the response in Merseyside; this enabled local managers to carry out timely action to support the infrastructure, equipment and medical supplies and staffing needs of the pandemic. The Coronavirus Emergency Response Fund which was disbursed by Central government to health service providers aided rapid adoption of local solutions to the pandemic. Funds were mostly freed from stringent bureaucratic checks, which enabled managers to respond quickly.
- Increased funding for health services was against a backdrop of nearly a decade of austerity from which most health providers were yet to recover; thus, severe gaps in health resources remained despite the additional funds. Also, COVID funds were mostly channelled to improving care for COVID-19 patients and, as a result, key areas in routine services remained underfunded, including the IT systems needed to support efficient virtual service delivery.

“...we introduced Procalcitonin which we didn't have before and, again that just went against COVID monies. ...a very quick decision on that was made... whereas normally, we would have had to go through: 'well who's going to pay for this', etc. And it just went through COVID monies... which never would usually happen. ... things like D-Dimers..., was all centrally funded. So, the big block that we would normally have wasn't there and we were commissioned.”

LIV059, Lab decision maker

**Recommendations:** Provide managers with flexible budgets to take timely action; managers need to continually monitor their budgets - integrate into reporting; more investment is needed to clear backlog in routine services between pandemic 'waves'.

## Principle 7: Ensure agile tracking of health information: Health information systems may need to adapt. Innovation in how data is gathered and shared is important. Existing surveillance systems should be used, and feedback mechanisms established (DfID, 2020).

- In the local NHS hospitals, complex new systems were designed from a standing start to collect data for pandemic surveillance; however, data was not often analysed and made readily accessible to staff to facilitate effective monitoring and timely improvement in services.
- Existing health data systems in the hospitals were identified to be limited because they did not adequately support the assessment of equity and quality trends in routine services, including how these services may have been impacted by COVID-19. They also lack comprehensive patient and community data to allow responsive service delivery in line with the changing health needs.
- Most new service delivery initiatives, such as virtual consultation, were not systematically evaluated. With most of these previously untested, it is critical to understand how they work to facilitate appropriate improvements and possible scale-up in subsequent waves.





**Recommendations:** Regular analysis and reporting on service utilisation trends, including equity trends; systematic monitoring and evaluation of new initiatives integrated into reporting; use data for effective feedback and learning mechanisms; proactively task researchers and modellers with finding health system solutions (forecasting, integration with community data, reporting); and create structures and systems to promote reflective and learning practices across the healthcare system.

“...I suppose there's some value in looking at the things that we were looking at before COVID, because at least we have some longitudinal data on that so that we can see what the effect of COVID is... looking at cancer waiting lists which I think are in terrible shape, and looking at the time that it's going to take people to get their investigations, the waiting lists for clinics.”

LIV020, Hospital health worker

## **Principle 8: Cultivate effective partnerships and networks:** *Resilient organisations create, reinforce and draw on networks for complementary actions, e.g. development partners, local leaders, the private and not for profit sector, informal providers and religious leaders (DfID, 2020).*

- Networks, partnerships, and collaborative working within and across organisations and sectors were regarded as critical to effective responses.
- NHS providers engaged with regional public health teams to ensure closer alignment of response strategies and forecast hospital and critical care demand.
- Partnerships were formed with local hospitals and private sector organisations to deal with PPE shortages and provide urgent cancer operations.
- A partnership developed between local GPs aided the creation of common platforms ('hot-hubs') to provide care to suspected COVID-19 patients.
- A network of lab service providers in the North West region of England was formed during the height of the pandemic and was central to providers coping with validation of new testing platforms and standard operating procedures, shortages in laboratory equipment and raw materials required for SARS CoV2 testing.
- Local authorities worked with local leaders to promote greater understanding and uptake of public health guidance and interventions on COVID-19; although no such community engagement was undertaken by primary and secondary care providers.
- Respondents reported increased collaboration between social care providers through virtual technology to share ideas on safe practices in a context of limited guidance from central government.
- Cross-departmental collaboration and networking among staff, including harnessing internal relationships, were central to the adoption of innovative ideas at the organisational level.
- Weak collaboration between hospitals and primary care providers including GPs and care homes was identified to have created referral challenges. Limited collaboration between PHE and local authorities often led to divergent pandemic strategies and deprived the latter of critical expertise for infection control and health promotion.

“I think one thing, it's really highlighted is the divide between hospital and primary care. We didn't work together very well before the epidemic, and we are still not working together very well. And I think if things were to get better, the whole health system needs to work better. There is still a big divide. I mean we did manage to work together well in some circumstances but in general, we haven't worked together well. So I think that needs to be [addressed].”

LIV033, Health worker, community

**Recommendations:** Promote intersectoral collaboration with the private sector and other social service providers to build synergies for local resilience; and cultivate both formal and informal networks to facilitate information sharing, agreement on pathways and dissemination of innovations.



## (New) Principle 9: Structures and mechanisms for advanced preparedness:

*Effective pandemic response draws on robust advanced planning based on high quality evidence and inclusive participation of key stakeholders, regularly reviewed to align with changing needs. (WHO, 2020)<sup>5</sup>*

- Local response was hindered by a lack of advance pandemic preparedness. Although some organisations, such as the NHS trust, had a pandemic plan, it was based on an influenza pandemic and not regularly updated. This was compounded by the novelty of COVID-19 and the lack of adequate information about the disease.
- Initial modelling works which informed most early local response strategies were noted to be weak as they were not based on local information.
- No substantive structures for developing a plan for subsequent surges in COVID-19 or new pandemics was identified in local health service organisations.

“It was blatantly obvious that anything we’ve ever planned for in relation to a pandemic or anything along those lines was not the plans that we needed. ...part of that was maybe because of the poor understanding around COVID. ...So I think going forward there needs to be almost a better planning system in place... and it’s about what kind of pandemic. if it’s a respiratory disease we need to do all this, but if it’s some kind of blood borne disease actually, we need to do all this instead.”

LIV069, Hospital health workers



**Recommendations:** Advance pandemic preparedness for future waves is essential; need to develop an advance ward escalation plan; participatory planning process, involving staff across different levels of the organisation; planning should be iterative - allowing for regular reviews and adaptation of plans to reflect changing health needs and service demands.

## (New) Principle 10: Governance and leadership structures for timely action:

*Adapt existing local governance and leadership structures, and create new ones where necessary, to promote timely decision making, effective coordination of response, and compassionate leadership. (WHO, 2020)*

- Several key strategies were noted to be critical to effective response at the local level. Dedicated pandemic response committees were set up by many healthcare providers, integration across departments as well as the coordination of the intersectoral response. Delegation of key responsibilities to frontline staff, such as internal guidelines development, allowed for creative ideas within the organisation to be harnessed to develop innovative solutions, and more crucially, engendered a sense of recognition and ownership among staff, critical to boosting morale. Good departmental leadership and internal communication strengthened team responses across many organisations, encouraging staff participation and input.
- There was an overall feeling among junior staff members in the local NHS hospitals of a lack of influence on internal decisions about the response, as most decisions affecting them were deemed to be already made by the senior leadership without much scope for change.
- Central government guidance on the pandemic response was slow to emerge, creating inertia in many health service organisations. They were identified to lack clarity and were not well grounded in local realities. Many respondents

<sup>5</sup>Maintaining essential health services: operational guidance for the COVID-19 context.  
<https://www.who.int/publications/i/item/WHO-2019-nCoV-essential-health-services-2020.1>

perceived lack of transparency by central government, especially on PPE guidance, which triggered widespread mistrust among health workers.

- Tensions between central government and local autonomy were identified. Government guidance was mostly perceived to be oriented to achieving political objectives and not grounded in clinical reality and local priorities. Directives based on command and control provided limited room for local autonomy which strained relationships between the local senior leadership obliged to enforce central directives and frontline staff who wanted greater influence in shaping them.



**Recommendations:** Promote greater staff consultation and participation in internal decisions; establish an internal body/committee dedicated to coordinating COVID-19 response activities; improve transparency with staff about the pressures from central government.

“...we were having to work, to a large extent, in the dark... One of the things that was very interesting was actually how little information was coming out of London [who were ahead of Liverpool in wave 1]... We were really getting very little information and I don't think that helped in terms of planning. ...I did wonder whether the government had used the Civil Contingencies Act to try and suppress information to avoid panic.”

LIV008, Regional health decision maker



## Conclusion

Despite profound challenges presented by the COVID-19 pandemic in Merseyside, local health service providers have been quite successful in drawing on key opportunities within the health system and community to mount an effective response. Central to this has been partnership building, networking, and collaborative working within and across service organisations; flexible working; willingness to try new initiatives and iterative learning; and the rapid deployment of digital technology. However, significant challenges remain, and we hope the recommendations arising from the first wave and aligned to ten principles of resilience will contribute to strengthening the on-going COVID-19 response and the preparedness of the health system in Merseyside for future pandemics.

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