The management of workplace responses to COVID-19 outbreaks

Qualitative case studies in Greater Manchester to reduce the risk of transmission of COVID-19 in workplace settings

PROTECT-2022

National Core Study Report

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The PROTECT COVID-19 National Core Study on transmission and environment is a UK-wide research programme improving our understanding of how SARS-CoV-2 (the virus that causes COVID-19) is transmitted from person to person, and how this varies in different settings and environments. This improved understanding is enabling more effective measures to reduce transmission – saving lives and getting society back towards 'normal'.

UK local authorities that experience sustained high levels of COVID-19 are termed areas of enduring prevalence (AEP) according to UK Scientific Advisory Group for Emergencies (SAGE) in 2021. Greater Manchester is an area of enduring prevalence. These case studies consist of 3 reports of studies carried out in Greater Manchester during the COVID-19 pandemic: Infection, Prevention and Control (IPC) for COVID-19 in Care Home Settings in Greater Manchester: A Health (care) Needs Assessment; Infection prevention control in domiciliary care settings in Greater Manchester: a health (care) needs assessment; and Data sharing needs and the suitability, integrity, and availability of data in Higher Education Settings – Interim Report.

Key messages from report 1 include the issue that we do not fully understand the impact of COVID on individuals from ethnic minority backgrounds in adult social care settings due to big gaps and limitations in ethnicity data, and requirements for improved communication, training, and management of staff absence across the sector. The recommendations from report 2 include improved reporting of infections and deaths in domiciliary care, and from report 3, improved knowledge and training of data management.

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Key messages

Greater Manchester is an area of enduring prevalence. Risk of transmission in many of our local authority areas were based around workplaces. Theme 3 WP3 sought to explore in depth key components to reduce the risk of workplace transmission through needs assessments of infection prevention and control and data needs,

Domiciliary Care & Care Homes Integrated Recommendations

1. Deaths and ethnic minority groups – The ramifications of continually ignoring domiciliary care are becoming evident. Deaths have at least doubled in the community, possibly more, the data reporting should be more rigorous and robust. Carers from ethnic minority backgrounds and service users need particular attention due to higher risks.

    - We do not fully understand the impact of COVID on individuals from ethnic minority backgrounds in adult social care settings due to big gaps and limitations in ethnicity data. More data is critical to understanding the actions that need to be taken across adult social care to ensure that all people are given safe, high quality care, appropriate for their individual needs. This data should highlight the much wider question of how ethnicity is recorded across adult social care. The lack of data on ethnicity across adult social care as a whole makes it more important that any information in this area is shared - both to aid understanding and highlight the need for more robust data, as well as directing action.

2. Communication – There is a need for improved communication and collaboration between the system. The care sector has asked for there to be consistent messaging across the system - involving all stakeholders, so there is a clearer understanding of what needs to be done, and to ensure that expectations are better managed. Further investigation is needed into how the relationships between these stakeholders can be improved and strengthened.

    - There is a need for improved communication across care sector on PPE.

    - Need more insight into the system (in relation to the care sector) and the relationship local authorities and LRFs have with care home/domiciliary care providers. There is already a lot of strain and overburden on care services. Consequently, having a stronger relationship as well as clearer collaboration and communication, between care home providers and local authorities will also improve the ease of care home management and the quality of the services being delivered.

    - Accountability of CCGs and Local authorities' roles in policy remains unclear (CCGs) or complex (LAs) and is needed particularly in designating specific operational aspects and single points of contact as this will be key for efficiency.

- Mixed messages from government e.g. ‘return to office’ and ‘eat out help out’ are creating confusion and complacency amongst staff in all care sectors.

- There is currently no legislated time for local authorities to conduct care assessments. Guidance does not cover the prioritisation process in great detail and states that it will often rely on the use of informed and professional judgement. It would be helpful to have more specific guidance on the prioritisation process as it relates to care homes.

3. Public Health locality teams are under-resourced – more staff needed.

4. Training – The care sector has also called for more support and training. Government should work with the care sector representative bodies to produce some specialised training videos for standard PPE and offer tailored insights and training into how the guidance applies in particular care settings. This training and support should be offered locally in order to meet the specific needs of staff working in the sector and to also tailor the training/support to align with the local guidance/requirements.

   - More targeted training for care home staff on how to appropriately administer a COVID test/swab on care home residents or themselves. This ensures that the tests being sent out were performed correctly, reducing the likelihood of ‘false negatives’ and also reducing the chance that the test needs to be repeated if the test was non-viable (which is especially important for those who find testing traumatic, such as older adults with dementia).

   - Self-administered testing guidance should be developed to ensure testing is viable and is being conducted correctly, as should the guidance surrounding expected time periods for receiving results and next steps following positive testing outcomes.

   - More training on how the PPE guidance applies in particular care settings.

   - The video providing instructions on swabbing needs to be revised and improved upon.

   - Guidance around IPC and PPE face mask use should be clarified - e.g. not to hang masks on chins or share objects in communal areas (as some outbreaks have been linked to communal staff areas).

5. Evidence regarding transmission of COVID by aerosols is limited – Ventilation in care settings / homes needs urgent attention as does use of aerosol generating procedures training for carers.

6. Shielding & Care Groups – Dividing care home staff into ‘care groups’ or staff bubbles should be investigated as it may limit the spread of infection. Despite their best efforts, care home workers often become inadvertent vectors to the transmission of COVID. Consequently, allocating subgroups of the staff team to provide care to specific service users (e.g. those shielding) may help reduce infection in care homes. However, it is also important to note the workforce and logistical challenges of doing this, especially for smaller care providers, and a decision about whether this is feasible to conduct should be made locally.

7. Testing Residents and Safe Hospital Discharge from NHS to Social Care Setting – More attention should be paid to the insidious spread of disease and harm contributed by asymptomatic COVID carriers. This is especially important considering a negative test result is not required prior to transferring/admitting a resident to a care home from hospital. There is a need for more specific guidelines to say that anyone being admitted into a care home from hospital or from the community (whether symptomatic or asymptomatic), must complete the 14-day isolation period, unless they have been tested and can confirm they are not infected.

    - Communication of COVID patient discharges from hospital to community carers and community teams should be streamlined – Hospital discharge needs to be streamlined and developed further and pressure on care sector needs exploring regarding ‘bed-blocking’ and discharge pressures. Early qualitative findings reveal domiciliary care is under supported at the local level by Public Health teams and as the sector is extremely fragmented it is difficult to support. Collaborative and trusting relationships are key and have been established for some areas resulting in overall positive change, however further work is required. Information and key points of contact for patients and families is needed.

    - Designated policy translators and single points of contact in Public Health locality teams would assist the domiciliary care sector (not just registrars, they are too busy) and would help immensely.

8. Test and Trace – Concerns about the inadequacy of test and trace as the service does not appear to be ‘up and running’ in a consistent manner. A review of this system is urgently required.

9. Care workforce/staffing issues – Staff absences across the sector are a growing concern. There is an urgent need to support providers with staff absences and to develop sustainable solutions for building the social care workforce more broadly.

    - Domiciliary care is understaffed and absences are increasing. Staff feel undervalued, underpaid and may reach exhaustion/burnout. The sector is financially unstable and not resilient.

10. Certain geographical areas require targeted preventative support e.g. Salford and Bury / North West more broadly from COVID deaths data.

11. COVID in stools/faecal matter should be acknowledged in care sector.

Domiciliary Care Only

1. Learning disability sector (deaths doubled here also), self-funders, unpaid carers and voluntary sectors need clearer guidance and support.

2. Storage of COVID waste in people’s homes in the community may increase spread of infection.

3. Access to testing for home carers and those in receipt of care should be prioritised. Testing is still not easily accessible for service users. Policy is still unclear, is confusing for domiciliary care and is open to subjective interpretation.

Care Homes Only

1. Official data – Some official data on care homes (e.g. number of residents) has been incorrect and urgently requires revision and updating.

2. Training – If mass testing was rolled out in care homes, care home staff/residents would require training in order to correctly conduct and administer the swab tests. Some have suggested that it would be preferable to have a microbiologist run through the process with them.

Higher Education data needs

COVID-19 brought new challenges and stress to a system that was not already prepared to take on such critical work, at such short notice. A lack of data and support at a national level, early on, led local systems and stakeholders to develop and enact their own approaches, which they retained throughout, as they remained effective. When national data was finally made available, local teams did not have the skills or knowledge on how best to use it. Good co-operation, across the local footprint, produced the best possible response. Changing guidelines and legislation, often communicated late to organisations, presented challenges. The Greater Manchester team worked together closely to develop a bespoke model of data triangulation and sharing to reduce the risk of transmission in universities in 2021, learning from the needs from the previous year.

Conclusions

Phases 1 and 2 found the paucity of data by workplace or occupation during the pandemic. Areas of enduring prevalence reflecting in part ongoing socio-economic deprivation. Theme 3 WP3 team has worked in Greater Manchester (GM) to assess data needs, capabilities, capacities and gaps. The GM partnership of the public health teams based in local authorities, UKSHA, the Greater Manchester Combined Authority, the developing Integrated Care Systems and Board in GM ICS presents an opportunity to study the future COVID response whilst implementing the Living with COVID response as an unique natural experiment.

Report 1: Infection, Prevention and Control (IPC) for COVID-19 in Care Home Settings in Greater Manchester: A Health (care) Needs Assessment

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1. Introduction

Residents in care homes are more likely to experience severe disease due to age and comorbidities. Not all countries are reporting data on deaths in care homes from severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) or COVID-19. The impact of COVID-19 on care homes has been very different internationally; some countries, such as Hong Kong, have reported no deaths (or infections) in care homes, whilst other countries, such as Canada, have reported that over 80% of COVID-19 deaths were of care home residents (Comas-Herrera *et al.*, 2020). Official data from 26 countries suggests that, as of 26th June, 47% of deaths related to COVID-19 occurred in care homes (Comas-Herrera *et al.*, 2020).

Infection prevention and control (IPC) measures and systems are a key foundation within the social care sector and legislation requires all care providers to follow guidelines ensuring that they are at all times 'assessing the risk of, and preventing, detecting and controlling the spread of, infections, including those that are health care associated' (Health and Social Care Act, 2008). The COVID-19 pandemic has made increasing demands on the adult social care sector, whose remit, scope and forms of service delivery are complex (DHSC, 2020g). The sector includes services for older people who often have underlying conditions, making adult social care particularly vulnerable to the impact of COVID-19 (Comas-Herrera *et al.*, 2020). As older people (those above 65 years) who require care and support from others have been cited as being particularly susceptible to severe infection by COVID-19 (WHO, 2020), effective IPC measures are more critical than ever to minimise the spread of infection and COVID-19-related deaths.

Care homes within the North West rank amongst the highest in terms of outbreaks in England (CQC, 2020a). Providers have reported facing a shortfall of service users due to increased service user mortalities and an inability to take on new service users (CQC, 2020a). Furthermore, providers are struggling to fund and source personal protective equipment (PPE) (the cost of which is hugely inflated), which is a vital factor for effective IPC measures (CQC, 2020a).

Modelling of mortality data in Ontario, Canada, from a pre-print publication (not peer reviewed) confirms that that mortality rates in care homes were 13 times higher than in community cohorts of those aged over 69 years (Fisman *et al.*, 2020). Models demonstrate that lagged infections in staff were the most common predictors of death in residents (Fisman *et al.*, 2020). However, transmission of COVID-19 may not be the only factor; increased staff absence may reduce the ability of care homes to provide care of the expected standard and increased mortality may result from factors such as increased dehydration (Fisman *et al.*, 2020).

A lack of IPC resources for care homes such as PPE, testing etc. may mean staff are unable to adequately care for those they are responsible for, which may result in suffering or loss of life (CQC, 2020a). This may also cause many care workers to experience a degree of moral distress and moral injury (Farnsworth *et al.*, 2017). Lack of resources, clear guidance and training may also mean staff perceive themselves as at increased risk and view their employers as inadequately attending to their health and well-being (Williamson *et al.* , 2020). This may have further adverse effects upon care staff sickness absence. Staff morale and well-being has already recently been reported as adversely affected by COVID-19 (CQC, 2020a). The CQC (2020) have indicated COVID-19 related sickness absence is rife across the sector (with 4.6 million working days lost in the health and social care sectors prior to the pandemic (Health and Safety Executive, 2019)) and providers are experiencing an inability to recruit cover staff from agencies (CQC, 2020a). Added to this, care providers have reported burnout, extreme anxiety and distress due to multiple service user and staff deaths, as well as financial concerns (CQC, 2020a). Further increases to instability in the sector's labour market will increase market fragility, placing greater pressure on local authorities, informal carers and voluntary agencies, whilst increasing unmet care needs (CQC, 2020a).

The clinical definition of COVID-19 may be less useful in this population. Guidance from the British Geriatric Society on managing the pandemic in care homes (British Geriatrics Society, 2020) highlights that the clinical definition of a new continuous cough and/or high temperature may be insufficient in this cohort. Instead, care home residents may present atypically with non-respiratory symptoms such as new onset confusion and/or diarrhoea (British Geriatrics Society, 2020). Care home staff are urged to look for these 'soft signs'. However, the atypical presentation may confuse the ability to identify suspected COVID-19 cases.

Asymptomatic and pre-symptomatic transmission presents a problem in care home settings. Few countries are testing in care homes systematically (Comas-Herrera et al., 2020). However, those studies that are available show that as many as half of people with COVID-19 infections in care homes were asymptomatic (or pre-symptomatic) at the time of testing, highlighting the lack of testing and the reliance of identifying COVID-19 cases based on symptoms alone as contributors to spread within and between facilities (Kimball et al., 2020; McMichael et al., 2020). Recent data from Belgium, where 280,965 tests (138,373 staff and 142,592 residents) were conducted in care homes between 10th April and 18th May, found that of the 49% of staff who were tested, 2% tested positive and 73% of those who tested positive were asymptomatic. As for the 51% of residents who were tested, 4% tested positive and of these, 76% were asymptomatic (Sciensano, 2020 reported in Comas-Herrera et al., 2020).

Women account for 83% of the social care workforce nationally (Skills for Care, 2019b) and 82% of the North West workforce (Skills for Care, 2019a). National figures indicate that deaths in caring occupations are statistically higher for women in these sectors, in comparison to those of females in other occupations (ONS, 2020a). Ethnic minorities are also disproportionately affected, with recent reports from Public Health England (PHE) (2020a) and PHE (2020j) indicating that those working in social care had significantly high rates of death from COVID-19. The report confirms that those from ethnic minority communities are over-represented among those who are ill with COVID-19 and the risk of dying from COVID-19 is increased in individuals from these communities compared to the White population. These findings are particularly pertinent to the adult social care sector as ethnic minorities care workers account for 21% of the adult social care workforce nationally (though this is to a lesser extent in the North West at 9%) (Skills for Care, 2019b).

In addition to this, a lack of IPC may mean service users are transferred to hospital from care homes, putting further strain upon hospitals (WHO, 2020). Significant numbers of those surviving critical respiratory illnesses such as COVID-19 can experience multiple short, medium and long-term physical and psychological impairments including Post-Intensive Care Unit Syndrome (PICS) and post-traumatic stress as a result of hospitalisation (Colbenson, Johnson and Wilson, 2019). The Government anticipates 45% of those discharged from hospital will require ongoing support from health and social care (DHSC, 2020g) and so care planning and effective IPC measures will rely upon communication between social care providers and multiple others such as local authorities, IPC health teams, GPs and

rehabilitative professionals. Little is known about how these processes are coordinated during the pandemic and their effectiveness.

As such, exploration of existing IPC systems and measures is now required to build supportive mechanisms for effectively preventing and controlling COVID-19 infections in the community for those who provide and receive care, and to reduce COVID-19 related ill-health and deaths in staff and service users.

2. Aims and objectives

The purpose of this HNA is:

- To build a picture of the current system for COVID-19 IPC measures in Greater Manchester care homes; assess unmet IPC needs in population segments; identify barriers and opportunities to increase and improve IPC measures for COVID-19 in Greater Manchester care homes to maximise health benefit.

- To make recommendations for a feasible IPC programme and cohort testing programme.

- To build an evidence base using available data, intelligence and literature and gather primary data through interviews with key system stakeholders.

3. Epidemiological Needs Assessment

There are 565 regulated care homes in Greater Manchester (GM) (CQC, 2020b) – refer to Appendices 1, 2 and 3 for sources of information about care homes in GM and data on the sector, make-up and workforce.

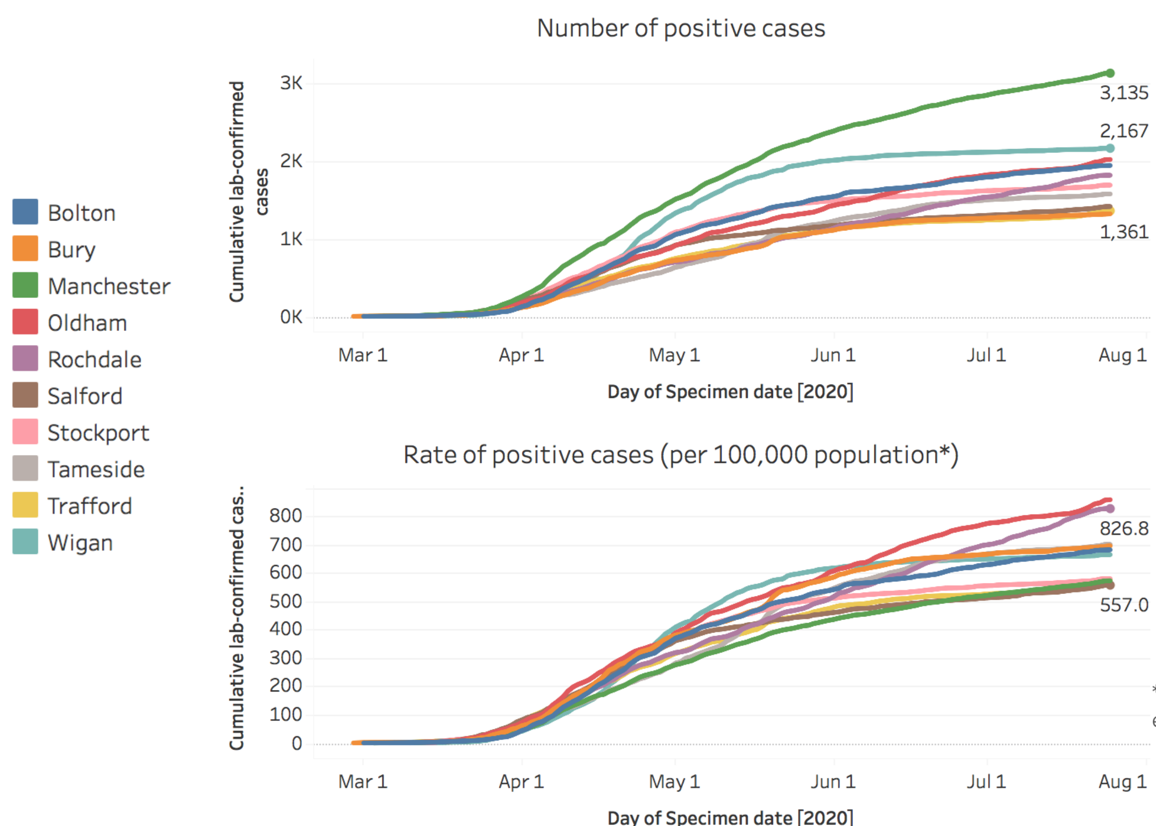
Table 1: Regulated care homes in GM by local authority	
Local Authority	**Number of regulated care homes**
Bolton	56
Bury	56
Manchester	92
Oldham	44
Rochdale	58
Salford	45
Stockport	64
Tameside	38
Trafford	57
Wigan	55
GM Total	565

3.1 COVID-19 cases and deaths in Greater Manchester

The PHE tableau provides the number of COVID-19 cases in GM (Manchester Health & Care Commissioning, 2020). This is updated daily. Table 2 and Figure 1 show the number of confirmed positive COVID-19 cases by GM local authorities. This data includes total lab-confirmed cases of COVID-19 (confirmed by NHS/PHE labs) in each GM local authority.

Table 2: Number of laboratory confirmed COVID-19 cases up to 25th July 2020 in local authorities in Greater Manchester (Manchester Health & Care Commissioning, 2020)	
Local authority	**Number of lab-confirmed cases**
Bolton	1,945
Bury	1,322
Manchester	3,135
Oldham	2,022
Rochdale	1,819
Salford	1,417
Stockport	1,692
Tameside	1,578
Trafford	1,361
Wigan	2,167
Greater Manchester	18,458

Figure 1: *Graphs showing the number of laboratory confirmed COVID-19 cases up to 25th July 2020 in local authorities in Greater Manchester (Manchester Health & Care Commissioning, 2020)*



3.2 COVID-19 in care homes in Greater Manchester

Deaths

Data on COVID-19 related deaths in care homes is recorded by the Office for National Statistics (ONS).

In the North West region, for week ending 10th July 2020 there were 849 COVID-19 related deaths in care homes out of a total of 3,731 deaths. Table 3 shows the data on registered deaths by local authority (ONS, 2020a). Up to the week ending 10th July 2020 the following deaths were recorded in GM:

Table 3: Number of deaths by actual date of death registered up to 10th July 2020, in care homes in Greater Manchester (ONS, 2020a)

Local authority	All deaths	COVID-19 deaths	COVID-19 deaths as a percentage of all deaths (%)
Bolton	408	107	26.2
Bury	330	68	20.6
Manchester	422	78	18.5
Oldham	363	86	23.7
Rochdale	283	40	14.1
Salford	357	132	37.0
Stockport	489	122	24.9
Tameside	306	57	18.6
Trafford	324	85	26.2
Wigan	449	74	16.5
Greater Manchester	3,731	849	22.8

Outbreaks

PHE provide weekly numbers and percentage of care homes reporting a suspected or confirmed outbreak of COVID-19 by local authority, government office region and PHE centre (PHE, 2020e). Care homes include residential and nursing homes. Any individual care home is only included in the dataset once. If a care home has reported more than one outbreak, only the first is included in this dataset. Figures are included for each week starting from 3rd March 2020. The dataset contains no indication of whether the reported outbreaks are still active (PHE, 2020e).

As of 23rd July 2020, the North West had the highest percentage of care homes which have reported an outbreak in England, with the North East (54.4%) and London (50.1%) being the second and third highest respectively.

Table 4: Numbers and percentages of care homes with COVID-19 outbreaks, North West and Greater Manchester local authorities, as of 23rd July 2020 (PHE, 2020e)			
Local Authority	**Total outbreaks (care homes)**	**Number of Care Homes**	**Percentage (%) of care homes that have reported an outbreak**
Bolton	29	56	51.8
Bury	28	56	50.0
Manchester	55	92	59.8
Oldham	36	44	81.8
Rochdale	29	58	50.0
Salford	23	45	51.1
Stockport	42	64	65.6
Tameside	33	38	86.8
Trafford	29	57	50.9
Wigan	45	55	81.8
Greater Manchester	349	565	61.8
North West region	1,055	1,917	55.0

As of 23rd July 2020, Tameside had the highest rate of outbreaks, with 86.8% of care homes having reported an outbreak. Oldham and Wigan report the second highest percentage, with 81.8%. Bury and Rochdale had the lowest percentage of care homes reporting outbreaks, with 50%.

Between 28th May 2020 and 23rd July 2020, the largest increase (23.6%) was observed in Tameside, where the percentage rose from 63.2% to 86.8%. Salford had the lowest increase between this period, from 44.4% to 51.1%, a 6.7% rise.

The NHS capacity tracker web tool and PHE Health Protection team (HPT) data clarifies which care homes have an outbreak, and so if prioritisation is needed, those with recent or established outbreaks can be targeted.

3.3 ONS Data: Care home COVID-19 deaths in England and Wales

Data on COVID-19 related deaths in non-hospital settings in England and Wales is released by the ONS as part of a weekly update on registered deaths, which has been provided since week ending 13th March 2020. There is a lag between the daily updates on hospital deaths released by NHS England. The ONS defines a COVID-19 related death as COVID-19 mentioned on the death certificate. A doctor can certify the involvement of COVID-19 based on symptoms and clinical findings – a positive test result is not required. As it is unclear the extent to which COVID-19 is recorded on death certificates it is also helpful to look at the total number of deaths in care homes, which can be compared to previous averages. It has also been recognised that as care home residents become seriously ill they may be transferred to hospital, and so subsequent deaths will be recorded as hospital rather than care home deaths.

Initially, the majority of COVID-19 deaths in England and Wales occurred in hospitals but as this figure started to decrease, deaths in care homes are increased as shown in Figures 2 and 3. Year to date figures show that up to week ending 10th July 2020 (week 28) there have been 15,122 COVID-19 related deaths in care homes in England and Wales (see Figure 2) (ONS, 2020c).

Figure 2: *Deaths involving the coronavirus registered between weeks 1 and 28 of 2020 by place of occurrence, England and* Wales (ONS, 2020c)

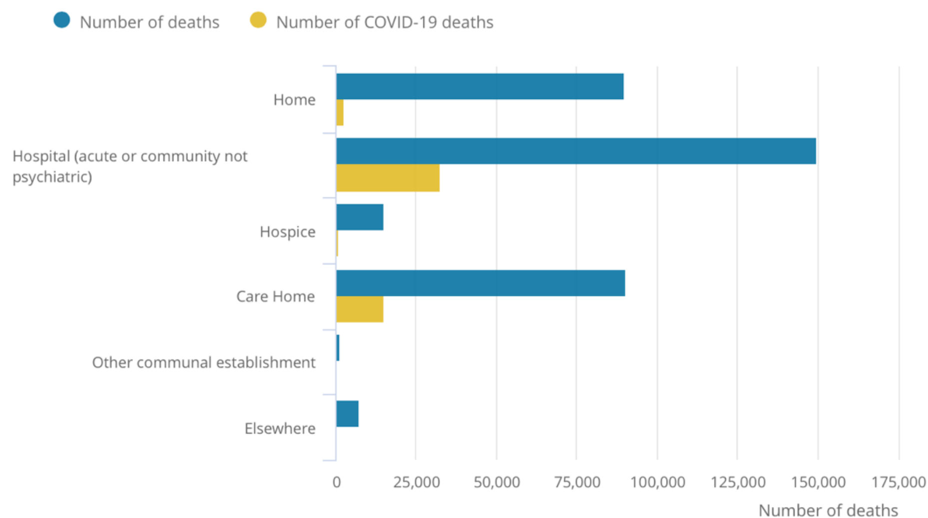
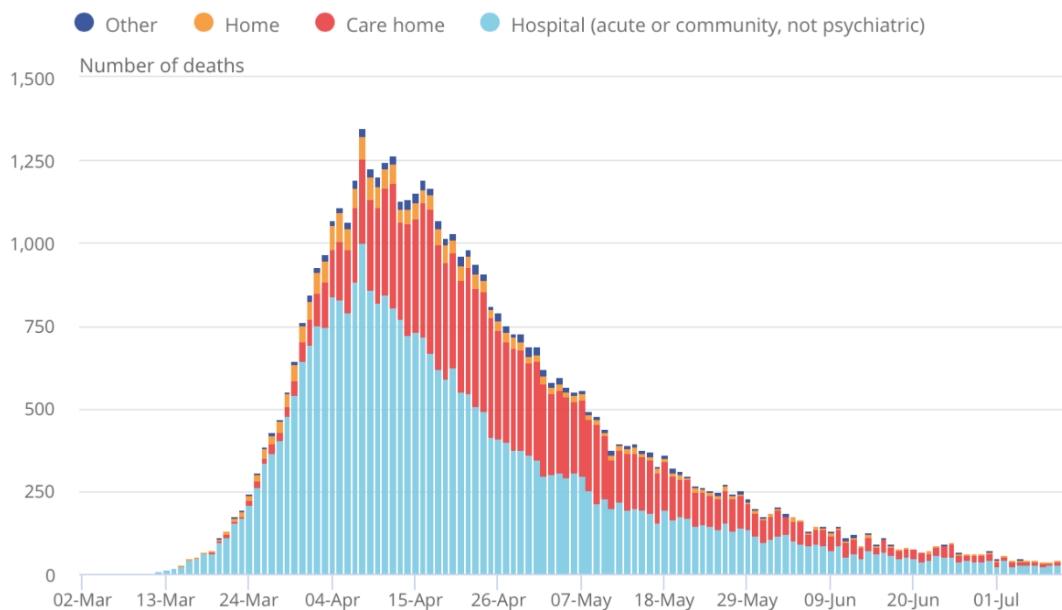


Figure 3: *Number of deaths by actual date of death registered up to 10th July 2020, by the place the death occurred and per day for England and Wales (ONS, 2020c)*



The following are reported in the release on 21st July 2020 and relate to deaths recorded in the week ending 10th July 2020 (week 28) (ONS, 2020b).

- There was a total of 8,690 deaths registered in England and Wales in week 28. Of those, 366 mentioned "COVID-19", the lowest number of deaths involving COVID-19 in the last 16 weeks and a 31.2% decrease compared with Week 27 (532 deaths).

- The proportion of deaths occurring in care homes decreased to 19.0% while deaths involving COVID-19 as a percentage of all deaths in care homes decreased to 5.8%.
- Of all deaths involving COVID-19 registered up to Week 28, 63.5% (32,332 deaths) occurred in hospital with the remainder mainly occurring in care homes (29.7% i.e. 15,122 deaths).

- The proportion of deaths from all causes that occurred in care homes continued to decrease to 19.0% in Week 28. The proportion of care home deaths that involved COVID-19 also decreased; 5.8% of all deaths in care homes involved COVID-19 in Week 28, compared with 9.2% in Week 27.

- In Week 28, the number of deaths registered was 6.1% below the five-year average (560 deaths fewer), this is the fourth consecutive week that deaths have been below the five-year average.

3.4 Care Quality Commission (CQC) data

The ONS is also now publishing on the number of deaths in care homes in England that are notified to the CQC (ONS, 2020d). This gives a more up-to-date number of deaths in care homes than was previously available. In CQC figures, a death involving COVID-19 is based on the statement from the care home provider to the CQC: the assessment of whether COVID-19 was involved may or may not correspond to a medical diagnosis or test result or be reflected in the death certification. CQC notifications data are available more quickly than death registration data.

From 10th April to 17th July 2020, the CQC had been notified a total of 13,856 deaths from COVID-19 in care home settings in England.

In response to increasing concern relating to the impact of the virus in the community, national figures released by the DHSC and presented at the daily press conference began to incorporate number of deaths in all settings, drawing on data from PHE from 29th April 2020. However, these are not broken down further to allow for analysis of deaths in care homes specifically.

3.5 COVID-19 Surveillance Report

Up to 21st July 2020, COVID-19 spread continued to decline or remain stable in England across the majority of surveillance indicators during week 29. There has been a small increase in case detections in the North West and West Midlands through both Pillar 1 and Pillar 2

testing. At a local authority level, activity was highest in Blackburn and Darwen where incidences have continued to increase and local measures were implemented from mid-July. Case detections are highest in adults aged 85 and over. There has been an increase in the proportion of cases from the Asian/Asian British ethnic group, this is likely to reflect larger populations from this ethnic group in areas that are currently seeing higher incidence. By NHS regions, the highest hospitalisation and ICU/HDU rate was observed in the North West and North East. The North West has maintained this status for at least the past month. Up to 21st July, 2020, 6,772 cumulative deaths were reported for the North West (PHE, 2020o), the highest amount of regional deaths in England and Wales.

3.6 Health Disparities & Impact of COVID-19 on Communities

3.6.1 Overall COVID-19 Impact

A recent report from PHE (2020a) has shown that older age, ethnicity, male sex and geographical area, among other factors, are associated with an increased risk of infection, more severe symptoms and higher death rates. The PHE review of disparities in the risk and outcomes of COVID-19 shows that there is an association between belonging to particular ethnic groups and the likelihood of testing positive and dying with COVID-19. The review found that the highest age standardised diagnosis rates of COVID-19 per 100,000 population were in people of Black ethnic groups (486 in females and 649 in males) and the lowest were in people of White ethnic groups (220 in females and 224 in males).

An analysis of survival among confirmed COVID-19 cases revealed that people of Bangladeshi origin had approximately twice the risk of death when compared to White British people. Moreover, those with Chinese, Indian, Pakistani, Other Asian, Caribbean and Other Black ethnicity had between 10- 50% higher risk of death when compared to White British (PHE, 2020a). Black African or Black Caribbean ethnicity are 1.9 times more likely to die due to COVID-19. Males of Bangladeshi and Pakistani ethnicity are 1.8 times more likely to die, and females of Bangladeshi and Pakistani ethnicity are 1.6 times more likely to die.

Overall, death rates from COVID-19 were higher for ethnic minorities when compared to White ethnic groups. This is the opposite of that observed in previous years, when the all-cause mortality rates are lower in Asian and Black ethnic groups. Comparing to previous years, all-cause mortality was almost 4 times higher than expected among Black males for this period and almost 3 times higher in Asian males. Among females, deaths were almost 3 times higher in this period in Black, Mixed and Other females, and 2.4 times higher in Asian females (PHE, 2020a). Examination of the ONS data concluded that Black African or Black Caribbean ethnicity are 1.9 times more likely to die due to COVID-19.

As for mortality by ethnicity in UK healthcare workers, a higher than expected proportion of fatalities were found, when taking into account the proportion of the NHS workforce that is from an ethnic minorities background. Of the deaths in healthcare workers reported, 63% were in ethnic minorities groups: 36% were of Asian ethnicity (compared to 10% of NHS workforce) and 27% were of Black ethnicity (compared to 6% of the NHS workforce). Further analysis is urgently needed to understand the morbidity and mortality of health and social care workers due to COVID-19, with a particular focus on ethnic minorities groups (Cook, Kursumovic and Lennane, 2020; PHE, 2020a).

3.6.2 Ethnic Minorities & Care homes

Figures have also shown that Black and Asian care home residents are more likely to die of COVID-19 than their White counterparts in England. COVID-19 caused 54% of deaths among Black people living in care homes compared with 44% among White people, according to data released by the CQC (CQC, 2020c). Asian people were also more vulnerable to dying from the disease in care homes, with 49% of deaths among the Asian population caused by COVID-19 from 10 April to 15 May 2020 (Booth, 2020). CQC completed a targeted piece of work, supported by ONS, to analyse the impact of COVID-19 on ethnic minorities in care settings. The Chief Inspector of Adult Social Care at CQC notes that the figures revealed a "disproportionate impact" of COVID-19 on individuals from ethnic minority backgrounds (CQC, 2020c). Urgent action is needed to:

- Better understand this impact and what is behind the numbers
- Examine the care people receive
- Alert everyone involved in adult social care of this increased risk to individuals from ethnic minority backgrounds
- Implement approaches which effectively address such disparities and improve the situation.

The data showed that 538 people from an ethnic minority background died from COVID-19 in care home settings during this period. However, CQC noted that collection of ethnicity data was not mandatory and was provided by the care home rather than the individual and therefore may not be an accurate representation (Booth, 2020). As such, although these figures are the most accurate available, it is important to also consider the limitations of the data provided by CQC (CQC, 2020c):

- Providers are required by law to notify CQC of the death of a person accessing their service. CQC asks for a range of demographic information about the person who died using a structured notification form. The ethnicity of the person who died is asked for, but it is not mandatory for the service to provide it (this information is also not available from a death certificate).

- The ethnicity reported on the notification form reflects the ethnicity that the provider selects – CQC cannot be sure that this would be the same as that which the person who died would self-report.
- The percentage of forms where ethnicity was unknown, not stated, missing or which could not be analysed (due to factors including illegibility of handwritten forms) was 13.8% in 2020 and 13.4% in 2019. It is possible that the death notifications where ethnicity is not recorded include a higher proportion of people from ethnic minorities groups but CQC are not able to determine this.
- Despite removing a large number of duplicates from this data, CQC cannot guarantee that every duplicate has been removed.

As a result, the figures released by CQC cannot be contextualised due to the lack of data on ethnicity across the adult social care sector population as a whole - this data is not consistently collected on admission by care homes or by other adult social care providers. The data is also unadjusted, meaning it does not take into account any other factors such as age structure, socio-economic status or geographical factors. (CQC, 2020c)

It is clear that urgent action is needed to fully understand the impact of COVID-19 on people from ethnic minority backgrounds in adult social care settings. The data published by CQC indicates a disproportionate impact on people from ethnic minority backgrounds from COVID-19 in adult social care, but the limitations of the data mean that much more work is needed. More data is critical to understand the actions that need to be taken across adult social care to ensure that all people are given safe, high quality care, appropriate for their individual needs. This data should highlight the much wider question of how ethnicity is recorded across adult social care.

Data, although important, is only one fragment of the wider issue. Everyone involved in adult social care needs to be alert to the increased risk to people from ethnic minority backgrounds from COVID-19 in care settings. Every part of the sector needs to work together to look at what is behind the numbers and really examine the care people receive and what can be done to improve this situation.

Recommendations

- Given that individuals from ethnic minority groups working in adult and social care are at a higher risk of COVID-19 exposure, their needs should be prioritised by employers and organisations. Staff should be made to feel comfortable to voice concerns without fear of job loss or discrimination. The NHS have now begun to risk assess staff according to increased vulnerability such as ethnicity (NHS Employers, 2020). This is a potential avenue for care providers to follow.
- Develop culturally competent occupational risk assessment tools that can be employed in a variety of occupational settings. Occupational risk assessments as an evidence-

based tool could help employees to understand risk and identify employees who may be at an increased risk of acquiring or transmitting infection. This is especially important for key workers who work with a large cross section of the general public or are in contact with those infected with COVID-19. Support and guidance must accompany the use of these tools to ensure that workers do not feel discriminated against and that they feel comfortable to identify risks and issues without fear of losing their job (PHE, 2020a).

- Mortality due to COVID-19 is higher in ethnic minorities and more must be done to protect and support staff working in health and social care services. There are significant concerns over the level of support that frontline workers have received. There is a fundamental issue of trust between employers and organisations, and this should be a priority to address as we move into the recovery phase of COVID-19. Further analysis is urgently needed to understand the morbidity and mortality of health and social care worker due to COVID-19, with a particular focus on ethnic minorities.

- Mortality data for the impact of COVID-19 on ethnic minorities has primarily relied on hospital reported deaths. Consequently, not including care home deaths could artificially inflate ethnic minority deaths as more White British older adults reside in nursing and residential homes.

- The lack of data on ethnicity across adult social care as a whole makes it more important that any information in this area is shared - both to aid understanding and highlight the need for more robust data, as well as directing action.

- A systematic and uniform approach is required to ensure accuracy of figures and data. Comprehensive and quality ethnicity data collection and recording should be mandated as part of routine NHS and social care data collection systems. This includes the recording of ethnicity for all mortality and morbidity data. The data should be readily available to local health and care partners to inform actions which mitigate the impact of COVID-19 on ethnic minorities.

4. Infection Prevention and Control Policies, Guidance and Methods

The Government outlined a plan for adult social care which was last updated on 16th April 2020 (DHSC, 2020e). The plan addresses four key areas: 1) controlling the spread of infection, 2) supporting the workforce, 3) supporting independence, supporting people at the end of their lives and responding to individual needs and 4) supporting local authorities and the providers of care. These areas have independent policies developed separately for different providers such as care homes and domiciliary care providers. These policies will be outlined below in relation to care home providers and their service users. The guidance is changing rapidly and is correct as of 27th July 2020.

4.1 Overall IPC Guidance

In addition to the Government's adult social care action plan (DHSC, 2020e) for supporting the sector in England throughout the COVID-19 outbreak, the Government (DHSC and PHE) has also issued 2 guidance collections: 1) COVID-19 adult social care guidance (DHSC and PHE, 2020) which includes information specific to the sector in its response to COVID-19 and 2) broader guidance on COVID-19 for health and social care settings, other non-clinical settings and for the general public (PHE, 2020b). These reports highlight that the key strategies to reduce the spread of infection is through the distribution and use of PPE, shielding and care groups, safe hospital discharge and testing, support for social care, information collection and governance and other areas.

4.2 Personal Protective Equipment (PPE)

PPE, such as gloves, aprons and facemasks, has only historically been needed in some adult social care settings. Care providers that need it have normally made their own arrangements to buy PPE through the market. However, as a result of COVID-19, global demand for this equipment is at unprecedented levels and several countries have placed export bans on the sale of PPE, making it extremely hard for many care providers to access PPE through their normal routes/suppliers. Consequently, the Government has stepped in to support the supply and distribution to the care sector, focusing on ensuring there is an emergency supply in place, whilst building a longer-term solution for distribution to the sector. In April the Government published its PPE plan (DHSC, 2020f) and PPE guidance (PHE, 2020h) provides details for its usage in the social care sector.

For PPE, the Government has seen a drastic shift in the need to supply PPE, moving from formerly providing PPE to 226 NHS trusts, to now providing to over 58,000 providers, including care homes, hospices, residential rehabilitation and community care organisations. The Government announced on 30th April that all PPE will be purchasable VAT free until 31 July 2020 owed to campaigning by the UK Home Care Association (UKHCA) (UKHCA, 2020a). As an initial step, social care providers across England received an emergency drop of **7 million** PPE items to help all care providers registered with CQC to meet immediate needs (DHSC, 2020e).

Local resilience forums (LRFs) (for GM this is AGMA Civil Contingencies and Resilience Unit (Cabinet Office, 2019)) play an important role in the local response to the pandemic. LRFs have been tasked with the management and distribution of PPE at the local level. On April 6th 2020, the Government authorised the release of a further **34 million** items of PPE across 38 LRFs, including **8 million** aprons, **4 million** masks and **20 million** pairs of gloves, which were mainly intended for social and primary care health services and were distributed through local

authorities (DHSC, 2020e). The Government made it clear that they will continue to communicate with local areas and distribute PPE by the LRFs. A National Supply Disruption Response (NSDR) system has also been established to respond to emergency PPE requests, including for the social care sector. This system includes:

- a 24/7 helpline for providers who have an urgent requirement (for example require stock in less than 72 hours), which providers have been unable to secure through business as usual channels and,
- an express freight desk solution to pick, pack and deliver an allocation of PPE to the provider once the case has been approved (DHSC, 2020c).

Where adult social care providers are unable to obtain PPE through their usual wholesalers and there remains an urgent need for additional stock, they can approach their LRF. PPE stock levels can be reported in CQC's 'Update CQC on the impact of COVID' online form. Providers should have been contacted by CQC to advise on the process.

The Government also rolled out a new national online supply "Clipper" distribution system which intends to provide a central hub for the supply and distribution of PPE to primary and social care providers (DHSC, 2020i). This system was established to ensure all health and social care workers have equal access to PPE. GPs, small social care providers, and domiciliary care providers, are able to register on the online PPE portal and order critical COVID-19 PPE as an emergency top-up system. Large care providers are currently unable to use the portal because they are more likely to be registered with a wholesaler. Multiple orders can be placed weekly, within limits determined by the Government (DHSC, 2020i). In the event that the care provider cannot get the PPE needed through wholesaler routes or the PPE portal, they are advised to contact their LRF. As for providers who are not invited to use the portal, such as large social care providers, they should also continue using their LRFs if unable to access their required PPE through wholesaler routes.

PHE have developed specific guidance for the donning and doffing (putting on and taking off) of PPE in care homes (PHE, 2020f, 2020n, 2020l, 2020m). The guidance also stipulates that when staff are providing care for individuals within two metres which involves direct contact such as; getting in/out of bed, feeding, dressing, bathing, grooming, toileting, dressings etc. or when unintended contact with clients is likely (e.g. when caring for service users with challenging behaviour), then full PPE should be worn (PHE, 2020n). This includes disposable gloves, a disposable plastic apron, a fluid-repellent surgical mask and eye protection such as goggles where service users have a cough or are vomiting. Staff and managers are advised to monitor residents for symptoms and whilst care home staff should wear PPE with all residents, as recommended, it may be appropriate to see individuals with symptoms at the end of the rounds (where safe to do so) and discuss with the manager ways to minimise direct

contact (where appropriate) to reduce risk. Providers are also tasked with advising staff how to clean goggles between visits, but PHE advise they should be worn continuously unless taking a break. It is further noted that PPE is only effective in combination with frequent hand washing and sanitisation. Face touching should be avoided where possible and masks should be disposed of if they become soiled, damp, damaged or uncomfortable. If the mask remains intact and does not need removing, it is advised as safe to wear the same mask between different care calls as it states there is no evidence to suggest that replacing face masks and eye protection between visits would reduce risk of infection and in fact, there may be more risk in repeatedly changing face masks or eye protection as it involves unnecessary face touching. It is advised that when touching is not required with residents, but contact within two metres is, such as for; removing medicines from their packaging, prompting people to take their medicines, preparing food for clients who can feed themselves without assistance or cleaning, that only a surgical mask along with hand washing and sanitisation is required. Waste should be placed in a refuse bag and disposed of as normal domestic waste unless the service user has symptoms of COVID-19 (new continuous cough, shortness of breath, fever). For waste from people with symptoms of COVID-19, waste from cleaning of areas where they have been (including disposable cloths and tissues) and PPE waste from their care it is advised that it (PHE, 2020b):

1. Should be put in a plastic rubbish bag and tied when full
2. Should then be placed in a second bin bag and tied and
3. Should be put in a suitable and secure place and marked for storage for 72 hours

Waste should be stored safely and securely kept away from children. This waste should not be put in communal waste areas until the waste has been stored for at least 72 hours. Storing for 72 hours saves unnecessary waste movements and minimises the risk to waste operatives. Such waste does not require a dedicated clinical waste collection in the above circumstances. The advice stipulates that reusable PPE such as masks can be worn, but must be cleaned between visits in line with manufacturer's instructions, which providers must discuss with their staff. Where there is a shortage of masks, it is advised that masks are folded inwardly from the outside and kept in a storage box or sealable bag with the staff member's name on it and accessed in line with hand sanitisation before and after use. Gloves and aprons should not be reused at any time. Where service users are identified as extremely vulnerable or shielding, PPE should be followed in line with the guidance for staff working with direct touch within two metres. Staff uniforms should be laundered after each shift and washed separately from other clothes, in a machine half full, at maximum temperature and then ironed or tumble-dried (PHE, 2020n).

Care home providers are still having to secure their own supplies of PPE as they are not getting the volumes they need from the promised online PPE portal system. Those involved in the pilot for the national rollout for the system found that only a fraction of the PPE required was being supplied to care homes. For example, one care provider which required over 35,000 face masks a week only received 400. Emergency drops have been helpful, but they have been sporadic and inconsistent, with some supplies not always enough to meet local demands. As such, providers could not rely on the national portal system (and considered it a last resort) and have had to secure their own supplies, despite needing to pay inflated prices.

Given that care home providers are still being forced to buy PPE on the open market to protect their staff and residents, this demonstrates that the NHS is still being prioritised, despite the apparent recognition that care homes are also part of the front line.

It will be much harder for care homes to find PPE supplies on the open market as businesses begin to reopen and also join the rush to buy PPE. As people return to work and the demand for PPE rises, people will begin to secure PPE for personal use, and this may consequently lead to another chronic national shortfall in PPE, resulting in an 'everyone for themselves' state/mentality in the health and social care sector. This will subsequently have further impacts on care home staff and residents, so it is important to ensure that vital social care workers have all the protection and equipment they need to look after the elderly and vulnerable.

Recommendations

- Improved communication between care home providers, local authorities and the NHS. The care sector has asked for consistent messaging across the NHS and care sectors about PPE so that everyone is clear about when to use PPE, and when it is not necessary.

- The care sector has also called for more support with training as whilst many parts of the sector work regularly with infection control, these are new requirements. For example, there was confusion around the re-use of certain items such as masks. Moreover, some parts of the sector, particularly smaller scale settings are not used to managing infectious disease and may not be familiar with infection control procedures.

- PHE should work with the care sector representative bodies to produce some specialised training videos for standard PPE and offer tailored insights and training into how the PPE guidance applies in particular care settings. Training and support should be offered locally to ensure safety and respond to the specific needs of staff working in the sector.

- PHE PPE guidelines in relation to masks and the re-use of them, indicates carers should wash these in between visits. As this may not be feasible for those working across different care homes, clarification regarding this is needed. It should also be

ascertained as to whether carers are using the same masks all day in the absence of availability of disposable masks and whether this is safe or not.

- Guidance on storage of COVID-19 waste is vague and should be clarified. For example, PHE guidance indicates it should be kept in service users' homes 'securely' away from other waste for 72 hours. It should be explored as to how feasible this is and how service users are storing waste.

- Funding and further provision beyond cuts to VAT for PPE will be necessary to support providers beyond 31st July 2020 and a review is required to understand the resources required to mitigate the impact of a potential second wave of COVID-19 in the winter and other influenza like illnesses.

- Ensure social care workers have equitable access to PPE and the protection and equipment they need to look after the elderly and vulnerable.

4.3 Shielding, Care Groups & Other IPC Measures

Those identified as 'clinically extremely vulnerable' may be at higher risk of serious illness if they catch COVID-19 and have therefore been advised to take additional action to prevent themselves from coming into contact with the virus. Such actions include shielding, which involves keeping outside interactions to a minimum (PHE, 2020k).

Shielding advice also applies to clinically extremely vulnerable people living in care homes. Care providers should carefully discuss this advice with the residents, families, carers and staff caring for such people to ensure the guidance is adhered to where appropriate (PHE, 2020k). There may be additional specific measures in place in residential and nursing facilities to ensure all those being cared for are protected as much as possible. Residents' individual circumstances must be considered in any decisions, ensuring that their human rights, personal choices, safety and dignity are upheld.

Although there is no specific guidance for how shielding can be safely conducted in care homes, DHSC (2020b) did publish a guidance for shielding in domiciliary care. This guidance advised that where possible, providers should divide the service users into 'care groups' and allocate subgroups of their staff team to provide care to each. If providers are unable to do this, then they may choose to divide their workforce into 2 groups: one to support the shielded, and the other to support the 'at risk' groups and everyone else. This is proposed as a practical suggestion, but if providers are unable to work in this way, local authorities are tasked with providing support through their plan to provide mutual aid. Where local authorities cannot support this, providers are asked to contact LRFs.

The guidance on shielding in domiciliary care (DHSC, 2020c) also stated that in order to further reduce contact between staff and service users, providers are advised to; have team meetings and handovers remotely, stagger times of entry to collect equipment, ensure that there is a high level of support and a focus on staff health and wellbeing, promote support initiatives offered through the Adult Social Care Action Plan, provide remote access to regular supervision, and remotely but securely share information relating to care between agencies by asking all staff to sign up to NHSmail, or another secure email system.

Recommendations

- There is detailed guidance on how to approach the shielded in domiciliary care, but not much guidance on those shielding in care homes and how care home providers should be dealing with it. It may be worth recommending that the care home providers divide the care home staff into 'care groups' or staff bubbles. Despite their best efforts, care home staff can often become inadvertent vectors to the transmission of COVID-19. Consequently, allocating subgroups of the staff team to provide care to specific service users (e.g. those shielding) may help reduce infection in care homes. However, it is also important to note the workforce and logistical challenges of doing this, especially for smaller care providers, and a decision about whether this is feasible to conduct should be made locally.

- The shielding guidance (PHE, 2020k) states that there 'may be additional specific measures in place for care homes to ensure all those being cared for and shielding are protected as much as possible', however the guidance does not elaborate or specify what these additional measures are. Separate guidance on how care homes can continue to operate safely when certain residents are shielding, and what changes would need to be made to further reduce contact between staff and residents is recommended.

- The guidance for shielding in domiciliary care providers (DHSC, 2020c) indicates that staff should conduct supervision and handovers remotely and that information should be shared over secure email such as NHSmail. There is no indication as to whether care homes have access to devices (such as NHSmail) that will enable care staff to fulfil these duties. A review should be conducted to ascertain whether staff have access to adequate equipment to enable information sharing and to ensure this is conducted in a confidential manner that meets data GDPR standards.

- From August 1st, the Government will no longer be advising individuals to shield unless the transmission of COVID-19 in the community begins to significantly increase. When shielding is relaxed, it is worth knowing what procedures should remain in place in care homes for people who are still concerned that they are clinically extremely vulnerable and are not yet comfortable to stop shielding.

4.4 Local Authority Responsibilities

Guidance published by DHSC (2020a) sets out how local authorities can use the new Care Act easements, created under the Coronavirus Act 2020, to ensure the best possible care is provided during this exceptional period. Local authorities and care providers are facing rapidly growing pressures as more support is required due to care workers are having to self-isolate or unable to work for other reasons. The Government has put in place a range of measures to help the care system manage these pressures. Local authorities should do everything they can to continue meeting their existing duties prior to the Coronavirus Act provisions coming into force. In the event that they are unable to do so, it is essential that they are able to streamline present assessment arrangements and prioritise care so that the most urgent needs are met. The powers in the Act enable them to prioritise more effectively where necessary than would be possible under the Care Act 2014 prior to its amendment. However, these powers are time-limited and are there to be used as narrowly as possible. Local authorities should only begin to exercise the Care Act easements when the demand on social care is increased to the extent where continuing to practice compliance with Care Act duties will likely result in urgent needs not being met, potentially risking life. Moreover, given that social care varies greatly across local authorities, the decision to operate the easements should be taken locally.

These changes fall into 4 groups and are applicable for as long as these powers are in force (DHSC, 2020a):

1. Local authorities will not have to carry out detailed assessments of people's care and support needs in compliance with pre-amendment Care Act requirements. However, requests for care and support are to still be responded to as quickly as possible.
2. Local authorities will not have to carry out financial assessments, but local authorities do have powers to retrospectively charge people for the care and support they receive during this period.
3. Local authorities will not have to prepare or review care and support plans. However, they will still be expected to carry out proportionate, person-centred care planning which provides sufficient information to all concerned, particularly those providing care and support, often at short notice. Where local authorities choose to revise plans, they must also continue to involve users and carers in any such revision.
4. Local authorities are still responsible for take all reasonable steps to meet the care need. The Coronavirus Act ensures that care is not withdrawn, but in the event that they are unable to meet all needs, the powers enable local authorities to prioritise those with the most pressing needs, for example enhanced support for people who are ill or self-isolating, and to temporarily delay or reduce other care provisions (DHSC, 2020a).

Local authorities and Clinical Commissioning Groups (CCGs) are expected to support care providers with the costs of extra staffing and other costs incurred during the pandemic, such as PPE. Local authorities should work with CCGs to support providers to identify other support needs. Service users and families should be involved in line with a personalised approach as

to how visits are amended/reduced. Where staffing needs cannot meet service user needs, providers should prioritise those identified as most vulnerable.

Recommendations

- There is currently no legislated time period for local authorities conducting care assessments. The guidance states to 'prioritise those in most need'. It may provide reassurances to service users and families if they had an idea of how long they should wait before chasing care arrangements.

- Guidance does not cover the prioritisation process in great detail and relies on informed and professional judgement. It would be helpful to have more specific guidance on the prioritisation process as it relates to care homes.

- The Care Act easements guidance for local authorities (DHSC, 2020a) does not make any mention of how local authorities can work with their LRFs. LRFs provide a forum to discuss, address and escalate local issues to central government. Whilst local authorities will act as the key deliverer of support, it is important that LRFs maintain situational awareness of how this cohort is being supported.

- Delivering this support system to the social care sector will require sustained collaboration between the public sector, LRFs, voluntary organisations and the private sector. Each local authority will refine its arrangements to suit the needs of its area. LRFs should continue to act as a strategic forum for local partners to develop an overall view of demand and supply of support in each area and to identify and address any issues arising from how the system is operating locally (Gov.uk, 2020c).

- It is also important to get more insight into the system (in relation to care homes) and the relationship local authorities and LRFs have with care home providers. Further investigation into how these relationships can be improved and strengthened – e.g. through better communication (such as having a clearer idea of the expectations and responsibilities) is urgently required.

- There is a need for pragmatic research with local authorities to understand the approaches being taken to care homes testing and IPC and to share learning.

4.5 Managing Outbreaks

In the event of a suspected outbreak of COVID-19 in a care home, the first step is for the care manager to refer to the local Health Protection Team in line with outbreak control plans that are in place for all infectious diseases (DHSC, 2020e). Appropriate public health action will be agreed specifically in response to COVID-19. This will include isolating cases, determining the best approach to isolating residents, reinforcing infection control practices and reviewing the plan if the situation escalates. An appropriate response to PPE, staffing, and controlling visitors will also be agreed. The authorities may need to consider an option that does more to

isolate vulnerable individuals who might be at risk of becoming infected and move people to different locations. There are risks on both sides. Many people in care homes are frail, and the move itself is likely to reduce quality of life and in some cases lead to death. It may still be necessary though to make that option available in case it becomes clinically and socially required. All care providers can and should look to their local authority and local health services for support. This is true whether the care provider has a contract with the local authority or not. Local authorities need to have a clear picture of all alternative local provision that could be used in the case of an outbreak. Where local authorities are unable to meet the emergency needs of a care provider, they should report into their Strategic Coordination Group of the LRF for additional support. The aim is to test all symptomatic residents in a care home setting with an outbreak.

All staff should use appropriate PPE (PHE, 2020g) whilst caring for possible or confirmed COVID-19 residents. Those staff who come into contact with a COVID-19 positive patient can remain at work due to short-lived exposure. Cohort staff should be implemented for those with COVID-19. Staff who are assessed as vulnerable should be assigned appropriate duties. Staff [or their family members] with symptoms should self-isolate for 7 days (DHSC, 2020e; Gov.uk, 2020a; PHE, 2020c). Where there is risk of lack of continuity of care, this should be reported to the local authority immediately (Gov.uk, 2020a).

4.6 Testing

Access to testing is key to reducing infection and saving lives. A key issue throughout this pandemic has been to improve the availability of testing for frontline social care and primary care staff and residents. The response has been to make more testing available. However, concerns around testing have continued, particularly related to communication, and there is an ongoing need for clarity about who is leading on testing and where to go for it.

4.6.1 Testing Residents and Safe Hospital Discharge from NHS to Social Care Setting

The Government has released a range of guidance for testing in care homes (DHSC, 2020e; Gov.uk, 2020a; PHE, 2020j).

Transferring in to care homes

A policy is being instituted to ensure all residents are tested prior to admission to care homes. All those being discharged (following the guidance issued by the NHS on hospital service discharge requirements (DHSC, 2020g)) from hospital – both symptomatic and asymptomatic – are to be tested for COVID-19 in advance of timely discharge (DHSC, 2020e; PHE, 2020j). Where a test result is pending, the patient will be discharged and should be isolated in the same way as a COVID-19 positive patient. Isolation is recommended for 14 days even if the tests are negative. Providers should follow the relevant guidance for use of PPE for COVID-

positive people during this 14-day period. Discharged patients should be admitted into care homes that are able to meet this requirement. If appropriate isolation is not available with a local care provider, the individual's local authority should secure alternative accommodation arrangements with assistance from the appropriate NHS primary and community-based care (DHSC, 2020e).

A negative test result is not required prior to transferring/admitting to a care home from hospital. Where a patient is being discharged to a care home and has a COVID-19 positive test, the hospital will provide the care home with the date and test result, the date of onset of symptoms, and a care plan from discharge to isolation (Gov.uk, 2020a). However, guidance also states that patients being discharged will be tested prior to discharge (DHSC, 2020e; PHE, 2020j). Where isolation can't be provided, the local authority will be asked to seek alternative care home provision (DHSC, 2020e). Hospital discharge pathways must include NHS organisations working closely with adult social care colleagues, the care sector and the voluntary sector. No person should be discharged before it is clinically safe to do so (DHSC, 2020g). The guidance advises that a trusted discharge assessor based at the hospital ward will provide; person-led follow up by giving people the direct number of the ward discharged from to call back for advice, a call back with results of investigations and any changes or updates to a person's management plan which means bringing them back under the same team or speciality, requests for community nursing follow up with a specific clinical need, requests for GPs to follow up in some selected cases. Most hospitals already use trusted assessor schemes for discharges to care homes and care at home services in their areas. All hospitals will train additional discharge staff to operate as trusted assessors where these do not already exist to supplement trusted assessors in existing schemes. These will be kept up to date in local NHS Discharge to Assess (D2A) arrangements. This should be prioritised. This requires hospital, community health, and social care providers to work together to make sure people have the right support in place.

During the transferring process from hospital to care homes, the Hospital Discharge Service and staff need to communicate with care homes on the COVID-19 status of the individual and whether the individual displays any symptoms consistent with the virus (Gov.uk, 2020a). PHE along with NHS England and the Department of Health and Social Care (DHSC) have agreed to prioritise testing for those with the highest risk of developing severe illness from COVID-19 (Gov.uk, 2020a). Consequently, the Government aims to offer more testing:

- to all patients in critical care for pneumonia, acute respiratory distress syndrome (ARDS) or flu like illness;
- to all other patients requiring admission to hospital for pneumonia, ARDS or flu like illness; and

- where an outbreak has occurred in a residential or care setting.

For those asymptomatic individuals transferring in from the community, the care home should consider isolating them for 14 days (DHSC, 2020e).

Asymptomatic patients should maintain social distancing wherever possible, with the extremely vulnerable following the shielding guidance set out by PHE (PHE, 2020d). Daily monitoring for symptoms should be implemented for staff and residents. Twice daily temperature checks should occur (≥37.8) whilst looking out for a new continuous cough, shortness of breath and loss of, or change to, their sense of smell or taste. Staff should be extra vigilant of symptoms for those with communication difficulties i.e. dementia, learning disabilities, etc. If present, cases should be reported to 111 and full infection control measures should be implemented (Gov.uk, 2020a).

Symptomatic residents should be promptly isolated, moved to a single room with a separate bathroom if possible, for 14 days. Contact 111 for advice on advice on assessment and testing. If further clinical assessment is advised, contact their GP for advice on escalation and to follow patient centred decision making. In a medical emergency dial 999 and implement full infection control measures (Gov.uk, 2020a).

Transferring out to hospital for urgent or essential care – firstly, assess for hospitalisation and consult the family or Power of Attorney and check their Advanced Care Plan (ACP) or Treatment Escalation Plan (TEP). If hospitalisation is needed, follow IPC measures and contact their GP for clinical management and End of Life care plans (Gov.uk, 2020a).

As testing capacity increases, the Government also aims to offer more comprehensive testing in care homes by (Gov.uk, 2020a):

- **Single symptomatic resident:** Testing may be offered following contact with NHS 111 or according to local protocol for swabbing and testing.
- **More than one symptomatic resident:** Inform the Health Protection Team. They may arrange swabbing for up to 5 initial possible cases to confirm the existence of an outbreak. Testing all cases is not required as this would not change subsequent management of the outbreak.

All infection control measures, such as isolation and cohorting, must continue until results for all tested residents are known or until the resident has completed the isolation period (Gov.uk, 2020a).

Tests will primarily be given to critical care patients for pneumonia, acute respiratory distress syndrome (ARDS) or flu like illness, all other patients with a need for hospital admission for the as mentioned conditions, or where there has been an outbreak in a residential or care

setting (Gov.uk, 2020a). However, it has been confirmed that no CE-marked tests are yet available in the UK for home use (Gov.uk, 2020b).

The tests being offered are PCR tests. The CQC is co-ordinating testing in the care sector and is contacting all 30,000 care providers to offer them the opportunity to test their staff.

On June 6th, the Government met the target to distribute test kits to all care homes for those over 65, or those who suffer from dementia. On June 8th, under the same programme, test kits were distributed to all care homes in England (DHSC, 2020d). From 6th July, whole-home testing in care homes without outbreaks has been implemented – weekly for staff and monthly for residents. As of July 8th, there had been an estimated 352,946 tests on care home residents for COVID-19 through DHSC testing routes in the UK and an estimated 100,900 care home residents in England tested for COVID-19 through PHE testing routes (DHSC, 2020d).

Recommendations

- More attention should be paid to the insidious spread of disease and harm contributed by asymptomatic COVID-19 carriers. The guidance on testing residents and hospital discharge seems to place more emphasis on symptomatic testing. There is not enough caution being placed on those who are asymptomatic or have the potential to be asymptomatic carriers. This is especially important considering a negative test result is not required prior to transferring/admitting a resident to a care home from hospital.

- There should be more specific guidelines requiring anyone admitted into a care home from hospital or from the community (whether symptomatic or asymptomatic), to complete the 14-day isolation period, unless they have been tested and can confirm they are not infected.

4.6.2 Testing Staff

In early April, social care staff were identified as a priority for testing. To cope with the significant staff absence rates due to self-isolation and to support care workers to return to work as soon as it is safe to do so, testing will be provided for social care workers and those in their household who have COVID-19-like symptoms (DHSC, 2020e). The DHSC is rolling out a self-referral testing system for social care workers across the country and there is now capacity available for all social care workers who need to be tested, just as there is for NHS staff and their families. As of July 8th, there was an estimated 741,021 tests on social care workers in the UK and their symptomatic household members for COVID-19 through DHSC testing routes (DHSC, 2020d). However, evidence (DHSC, 2020b) showed that there were gaps in testing for social care staff with most testing facilities for non-NHS staff not yet available, and with only around 50 regional drive-in sites, which require people to have access to a car. Walk-in testing centres are gradually opening up.

Recommendations

- A key issue throughout this pandemic has been to improve the availability of testing for frontline social care and primary care staff and residents. The response has been to make more testing available. However, concerns around testing have continued, particularly around communication, and there is an ongoing need for clarity about who is leading on testing and where to go for it.

- There are still gaps in testing for social care staff. Consequently, there is a need for more widely accessible testing facilities and centres to social care staff and their families.

4.6.3 Testing Process

To arrange a test, staff should speak to their employer, who should have information on how to make an appointment for their staff or residents through LRFs, their associated national department or directly through the DHSC. The CQC is leading coordination of testing. Employers are asked to identify social care staff and their families who are eligible for testing in line with PHE guidance (DHSC, 2020b) and refer them to their local testing centre. In order to ensure testing access is prioritised according to local need, CQC is also working with local decision makers and national bodies (such as Association of Directors of Adult Social Services (ADASS), LRFs, PHE etc.) (DHSC, 2020e).

A summary of the test process is provided below:

- The test involves taking a swab of the nose and the back of the throat. This can be self-administered or done by someone else (assisted).
- NHS staff and patients only can be tested within an NHS facility
- There are approximately 50 drive-through regional testing sites open across the country
- Mobile testing units are being developed – these tests will be offered where they are needed (rather than at regional testing site)
- Test kits are being provided directly to satellite centres (e.g. to places like hospitals with an urgent/significant need)
- Home test kits are being developed – these will be delivered to someone's door so that testing can take place without needing to leave the house
- Couriers will collect the samples and bring to the lab. The Government aims to make the test results available within 48 hours.

Concerns have been raised regarding negative tests, which may produce 'false negatives', for example if the virus was present in small amounts, or the specimen from the throat or nose wasn't taken correctly, or because the tests are not always accurate (Kings Fund, 2020a).

Recommendations

- More targeted training for care home staff on how to appropriately administer a COVID-19 test/swab on care home residents or themselves. This ensures that the tests being sent out are performed correctly, reducing the likelihood of 'false negatives' and also reducing the chance that the test needs to be repeated if the test is non-viable (which is especially important for those who find testing traumatic, such as older adults with dementia).

- Self-administered testing guidance should be developed to ensure testing is viable and is being conducted correctly. Guidance surrounding expected time periods for receiving results and next steps following positive testing outcomes should be clear.

- It is vital to establish which care providers have been contacted and supported regarding the testing process and a review is required to understand how and how many staff are accessing testing, particularly given the PHE report on disparities indicates many care staff travel to work via public transport and so may not be able to access these locations (PHE, 2020i). Given the higher risk to the ethnic minority community, these staff should have targeted support measures.

4.6.4 Test and Trace

On the 27th May 2020, the Government announced a test and trace programme, which was officially launched on 28th May 2020 (DHSC, 2020h). The programme aims to ensure that anyone who develops symptoms of COVID-19 can quickly be tested, and also includes targeted asymptomatic testing of NHS and social care staff and care home residents by tracing close, recent contacts of anyone who tests positive for COVID-19 and, if necessary, notifies them that they must self-isolate at home to help stop the spread of the virus. The system advises those in contact with others who have tested positive to isolate for at least seven days. Anyone else in the household must self-isolate for 14 days from when the positive tested person started having symptoms. Those identified must order a test immediately at www.nhs.uk/coronavirus or call 119 if they have no internet access. If the test is positive those people must complete the remainder of the seven-day self-isolation. Anyone in the household must also complete self-isolation for 14 days from when the positive tested person started having symptoms. If the test is negative, other household members no longer need to self-isolate. If the person is tested as positive, the NHS test and trace service will send them a text or email alert or call with instructions of how to share details of people with whom they have had close, recent contact and places they have visited. This is online via a secure website or via a call from a contract tracer. Contact tracers will; call or send a text message from 'NHS', asking for the person's full name and date of birth to confirm identity, and postcode to offer support while self-isolating, ask if the person is experiencing any coronavirus symptoms,

provide advice on what they must do as they have been in contact with someone who has tested positive for coronavirus.

Test and trace has been reported as not running effectively yet, with tracers only managing to make contact with less than three quarters (10,192 of 14,045) of people referred to the service in the two weeks to 10th June 2020 (BBC, 2020b). A recent study in the Lancet has indicated that a combination of isolation, intensive contact tracing and physical distancing measures may be the most effective and efficient way to achieve and maintain epidemic control (Kucharski *et al.*, 2020).

An NHS coronavirus app is currently being trialled on the Isle of Wight. However, on 17th June Lord Bethell, the Minister for Innovation at the DHSC, informed the Commons Science and Technology Committee that the app would not be completed until at least the winter (BBC, 2020a) with the Government announcing on 18th June they would be shifting its tracing app to a model based on technology provided by Apple and Google (BBC, 2020b).

Recommendations

- There are concerns about the inadequacy of test and trace. Test and trace relies upon consistent technology and upon the general public being honest about contacts. The service does not appear (as of 27th July 2020) to be 'up and running' in a consistent manner. Test and trace along with other combined consistent measures is essential to effective IPC and so a review of these processes is urgently required.

4.6.5 Different Types of Testing

Swab testing for virus

Swab testing requires nose and throat swab at present. There is huge test capacity in Greater Manchester laboratories (Manchester Royal; 2 laboratories, Royal Oldham Hospital, Alderley Park [one of the 4 so-called 'Lighthouse' labs building to 100,000 test per day capacity at each site). None of the laboratories are receiving anything like the number of specimens they have capacity for. There are drive in swabbing sites around Manchester which are not being heavily used.

Visiting care homes to conduct COVID-19 tests would present a risk of transmission of virus. If NHS labs do the testing, results will be made available by standard laboratory reporting procedures. If the Lighthouse labs are to test it is important to know that tests are presently accessed by a smartphone 'app' and are reported back to individuals via NPex and mobile phone text reporting. There are no clinical or demographic records held in Lighthouse laboratories. The lighthouse labs only test, they do not provide test kits or apps. Quality of swabbing is essential. If the swabs are poorly taken, the testing is a waste of time.

Antibody testing for virus

Current tests are being evaluated in the UK at PHE Porton Down and disparate other sites. There are considerable numbers of test evaluations in progress in Europe. Problems of specificity and sensitivity have been identified in all studies to date suggesting further refinement of tests will be needed.

The collection of dried blood spots (DBS), now, and at regular intervals would allow study of the temporal evolution of infection. The specimens can be safely stored until such time as reliable testing is available. The virus is not usually found in blood and when dried on paper is rendered inactive. To commence collection of samples, supplies will need to be obtained, there may be a lag time in obtaining supply. If this is to go ahead funding for kit component purchase must be obtained quickly (Personal communication).

It is feasible to consider weekly collection of swab and DBS samples. However, a properly taken throat swab is unpleasant. It may be that an adequately taken nasal swab might be more acceptable and there is limited data to suggest nasal swabbing is as good as oropharyngeal swabbing in diagnosis of acute infection (Wölfel *et al.*, 2020).

Rapid Tests & Self-sampling - ECDC – EU/EEA/UK Testing Methods and Assays

RT-PCR (reverse transcription - polymerase chain reaction) is the current test methodology applied in EU/EEA Member States. However, these tests require well-equipped laboratory facilities, highly skilled technologists and multiple reagents. Due to the infrastructure limitations and supply shortages, reliable rapid diagnostic tests for COVID-19, in particular rapid antigen or RNA detection tests, could alleviate the pressure on laboratories and expand testing capacity to meet the most urgent medical and public health needs (ECDC, 2020).

Rapid tests may provide results in 10–30 minutes, they are relatively simple to perform and interpret and therefore require limited test operator training. They may be intended either for use in hospital laboratories or near the point-of-care. Several commercial detection assays for COVID-19 are on the market, however information on their clinical performance is still limited (ECDC, 2020).

Serological assays for COVID-19 specific antibodies are under development and available assays are listed in the FIND inventory. Research groups have developed and are validating in-house antibody detection tests for COVID-19. Preliminary reports on ELISA assays have shown good correlation of antibody titration result with virus- neutralising antibodies. COVID-19 antibody detection tests have limited usefulness for early COVID-19 diagnosis as it can take 6–15 days after onset of symptoms for patients to become positive for detectable antibodies. However, the tests can be used for diagnosis of patients with delayed presentation to hospitals or retrospective diagnosis of milder cases. Once validated, commercial COVID-

19 antibody tests will be essential for performing large-scale seroepidemiological population surveys, for assessing the immune status of first-line responders and healthcare personnel and for guiding safe return to work as part of de-escalation strategies when transmission begins to abate. Collecting paired serum specimens at symptom onset, at admission, during the convalescent stage, or upon discharge will be useful for subsequent testing in seroepidemiological studies. Sera biobanking should be undertaken, particularly for hospitalised patients and during outbreaks in schools or confined facilities. WHO has provided several different types of protocols to study immune response in the population and in targeted groups (ECDC, 2020).

Self-sampling approaches may provide an efficient way to screen patients for COVID-19 on a large-scale basis, while reducing the risk of contaminating workers at healthcare facilities and decreasing the risk of non-infected people becoming infected in waiting rooms. To date, there are no validated self-testing or community-based COVID-19 testing assays available (ECDC, 2020).

Recommendations

- There is the potential to capture dried blood spots, especially considering current testing methods require in-person collection of specimens by a healthcare worker or trained staff member. Individuals who do not have access to testing facilities (e.g. due to needing a car) are risking infection exposure to both the residents and fellow staff members. It is also worth considering different systems for testing delivery – for example, training care home staff to carry out the tests.

- More evidence is needed to understand the benefits and risks of engaging in cohort testing, in particular swab and dry blood spot testing in care home settings across GM and the most effective approach e.g. frequency of testing, collection methods, contact tracing etc.

4.6.6 Difficulties Experienced in a Local Authority Rolling Out Mass Testing

A local authority rolling out mass testing during the early stages of the pandemic reported the following challenges in implementing the system (Personal Communication, Local Authority lead, 2020)

- Difficulty briefing and explaining the process and procedure of the swab tests to care homes.
    - Not all care homes answered the phone or emails and attended zoom sessions (which were held to brief them on the swab testing).
- Difficulties with care home residents/staff using the self-swab tests
    - Needs to induce a gag reflex and make eyes water when going up the nose for a good swab.

- Issues with the quality of the video providing instructions on swabbing
    - The self-swabbing video did not make this criteria (gag reflex and eyes water) clear and was not very good at explaining how to do this.
    - Having a microbiologist to run through the swabbing process is helpful
- A lot of issues with the courier service and transporting of the swab tests to and from the care homes.
    - Need to clearly establish when swabs will be delivered and collected
- The number of residents in care homes retrieved from official data was incorrect, which resulted in some care homes receiving too many swab tests, whilst other homes not receiving enough.

Recommendations

- There is a need to improve the communication between care home providers and local authorities. There is already a lot of strain and overburden on care services. Consequently, having a stronger relationship, as well as clearer collaboration and communication, between care home providers and local authorities will also improve the ease of care home management and the quality of the services being delivered.

- For mass testing to be rolled out in care homes, care home staff/residents would require training in order to correctly conduct and administer the swab tests. It would be preferable to have a microbiologist run through the process with them. Moreover, the video providing instructions on swabbing needs to be revised and improved upon.

- Some official data on care homes (e.g. number of residents) has been incorrect and urgently requires revision and updating.

4.7 Care After Death

Continuation of strict infection control measures is required after death to prevent spread of infection (Gov.uk, 2020a).

4.8 Staff Absences Due to COVID-19

The CQC (2020a) insight report has indicated that staff absences across the sector are a growing concern. Further reports indicate that there is an urgent need to support providers with staff absences and to develop sustainable solutions for building the social care workforce more broadly.

5. Qualitative findings

After initial discussions with key stakeholders in the local COVID-19 response, the need for a rapid, real-time evaluation and record of processes and procedures developed was recognised.

We have consulted with seven public health registrars, IPC leads and other key stakeholders across North West local authorities so far. Initial results from this qualitative research are shared below:

5.1 Aim

To map local systems and processes for testing and IPC in care homes and domiciliary care, identify gaps and challenges and potential solutions, with the learning shared among the local authorities as part of a rapid assessment approach.

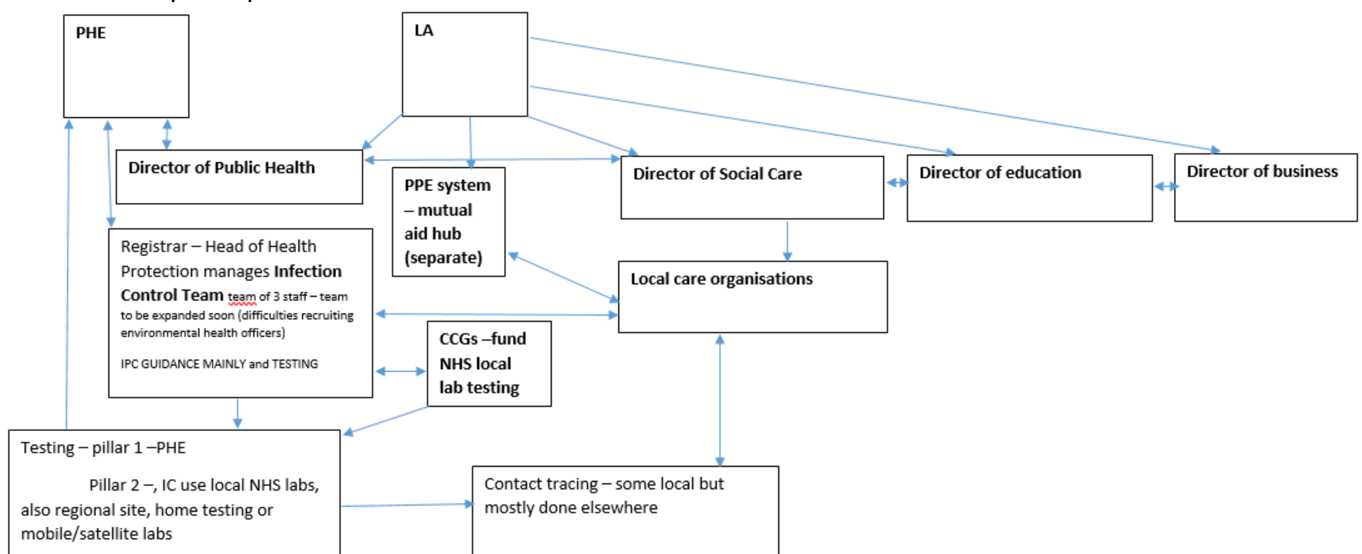
5.2 Objectives

- Map out processes and systems for testing and IPC in each participating local authority, including integration structures between department and organisations
- Identify local challenges and gaps
- Share learning between participating local authorities to help them overcome challenges
- Identify the extent to which care homes have been able to access testing and IPC measures
- Investigate the processes and challenges for testing and IPC in domiciliary care settings
- Document the results to inform learning for potential future outbreaks

5.3 Initial Results

Structures

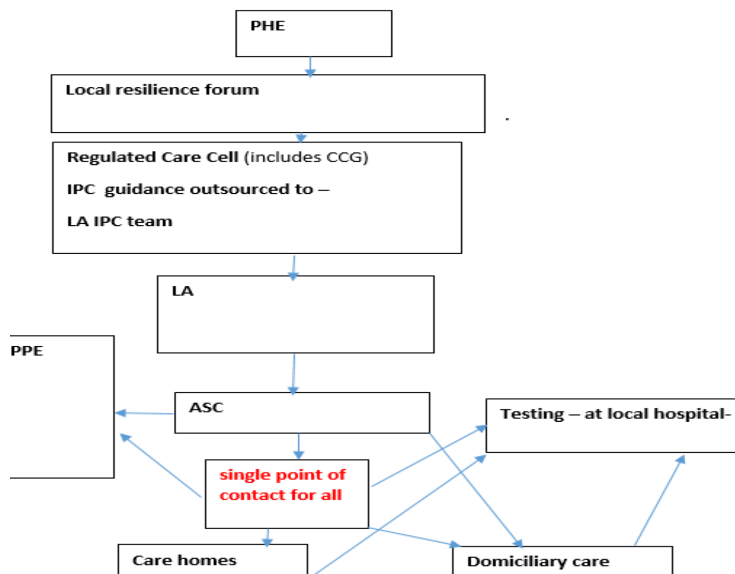
- Some structures across the North West have been fragmented. For example, some areas have had separate bodies responsible for various processes such as testing. An example is provided below:



- These areas have reported that initially it was challenging to communicate across the different areas of IPC, PPE and testing, but that this was overcome by establishing

daily meetings (for some bi-daily) where incidents, learning and emerging challenges and need could be shared.

Other areas reported a more centralised structure with a single point of contact such as the following:



- Fragmented structures created challenges with communication including communicating incidents and outbreaks, resource allocation, training and support systems.

Respondent 1:

> *Not having everyone in one place has meant that it was hard to get information about different need. We tried to get everyone working together but we each had our own sections to look after.*

- Single points of contact were particularly useful for sharing learning.
- Centralised structures led to more successful communication and knowledge sharing.
- Daily meetings / communication across teams and with providers enabled knowledge sharing and flagged ongoing issues.

Respondent 2:

> *It was really useful that I was the single point of contact. I shared all the incidents and learning with others and I was able to flag outbreaks. We*

had daily meetings twice a day which meant I could feed everything back quickly.

- Building on existing relationships already established with care providers meant information sharing was strong.

Respondent 3:

We already have excellent relationships with care homes so that allowed us to work closely with them. They trusted us and valued what we had to tell them, even when we were being forced to constantly change the advice as the policy changed. It hugely helped our ability to provide support having that existing relationship there.

- Some areas felt that the pandemic had helped established key links and relationships with key stakeholders where this had not been present previously and was a really positive outcome

Respondent 4:

It's great because actually the adult social care team are located with us and I never even knew who they were or what they did. Now I understand their roles more and we have built a good relationship so going forward we can build on that.

- Structures for liaising with domiciliary care providers were weaker than those established with care homes. Several areas hope to build more resilient structures for communicating with domiciliary care providers over the coming weeks/months.

Respondent 2:

Unfortunately, no, we don't have those strong relationships with the domiciliary care providers and interact quite separately with them. They tend to liaise just with the adult social care team but we did try to feed information to them through that route. We do hope to build these relationships going forward as it will be needed, we need to support the domiciliary care providers and people who self fund we know that now.

- Identifying lead staff who can work under highly pressurised emergency situations may be beneficial going forward.

Respondent 4:

> *What I've learned is how well I work under pressure. But I guess that means that going forward if a second wave hits and I've moved to my new post, will there be someone who replaces me who can work under a highly pressurised situation and be able to implement everything I've developed over the last few months.*

Overarching themes relevant to all geographical areas

- Policy was vague, changed frequently and was difficult for care providers to understand. This meant that stakeholders were concerned about local planning and whether there would be negative repercussions such as blame if planning was not implemented adequately.
- A huge role of registrars and IPC leads was to translate this knowledge and make it applicable for different settings e.g. care homes and domiciliary care and make it relevant to different geographical / local areas.

Respondent 4:

> *It still feels so chaotic, it's about as clear as mud on how that will work on an operational level. The Director of Public Health will now deploy testing – but who will be overseeing this? It's all about localised responsibility now but– we haven't got the infrastructure around it being local – there's no planning – is it so they can blame us? We can prep but will we be blamed for second wave?*

Respondent 6:

> *A huge part of our role was translating the policy for them, they were so scared and they didn't understand a lot of the policy and they didn't have time to read it all the amount of times it kept changing. Their priority was to keep the care home safe and do their actual jobs. Having us there was key to that policy translation for them. Policy looks good on paper but not in reality – it's for local interpretation.*

Respondent 1:

> *The amount of people we had calling us asking 'what does this mean?' I helped where I could but sometimes I didn't understand the policy myself as it was vague or contradictory – then I would have to redirect them to Public Health England.*

Respondent 5:

> *I just did not have time to do my actual job and to field hundreds of calls from the general public, care homes, providers, other staff, teachers, dentists all sorts. I tried my best and I worked into the night most days. I felt like I was letting people down but I really tried my hardest. I could have done with a few more team mates to help me with that element.*

- Policy that gives clearer guidance on accountability is required to avoid duplication of work and to make processes more streamlined. Distribution of accountability between local authorities and CCGs was particularly confusing and unhelpful, creating difficulty with the potential for service users to fall through the gap, with accessing testing and resourcing PPE particularly challenging especially for self-funders.
- Support structures for self-funders, domiciliary care, learning disabilities, assisted living and children and young people's services were often disjointed and under resourced. Clearer guidance, more resilient structures and resources are necessary, particularly around testing and PPE for these groups.
- Some areas reported strong links with CCGs and this created a collaborative approach to management of COVID-19. Conversely, less collaborative CCGs hindered efforts. Clearer accountability in policy may facilitate more resilient structures.

Respondent 1:

> *Accountability for IPC/PPE guidance is unclear and there is a tussle between local authorities and CCGs as to who is responsible and accountable for what. Policy was just too vague about this.*

Respondent 5:

> *The CCG were not that helpful, but who can blame them as the policy was so vague right? I had a lot of self-funders ringing me, they were so upset about having to read guidance and not understanding who was responsible for what – they also told me about their personal assistants not understanding guidance and not having access to PPE or knowing where to get it. Policy neglected them I think.*

- IPC leads and registrars reported working excessive hours to support providers, translate policy and develop new localised policies. Ring-fenced time and funding to employ new staff to support this going forward is urgently required.

Respondent 4:

Oh I worked 'til 12am (ish) some nights. I'm sure I'm not the only one who will tell you that. I worked during my annual leave. If I didn't do that, I dread to think honestly.

- Some local authorities reported immediately 'training the trainers' – facilitating prompt training of staff in care homes and other organisations so that these people could train other staff regarding correct use of PPE, IPC measures and how to perform testing. Webinars and virtual meetings were a welcome supplement for training but were not considered an adequate substitute for face-to-face training.

Respondent 3:

Our IPC staff went out to train care providers and then those people trained staff. We trained the trainers. This worked really well for us.

Respondent 1:

We made the time to do webinars to answer questions for staff and to demonstrate donning and doffing of PPE that sort of thing, but it was no substitute for face to face training, that was sorely missed I think.

- All local authority staff, IPC leads, registrars, care providers, managers and staff have gone above and beyond to support each other in every area. Stakeholders felt support from policymakers and successes were a result of their hard work and efforts. This way of working is not sustainable and staff reported absences, stress, anxiety, exhaustion, burnout and fatigue taking hold. Local authorities urgently require support, funding and resources to recruit more staff. Staff recruitment to support ongoing management is necessary and staff recruitment has been difficult.

- Policy did not consider the size of teams available at the local level. There is an assumption in policy that local teams have all the required resources to manage outbreaks, provide guidance, support testing and resource PPE. This was not the case and policymakers need to act quickly to provide sufficient resources at the local level.

Respondent 2:

We struggled to recruit staff like environmental officers, I mean who will come and work for us in the middle of a pandemic when they can get a much higher wage elsewhere like earning 30% more for the NHS? Our team was quite small anyway, you know?

Respondent 3:

Oh lord, I mean care staff were frightened and I mean really scared. They were scared of getting COVID, they were scared they couldn't get tests,

then they were scared of being blamed. They were scared for their own families. It was just awful.

Respondent 7:

My worry now is that exhaustion is setting in. That with staff absences and sickness. They need help.

Respondent 6:

They didn't take note of the size of our teams, we saw that having IPC one day a week was not sufficient so we addressed it ourselves. If we didn't bring that IPC in-house through the CCG then…it's not that we want to criticise Public Health England but we were asking them to make key decisions in January and they kept refusing.

- Areas where IPC was in-house and more integrated with health such as through CCGs was beneficial and building these links should be a key priority going forward.

Respondent 4:

We had everything in-house and we had the CCG integrated in the care cell. That meant we had strong relationships to build on and things were more efficient.

- Managing expectations of care providers and staff and avoiding ambiguity, changing information, fear, blame and stigma were important.

Respondent 3:

I speak to managers and ask them how they are doing, they all say they struggle with the constant change in attitude and then they think 'oh we don't need to take precautions' they want me to reassure them, it's about managing expectations. Managers then take it back to training, everything improves, then the policy changes again, then complacency sets in, then it drops, it's mixed message ups and downs in compliance they are exhausted.

Respondent 4:

Looking back I can't believe the prime minister has blamed care homes, it really didn't help matters.

- Many areas reported confusion from the public including faith leaders regarding all ceremonies and gatherings as policy focussed on weddings. Advice needs to be consistent and easily available.

Respondent 2:

> *I had faith leaders ringing me saying 'Okay 30 people for weddings but what about christenings? Other ceremonies?' It was vague so I had to either make a decision to advise or redirect them to Public Health England.*

- A key success has been establishing centralised information that can be shared across many settings and areas. Problems emerged initially when trying to source information.

Respondent 6:

> *We had to centralise the information quickly as the systems weren't able to do that initially. We struggled to find information. We have now set it up so that we can go to one place and they have all the information.*

- Domiciliary care structures need to be rapidly supported especially given the likely increase in demand for these services as a result of the pandemic.
- All participants flagged that care workers are underpaid and undervalued and this needs addressing urgently, particularly given the increased demands placed on them by the pandemic.

Respondent 4:

> *Yes domiciliary care needs support. If I'm honest they have been failed.*

Respondent 6:

> *These are people who are very badly paid and I don't mean to disparage them but they are often not well educated, they don't understand, they are poorly valued, sitting in cars all together, smoking together, going into different homes, masks around their chins, don't understand droplets and spread, sharing cars, they are doing a tough job, they need support.*

- Policy makers should focus urgently on prevention strategies to minimise the spread of infection
- There is a lack of guidance and support for unpaid carers and voluntary services and they need to be supported urgently as they have provided much support to the care sector.

Respondent 1:

I think this is a dawning realisation for many people that the social care structure is a mess and needs funding and the voluntary sector is not supported neither are unpaid carers.

Respondent 7:

Policy now needs consistency. It needs to be about prevention and early intervention. People now want to work with us and build those preventative relationships – it's brought us together and we will build on this. We have major concerns about people temporarily cancelling care packages – informal carers then rose so clarity in policy is needed here.

IPC measures

- IPC guidance from PHE was developed in isolation and would have benefited from consultation with IPC stakeholders. Some IPC leads felt guidance undermined training they had been providing for years, for example reusing PPE. Coupled with frequent changes in policy, staff felt their advice to care providers was constantly changing and this undermined their communication with care providers. Existing strong relationships with care providers in some areas buffered the impact of this; however, where relationships were less strong, this meant care providers were becoming disillusioned with constantly changing advice.

Respondent 6:

PHE developed their policies and guidance without us, they didn't consult us and we know our areas. Why didn't they consult IPC professionals in the first place? It's beyond me.

- Stakeholders felt that the national cultural shift in legislation and easing of social distancing measures created confusion and may lead to complacency with IPC measures going forward.

Respondent 7:

Yes we are trying to regenerate the economy but we don't want our care staff going to pubs. Perhaps key workers should not be allowed to go or think more about what they do. You can do things in a safer way, socially distanced in a safe way or enclosed public place. They can enforce face

coverings. They are going to have to learn to live in a different way, if test and trace works we can find that helpful but can't just rely on that.

- Care providers created bubbles or staff groups to minimise infection. Car sharing was used to support staff who would normally use public transport.

Respondent 3:

Care providers created staff bubbles, they found new ways of working like having certain staff only on one floor in bubbles or care groups to stop spread of infection and this worked better for residents as then they had continuity, so this was a happy accident.

Respondent 7:

Staff shared cars so they didn't have to travel on public transport and that helped.

- Guidance on communal areas such as staff rooms and breakout areas was inadequate and meant some areas had seen outbreaks due to PPE doffing and weaker IPC measures in these areas. Clearer guidance is urgently needed.

Respondent 2:

There were reports of outbreaks from staff rooms and I think what was happening was staff were doffing their PPE and sharing a cuppa and cake and having a cuddle for support not realising they were just as likely to spread COVID in the staff room. It just wasn't clear to people that it was needed everywhere not just when you're caring for someone.

Respondent 5:

Communal areas were a nightmare and I don't know if there was thought as to the need to deep clean the communal areas.

- Some care providers have used the ASC ring-fenced funding to install IPC facilities such as hand gel dispensers and PPE dispensers next to residents doors in care homes. This has worked well in enabling staff to efficiently and safely don and doff PPE and maintain high IPC standards.

Respondent 7:

Our providers have used the grant money to install PPE dispensers hanging over residents' doors, in staff rooms, making it easy for them.

Testing and discharge

- Some stakeholders felt pressured to take on patients and challenged hospitals, requesting that patients were accepted only upon the condition that items of PPE such as goggles were sent with patients. Some hospitals agreed to this and so this could be adopted by other areas.

Respondent 4:

> *I mean, the pressure from hospital discharge teams we had saying 'call this care home, call them and get them to take them back call them call them!' Often people are better off in care homes than hospitals but they didn't have the appropriate PPE. We told them right, we'll ask them but on the condition you send them with a pair of goggles to protect the staff member.*

- Advice regarding isolation periods was changeable and confusing (e.g. shifts between 14 days and 28 days isolation). Clarity and consistency is needed going forwards. Concerns regarding the isolation of residents and their emotional/psychological well-being have also been raised.

Respondent 6:

> *It was 14 days then back to 28 days then back to PHE 'what is the guidance?' Back and forth back and forth. If they come back positive are they at the end of an outbreak or not? Is it outbreak resolved (after last symptomatic person) or is it after last negative outbreak? Policy looks good on paper but not in reality.*

- Some residents/patients were discharged via public transport and local authorities had to resource private transport for these people. Guidance regarding safe discharge should address this urgently.

Respondent 3:

> *We arranged taxis for the patients to get back to care homes and their homes as the hospital were sending them home on public transport.*

- Testing of staff was a concern. Policy should ensure testing is available for all staff including administrative, cleaning, kitchen and other staff. Concerns were raised regarding people not employed by care providers such as tradespeople and agency staff and their use of PPE or lack thereof.

Respondent 2:

Nobody was testing the kitchen staff or the admin staff or people coming in and out like you know tradesmen. I don't think it crossed anyone's mind that they would need testing or PPE.

- Testing for learning disability service users, assisted living and children and young people is under resourced.
- Concerns were raised around the current inadequacy of test and trace.
- There should be further consideration given by policy-makers to the ethics surrounding learning disability service-users who can find testing traumatic. This also applies to older adults with dementia.

Respondent 7:

There's been scepticism around the value of testing. They were saying on tv 'everyone can get a test'. Right then, we've got someone symptomatic, so IPC won't bother testing if there's already someone positive. Then their family members find out their family member wasn't tested so they go to the local MP and at the end of the day that person needs testing!

Respondent 6:

We had families calling saying please don't test our relative or come in PPE it will really upset them. We couldn't explain enough that our staff need that protection.

Respondent 3:

We had to weigh it up, is it ethically justifiable? Who do we test? We don't test all for sake of testing and some found it very difficult and distressing, some residents were unwilling or understanding was difficult so we had to think about should we test with no symptom? We had to treat it case by case.

- Concerns were raised around the location of test sites and the ease of access, particularly for staff who do not drive. Where home tests became available, there were concerns around whether people were conducting these correctly and clear guidance on how to do these is required.

Respondent 1:

> *Some care staff were expected to go to a test site miles away and they didn't even drive.*

Personal Protective Equipment (PPE)

- Training on donning and doffing of PPE needs to be supported swiftly.

Respondent 7:

> *Some staff were not even changing gloves between service users so there's general training issues, low paid jobs, low valued, low training, we did a mini audit – are all your staff changing at work etc? Not travelling in uniform on public transport? There were some language communication issues e.g. none- English speakers.*

- There was confusion around the re-use of certain items such as masks, especially for domiciliary carers, and how possible it is to clean items in-between visits.
- Policy dictates to re-use items where new PPE is not available which undermines established safe IPC practice. Policy also dictates for domiciliary carers to wash reusable items in-between home visits – this is not feasible. Concerns have been raised around the environmental damage being caused due to increased use of disposable items.

Respondent 5:

> *As for the reusing masks and washing in-between visits are they serious? How do staff do that?*

Respondent 6:

> *Everything the guidance said about reusing PPE or folding it up etc went against everything we have ever been teaching people as IPC experts. You simply don't reuse PPE it just isn't safe practice at all. It undermined years of expertise and knowledge.*

Respondent 1:

> *With my sustainability and environmental hat on, I did worry about the waste and the damage to the environment of all this PPE being used.*

- Training around PPE and Aerosol Generating Procedures (AGPs) is urgently required. It has become apparent that there is much more use of these in the community such

as via domiciliary carers than was previously known. Some areas have begun audits to establish how wide spread this is.

Respondent 1:

There was inadequate training in IPC PPE for care staff who hadn't used it before and particularly around aerosol generator procedures.

Respondent 7:

There was lots more people using AGPs than we had realised so we are now doing an audit to make sure we know where and when and we can offer training now.

- Training for staff who do not usually wear PPE such as social workers was not included in policy and these people require support going forward. This applies to all health and care staff and should also be promptly considered in relation to other sectors such as dentistry and education/teaching.

Respondent 1:

I really worry about social workers and teachers and dentists, they were worried you see about how to use PPE, they just hadn't had that sort of training before to the level they needed any way.

- Dehydration of staff due to PPE should be addressed more clearly in policy especially for the summer months.

Respondent 3:

There were lots of staff getting dehydrated and it's a worry for the summer. Policy needs to address that.

- Some areas had developed formulas for working out how much PPE was needed for each home/provider and this ensured that PPE was evenly and fairly distributed.

Respondent 2:

Yes we developed a formula as people were over egging what PPE they needed probably through fear and wanting to stockpile. We needed to make it equitable so we developed a formula to ensure it was fair.

5.4 Initial conclusions from the qualitative findings

As the above summary from initial interviews shows, local authorities and health systems have undertaken a huge amount of work to mitigate the impact of COVID-19 in their areas during the initial crisis, often whilst national guidance has been lacking or unclear. Innovative approaches have been developed to overcome emerging challenges, and new relationships have been formed between organisations and departments to support this process. The response in each locality has been different depending on the local infrastructure and expertise in place, and already it is possible to share learning about common concerns and best practice. Nevertheless, the research has highlighted a number of areas of ongoing concern, such as PPE fatigue, lack of staffing and resources, lack of clear guidance, and issues around domiciliary care, which require both immediate attention, and sufficient preparatory work in advance of a potential second wave.

The next stage of the rapid evaluation will draw on some of these major emerging themes to continue to a) map and record the locality response as the epidemic progresses b) examine how local infrastructure and policy develops, sharing new learning and c) feedback these results to policy-makers to improve support and guidance moving forward.

6. Conclusions and recommendations

Ethnic minorities and Care homes

- Given that individuals from ethnic minorities working in adult and social care are at a higher risk of COVID-19 exposure, they should be prioritised by employers and organisations to address their needs. Staff should be made to feel comfortable and safe to voice concerns without fear of job loss or discrimination.

- Develop culturally competent occupational risk assessment tools that can be employed in a variety of occupational settings. Occupational risk assessments as an evidence-based tool could help employees to understand risk and identify employees who may be at an increased risk of acquiring or transmitting infection. This is especially important for key workers who work with a large cross section of the general public or are in contact with those infected with COVID-19. However, again, support and guidance must accompany the use of these tools to ensure that workers do not feel discriminated against and that they feel comfortable to identify risks and issues without fear of losing their job (PHE, 2020a).

- Mortality due to COVID-19 is higher in ethnic minorities and more must be done to protect and support staff working in health and social care services. There are significant concerns over the support that ethnic minority frontline workers have received. There is a fundamental issue of trust between employers and organisations, and this should be a priority to address as we move into the recovery phase of COVID-19.

- Mortality data for the impact of COVID-19 on ethnic minorities has primarily relied on hospital reported deaths. Consequently, not including care home deaths could artificially inflate deaths as more White British older adults reside in nursing and

residential homes. Further analysis is urgently needed to understand the morbidity and mortality of health and social care workers due to COVID-19, with a particular focus on ethnic minorities.

- The lack of data on ethnicity across adult social care as a whole makes it more important that any information in this area is shared - both to aid understanding and highlight the need for more robust data, as well as directing action.

- It is clear that urgent action is needed to fully understand the impact of COVID-19 on people from BME backgrounds in adult social care settings. The data published by CQC indicates a disproportionate impact on people from ethnic minority backgrounds from COVID-19 in adult social care, but the limitations of the data mean that much more work is needed. More data is critical to understanding the actions that need to be taken across adult social care to ensure that all people are given safe, high quality care, appropriate for their individual needs. This data should highlight the much wider question of how ethnicity is recorded across adult social care.

- A more systematic and uniformed approach is required to ensure accuracy of figures and data. Comprehensive and quality ethnicity data collection and recording should be mandated as part of routine NHS and social care data collection systems. This includes the recording of ethnicity for all mortality and morbidity data. The data should be readily available to local health and care partners to inform actions which mitigate the impact of COVID-19 on ethnic minorities.

- Data, although important, is only one fragment of the wider issue. Everyone involved in adult social care needs to be alert to the increased risk to people from ethnic minority backgrounds from COVID-19 in care settings. Every part of the sector needs to work together to look at what is behind the numbers and really examine the care people receive and what can be done to improve this situation.

Personal Protective Equipment (PPE)

- Improved communication between care home providers, local authorities and the NHS. The care sector has asked for there to be consistent messaging across the NHS and care sector about PPE so that everyone is clear about when to use PPE, and when it is not necessary.

- The care sector has also called for more support with training as whilst many parts of the sector work regularly with infection control, these are new requirements. For example, there was confusion around the re-use of certain items such as masks. Moreover, some parts of the sector, particularly smaller scale settings are not used to managing infectious disease and may not be familiar with infection control procedures.

- PHE should work with the care sector representative bodies to produce some specialised training videos for standard PPE and offer tailored insights and training into how the PPE guidance applies in particular care settings. Training and support should be offered locally to ensure safety and respond to the specific needs of staff working in the sector.

- PHE PPE guidelines in relation to masks and the re-use of them, indicates carers should wash these in between visits. As this may not be feasible for those working across different care homes, clarification regarding this is needed. It should also be

ascertained as to whether carers are using the same masks all day in the absence of availability of disposable masks and whether this is safe or not.

- Guidance on storage of COVID-19 waste is vague and should be clarified. For example, PHE guidance indicates it should be kept in service users' homes 'securely' away from other waste for 72 hours. It should be explored as to how feasible this is and how service users are storing waste.

- Funding and further provision beyond cuts to VAT for PPE will be necessary to support providers beyond the 31st July 2020 and a review is required to understand the resources required to mitigate the impact of a potential second wave of COVID-19 in the winter and other influenza like illnesses.

- Care home providers are still having to secure their own supplies of PPE as they are not getting the volumes they need from the promised online PPE portal system. Those involved in the pilot for the national rollout for the system found that only a fraction of the PPE required was being supplied to care homes. For example, one care provider which required over 35,000 face masks a week only received 400. Emergency drops have been helpful, but they have been sporadic and inconsistent, with some supplies not always enough to meet local demands. As such, providers could not rely on the national portal system (and considered it a last resort) and have had to secure their own supplies, despite needing to pay inflated prices.

- Given that care home providers are still being forced to buy PPE on the open market to protect their staff and residents, this demonstrates that the NHS is still being prioritised, despite the apparent recognition that care homes are also part of the front line.

- It will be much harder for care homes to find PPE supplies on the open market as businesses begin to reopen and also join the rush to buy PPE. As people return to work and the demand for PPE rises, people will begin to secure PPE for personal use, and this may consequently lead to another chronic national shortfall in PPE, resulting in an 'everyone for themselves' state/mentality in the health and social care sector. This will subsequently have further impacts on care home staff and residents, so it is important to ensure that vital social care workers have all the protection and equipment they need to look after the elderly and vulnerable.

- Ensure social care workers have equitable access to PPE and the protection and equipment they need to look after the elderly and vulnerable.

Shielding, Care Groups & Other IPC Measures

- There is detailed guidance on how to approach the shielded in domiciliary care, but not much guidance on those shielding in care homes and how care home providers should be dealing with it. Dividing care home staff into 'care groups' or staff bubbles should be investigated. Despite their best efforts, care home workers often become inadvertent vectors to the transmission of COVID-19. Consequently, allocating subgroups of the staff team to provide care to specific service users (e.g. those shielding) may help reduce infection in care homes. However, it is also important to note the workforce and logistical challenges of doing this, especially for smaller care providers, and a decision about whether this is feasible to conduct should be made locally.

- The shielding guidance (PHE, 2020k) states that there ‘may be additional specific measures in place for care homes to ensure all those being cared for and shielding are protected as much as possible’, however the guidance does not elaborate or specify what these additional measures are. Separate guidance on how care homes can continue to operate safely when certain residents are shielding, and what changes would need to be made to further reduce contact between staff and residents is recommended.

- The guidance for shielding in domiciliary care providers (DHSC, 2020c) indicates that staff should conduct supervision and handovers remotely. It states that information should be shared over secure email such as NHSmail. There is no indication as to whether care homes have access to devices (such as NHSmail) that will enable care staff to fulfil these duties. A review should be conducted to ascertain whether staff have access to adequate equipment for this to enable information sharing and to ensure this is conducted in a confidential manner that meets data GDPR standards.

- From August 1st, the Government will no longer be advising individuals to shield unless the transmission of COVID-19 in the community begins to significantly increase. When shielding is relaxed, it is worth knowing what procedures should remain in place in care homes for people who are still concerned that they are clinically extremely vulnerable and are not yet comfortable to stop shielding.

Local Authority Responsibilities

- There is currently no legislated time for local authorities to conduct care assessments. The guidance states to ‘prioritise those in most need’. It may provide reassurances to service users and families if they had an idea of how long they should wait before chasing care arrangements.

- Guidance does not cover the prioritisation process in great detail and states that it will often rely on the use of informed and professional judgement. It would be helpful to have more specific guidance on the prioritisation process as it relates to care homes.

- The Care Act easements guidance for local authorities (DHSC, 2020a) did not make any mention of how local authorities can work with their LRFs. LRFs provide a forum to discuss, address and escalate local issues to central government. Whilst local authorities will act as the key deliverer of support, it is important that LRFs maintain situational awareness of how this cohort is being supported.

- Delivering this support system to the social care sector will require sustained collaboration between the public sector, LRFs, voluntary organisations and the private sector. Each local authority will refine its arrangements to suit the needs of its area. LRFs should continue to act as a strategic forum for local partners to develop an overall view of demand and supply of support in each area and to identify and address any issues arising from how the system is operating locally (Gov.uk, 2020c).

- It is also important to get more insight into the system (in relation to care homes) and the relationship local authorities and LRFs have with care home providers. Further investigation into how these relationships can be improved and strengthened – e.g. through better communication (such as having a clearer idea of the expectations and responsibilities) – is urgently required.

- There is a need for pragmatic research with local authorities to understand the approaches being taken to care homes testing and IPC and to share learning.

Testing Residents and Safe Hospital Discharge from NHS to Social Care Setting

- More attention should be paid to the insidious spread of disease and harm contributed by asymptomatic COVID-19 carriers. The guidance on testing residents and hospital discharge seems to place more emphasis on symptomatic testing. There is not enough caution being placed on those who are asymptomatic or have the potential to be asymptomatic carriers. This is especially important considering a negative test result is not required prior to transferring/admitting a resident to a care home from hospital. There should be more specific guidelines to say that anyone being admitted into a care home from hospital or from the community (whether symptomatic or asymptomatic), must complete the 14-day isolation period, unless they have been tested and can confirm they are not infected.

Testing Staff

- A key issue throughout this pandemic has been to improve the availability of testing for frontline social care and primary care staff and residents. The response has been to make more testing available. However, concerns around testing have continued, particularly around communication, and there is an ongoing need for clarity about who is leading on testing and where to go for it.

- There are still gaps in testing for social care staff. Consequently, there is a need for more widely accessible testing facilities and centres for social care staff and their families.

- Allocating subgroups of the staff team to provide care to specific service users (e.g. those shielding) may help reduce infection in care homes. This will be especially important for newly admitted residents (who are either coming from the community or were discharged from the hospital) seeing as they may be infected (sometimes asymptomatically), and therefore pose a risk to both staff as well as other care home residents. However, it is also important to note the workforce and logistical challenges of doing this, especially for smaller care providers, and a decision about whether this is feasible to conduct should be made locally.

Testing Process

- More targeted training for care home staff on how to appropriately administer a COVID-19 test/swab on care home residents or themselves. This ensures that the tests being sent out were performed correctly, reducing the likelihood of ‘false negatives’ and also reducing the chance that the test needs to be repeated if the test was non-viable (which is especially important for those who find testing traumatic, such as older adults with dementia).

- Self-administered testing guidance should be developed to ensure testing is viable and is being conducted correctly, as should the guidance surrounding expected time periods for receiving results and next steps following positive testing outcomes.

- It is vital to establish which care providers have been contacted and supported regarding the testing process and a review is required to understand how and how many staff are accessing testing given the disparities report indicates many care staff travel to work via public transport and so may not be able to access these locations. Given the higher risk to people from ethnic minorities, these staff should have targeted support measures.

Test and Trace

- There are concerns about the inadequacy of test and trace. Test and trace relies upon consistent technology and upon the general public being honest about contacts they have had. The service does not appear (as of 27th July 2020) to be ‘up and running’ in a consistent manner. Test and trace along with other combined consistent measures is essential to effective IPC measures and so a review of these processes is urgently required.

Different Types of Testing

- There is the potential to capture dried blood spots, especially considering current testing methods require in-person collection of specimens by a healthcare worker or trained staff member. Individuals who do not have access to testing facilities (e.g. due to needing a car) are risking infection exposure to both the residents and fellow staff members. It is also worth considering different systems for testing delivery – for example, training care home staff to carry out the tests.

- More evidence is needed to understand the benefits and risks of engaging in cohort testing, in particular swab and dry blood spot testing in care home settings across GM and the most effective approach e.g. frequency of testing, collection methods, contact tracing etc.

Rolling Out Mass Testing

- There is a need to improve the communication between care home providers and local authorities. There is already a lot of strain and overburden on care services. Consequently, having a stronger relationship, as well as clearer collaboration and communication, between care home providers and local authorities will also improve the ease of care home management and the quality of the services being delivered.

- If mass testing was rolled out in care homes, care home staff/residents would require training in order to correctly conduct and administer the swab tests. It would be preferable to have a microbiologist run through the process with them. Moreover, the video providing instructions on swabbing needs to be revised and improved upon.

- Some official data on care homes (e.g. number of residents) has been incorrect and urgently requires revision and updating.

Staff Absences Due to COVID-19

- The CQC (2020a) insight report has indicated that staff absences across the sector are a growing concern. Further reports from others indicate that there is an urgent need to support providers with staff absences and to develop sustainable solutions for building the social care workforce more broadly.

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Appendix 1: CQC data

CQC data incorporating provider, contact details and addresses can be accessed here: https://www.cqc.org.uk/about-us/transparency/using-cqc-data

Appendix 2: GM Independent Prosperity Review

The GM Independent Prosperity Review (Adult Social Care, 2019) reviews the sector make-up and workforce and is available here:

https://www.greatermanchester-ca.gov.uk/media/1908/gmipr_tr_adultsocialcare2.pdf

Appendix 3: Skills for Care – Social care workforce data

These reports (Skills for Care, 2019a, 2019b) provide information on the adult social care sector and workforce in England and in the North West region, including adult social care workforce estimates by care service of employment and type of employer.

- https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/documents/Regional-reports/North-West-regional-report-2019.pdf

- https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/documents/State-of-the-adult-social-care-sector/State-of-Report-2019.pdf

Report 2: Infection prevention control in domiciliary care settings in Greater Manchester: a health (care) needs assessment

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1. Introduction

Infection prevention and control (IPC) measures and systems are a key foundation within the social care sector and legislation requires all care providers to follow guidelines ensuring that they are at all times 'assessing the risk of, and preventing, detecting and controlling the spread of, infections, including those that are health care associated' (Health and Social Care Act, 2008, sch 12 cl h). The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) or COVID-19 pandemic has made increasing demands on IPC measures and the adult social care sector more broadly, whose remit, scope and forms of service delivery are complex (Department of Health and Social Care (DHSC), 2018a). The sector includes services for older people who often have underlying conditions, making adult social care particularly vulnerable to the impact of COVID (Comas-Herrera et al., 2020). As older people (those above 65 years), who require care and support from others have been cited as being particularly susceptible to severe infection by COVID-19 (WHO, 2020a), effective IPC measures are more critical than ever to minimise the spread of infection and COVID-19-related deaths.

Care homes within the North West rank amongst the highest in terms of outbreaks and approximately 15% (as of 11th June 2020) of the region's domiciliary care (which includes; care provided at home, supported living and extra care housing) providers have reported caring for service users with COVID-19 (CQC, 2020a). Providers have reported facing a shortfall of service users due to increased service user mortalities and an inability to take on new service users (CQC, 2020a). Furthermore, providers are struggling to fund and source personal protective equipment (PPE) (the cost of which is hugely inflated), which is a vital factor for effective infection prevention and control measures and many insurance companies are unwilling to provide services coverage to providers who take on COVID-19 patients (CQC, 2020a). The sector was under financial pressure prior to the pandemic, which is now having a significant impact on the financial viability of these services (CQC, 2020a).

A lack of financial and IPC resources for domiciliary care providers such as PPE, may mean staff are unable to adequately care for those they are responsible for, which may result in suffering or loss of life (CQC, 2020a). This may also cause many care workers to experience a degree of moral distress and moral injury (Farnsworth et al., 2017). A lack of resources, clear guidance and training may also mean staff perceive themselves as at increased risk and view their employers as inadequately attending to their health and well-being (Williamson et al., 2020). This may have further adverse effects upon care staff sickness absence. Staff morale and well-being has already recently been reported as adversely affected by COVID-19 (CQC, 2020a). The CQC (2020a) has indicated COVID-19 related sickness absence is rife

across the sector (with 4.6 million working days lost in the health and social care sectors prior to the pandemic (HSE, 2019a)) and providers are experiencing an inability to recruit cover staff from agencies (CQC, 2020a). Added to this, care providers have reported burnout, extreme anxiety and distress due to multiple service user and staff deaths, as well as financial concerns (CQC, 2020a). Further increases to instability in the sector's labour market will increase market fragility, placing greater pressure on local authorities, informal carers and voluntary agencies, whilst increasing unmet care needs (CQC, 2020a).

Women account for 83% of the social care workforce nationally (Skills for Care, 2019a) and 82% of the North West workforce (Skills for Care, 2019b). National figures indicate that deaths in caring occupations are statistically higher for women in these sectors, in comparison to those of females in other occupations (ONS, 2020a). People from ethnic minority backgrounds are also disproportionately affected, with recent reports from Public Health England (PHE,(2020a and PHE,2020e) indicating that those working in social care had significantly high rates of death from COVID-19. The report confirms that those from ethnic minority communities are over-represented among those who are ill with COVID-19 and the risk of dying from COVID-19 is increased in individuals from these communities compared to the White population. These findings are particularly pertinent to the adult social care sector as care workers from ethnic minority backgrounds account for 21% of the adult social care workforce nationally (though this is to a lesser extent in the North West at 9%) (Skills for Care, 2019a).

In addition to this, COVID-19 and other infections are transmitted to older people by the people caring for them (families and care staff) and the government has estimated there are over five million people providing informal or unpaid care nationally (DHSC, 2020c). A recent study on healthcare practitioners has shown that droplet and inhalation transmission routes predominate over the contact route, contributing up to 57% of the probability of infection, on average, without use of PPE. On average, 80% of inhalation exposure occurs when health care professionals are near patients (Jones, 2020). Given these findings relate to close contact, it is likely that these probabilities are similar for carers and service-users where PPE is not used or available. As support structures are limited for families and informal carers, a lack of prevention may mean service users are transferred to hospital, putting further strain upon hospitals (WHO, 2020a). Furthermore, for service users who are hospitalised, significant numbers of those surviving critical respiratory illnesses such as COVID-19 can experience multiple short, medium and long-term physical and psychological impairments including post-Intensive Care Unit Syndrome (PICS) and post-traumatic stress (Colbenson et al., 2019 and Davidson et al., 2013 and Murray et al., 2020). The Government anticipates 45% of those discharged from hospital will require ongoing support from health and social care (DHSC,

2020a) and so care planning and effective IPC measures will rely upon communication between social care providers and multiple others such as local authorities, IPC health teams, GPs and rehabilitative professionals. Little is known about how these processes are being conducted and coordinated during the pandemic and how effective these processes are. A recent second insight report from the CQC (2020e) has indicated that collaboration amongst organisations was seen as vital, with strong relationships between providers and across other sectors being the key to the success of managing the crisis. Positive working relationships reduced the time taken to accomplish goals such as procuring PPE. Regular meetings across organisations and ensuring information monitoring and sharing was prioritised improved the management of the pandemic. Poor communication, lack of clear accountability, a need to work at pace and duplication of work created barriers to working successfully to manage COVID-19. Fragmentation in current health and care systems may significantly impair the ability to respond effectively to the pandemic and should be urgently addressed.

IPC and other protective funding and resources in the Adult Social Care Infection Control Fund ring-fenced grant (DHSC, 2020b) have been largely directed towards supporting care homes as opposed to domiciliary care and government restrictions have decreased the ability of families, friends and social care staff to provide support to service users. In addition to this, emergency legislation has suspended statutory obligations of local authorities to conduct detailed assessments of care needs and to meet these needs (Comas-Herrera et al., 2020) and so in combination with the above issues, this means that domiciliary care now faces a critical period. Exploration of existing IPC systems and measures is now required to build supportive mechanisms for effectively preventing and controlling COVID-19 infections in the community for those who provide and receive domiciliary care, and to reduce COVID-19 related ill-health and deaths in staff, service users and their loved ones.

2. Aims and Objectives

The purpose of this Health Needs Assessment (HNA) is:

- To build a picture of the current systems and measures for COVID-19 IPC; assess unmet needs in population segments and identify barriers and opportunities to improve IPC measures for COVID-19 in Greater Manchester domiciliary care providers, to maximise health benefit.
- To make recommendations for a feasible IPC programme.
- To build an evidence base using available data, intelligence and literature and gather primary data through interviews with key system stakeholders.

3. Epidemiological Needs Assessment

There are 894 regulated adult social care domiciliary care providers in the North West, with 304 in Greater Manchester (GM) (CQC, 2020b), highlighting the diverse and often fragmented nature of care provision. The table below details the number of providers in each locality:

Table 1: Number of domiciliary care providers by local authority

Local authority	**Number of providers**
Bolton	37
Bury	29
Manchester	53
Oldham	23
Rochdale	26
Salford	24
Stockport	43
Tameside	14
Trafford	33
Wigan	22

3.1 COVID-19 cases and deaths in Greater Manchester

The PHE tableau (PHE, 2020b) provides the number of COVID-19 cases in GM. This is updated daily. Table 2 shows the number of confirmed positive COVID-19 cases by GM local authorities. This data includes total lab-confirmed cases of COVID-19 (confirmed by NHS/PHE labs) in each GM local authority.

Table 2: Number of laboratory confirmed COVID-19 cases up to 25th July 2020 in local authorities in Greater Manchester (PHE,2020b)

Local authority	**Number of lab-confirmed cases**

Bolton	1,945
Bury	1,322
Manchester	3,135
Oldham	2,022
Rochdale	1,819
Salford	1,417
Stockport	1,692
Tameside	1,578
Trafford	1,361
Wigan	2,167
Greater Manchester	18,458

In England and Wales, up to 10th July there were 53,510 registered COVID-19 deaths across all settings (ONS, 2020a; ONS, 2020b). Table 3 shows the data on all registered deaths this year by local authority in GM and in England and Wales (ONS, 2020a; ONS, 2020b). Up to the 10th July the following deaths were recorded:

Table 3: Number of deaths across all settings by actual date of death registered up to 10th July, in the community in Greater Manchester and England and Wales 2020			
Local authority	**All deaths**	**COVID-19 deaths**	**COVID-19 deaths as a percentage of all deaths (%)**
Bolton	1782	320	17.9
Bury	1214	235	19.3
Manchester	2437	399	16.3
Oldham	1394	254	18.2
Rochdale	1381	225	16.2
Salford	1532	318	20.7
Stockport	1895	341	17.9
Tameside	1587	293	18.4
Trafford	1395	235	16.8
Wigan	2081	345	16.5
Greater Manchester	16,698	2,965	17.7
England and Wales	351,937	53,510	15.2

The table shows that the percentage of COVID-19 deaths within GM is **almost 3% higher** than the percentage of COVID-19 deaths across England and Wales indicating that GM requires particular support**. Salford has the highest rates** of COVID-19 deaths as a percentage of all deaths and this has not changed since early June, so specific support measures may be needed there in the first instance. However, the table may also reflect differences in the recording of deaths by COVID-19. For example, it has been acknowledged that there are issues surrounding the timeliness of registering deaths and ONS deaths data

includes both deaths in people who have tested positive and those not tested but where the doctor suspected Covid-19 (The King's Fund, 2020a).

3.2 (COVID-19) Surveillance Report

Up to 21st July 2020, nationally, COVID-19 activity continued to decline or remain stable in England across the majority of surveillance indicators during week 29. There has been a small increase in case detections in the North West and West Midlands through both Pillar 1 and Pillar 2 testing. At a local authority level, activity was highest in Blackburn and Darwen where incidences have continued to increase and local measures were implemented in mid-July. Case detections are highest in adults aged 85 and over. There has been an increase in the proportion of cases from the Asian/Asian British ethnic group, this is likely to reflect larger populations from this ethnic group in areas that are currently seeing higher incidence. By NHS regions, the highest hospitalisation and ICU/HDU rate was observed in the North West and North East. This means that the North West has maintained this status for at least the past month. Up to 21st July, 2020, 6,772 cumulative deaths were reported for the North West (PHE, 2020c), the highest amount of regional deaths in England and Wales.

PHE have now conducted a pilot point prevalence survey of COVID-19 among domiciliary care staff in England (2020h). 62 providers across 5 regions were recruited to the study. Between 10 and 15 providers were recruited from each region. In total 3,813 swabs were sent out to recruited providers. 2,015 swabs were returned to PHE Colindale giving a response rate of 52.8%. Of 2,015 samples, 2 (0.1%, 95% confidence interval 0.02%-0.40%) participants were found to be positive for SARS-CoV-2 on PCR testing. Positive individuals came from 2 regions. Both were asymptomatic and 1 reported being a contact of a confirmed case.

The findings provide evidence that the prevalence of COVID-19 among domiciliary care workers who are currently working is in line with the general population (0.1% with a 95% confidence interval of 0.02%-0.40% compared with 0.09% (95% confidence interval 0.04% - 0.19%) in the general population) and not a higher prevalence as observed in studies of front line healthcare workers and care home staff. However, due to the small size of this study it is not possible to investigate regional differences in prevalence. It should also be noted that that domiciliary care workers currently off work or self-isolating are underrepresented in this survey.

3.3 Domiciliary care COVID-19 deaths in England and Wales

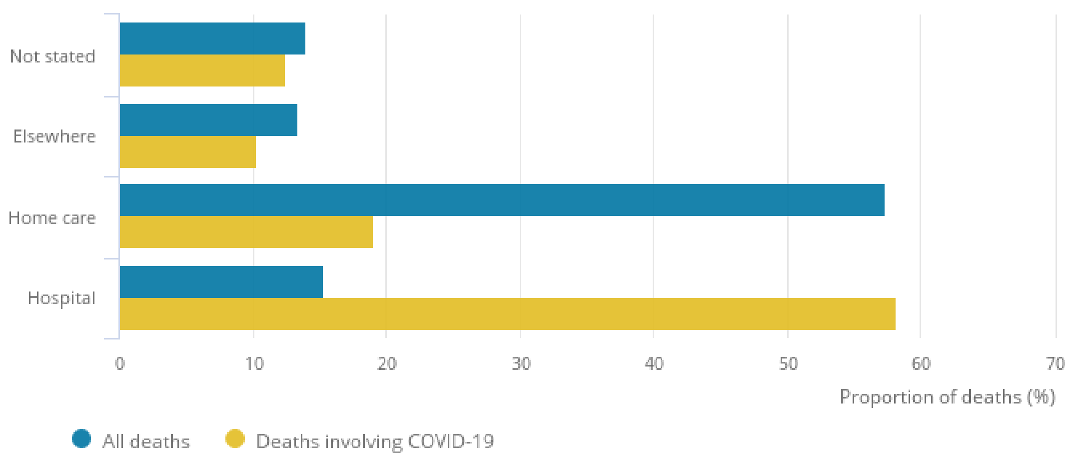
Data on COVID-19 related deaths in people receiving domiciliary care in England is not released by the Office for National Statistics as part of the weekly update on registered deaths, unlike for other sectors, such as the figures for care home deaths, which have been provided since week ending 13th March 2020. However, the CQC has now begun to provide the ONS

with some data, although this is not a regular occurrence. In CQC figures, a death involving COVID-19 is based on a 'Death of a person using the service – notification form', sent to the CQC via the provider (CQC, 2020d). The assessment of whether COVID-19 was involved may or may not correspond to a medical diagnosis or test result or be reflected in the death certification. CQC notifications data are available more quickly than death registration data, but are not released regularly. A doctor can certify the involvement of COVID-19 based on symptoms and clinical findings – a positive test result is not required. As it is unclear the extent to which COVID-19 is recorded on death certificates it is also helpful to look at the total number of deaths for those receiving domiciliary care, which can be compared to previous averages. As service users become seriously ill they may be transferred to hospital, and so subsequent deaths will be included in hospital death figures.

From 10 April 2020 (when data were first available) to 19th June 2020, there were **6,523** deaths of recipients of domiciliary care in England; this is **3,628 deaths higher** than the three-year average (2,895 deaths) for the same time period. Of the 6,523 deaths of domiciliary care service users, 819 (12.6%) of these were reported as involving COVID-19. This is lower than the 38.4% of deaths involving COVID-19 among care home residents notified to the CQC for the same time period, but is a substantial increase in deaths none-the-less (ONS, 2020c).

The Care Inspectorate Wales (CIW) do not hold information on deaths in domiciliary care services as these services are not legally required to notify CIW of deaths. The ONS data does not contain information on whether a person was in receipt of domiciliary care, so no direct comparisons are possible for Wales.

Figure 1: Number of deaths notified to the Care Quality Commission involving COVID-19 in home care service users by place of occurrence, up to 19th June, England 2020



Source: Office for National Statistics – Deaths involving COVID-19 in the care sector

The proportion of deaths involving COVID-19 as highest in hospital may reflect that the patient is tested for COVID-19 in hospital and that accessing a test for domiciliary care service users has not been a priority. Inability to access testing due to mobility restrictions and accessibility of testing more broadly may also be a factor. It may also reflect that confirmation of COVID-19 following a domiciliary care service user death is not required as discussed above in section 3.3.

The second CQC insight report (2020e) has indicated that deaths of people in the community receiving domiciliary care who have a **learning disability have doubled.** This area remains underreported and under examined.

Reporting deaths of care staff

Some preliminary findings relating to deaths of domiciliary care staff are discussed in the surveillance report section 3.2 above. Legislation outlines that deaths of staff members working in adult social care should now be reported to the family, others at work (where this has been agreed by the family), reported to the Health and Safety Executive (HSE), the DHSC, the CQC and the coroner (if applicable e.g. where the death is unknown or unnatural). Employers are required to support the family to apply for a £60,000 lump sum payment from the NHS and Social Care Coronavirus Life Assurance Scheme 2020. Providers should also refer families of non-European Economic Areas about the coronavirus bereavement scheme (DHSC, 2020j).

Recommendations

- As the ONS are acquiring all their domiciliary care deaths figures from CQC as no other organisation records whether the person was in receipt of domiciliary care and CQC are not providing regular updates (and therefore neither are ONS), a systematic and uniformed approach is required to ensure accuracy of figures. There is still an urgent need to address this in Wales where it is not a requirement for domiciliary care providers to report these deaths to the CIW. However, new legislation will make this a requirement from August 2020 (Welsh Government, 2018).

- Domiciliary care infection cases are not systematically recorded anywhere as yet; however, CQC have stated they have been informed of 15% of NW providers dealing with COVID-19 cases. Again, a more systematic and uniformed approach is required to ensure accuracy of figures and to highlight localised/regional outbreaks to facilitate efficient and appropriate management.

- COVID-19 related deaths are not always recorded as with care homes and the process has been reported as subjective. Again, a more uniform and consistent approach is required to ensure accuracy of data reporting.

3.4 Reviews of disparities in risks and outcomes

A recent report from PHE (2020e) indicates excess mortality due to COVID-19 is higher in ethnic minority populations and Black African or Black Caribbean ethnicity may be of highest increased risk and more must be done to protect and support ethnic minority staff working in health and care service, with domiciliary care staff specifically noted here. Individuals from ethnic minorities are more likely to work in occupations such as domiciliary care, with a higher risk of COVID-19 exposure. Staff are also more likely to use public transportation to travel to work. Their report indicates deep concerns raised about the support that ethnic minorities front line workers have received. There were good examples of occupational risk assessments providing an opportunity to ensure a standardised approach at scale to all health and care settings.

Recommendations

- As individuals from ethnic minorities are more likely to work in occupations such as domiciliary care, with a higher risk of COVID-19 exposure, their needs should be prioritised by employers and organisations. Staff should be made to feel comfortable and safe to voice concerns without fear of job loss or discrimination. The NHS have now begun to risk assess staff according to increased vulnerability such as ethnicity (NHS Employers, 2020). This is a potential avenue for care providers to follow.

4. Infection prevention and control policies and reports

The government outlined a plan for adult social care which was last updated on 16th April 2020 (DHSC, 2020c). The plan addresses four key areas; 1) controlling the spread of infection, 2) supporting the workforce, 3) supporting independence, supporting people at the end of their

lives and responding to individual needs and 4) supporting local authorities and the providers of care. These areas have independent policies developed separately for different providers such as care homes and domiciliary care providers. These policies will be outlined below as to how they relate to providers of domiciliary care and their service users. The guidance is changing rapidly and is correct as of 24th July 2020.

4.1 IPC guidance

In the COVID-19: provision of home care policy (DHSC, 2020d), providers have been given guidance that specifically relates to domiciliary care. The plan highlights that the key strategy to reduce the spread of infection is via; the distribution and use of PPE, shielding and care groups, hospital discharge and testing, support for social care, information collection and governance and other areas.

On the 10th July, the DHSC released a COVID-19: adult social care risk reduction framework (2020k). The guidance outlines for providers how to conduct risk assessments for the workplace relevant to workers and service users and which workers and service users are at most risk in line with findings on health status, sex, age and ethnicity. The policy links to existing policy documents available for specific areas such as PPE, IPC and testing.

4.2. Personal Protective Equipment (PPE)

For PPE, the government has seen a drastic shift in the need to supply PPE, moving from formerly providing PPE to 226 NHS trusts, to now providing to over 58,000 providers, including care homes, hospices, residential rehabilitation and community care organisations. The government announced on 30th April that all PPE will be purchasable VAT free until 31 July 2020 owed to campaigning by the UK Home Care Association (UKHCA) (UKHCA, 2020a). Local resilience forums (LRF) (for GM this is AGMA Civil Contingencies and Resilience Unit (Cabinet Office, 2019)) have been tasked with the management and distribution of PPE at the local level and a National Supply Disruption Response (NSDR) system has been established to respond to emergency PPE requests, including for the social care sector, including; a 24/7 helpline for providers who have an urgent requirement (for example require stock in less than 72 hours), which providers have been unable to secure through business as usual channels and an express freight desk solution to pick, pack and deliver an allocation of PPE to the provider once the case has been approved (DHSC, 2020c). Where adult social care providers are unable to obtain PPE through their usual wholesalers and there remains an urgent need for additional stock, they can approach their LRF. PPE stock levels can be reported in CQC's 'Update CQC on the impact of COVID' online form. Providers should have been contacted by CQC to advise on the process.

PHE have developed specific guidance for the donning and doffing (putting on and taking off) of PPE (PHE, 2020d). Visual guidance formats are available although guidance is not available in multiple languages and so communities with English as a second language may face challenges here. The guidance also stipulates that when staff are providing care for individuals within two metres which involves direct contact such as; getting in/out of bed, feeding, dressing, bathing, grooming, toileting, dressings etc. and or when unintended contact with clients is likely (e.g. when caring for service users with challenging behaviour), then full PPE should be worn. This includes disposable gloves, a disposable plastic apron, a fluid-repellent surgical mask and eye protection such as goggles where service users have a cough or are vomiting. Staff and managers are advised to monitor service users for symptoms (for example by calling ahead before a visit). Providers are tasked with advising staff how to clean these goggles between visits, but the PHE advise they should be worn continuously unless taking a break. It is further noted that PPE is only effective in combination with frequent hand washing and sanitisation. Face touching should be avoided where possible and masks should be disposed of if they become soiled, damp, damaged or uncomfortable. If the mask remains intact and does not need removing, it is advised as safe to wear the same mask between different care calls as it states there is no evidence to suggest that replacing face masks and eye protection between visits would reduce risk of infection and in fact, there may be more risk in repeatedly changing face masks or eye protection as it involves unnecessary face touching. It is advised that when touching is not required with service users, but contact within two metres is, such as for; removing medicines from their packaging, prompting people to take their medicines, preparing food for clients who can feed themselves without assistance or cleaning, that only a surgical mask along with hand washing and sanitisation is required.

As of the 20th July updated advice from PHE (2020f) outlines that staff should don clean PPE if taking a break in a communal area or are visiting their work office and should remove gloves, apron and mask and clean their hands and put on a new face mask. This is not required if a risk assessment has been conducted and the organisation has ensured social distance measures of two metres in communal areas, social/physical distancing, hand hygiene and frequent surface and equipment decontamination, however the staff member must be sure of this before choosing not to wear PPE.

Waste should be placed in a refuse bag and disposed of as normal domestic waste unless the service user has symptoms of COVID-19 (new continuous cough, shortness of breath, fever). For waste from people with symptoms of COVID-19, waste from cleaning of areas where they have been (including disposable cloths and tissues) and PPE waste from their care it is advised that it:

1. Should be put in a plastic rubbish bag and tied when full
2. Should then be placed in a second bin bag and tied and
3. Should be put in a suitable and secure place and marked for storage for 72 hours

Waste should be stored safely and securely kept away from children. This waste should not be put in communal waste areas until the waste has been stored for at least 72 hours.

Storing for 72 hours saves unnecessary waste movements and minimises the risk to waste operatives. Such waste does not require a dedicated clinical waste collection in the above circumstances. The advice stipulates that reusable PPE such as masks can be worn, but must be cleaned between visits in line with manufacturer's instructions, which providers must discuss with their staff. Where there is a shortage of masks, it is advised that masks are folded inwardly from the outside and kept in a storage box or sealable bag with the staff member's name on it and accessed in line with hand sanitisation before and after use. Homemade or cloth masks should not be used. Gloves and aprons should not be reused at any time. Where service users are identified as extremely vulnerable or shielding, PPE should be followed in line with the guidance for staff working with direct touch within two metres. Staff uniforms should be laundered after each shift and washed separately from other clothes, in a machine half full, at maximum temperature and then ironed or tumble-dried (PHE, 2020d). Further updates issued on the 20th July (PHE, 2020g) reiterated the reuse of masks only where absolutely necessary. Guidance now also stipulates that staff should be appropriately hydrated during prolonged use and trained to recognise dehydration, fatigue and exhaustion while wearing PPE (PHE, 2020g), however there is no specific guidance on this training.

For people who **use direct payments to source personal assistants** (PAs), if the direct payment contains funding to purchase PPE for their PA, they should continue to use that funding to purchase PPE. If the person cannot get PPE in this way, the direct payment is not set up to fund PPE, or there is different/additional PPE needed during the COVID-19 pandemic cannot be funded through your existing direct payment, they are advised to contact their LA or CCG who will help them to get the PPE they need.

For unpaid or informal carers, the guidance states that these people should follow government advice on hygiene. If family members who provide care and support live with the person permanently, PHE does not recommend using more PPE than would normally be used. If the family member is not living in the same accommodation and their care and support requires PPE, they should be able to access and use PPE.

Self-funders are advised to follow the general domiciliary care guidance and direct payment guidance around health and safety, which they are required to access themselves on the government website (DHSC, 2020i). If they are unable to support themselves due to the wider impact of COVID-19 and have no alternative arrangements they are advised to contact their LA to discuss alternative care and support arrangements. If their PA is showing symptoms of COVID-19, they are advised to immediately self-isolate and cease care. If their PA is not practising social distancing in their personal life, as the employer, the service user is tasked with discussing this with their PA. They are advised to keep a record of the discussion and what has been agreed. If the PA continues to refuse to practise social distancing in line with government advice, they are advised to take disciplinary action. Self-funders are advised to contact their LA or CCG if their carer refuses to come to work due to social distancing.

Recommendations

- PHE PPE guidelines in relation to masks and the re-use of them, indicates carers should wash these in-between visits. As this may not be feasible for those in the community, clarification regarding this is needed. It should also be ascertained as to whether carers are using the same masks all day in the absence of availability of disposable masks and whether this is safe or not.

- Guidance on storage of COVID-19 waste is vague and should be clarified. For example, PHE guidance indicates it should be kept in service users' homes 'securely' away from other waste and children for 72 hours. It should be explored as to how feasible this is and how service users are storing waste.
- There is no guidance for how informal carers or self-funders can obtain PPE and so this requires urgent attention. There is minimal advice in general for self-funders.

- Information on self-funders and how they are accessing IPC is particularly hard to determine as local authorities do not have all this information. A review of how best to establish and maintain communication with this population is urgently required to help manage future outbreaks and to establish and address unmet care needs.

- Funding and further provision beyond cuts to VAT for PPE will be necessary to support providers beyond the 31st July 2020 and a review is required to understand the resources required to mitigate the impact of a potential second wave of COVID-19 in the winter and other influenza like illnesses.

- Guidance surrounding the training of staff in dehydration should be provided and made explicitly and easily available.

4.3 Shielding, care groups and other IPC measures

People who are 'clinically extremely vulnerable' will have received a letter from the NHS or their GP advising them to shield. If someone has not been notified but is concerned that they are clinically extremely vulnerable, they are advised to contact their GP. Again, these letters

were only sent out in English and so this may have been problematic for communities who do not speak English or have English as a second language.

Providers have been advised to reduce the risk of exposure to COVID-19 to people who require specific shielding measures by dividing service users into 'care groups' and to allocate subgroups of their staff team to provide care to each. The workforce and logistical challenges of doing this, especially within small and medium sized providers are acknowledged, and a decision about whether this is possible would need to be made locally. If providers are unable to divide their workforce into subgroups for each category, they may be able to divide the workforce into two groups: one to support the shielded, the other to support 'at risk' groups and everyone else. This is being proposed as a practical suggestion that may be viable for some providers, rather than a direction all providers are expected to follow. If providers are unable to work in this way, LAs are tasked with providing support through their plan to provide mutual aid. Where LAs cannot support this providers are asked to contact LRFs.

To further reduce contact between staff, providers are advised to; have team meetings and handovers remotely, stagger times of entry to a community base to collect equipment, minimise clutter in community bases and hard surfaces should be regularly cleaned, ensure that there is a high level of support and a focus on staff health and wellbeing , promoting support initiatives offered through the Adult Social Care Action Plan, provide remote access to regular supervision, remotely but securely share information relating to care between agencies by asking all staff to sign up to NHS mail, or another secure email system.

Recommendations

- Guidance only recommends 'care groups' or staff bubbles for those shielding and not other service users. It may be helpful and reduce infection if these care groups can be established for all users where feasible.

- Guidance indicates that staff should conduct supervision and handovers remotely. It states information should be shared over secure email such as NHS mail. They are now required to do so with distancing and hygiene measures in place. There is no indication as to whether time is being ring-fenced for care staff to fulfil these extra duties and whether all staff have access to devices that will enable this. A review should be conducted to ascertain whether staff have access to adequate equipment for this and ring-fenced time to enable information sharing, and to ensure this is conducted in a confidential manner that meets data GDPR standards.

4.4 Local authority responsibilities

LAs and CCGs are expected to support care providers with the costs of extra staffing and other costs incurred during the pandemic, for example donning and doffing PPE, time spent explaining to people with cognitive impairment why masks are being worn, and/or additional

travel costs etc. LAs should work with CCGs to support providers to; reduce the number of carers going into service user's homes, identify other support needs and organisations and to establish and organise where possible for one organisation to provide all care needs. Service users and families should be involved in line with a personalised approach as to how visits are amended/reduced and providers are tasked with conducting risk assessments of reduced visits. Where staffing resources cannot meet service user needs, providers should prioritise those identified as most vulnerable. If a person refuses care and is identified as lacking capacity to do so, providers should refer to the mental capacity act as normal.

In line with the Care Act easements: guidance for local authorities (DHSC, 2020e), LAs are now able to prioritise need as the act reduces the requirement for detailed assessments of people's care and support needs (although this must still be done in a timely manner) by allowing supported self-assessments, telephone assessments and use of third party professionals to assist with assessments. Furthermore, financial assessments can now be conducted retrospectively. LAs no longer have to prepare or review care plans; however, they will still be expected to carry out proportionate, person-centred care planning which provides sufficient information to all concerned, particularly those providing care and support, often at short notice. Where they choose to revise plans, they must also continue to involve users and carers in any such revision. The duties of LAs to meet eligible care and support needs, or the support needs of a carer, are replaced with a power to meet needs. Local authorities will still be expected to take all reasonable steps to continue to meet needs to a pre-pandemic standard. In the event that they are unable to do so, the powers will enable them to prioritise the most pressing needs, for example enhanced support for people who are ill or self-isolating, and to temporarily delay or reduce other care provision.

Local authorities, working with the LRP should also;

- ensure their list of individuals in receipt of local authority-commissioned home care is up to date and record levels of informal support available to individuals
- map all care and support plans commissioned by the local authority, to inform planning during an outbreak. Support providers similarly to map those packages that are self-funded
- ascertain how to maintain viable home care provision during the outbreak of COVID-19, including financial resilience – the Local Government Association, Association of Directors of Adult Social Services and the Care Provider Alliance has published best practice actions on financial resilience (ADASS 2020b).

Recommendations

- There is currently no legislated time period for LAs to conduct care assessments. The guidance states to 'prioritise those in most need'. It may provide reassurances to service users and families if they had an idea of how long they should wait before chasing care arrangements.

- LAs are tasked with 'how to maintain viable domiciliary care solutions' and NHS and care providers are tasked with liaising about this with LAs. However, this is relatively vague and does not provide a gold standard approach, meaning accountability is lacking and guidelines are open to subjective interpretation that could lead to care needs being unmet.

- Guidance related to the involvement of voluntary organisations is vague and there is no clear indication of how this is being monitored. A review of these processes is urgently required.

4.5 Testing and hospital discharge

All staff who require a test (those who show symptoms of COVID-19) may access one in line with the ASC action plan (DHSC, 2020c) via the government self-referral system. This applies to home care staff, domiciliary carers and unpaid carers. There is now capacity available for all social care workers who need to be tested, just as there is for NHS staff and their families. However, evidence (DHSC, 2020f) showed that there were gaps in testing for social care staff with most testing facilities for non-NHS staff not yet available, and with only approximately50 regional drive-in sites, which require people to have access to a car, although some walk-in centres have now been announced.

All people admitted to hospital to receive care will be tested for COVID-19, and hospitals should share care needs and COVID-19 status with relevant community partners planning the subsequent community care. Some people with non-urgent needs, who do not meet the clinical criteria to reside in hospital, will be discharged home for their recovery period. All individuals can be cared for at home by home care or supported living care providers, regardless of their COVID-19 status, if the guidance on use of PPE is correctly followed. Testing must not hold up a timely discharge as detailed in the COVID-19 hospital discharge service requirements (DHSC, 2020a). Where a test has been performed in hospital, but the result is still awaited, the patient will be discharged as planned and, while the result is pending, home care providers should assume that the person may be COVID positive for a 14-day period and follow guidance on the correct use of PPE. Similarly, as set out in the COVID-19 adult social care action plan, any individual being taken on by a home care or supported living care provider should be cared for as possibly COVID-positive until a 14-day period has passed, within their home. Providers should follow the relevant guidance for use of PPE for COVID-positive people during this 14-day period.

Hospital discharge pathways must include NHS organisations working closely with adult social care colleagues, the care sector and the voluntary sector. No person should be discharged before it is clinically safe to do so (DHSC, 2020a). The guidance advises that a trusted discharge assessor based at the hospital ward will provide; person-led follow up by giving people the direct number of the ward discharged from to call back for advice, a call back with results of investigations and any changes or updates to a person's management plan which means bringing them back under the same team or speciality, requests for community nursing follow up with a specific clinical need, requests for GPs to follow up in some selected cases. Most hospitals already use trusted assessor schemes for discharges to care homes and care at home services in their areas. All hospitals will train additional discharge staff to operate as trusted assessors where these do not already exist to supplement trusted assessors in existing schemes. These will be kept up to date in local NHS Discharge to Assess (D2A) arrangements. This should be prioritised. All registered domiciliary care providers and managers will need to ensure legal requirements for assessments will be met, and that particular consideration will be given to safety and infection control-related needs. This requires hospital, community health, and social care providers to work together to make sure people have the right support in place.

Where people are discharged from an acute or community hospital back to their own home, the requirements of the discharge guidance applies. The guidance requires that each locality appoints a local co-ordinator with accountability for all elements of the discharge process covered by the guidance, including the provision of discharge summaries.

Where home care agencies identify inadequacies in discharge summaries, these need to be escalated to the local co-ordinator. All areas are required to have a local co-ordinator during the COVID-19 response.

The DHSC adult social care action plan (DHSC, 2020c) aim is to attract 20,000 people to work in social care over the next three months. The Government is supporting provider workforce needs through this £4 million social care recruitment campaign, encouraging job seekers to work in the care sector and giving access to free initial training. Fast track and free DBS checks have been implemented to support this.

Recommendations

- The guidance on the transfer of care from acute to community services such as care providers is vague and accountability is unclear. There is a risk that COVID-19 patients requiring domiciliary and other care needs may have unmet care needs and rapidly deteriorate. An urgent review is required to understand how these processes are working and to establish accountability, as well as to understand the multi-disciplinary communicative structures and processes required to support individuals.

4.6 Testing process

To arrange a test, staff should speak to their employer, who have information on how to make an appointment for their staff through LRFs, their associated national department or directly through the DHSC. The Care Quality Commission (CQC) is leading coordination of testing. Testing has been offered to over 11,000 care facilities and the CQC are working to contact all registered care providers. Employers are asked to identify social care staff and their families who are eligible for testing in line with PHE guidance and refer them to their local testing centre. In order to ensure testing access is prioritised according to local need, CQC is also working with local decision makers and national bodies (such as the Association of Directors of Adult Social Services (ADASS), LRFs and PHE etc.) (DHSC, 2020f).

A summary of the test process is provided below:

- The test involves taking a swab of the nose and the back of the throat. This can be self-administered or done by someone else (assisted).
- NHS staff and patients only can be tested within a NHS facility
- There are 50 drive-through regional testing sites open across the country
- Mobile testing units are being developed – these tests will be offered where they are needed (rather than at regional testing site)
- Test kits are being provided directly to satellite centres (e.g. to places like hospitals with an urgent/significant need)
- Home test kits are being developed – these will be delivered to someone’s door so that testing can take place without needing to leave the house
- Couriers will collect the samples and bring to the lab. The government aims to make the test results available within 48 hours (DHSC, 2020f).

Concerns have been raised regarding negative tests, which may provide ‘false negatives’, for example if the virus was present in small amounts, or the specimen from the throat or nose wasn’t taken correctly, or because the tests are not always accurate (Mayers and Baker, 2020 & Kings Fund, 2020a).

Recommendations

- It is vital to establish which domiciliary care providers have been contacted and supported regarding the testing process and a review is required to understand how and how many staff are accessing testing given the PHE (2020a) report on disparities indicates many ethnic minority care staff travel to work via public transport and so may not be able to access these locations. Given the higher risk to the ethnic minority community, these staff should have targeted support measures.

- Home testing kit guidance should be developed further to ensure testing is viable, as should the guidance surrounding expected time periods for receiving results and next steps following positive testing outcomes.

4.7 Test and Trace

On the 27th May 2020, the government announced a test and trace programme, which was officially launched on 28th May 2020 (DHSC, 2020g). The programme aims to ensure that anyone who develops symptoms of COVID-19 can quickly be tested to find out if they have the virus, and also includes targeted asymptomatic testing of NHS and social care staff and care home residents by tracing close, recent contacts of anyone who tests positive for COVID-19 and, if necessary, notifies them that they must self-isolate at home to help stop the spread of the virus. The system advises those in contact with others who have tested positive to isolate for at least seven days. Anyone else in the household must self-isolate for 14 days from when the positive tested person started having symptoms. Those identified must order a test immediately at www.nhs.uk/coronavirus or call 119 if they have no internet access. If the test is positive those people must complete the remainder of the seven-day self-isolation. Anyone in the household must also complete self-isolation for 14 days from when the positive tested person started having symptoms. If the test is negative, other household members no longer need to self-isolate. If the person is tested as positive, the NHS test and trace service will send them a text or email alert or call with instructions of how to share details of people with whom they have had close, recent contact and places they have visited. This is online via a secure website or via a call from a contract tracer. Contact tracers will; call from 0300 013 5000 or send a text message from 'NHS', asking for the person's full name and date of birth to confirm identity, and postcode to offer support while self-isolating, ask if the person is experiencing any coronavirus symptoms, provide advice on what they must do as they have been in contact with someone who has tested positive for coronavirus. Test and trace has been reported as not running effectively yet, with tracers only managing to make contact with less than three quarters (10,192 of 14,045) of people referred to the service in the two weeks to 10th June 2020 (BBC, 2020b). The WHO and a recent study in the Lancet have indicated that a combination of isolation, intensive contact tracing and physical distancing measures may be the most effective and efficient way to achieve and maintain epidemic control (Kucharski et al., 2020).

An NHS coronavirus app is currently being trialled on the Isle of Wight. However, on 17th June Lord Bethell, the Minister for Innovation at the Department of Health and Social Care, informed the Commons Science and Technology Committee that the app would not be completed until at least the winter (BBC, 2020a) with the Government announcing on 18th June they would be

shifting its tracing app to a model based on technology provided by Apple and Google (BBC, 2020b).

Recommendations

- Test and trace relies upon consistent technology and upon the general public being honest about contacts they have had. The service does not appear (as of 18th June) to be 'up and running' in a consistent manner. Test and trace along with other combined consistent measures is essential to effective IPC measures and so a review of these processes is urgently required.

4.8 Managing outbreaks

Local authorities should manage outbreaks as relevant to domiciliary care providers within the communities in which they reside as detailed above. CCGs, NHS providers and local community services and primary care, will work with local authorities and home care providers to manage outbreaks (DHSC, 2020d). All confirmed and suspected cases of COVID-19 should be reported daily in CQC's 'Update CQC on the impact of COVID' online form.

The provision of domiciliary care guidance (DHSC, 2020d) depicts that NHS services will support domiciliary care service providers by taking steps to:

- ensure their list of individuals in receipt of care at home support is up to date, establish levels of informal support available to individuals, and share lists with local authorities and home care providers to ensure join-up.

- consider which teams need to extend operational hours, or link to other services (such as out-of-hours general practice) in order to ensure the best possible care and maintain patients in the community.

- explore options for alternative care models, including tele-care and 'hub and spoke' models to provide advice and guidance to patients and potentially their families.

- ascertain how to maintain viable home care provision during the outbreak of COVID-19 – this includes developing joint plans with local authorities and, home care providers and primary care colleagues to agree how and when escalation processes can be triggered.

- support local authorities in planning around resilience, including plans to share resources locally in an outbreak of COVID-19 – this should include workforce, including the deployment of volunteers where it is safe to do so, and where appropriate indemnity arrangements are in place.

- consider how voluntary groups that currently support NHS services could also support domiciliary care teams and specific individuals – make the links between those voluntary groups that currently support NHS services, home care providers and local authorities.

Recommendations

- As noted above, as LAs are not currently recording outbreaks within the community and figures are only at present provided intermittently by CQC, there is a need to develop a more consistent approach towards this so that outbreaks in the community can be monitored more closely.

4.9 Staff absences due to COVID-19

Domiciliary care providers are being asked to complete the 'Update CQC on the impact of coronavirus online form' to track absences. They email providers every weekday with a unique link to their form. This was rolled out to Shared Lives services, Extra Care and Supporting Living services from 17th June (CQC, 2020c). The CQC insight report (2020a) has indicated that staff absences across the sector are a growing concern. Further reports from others indicate that there is an urgent need to support providers with staff absences and to develop sustainable solutions for building the social care workforce more broadly (discussed further in the section below).

4.10 Adult Social Care fund ring-fenced grant

On 9th June 2020, the government announced an Adult Social Care Infection Control Fund worth £600 million to support adult social care providers, including those with whom the LA does not have a contract, to reduce the rate of COVID-19 transmission in and between care homes and support wider workforce resilience. A small percentage (25%) of the fund is allocated to support domiciliary care providers with infection control measures, including payments to domiciliary care providers or wider workforce measures. These wider measures could include, for example, additional financial support for the purchase of PPE by providers or by the local authority directly (although not for costs already incurred) or measures to boost the resilience and supply of the adult social care workforce in their area in order to support effective infection control (DHSC, 2020h).

The Association of Directors of Adult Social Services (ADASS) (2020a) have reported in their recent budget survey with 146 LAs on 11th June 2020, that LAs are supporting providers with cashflow, including paying on plan for scheduled care and support that may or may not be delivered as a result of COVID-19 (72% of councils), paying immediately upon invoice (72%) and paying in advance (55%). However, delayed payments have caused significant problems in the past for providers and are reported as still existing and acutely threatening the collapse of many providers (CQC, 2020a). ADASS warns that without further immediate investment into the sector from the government, it is likely that more providers will collapse, essential care staff will be lost and unmet care needs will rapidly increase. Furthermore, the report highlights the detrimental impact a no-deal exit from the European Union may bring, as approximately 8% nationally (115,000 care staff across the care sector in the UK) and 4% (6,600 staff) in

the North West have a none-British EU nationality (Skills for Care, 2019a and 2019b). They call for urgent further funding for two years which can;

- Ensure continuity and stability for providers and services users.

- Allow providers to continue to support adult social care's additional costs of PPE, staffing costs and sickness cover.

- Meet increased adult social care needs relating to recovery and the long-term health conditions resulting from partial recovery from COVID-19, mental health and addiction support, the unmet needs of a growing number of informal family carers, adult safeguarding and other needs.

- Reform care system as we approach the coming winter (and EU Exit Deal) to maintain social care's delivery of transformation alongside the NHS, and to bridge the NHS with social care.

They also call for;

- An urgent new employment deal with care staff, including a workforce strategy, adult social care minimum wage, enhanced training, development and career progression, recognition and regulation.

- Reform of the care provider market based on sustainable new business models, economic growth, and commitment to improved quality – supported through regulation, a national market statement and local economic plans.
- A consultation programme over the next two years that is cross-government, includes extensive public and cross-party engagement, that works nationally, regionally and locally to build the care and support that people want now and over the next 10 – 20 years. This programme should include:

  a) Investment and funding solutions;
  b) Reshaping the market to meet all stakeholder needs
  c) Lead primary, community and mental health services in communities alongside social care and social supports for people who need care, supports, safeguards and healthcare;
  d) Address the deep inequalities faced by people (and their carers) with mental ill health and learning disabilities, ethnic minorities and poorer communities, older people at the end of their lives.

Recommendations

- Domiciliary care providers are not ring fenced for IPC funding in an equitable way as care homes are. As local authorities decide which providers get funding for IPC, they are prioritised after care homes have been funded and they are required to provide evidence of need which can be time consuming and costly to providers. There is a need to make this process more equitable for domiciliary care providers, who have seen deaths in service users.

- Providers may face financial difficulties if they are unable to obtain payments of invoices. The CQC insight report has already indicated financial pressures faced by

providers. Providers should be consulted as to what process would be most beneficial in supporting them as sustainable providers of care.

- As the domiciliary care sector has seen unprecedented staff shortages, providers struggling to stay afloat and service user decline, along with many people social distancing, there could be an unknown amount of isolated people not accessing care and being supported. A review of how best to maintain communication with vulnerable adults is urgently required to establish need and to address unmet care needs.

5. Qualitative findings

After initial discussions with key stakeholders in the local COVID-19 response, the need for a rapid, real-time evaluation and record of processes and the procedures that have been developed was recognised. We have consulted with seven public health registrars, IPC leads and other key stakeholders across North West local authorities so far. Some key points from our initial discussions are shared below.

5.1 Aim

To map local systems and processes for testing and IPC in care homes and domiciliary care, identify gaps and challenges and potential solutions, with the learning shared among the local authorities as part of a rapid assessment approach.

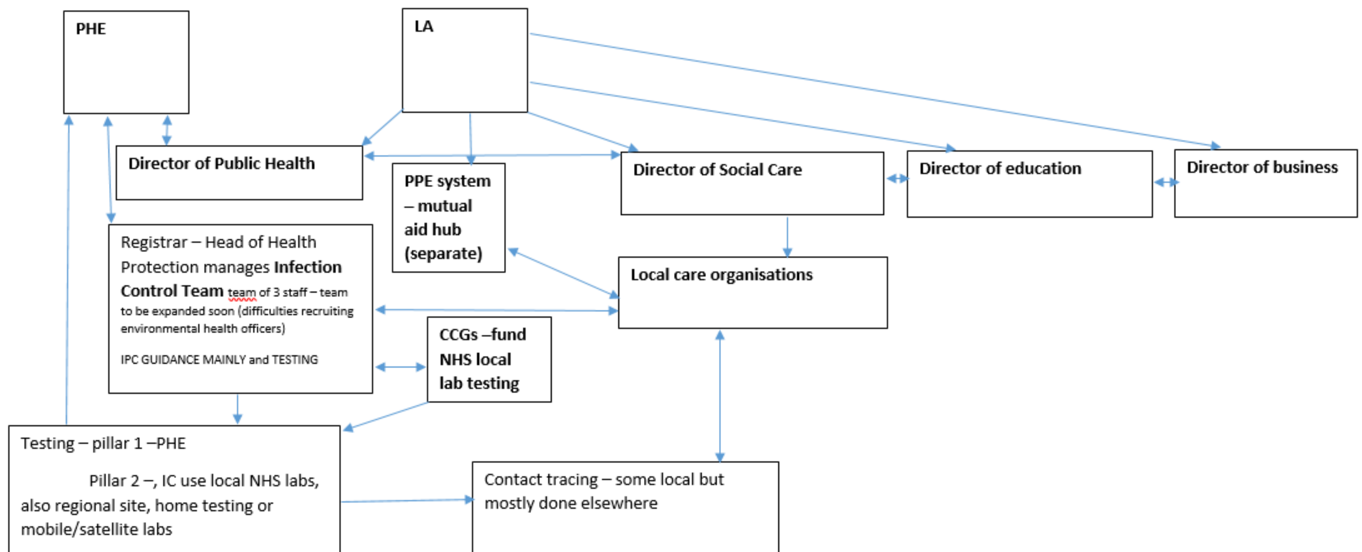
5.2 Objectives

- Map out processes and systems for testing and IPC in each participating local authority, including integration structures between department and organisations
- Identify local challenges and gaps
- Share learning between participating local authorities to help them overcome challenges
- Identify the extent to which care homes have been able to access testing and IPC measures
- Investigate the processes and challenges for testing and IPC in domiciliary care settings
- Document the results to inform learning for potential future outbreaks

5.3 Initial Results

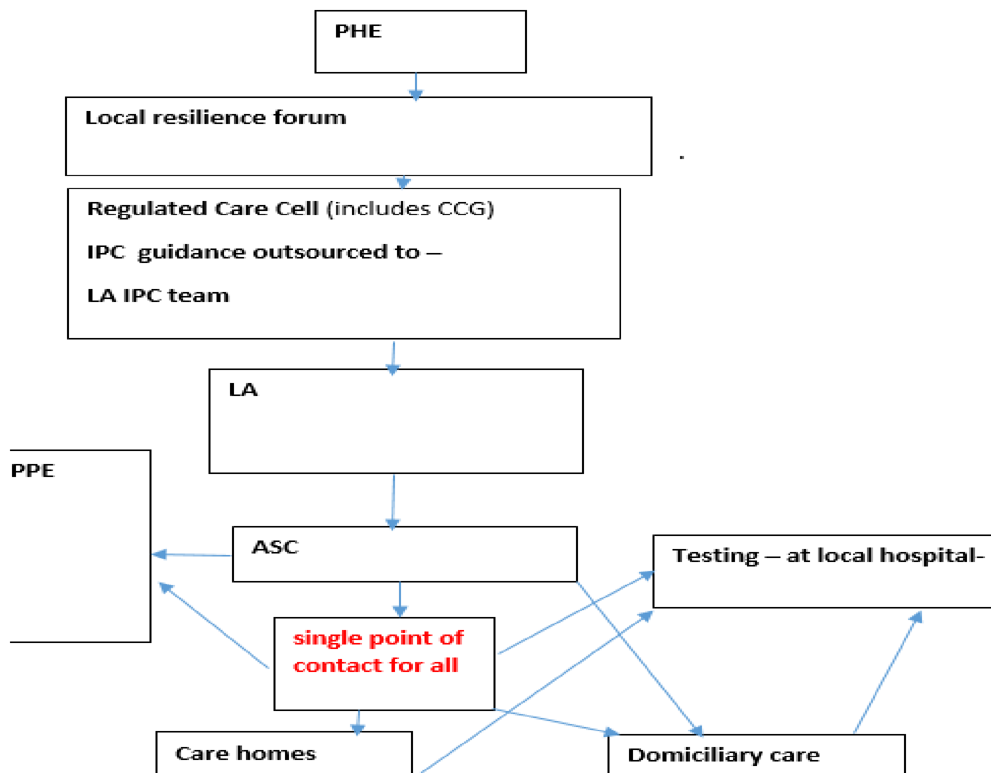
Structures

- Some structures across the North West have been fragmented. For example, some areas have had separate bodies responsible for various processes such as testing. An example is provided below:



- These areas have reported that initially it was challenging to communicate across the different areas of IPC, PPE and testing, but that this was overcome by establishing daily meetings (for some bi-daily) where incidents, learning and emerging challenges and need could be shared.

Other areas reported a more centralised structure with a single point of contact such as the following:



- Fragmented structures created challenges with communication including communicating incidents and outbreaks, resource allocation, training and support systems.

Respondent 1

> *Not having everyone in one place has meant that it was hard to get information about different need. We tried to get everyone working together but we each had our own sections to look after.*

- Single points of contact were particularly useful for sharing learning.
- Centralised structures led to more successful communication and knowledge sharing.
- Daily meetings / communication across teams and with providers enabled knowledge sharing and flagged ongoing issues.

Respondent 2

> *It was really useful that I was the single point of contact. I shared all the incidents and learning with others and I was able to flag outbreaks. We had daily meetings twice a day which meant I could feed everything back quickly.*

- Some areas felt that the pandemic had helped established key links and relationships with key stakeholders where this had not been present previously and was a really positive outcome

Respondent 4

> *It's great because actually the adult social care team are located with us and I never even knew who they were or what they did. Now I understand their roles more and we have built a good relationship so going forward we can build on that.*

- Structures for liaising with domiciliary care providers were weaker than those established with care homes. Several areas hope to build more resilient structures for communicating with domiciliary care providers over the coming weeks/months.

Respondent 2

> *Unfortunately, no, we don't have those strong relationships with the domiciliary care providers and interact quite separately with them. They tend to liaise just with the adult social care team but we did try to feed information to them through that route. We do hope to build these relationships going forward as it will be needed, we need to support the domiciliary care providers and people who self fund we know that now.*

- Identifying lead staff who can work under highly pressurised emergency situations may be beneficial going forward.

Respondent 4

> *What I've learned is how well I work under pressure. But I guess that means that going forward if a second wave hits and I've moved to my new post, will there be someone who replaces me who can work under a highly pressurised situation and be able to implement everything I've developed over the last few months.*

Overarching themes relevant to all geographical areas

- Policy was vague, changed frequently and was difficult for care providers to understand. This meant that stakeholders were concerned about local planning and whether there would be negative repercussions such as blame if planning was not implemented adequately.
- A huge role of registrars and IPC leads was to translate this knowledge and make it applicable for different settings e.g. care homes and domiciliary care and make it relevant to different geographical / local areas.
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Respondent 4

> *It still feels so chaotic it's about as clear as mud on how that will work on an operational level. The Director of Public Health will now deploy testing – but who will be overseeing this? It's all about localised responsibility now but– we haven't got the infrastructure around it being local – there's no planning – is it so they can blame us? We can prep but will we be blamed for second wave?*

Respondent 6

> *A huge part of our role was translating the policy for them, they were so scared and they didn't understand a lot of the policy and they didn't have time to read it all the amount of times it kept changing. Their priority was to keep the care home safe and do their actual jobs. Having us there was key to that policy translation for them. Policy looks good on paper but not in reality – it's for local interpretation.*

Respondent 1

> *The amount of people we had calling us asking 'what does this mean?' I helped where I could but sometimes I didn't understand the policy myself as it was vague or contradictory – then I would have to redirect them to Public Health England.*

Respondent 5

> *I just did not have time to do my actual job and to field hundreds of calls from the general public, care homes, providers, other staff, teachers, dentists all sorts. I tried my best and I worked into the night most days. I*

felt like I was letting people down but I really tried my hardest. I could have done with a few more team mates to help me with that element.

- Policy that gives clearer guidance on accountability is required to avoid duplication of work and to make processes more streamlined. Share/distribution of accountability between LAs and CCGs was particularly confusing and unhelpful, creating difficulty with the potential for service users to fall through the gap, with accessing testing and resourcing PPE particularly challenging especially for self-funders.

- Support structures for self-funders, domiciliary care, learning disabilities, assisted living and children and young people's services were often disjointed and under resourced. Clearer guidance, more resilient structures and resources are necessary particularly around testing and PPE for these groups.

- Some areas reported strong links with CCGs and this created a collaborative approach to management of COVID. Conversely, less collaborative CCGs hindered efforts. Clearer accountability in policy may facilitate more resilient structures.

Respondent 1

Accountability for IPC/PPE guidance is unclear and there is a tussle between LAs and CCGs as to who is responsible and accountable for what. Policy was just too vague about this.

Respondent 5

The CCG were not that helpful but who can blame them as the policy was so vague right? I had a lot of self-funders ringing me, they were so upset about having to read guidance and not understanding who was responsible for what – they also told me about their personal assistants not understanding guidance and not having access to PPE or knowing where to get it. Policy neglected them I think.

- IPC leads and registrars reported working excessive hours to support providers, translate policy and develop new localised policies. Ring-fenced time and funding to employ new staff to support this going forward is urgently required.

Respondent 4

Oh I worked 'til 12am (ish) some nights. I'm sure I'm not the only one who will tell you that. I worked during my annual leave. If I didn't do that, I dread to think honestly.

- Some LAs reported immediately 'training the trainers' – facilitating prompt training of staff in care homes and other organisations so that these people could train other staff regarding correct use of PPE, IPC measures and how to perform testing. Webinars and virtual meetings were a welcome supplement for training but were not considered an adequate substitute for face-to-face training.

Respondent 3

Our IPC staff went out to train care providers and then those people trained staff. We trained the trainers. This worked really well for us.

Respondent 1

We made the time to do webinars to answer questions for staff and to demonstrate donning and doffing of PPE that sort of thing, but it was no substitute for face to face training, that was sorely missed I think.

- All LA staff, IPC leads, registrars, care providers, managers and staff have gone above and beyond to support each other in every area. Stakeholders felt support from policymakers and successes were a result of their hard work and efforts. This way of working is not sustainable and staff reported absences, stress, anxiety, exhaustion, burnout and fatigue taking hold. LAs urgently require support, funding and resources to recruit more staff. Staff recruitment to support ongoing management is necessary and staff recruitment has been difficult.
- Policy did not consider the size of teams available at the local level. There is an assumption in policy that local teams have all the required resources to manage outbreaks, provide guidance, support testing and resource PPE. This was not the case and policymakers need to act quickly to provide sufficient resources at the local level.

Respondent 2

We struggled to recruit staff like environmental officers, I mean who will come and work for us in the middle of a pandemic when they can get a much higher wage elsewhere like earning 30% more for the NHS? Our team was quite small anyway, you know?

Respondent 3

Oh lord, I mean care staff were frightened and I mean really scared. They were scared of getting COVID, they were scared they couldn't get tests, then they were scared of being blamed. They were scared for their own families. It was just awful.

Respondent 7

My worry now is that exhaustion is setting in. That with staff absences and sickness. They need help.

Respondent 6

They didn't take note of the size of our teams, we saw that having IPC one day a week was not sufficient so we addressed it ourselves. If we didn't bring that IPC in-house through the CCG then…it's not that we want to criticise Public Health England but we were asking them to make key decisions in January and they kept refusing.

- Areas where IPC was in-house and more integrated with health such as through CCGs was beneficial and building these links should be a key priority going forward.

Respondent 4

We had everything in-house and we had the CCG integrated in the care cell. That meant we had strong relationships to build on and things were more efficient.

- Managing expectations of care providers and staff and avoiding ambiguity, changing information, fear, blame and stigma were important.

Respondent 3

I speak to managers and ask them how they are doing, they all say they struggle with the constant change in attitude and then they think 'oh we don't need to take precautions' they want me to reassure them, it's about managing expectations. Managers then take it back to training, everything improves, then the policy changes again, then complacency sets in, then it drops, it's mixed message ups and downs in compliance they are exhausted.

Respondent 4

Looking back I can't believe the prime minister has blamed care homes, it really didn't help matters.

- Many areas reported confusion from the public including faith leaders regarding all ceremonies and gatherings as policy focussed on weddings. Advice needs to be consistent and easily available.

Respondent 2

I had faith leaders ringing me saying 'Okay 30 people for weddings but what about christenings? Other ceremonies?' It was vague so I had to either make a decision to advise or redirect them to Public Health England.

- A key success has been establishing centralised information that can be shared across many settings and areas. Problems emerged initially when trying to source information.

Respondent 6

> *We had to centralise the information quickly as the systems weren't able to do that initially. We struggled to find information. We have now set it up so that we can go to one place and they have all the information.*

- Domiciliary care structures need to be rapidly supported especially given the likely increase in demand for these services as a result of the pandemic.
- All participants flagged that care workers are underpaid and undervalued and this needs addressing urgently, particularly given the increased demands placed on them by the pandemic.

Respondent 4

> *Yes domiciliary care needs support. If I'm honest they have been failed.*

Respondent 6

> *These are people who are very badly paid and I don't mean to disparage them but they are often not well educated, they don't understand, they are poorly valued, sitting in cars all together, smoking together, going into different homes, masks around their chins, don't understand droplets and spread, sharing cars, they are doing a tough job, they need support.*

- Policy makers should focus urgently on prevention strategies to minimise the spread of infection
- There is a lack of guidance and support for unpaid carers and voluntary services and they need to be supported urgently as they have provided much support to the care sector.

Respondent 1

> *I think this is a dawning realisation for many people that the social care structure is a mess and needs funding and the voluntary sector is not supported neither are unpaid carers.*

Respondent 7

> *Policy now needs consistency. It needs to be about prevention and early intervention. People now want to work with us and build those preventative relationships – it's brought us together and we will build on this. We have major concerns about people temporarily cancelling care packages – informal carers then rose so clarity in policy is needed here.*

IPC measures

- IPC guidance from PHE was developed in isolation and would have benefited from consultation with IPC stakeholders. Some IPC leads felt guidance undermined training they had been providing for years, for example reusing PPE. Coupled with frequent changes in policy, staff felt their advice to care providers was constantly changing and this undermined their communication with care providers. Existing strong relationships with care providers in some areas buffered the impact of this; however, where relationships were less strong, this meant care providers were becoming disillusioned with constantly changing advice.

Respondent 6

> *PHE developed their policies and guidance without us, they didn't consult us and we know our areas. Why didn't they consult IPC professionals in the first place? It's beyond me.*

- Stakeholders felt that the national cultural shift in legislation and easing of social distancing measures created confusion and may lead to complacency with IPC measures going forward.

Respondent 7

> *Yes we are trying to regenerate the economy but we don't want our care staff going to pubs. Perhaps key workers should not be allowed to go or think more about what they do. You can do things in a safer way, socially distanced in a safe way or enclosed public place. They can enforce face coverings. They are going to have to learn to live in a different way, if test and trace works we can find that helpful but can't just rely on that.*

- Care providers created bubbles or staff groups to minimise infection. Car sharing was used to support staff who would normally use public transport.

Respondent 3

Care providers created staff bubbles, they found new ways of working like having certain staff only on one floor in bubbles or care groups to stop spread of infection and this worked better for residents as then they had continuity, so this was a happy accident.

Respondent 7

Staff shared cars so they didn't have to travel on public transport and that helped.

- Guidance on communal areas such as staff rooms and breakout areas was inadequate and meant some areas had seen outbreaks due to PPE doffing and weaker IPC measures in these areas. Clearer guidance is urgently needed.

Respondent 2

There were reports of outbreaks from staff rooms and I think what was happening was staff were doffing their PPE and sharing a cuppa and cake and having a cuddle for support not realising they were just as likely to spread COVID in the staff room. It just wasn't clear to people that it was needed everywhere not just when you're caring for someone.

Respondent 5

Communal areas were a nightmare and I don't know if there was thought as to the need to deep clean the communal areas.

- Some care providers have used the ASC ring-fenced funding to install IPC facilities such as hand gel dispensers and PPE dispensers next to residents doors in care homes. This has worked really well in enabling staff to efficiently and safely don and doff PPE and maintain high IPC standards.

Respondent 7

Our providers have used the grant money to install PPE dispensers hanging over residents' doors, in staff rooms, making it easy for them.

Testing and discharges

- Some stakeholders felt pressured to take on patients and challenged hospitals and requested patients were accepted only upon the condition that items of PPE such as goggles were sent with patients. Some hospitals agreed to this and so this could be adopted by other areas.

Respondent 4

I mean, the pressure from hospital discharge teams we had saying 'call this care home, call them and get them to take them back call them call them!' Often people are better off in care homes than hospitals but they didn't have the appropriate PPE. We told them right, we'll ask them but on the condition you send them with a pair of goggles to protect the staff member.

- Advice regarding isolation periods was changeable and confusing (e.g. shifts between 14 days and 28 days isolation). Clarity and consistency is needed going forwards. Concerns regarding the isolation of residents and their emotional/psychological well-being have also been raised.

Respondent 6

It was 14 days then back to 28 days then back to PHE 'what is the guidance?' Back and forth back and forth. If they come back positive are they at the end of an outbreak or not? Is it outbreak resolved (after last symptomatic person) or is it after last negative outbreak? Policy looks good on paper but not in reality.

- Some residents/patients were discharged via public transport and LAs had to resource private transport for these people. Guidance regarding safe discharge should address this urgently.

Respondent 3

We arranged taxis for the patients to get back to care homes and their homes as the hospital were sending them home on public transport.

- Testing of staff was a concern. Policy should ensure testing is available for all staff including administrative, cleaning, kitchen and other staff should be ensured. Concerns were raised regarding people not employed by care providers such as tradespeople and agency staff and their use of PPE or lack thereof.

Respondent 2

Nobody was testing the kitchen staff or the admin staff or people coming in and out like you know tradesmen. I don't think it crossed anyone's mind that they would need testing or PPE.

- Testing for learning disability service users, assisted living and children and young people is under resourced.

- Concerns were raised around the current inadequacy of test and trace.

- There should be further consideration given by policy-makers to the ethics surrounding learning disability service-users who can find testing traumatic. This also applies to older adults with dementia.

Respondent 7

> *There's been scepticism around the value of testing. They were saying on tv 'everyone can get a test'. Right then, we've got someone symptomatic, so IPC won't bother testing if there's already someone positive. Then their family members find out their family member wasn't tested so they go to the local MP and at the end of the day that person needs testing!*

Respondent 6

> *We had families calling saying please don't test our relative or come in PPE it will really upset them. We couldn't explain enough that our staff need that protection.*

Respondent 3

> *We had to weigh it up, is it ethically justifiable? Who do we test? We don't test all for sake of testing and some found it very difficult and distressing, some residents were unwilling or understanding was difficult so we had to think about should we test with no symptom? We had to treat it case by case.*

- Concerns were raised around the location of test sites and the ease of access, particularly for staff who do not drive. Where home tests became available, there were concerns around whether people were conducting these correctly and clear guidance on how to do these is required.

Respondent 1

> *Some care staff were expected to go to a test site miles away and they didn't even drive.*

PPE

- Training on donning and doffing of PPE needs to be supported swiftly.

Respondent 7

Some staff were not even changing gloves between service users so there's general training issues, low paid jobs, low valued, low training, we did a mini audit – are all your staff changing at work etc? Not travelling in uniform on public transport? There were some language communication issues e.g. none- English speakers.

- There was confusion around the re-use of certain items such as masks, especially for domiciliary carers, and how possible it is to clean items in-between visits.
- Policy dictates to re-use items where new PPE is not available which undermines established safe IPC practice. Policy also dictates for domiciliary carers to wash reusable items in-between home visits – this is not feasible. Concerns have been raised around the environmental damage being caused due to increased use of disposable items.

Respondent 5

As for the reusing masks and washing in-between visits are they serious? How do staff do that?

Respondent 6

Everything the guidance said about reusing PPE or folding it up etc went against everything we have ever been teaching people as IPC experts. You simply don't reuse PPE it just isn't safe practice at all. It undermined years of expertise and knowledge.

Respondent 1

With my sustainability and environmental hat on, I did worry about the waste and the damage to the environment of all this PPE being used.

- Training around PPE and Aerosol Generating Procedures (AGPs) is urgently required. It has become apparent that there is much more use of these in the community such as via domiciliary carers than was previously known. Some areas have begun audits to establish how wide spread this is.

Respondent 1

There was inadequate training in IPC PPE for care staff who hadn't used it before and particularly around aerosol generator procedures.

Respondent 7

There was lots more people using AGPs than we had realised so we are now doing an audit to make sure we know where and when and we can offer training now.

- Training for staff who do not usually wear PPE such as social workers was not included in policy and these people require support going forward. This applies to all health and care staff and should also be promptly considered in relation to other sectors such as dentistry and education/teaching.

Respondent 1

I really worry about social workers and teachers and dentists, they were worried you see about how to use PPE, they just hadn't had that sort of training before to the level they needed any way.

- Dehydration of staff due to PPE should be addressed more clearly in policy especially for the summer months.

Respondent 3

There were lots of staff getting dehydrated and it's a worry for the summer. Policy needs to address that.

- Some areas had developed formulas for working out how much PPE was needed for each home/provider and this ensured that PPE was evenly and fairly distributed.

Respondent 2

Yes we developed a formula as people were over egging what PPE they needed probably through fear and wanting to stockpile. We needed to make it equitable so we developed a formula to ensure it was fair.

5.4 Initial conclusions from the qualitative findings

As the above summary from initial interviews shows, local authorities and health systems have undertaken a huge amount of work to mitigate the impact of COVID-19 in their areas during the initial crisis, often whilst national guidance has been lacking or unclear. Innovative approaches have been developed to overcome emerging challenges, and new relationships have been formed between organisations and departments to support this process. The response in each locality has been different depending on the local infrastructure and expertise in place, and already it is possible to share learning about common concerns and best practice. Nevertheless, the research has highlighted a number of areas of ongoing

concern, such as PPE fatigue, lack of staffing and resources, lack of clear guidance, and issues around domiciliary care, which require both immediate attention, and sufficient preparatory work in advance of a potential second wave.

6. Recommendations

- As the ONS are acquiring all their domiciliary care deaths figures from CQC as nobody else records whether the person was in receipt of domiciliary care and CQC are not providing regular updates (and therefore neither are ONS), a more systematic and uniformed approach is required to ensure accuracy of figures. There is still an urgent need to address this in Wales who do not require domiciliary care providers to report these deaths to the CIW.

- Domiciliary care infections cases are not recorded anywhere as yet; however, CQC have stated they have been informed of 15% of NW providers dealing with COVID cases. Again, a more systematic and uniformed approach is required to ensure accuracy of figures and to highlight localised/regional outbreaks to facilitate efficient and appropriate management.

- Information on self-funders and how they are accessing IPC is particularly hard to determine as local authorities do not have all this information. Again, a review of how best to establish and maintain communication with these people is urgently required to help manage future outbreaks and to establish and address unmet care needs.

- There is no guidance for how informal carers or self-funders can obtain PPE and so this requires urgent attention. There is minimal advice in general for self-funders.

- Guidance surrounding the training of staff in dehydration should be provided and made explicitly and easily available.

- Domiciliary care providers are not ring fenced for IPC funding in an equitable way as care homes are. As local authorities decide which providers get funding for IPC, they are prioritised after care homes have been funded and they are required to provide evidence of need which can be time consuming and costly to providers, there is a need to make this process more equitable for domiciliary care providers, who have seen deaths treble to service users.

- COVID-related deaths are not always recorded as with care homes and the process has been reported as subjective. Again, a more uniform and consistent approach is required to ensure accuracy of data reporting.

- As the domiciliary care sector has seen unprecedented staff shortages, providers struggling to stay afloat and service user decline, along with many people social distancing, there could be an unknown amount of isolated people not accessing care and being supported. A review of how best to maintain communication with vulnerable adults is urgently required to establish need and to address unmet care needs.

- As individuals from ethnic minorities are more likely to work in occupations such as domiciliary care, with a higher risk of COVID-19 exposure, they should be prioritised by employers and organisations to address their needs. Staff should be made to feel comfortable and safe to voice concerns without fear of job loss or discrimination.

- It is vital to establish which domiciliary care providers have been contacted and supported regarding the testing process and a review is required to understand how and how many staff are accessing testing given the disparities report indicates many ethnic minority care staff travel to work via public transport and so may not be able to access these locations. Given the higher risk to the ethnic minority community, these staff should have targeted support measures.

- Home testing kit guidance should be developed to ensure testing is viable, as should the guidance surrounding expected time periods for receiving results and next steps following positive testing outcomes.

- PHE PPE guidelines in relation to masks and the re-use of them, indicates carers should wash these in-between visits. As this may not be feasible for those in the community, clarification regarding this is needed. It should also be ascertained as to whether carers are using the same masks all day in the absence of availability of disposable masks and whether this is safe or not.

- Guidance on storage of COVID-19 waste is vague and should be clarified. For example PHE guidance indicates it should be kept in service users homes 'securely' away from other waste and children for 72 hours. It should be explored as to how feasible this is and how service users are storing waste. Some users bed bound disabled dementia.

- Guidance only recommends 'care groups' or staff bubbles for those shielding and not other service users. It may be helpful and reduce infection if these care groups can be established for all users where feasible.

- Guidance indicates that staff should conduct supervision and handovers remotely. It states information should be shared over secure email such as NHS mail. There is no indication as to whether time is being ring-fenced for care staff to fulfil these extra duties and whether all staff have access to devices that will enable this. A review should be conducted to ascertain whether staff have access to adequate equipment for this and ring-fenced time to enable information sharing and to ensure this is conducted in a confidential manner that meets data GDPR standards.

- The guidance on the transfer of care from acute to community services such as care providers is vague and accountability is unclear. There is a risk that COVID-19 patients requiring domiciliary and other care needs may have unmet care needs and rapidly deteriorate. An urgent review is required to understand how these processes are working and to establish accountability, as well as to understand the multi-disciplinary communicative structures and processes required to support individuals.

- There is currently no time period for LAs and conducting care assessments. The guidance just states to 'prioritise those in most need'. It may provide reassurances to service users and families if they had an idea of how long they should wait before chasing care arrangements.

- Providers may face financial difficulties if they are unable to obtain payments of invoices. CQC insight report has already indicated financial pressures faced by providers. Providers should be consulted as to what process would be most beneficial in supporting them as sustainable providers of care. PPE VAT removal may be beneficial beyond July 31st.

- LAs are tasked with 'how to maintain viable domiciliary care solutions' and NHS and care providers are tasked with liaising about this with LAs. However, this is relatively

vague and does not provide a gold standard approach, meaning accountability is lacking and guidelines are open to subjective interpretation that could lead to care needs being unmet.

- Test and trace relies on the general public being honest about contacts they have had. The service does not appear (as of 18th June) to be 'up and running' in a consistent manner. Test and trace along with other combined consistent measures is essential to effective IPC and so a review of these processes is urgently required.

- Guidance related to the involvement of voluntary organisations is vague and there is no clear indication of how this is being monitored, which should be urgently addressed.

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Report 3 – Data sharing needs and the suitability, integrity and availability of data in Higher Education Settings – Interim Report

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Background

Throughout the pandemic, universities (as organisations) have been ultimately responsible for managing their pandemic responses and implementing current legislation, policies and guidance in partnership with the local public health teams in local authorities and Public Health England (PHE) now UK Health Security Agency (UKHSA). Each partner plays a critical role in ensuring the health and safety of people in their area, and it is against this developing background of testing availability and data sharing that public health teams were tasked with managing workplace responses to local COVID-19 outbreaks, limiting spread and protecting the public, including higher education institutions.

The aim of the study was to explore the data requirements to manage cases, clusters and outbreaks in higher education settings to reduce the risk of transmission as part of a Greater Manchester (GM) case study for the PROTECT programme.

Methods

We conducted qualitative interviews with local public health teams, occupational health/university campus management and the PHE/UKHSA North-West Health Protection Team in GM to evaluate the data needs; suitability, integrity and availability of data sources; and the experience of using these throughout the pandemic for assessing and managing transmission in occupational settings. Participants were asked on the data requirements for managing workplace responses to reduce the risk of COVID-19 cases, clusters and outbreaks between January 2020 – February 2022.

Results

Participants discussed challenges in accessing relevant data at the outset and how they responded by initiating their own methods of data generation. Participants also spoke of difficulties in learning how to work with the data that was shared from the national system and communicating key messages to other stakeholders. Other factors, including changes and inconsistencies in national policy and guidance, were a source of high levels of personal stress among team members. Having a strong local team, working together, provided much needed support for all.

Conclusion

COVID-19 brought new challenges and stress to a system that was not already prepared to take on such critical work, at such short notice. A lack of support at a national level, early on, led local systems and stakeholders to develop and enact their own approaches, which they retained throughout, as they remained effective. When national data was finally made available, local teams did not have the skills or knowledge on how best to use it. Good co-operation, across the local footprint, produced the best possible response.

1.0 Introduction

Timeline

In February 2020, Public Health England (PHE) published the first details regarding testing in the UK for novel coronavirus SARS-CoV-2 (PHE, 2020a). At that point, clinicians who suspected novel coronavirus in a person could take samples from the nose, throat and deeper respiratory tract and send them for laboratory testing at PHE's laboratories in London, with the capacity to process samples from around 100 people a day. The Government aimed to quickly increase the country's testing capabilities to more than 1,000 people per day by widening diagnostic capacity from one laboratory in London to 12 labs in the following weeks. These would be sited in Scotland (2 laboratories); Northern Ireland; Wales; London; Cambridge; Birmingham; Bristol; Manchester; Leeds; Newcastle; and Southampton, to prepare for further cases and speed up the time from a sample being taken to a result in the lab.

This increased testing capacity was quickly unable to meet demand leading Prime Minister Johnson to announce on 12 March 2020 that testing would become restricted to those admitted to hospital and that contact tracing would stop. The numbers of cases and deaths in the UK soared and on 18 March 2020 the Department for Education (DfE) announced that all education settings would close on 20 March 2020 until further notice (DfE, 2020a). Soon after, the UK entered a National Lockdown on 23 March 2020. On 15 April 2020, hospital testing was expanded to also include anyone being discharged into a care home (DHSC, 2020a), while a further revision on 17 April 2020 ensured that police, fire, prison and Department of Work and Pensions staff could begin to get access to coronavirus testing (Boseley, 2020). With the introduction of a new 5-pillar plan, that brought together government, industry, academia, the NHS and others to expand manufacturing capacity and home-grown businesses in life sciences and other industries, came the ambition for mass testing at scale (DHSC, 2020b). The ambitions of the new 5-pillar plan were to:

- Scale up swab testing in PHE labs and NHS hospitals for those with a medical need and the most critical workers;
- Deliver increased commercial swab testing for critical key workers in the NHS across the UK, before then expanding to key workers in other sectors;
- Develop blood testing to help know if people across the UK have the right antibodies and so have high levels of immunity to coronavirus;
- Conduct UK-wide surveillance testing to learn more about the spread of the disease and help develop new tests and treatments; and
- Create a new National Effort for testing, to build a mass-testing capacity for the UK at a completely new scale.

This widespread testing would continue to prioritise critical key workers (NHS and social care staff and their families), before eventually including key workers from other sectors (teachers, hospital cleaners, public servants, the emergency services, supermarket staff, delivery drivers, and other critical infrastructure staff) (DHSC, 2020c). From 28 April 2020, anyone who could not work from home and symptomatic members of the public aged 65 and over could also be eligible for COVID-19 testing (DHSC, 2020d). In addition, local health protection teams were to become the first point of contact, where a care home suspects an outbreak of coronavirus (DHSC, 2020e).

In May 2020, local authority public health teams were given additional funding to develop tailored outbreak control plans, working with local NHS and other stakeholders. These plans would focus on identifying and containing potential outbreaks in places such as workplaces, housing complexes, care homes and schools, achieved by working closely with the test and trace service, local NHS and other partners. Data on the virus's spread would be shared with local authorities through the Joint Biosecurity Centre, so teams could understand how the virus was moving and inform local outbreak planning. (DHSC, 2020f). Finally, on 28 May, NHS Test and Trace service was launched across England. The importance of reducing risk of transmission of COVID-19, especially in workplace settings was to ensure cases were isolating and any potential contacts could identified to be advised on testing and self-isolation. This was particularly important in workplace settings including education settings.

This NHS Test and Trace service would use directly employed contact tracing staff and online services, in addition to public health teams, to identify and alert potential contacts to limit the spread of the virus (DHSC, 2020g). During its' first week (28 May and 3 June 2020) this new service had the cases of 8,117 people who tested positive for coronavirus (COVID-19) transferred to the contact tracing system. Of these, 5,407 were asked to provide details of recent contacts, 31,794 contacts were identified and 26,985 people were reached and advised to self-isolate (DHSC, 2020h). Local councils began to receive data on the numbers in their areas being contacted (Manchester City Council, 2021).

By July 2020, NHS Test and Trace were sharing postcode level data from the service with local authorities, to inform action to stop the spread of the virus in local communities. Initially, this data included test turnaround times, as well as further information on positive test results, those who have shared contacts and the contacts reached and asked to self-isolate (DHSC, 2020i). The 'COVID-19 contain framework' aimed to improve this further, including the number of positive cases at both an upper and lower-tier local authority level, broken down to local areas of 5,000 to 15,000 people, and formed part of the weekly PHE COVID-19 surveillance report (DHSC, 2020j).

Immediately ahead of the start of the new academic year 2020-21, DfE published guidance designed to support attendance in educational settings with contingency planning for areas with local lockdowns in place. This guidance included the pledge to provide schools and colleges with home testing kits, each receiving a pack of 10 tests, with more available to be ordered if needed. The home testing kits were for use only in exceptional circumstances, and should enable schools and colleges to take swift action to protect others if the test result is positive. (DfE (2020b). The Health and Safety Executive (HSE) issued COVID-19 specific workplace guidance, which stated all risk assessments needed to include COVID and was updated regularly (HSE, 2020a). COVID-19 reporting through RIDDOR was for any transmission (HSE, 2020b). Universities reopened, with students at Manchester Metropolitan University returning from August, earlier than other students in England (Manchester City Council, 2021), and DfE university specific guidance followed on 10 September 2020 (DfE 2020c). At the same time, the National Test and Trace service would offer to provide local areas with dedicated team of contact tracers (DHSC, 2020k). On 29 September 2020, the Secretary of State for Education confirmed that that universities were very well prepared to handle any outbreaks as they arise, and that UK Government had been working with the sector and Public Health England to make sure that univerities have every support and assistance they need should this happen (DfE, 2020d). Cases in Greater Manchester universities soon soared, with significant increase of outbreaks seen in halls of residences.

On 5 November 2020, due to rising cases, England entered a second National Lockdown (Prime Minister's Office, 2020) and school and colleges were advised to ensure that face coverings were worn by students and staff in communal spaces, outside of classrooms and where social distancing cannot be maintained (DfE, 2020e). Further guidance, specific to universities, provided for a 'student travel window' to allow travel home to families for Christmas, between 3-9 December 2020 with universities moving to online learning to aid this. Mass testing was also made available, to help more travel home without taking the virus with them (DfE, 2020f). This was to be followed by staggered returns, after Christmas, with further mass testing to help break transmission among students (DfE, 2020g). Following a partial easing of national restrictions in December 2020 (Greater Manchester was placed in Tier 3, then Tier 4), a third National Lockdown began on 5 January 2021 and educational settings closed again, moving to online provision in majority of subjects (DHSC, 2021, DfE, 2021a).

Schools reopened from 8 March 2021 alongside twice weekly rapid flow testing, which was widened to also include anyone who couldn't work from home, although universities would retain largely online learning until after the Easter holidays (DfE, 2021b). However, a backlog in laboratory testing impacted identification of new regional cases of the Kent (Alpha) variant. On 24 March 2021, the first cases of the Beta variant were detected in the region and then,

on 20 April 2021, the first cases of Delta variant (Manchester City Council, 2021). At this time, UK Government released an ad-hoc statistics publication of cases in higher education between August 2020-April 2021, which showed there had been 76,546 confirmed cases (67,571 students and 8,975 staff) with 59,596 of these cases in the Autumn term and 16,950 in the Spring term (DfE, 2021c).

The PHE policy document "Public Health England and NHS Test and Trace: our role in the Roadmap out of lockdown. Delivery plan April to June 2021" (PHE, 2021) describes the ongoing relationship between testing and managing responses to outbreaks. In September 2021, UK Health Security Agency (UKHSA) was formed to provide the health protection function previously included in PHE.

In May 2021, the requirement for face coverings to be worn in classrooms and communal areas, in schools and colleges, was removed (DfE, 2021d) and in September 2021, universities were called on to swiftly pivot "back from pandemic response to resume face-to-face teaching" in a speech at Universities UK Annual Conference (DfE, 2021e). The 'COVID-19 contain framework: a guide for local decision makers' (UKHSA, 2021) and 'COVID-19 Response: Autumn and Winter Plan 2021' (Cabinet Office, 2021) detailed how NHS Test and Trace, local authorities and UKHSA would continue working together over the autumn and winter period of 2021-2022, as we 'learn to live with COVID'.

Background

In March 2020, university and college campuses were closed in response to the Coronavirus pandemic and teaching moved online. This remained the case during the development of a robust and comprehensive testing and contact tracing system. In September 2020, guidance was published on arrangements for students moving back on to campuses for the autumn term (Hubble and Bolton, 2021). Since then, the student experience has been variable with changes between remote (online) and in person working patterns, and a blended approach to teaching and learning. Throughout the pandemic, Universities (as organisations) have been ultimately responsible for managing their pandemic responses and implementing current guidance on the basis of available data – which was not always available or easily accessible.

Health protection teams from the local authority and PHE now UKHSA, play a critical role in ensuring the health and safety of people in their area, and it is against this developing background of testing availability and data sharing that public health teams were tasked with managing workplace responses to local COVID-19 outbreaks, limiting spread and protecting the public. Until July 2020, when local testing data was finally being made available directly to them, local teams were acting with variable and delayed access to the level of data necessary to assist them. By this point, the University of Manchester had already developed its' own

mature reporting system for staff/students/visitors positive tests, which was supported by a data sharing agreement with Manchester City Council and weekly triangulation of data between the universities, Manchester City Council, PHE and UKHSA.

Testing and appropriate action on the results of tests are critical to keeping people safe, understanding this pandemic, and bringing and keeping it under control (Buck, 2020). With each change in policy surrounding COVID-19 testing and its purpose, local public health teams had to react and adapt. It is imperative to understand the data sharing needs of local public health teams, and the challenges they faced surrounding the suitability, integrity and availability of data during the active management of local outbreaks in order to evaluate the success of the service and preparedness for the future. What they did and how they did it offers us unique insight and learning into the functioning of this critical public health area.

Aim

To explore the data requirements to manage cases, clusters and outbreaks in higher education settings to reduce the risk of transmission as part of a Greater Manchester case study.

2.0 Methods

An experienced qualitative researcher conducted qualitative interviews and focus groups with local public health teams, occupational health/university campus management and the PHE/UKHSA North-West Health Protection Team in GM to evaluate the data needs; suitability, integrity and availability of data sources; and the experience of using these throughout the pandemic for assessing and managing transmission in occupational settings.

Recruitment

Participants who were known to have been directly involved in handling, interpreting and communicating the data on COVID-19 cases and transmission in Greater Manchester between January 2020-February 2022 and supporting the University of Manchester's responses, were purposively selected and received an email invitation to participate in the study. Data for this study were collected from 5 interviews and 2 focus groups (n=13 participants). The data was collected in March 2022.

Data Collection and Analysis

All interviews and focus group discussions were conducted online (Teams) using a semi-structured interview guide. Interviews and focus groups typically lasted 60-90 minutes. We asked participants about their experiences of working in their roles, at various stages of the pandemic and response – with particular reference to their data needs and the suitability, integrity and availability of data. Responses and notes were hand recorded by the researcher and a rapid thematic analysis using rapid assessment procedure (RAP) sheets (Taylor et al, 2018; Vindrola-Padros et al, 2020) was used to sort and analyse the interview and focus group notes, and derive relevant themes to provide a framework for understanding the issues raised. Anonymised participant quotes are included in the results.

3.0 Results

There were multiple barriers to get timely information on workplace outbreaks, which we explored using case studies from Greater Manchester. These barriers created challenges for the effective management of cases and for mounting an effective local response. They also created personal challenges for those tasked with implementing these.

Data needs

There was a lack of data available to local stakeholders at the start of the pandemic, which significantly affected their ability to respond appropriately.

Universities began designing ways to collect and track data on cases within their student population, while the local authority took a traditional health protection route (risk planning, standard notifications, looking at who/how many people may need to shield) and generating their own initial data to guide the response. They did work on risk factors, multi-generation households and used broader non-COVID data to identify potential places where infections may be seen (e.g. housing, census, areas with homelessness).

> *“We didn’t know what it was but we knew there was some kind of infection.” (P03)*

> *“I remember my boss asking me to think how we could gather info about student cases. I wrote the COVID student survey”. (P05)*

> *“As GM is multiagency system, there are plans in place. We pulled pandemic plan out, but it was based around ‘flu. Was a good starting point, but this was completely new.” (P06)*

The survey developed by University of Manchester had two versions (student and staff). This only captured a small number of entries until more testing became available and while emails would come through every few days, there was only ever limited capacity to follow up and teams could only do 1 chase on a student, to complete the campus management survey, when they had a positive result.

As the pandemic progressed, the demands and the system kept changing, which made it even more difficult for local teams to keep up with. There was often significant amounts of missing data following outbreaks (Pillar 1 and Pillar 2), which continued to limit the ability of local teams to respond.

> *"We were under the impression we'd get a particular set of data and that didn't happen!" (P10)*

When NHS Test and Trace began contacting Manchester City Council daily, this was to advise if any confirmed cases had worked in Manchester during their infectious period, and came in the format of 'line lists' (2+ cases) also termed 'postcode coincidences'.

> *"Very early on, because nowhere was open and people were literally only going to work, it was easy to work out where people had caught it" (P02)*

From a university perspective, the lack of reliable track and trace data throughout, and the need for data to easily move between the four nations of UK, was a particular concern. This was felt particularly when dealing with international students, finding difficulty in getting their vaccinations recognised in UK, and even Welsh students unable to evidence their COVID status.

> *"This probably has jeopardised the whole pandemic response" (P04)*

Data sharing measures and arrangements were discontinued on 24th February 2022 and local teams are currently waiting for plans to be developed for 'Living with COVID'. Local teams, across the GM footprint, expressed concerns about the short and medium term implications on how to detect enduring prevalence, or rise in cases, in the absence of testing.

> *"Concerned now we just won't know, I worry what will happen when people have to pay for testing. Have no idea how reliable data is now." (P01)*

- Reporting is now ramping down. The University of Manchester campus survey currently remains open to generate and proved a basic source of data, but with reduced testing capacity and removal of the legislation and guidance to test, adds to the uncertainty of what transmission maybe occurring on campus.

“I think the volume of under-reporting has the potential to be much, much bigger.” (P05)

“My role has changed already. When Test & Trace closed – line lists were our main evidence – we lost access to that. Last week we had zero reports. When the tests go, we’re going to have no intelligence.” (P02)

Suitability, integrity and availability of data

We found a lack of training also causes significant problems in the usability of data, when they were available.

For all GM organisations, the suitability and availability of data has been a slow and developing process. At the beginning of the pandemic, testing was only available for people in hospital. Locally, the challenges for teams set the tone for their response across all sectors and this immediately created a conflict relationship between local and national systems. Guidance and new policy were ‘handed down’ without supporting data, which made it difficult to implement.

“In the early days, the guidance we were fed and told to share, the evidence behind it was difficult to access. Very difficult to implement advice that we don’t agree with.” (P12)

There were lots of issues around risk assessment and providing support to ensure different sectors had the correct paperwork to operate safely. Data reports of non-compliance or concerns from the public (regarding potential infringements etc) were followed up by local enforcement teams and lists of settings were reviewed weekly (mainly hospitality and entertainment venues, plus private student accommodation – not halls of residences).

“Other element was businesses could self-report to us if had 2 or more cases in 14 days. We called these clusters, not outbreaks.” (P02)

The slow sharing of data, coupled with still limited testing, meant little data on actual cases was available and local public health teams didn’t get the information they needed in a timely way. Availability of data has increased throughout the pandemic but the format and types of data shared has not always had clear explanation or utility.

“Data delays would have been worse if we hadn’t had local systems.” (P06)

In May 2020, PHE began sharing granular data. This was done using Power BI reports. Initially, this was only aggregate numbers, not individual level recorded data. There was a lack of appropriate training, in understanding the integrity of the data e.g. which sources, whether

it was self-reported or added later and what the data flows and processes were, which created additional challenges.

> *"What was missing, at that point, that we didn't get until later was any training" (P03)*

The data files that were received came as multiple files broken up in multiple ways. Each one was bigger and bigger over time and included: test results positive cases; negative and void cases; contact tracing cases; contact tracing contacts; common exposures; and postcode coincidences. Being given data but not the skills to work with them exposed a knowledge disconnect between national and regional resources. It was not until summer 2021 that local authority received input from PHE in how best to use the data.

> *"There is a lack of understanding, nationally, about the skills of Local Authorities to handle data in a more automated way. PHE understood it all, but we didn't." (P03)*

Data for contact tracing, managing cases, clusters and outbreaks

A lack of joined up working severely hampered early efforts to manage and respond to rising cases and the changing nature of the pandemic.

The growing volumes and speed of data flows did not come with the guidance or support to work with these data; therefore, it was difficult to plan timely and proportionate actions. The data processing elements of public health intelligence teams was forced to increase, once the data were received. This was to allow data extraction, cleansing and analyses in order to communicate the meanings effectively and to the correct people. This meant a change in the nature of these roles and standing down of some routine work.

> *"Once data came in bigger numbers, everything else stopped – focus around the data sets being given. That Power BI became the centre of our world. It all came in one go – no guidance on how it all links, to support engagement, which bits are robust or not robust." (P03)*

To respond to this, local consultants within UKHSA put on webinars and resource packs to help make it more relevant, as the demands and the system kept changing.

> *"It was very tiring to keep up with. You were flying by the seat of your pants. I was fire-fighting." (P12)*

Working together provided a clear mission and clear sense of purpose for local teams, which raised the profile of data analysis/expectations and changed the skills needed. Universities

worked ‘hand-in-glove’ with Director of Public Health and Manchester City Council teams, and found that having their expertise on the campus management group was very beneficial – especially the safety team and risk & compliance.

> *“We had really good access, through [P06]’s team and others”. (P04)*

> *“Felt really rewarding that we put together an operation that seemed to work.” (P05)*

GM has consistently had some of the highest rates throughout the pandemic, which has place lots of pressures on the staff. The close working between teams was shown to have value across all partners, as everyone responded to the pressure and duty to do the best they could for their shared population.

> *“Feel like we had a sense of ‘duty’ to do what we could for the population we serve. It’s been an honour to be part of this team to try and make a difference” (P09)*

> *“You don’t hear anyone moaning” (P10)*

> *“Team strength has been key” (P07)*

When testing and data sharing between the national system and local authorities finally emerged, universities already had a mature reporting system in place for staff/students/visitors positive tests. There was a data sharing agreement with Manchester City Council and weekly triangulation of data between the universities, Manchester City Council and PHE and then later UKHSA. This allowed university staff to reflect on what they were doing and gave confidence to reporting rates data. Testing data went to secure website managed by onsite team which was available with only a 24 hour lag, and was reviewed daily with any positive cases followed up with local management, sports teams, halls of residences and welfare teams, and contact tracers.

> *“One of the big things, sitting alongside the others, the frustrating thing is we were attuned to how much effort we had put into keeping them safe, and staff didn’t ever see that. Keeping ahead of the comms was hard.” (P04)*

GM, as a region, acted on a local level much quicker and more effectively than the national response. As the local teams began to share data, they effectively formed one team, which improved the overall ability to manage cases, clusters and outbreaks. Now the region is moving to ‘*Living safely and fairly with COVID’,* the local system is looking at what testing

provision may remain, learning and trying to plan for better future system and re-evaluating how to move forwards. All this should enable systems to step up or push back in the future,

> *"The wider system learning has been incredible." (P12)*

> *"GM has developed confidence to go against the flow. Know how to take an issue to top. Having a Mayor has been really supportive." (P13)*

> *"One of the key things for us is that COVID hasn't gone away and we are waiting for new guidance to come it. We're still full on with this." (P06)*

Due to the recent publication of the "Living with COVID" guidance and new guidance for higher education settings, further analyses of the RAP sheets is currently underway to help inform this next phase of the pandemic.

4.0 Discussion and recommendations

The aim of this study was to explore the data requirements to manage cases, clusters and outbreaks in higher education settings to reduce the risk of transmission as part of a GM case study between January 2020 – February 2022.

The backdrop of evolving national and local testing and reporting systems and ever-changing national, regional and sector specific guidance created challenging conditions for those teams responsible to managing the public health response.

Summary of the data sources used

The data needs of local teams were not met early enough in the pandemic. The different teams responsible for supporting organisations and the public developed their own approaches, at pace, to fill this gap.

When data began to arrive from the national team, this was provided without any prior training on how to use it and so local partners found they did not easily have the skills or the knowledge to make best use of this.

The challenge to access the relevant data, at the appropriate time and with appropriate support created additional stress for those partners tasked with delivering a local response. Many stakeholders reported this to be a 'traumatising' experience, and one they would not choose to repeat.

Barriers to timely information on local and workplace outbreaks

The slow maturity of the national system, together with a lack of appropriate training and resources to support local teams in delivering appropriate responses to meet the needs of their population has been a constant source of frustration and stress, at a time when participants were also living through a global pandemic, on a personal level.

Those working in the various teams have proved to be committed and adaptable to the challenges they have faced. This has been an unexpected consequence for those tasked with running the system and keeping everyone safe.

Future work

"Living with COVID" presents a new set of challenges with increasing rates, hospitalisations and deaths with reduced restrictions and testing. Further analyses of the RAP sheets in year 3 and a natural experiment for GM case studies is being developed.

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