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Pilot point prevalence survey of COVID-19 among domiciliary care staff in England

July 2020

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1. Executive summary

Despite recent studies in health care workers and care home staff, to date there have been no studies of the prevalence of COVID-19 infection or risks of transmission in domiciliary care staff. This pilot study provides the first estimate of the prevalence of COVID-19 infections among domiciliary care workers in England. It will inform testing strategies for domiciliary care staff and measures to reduce the risk of transmission of COVID-19.

A prospective descriptive survey of a sample of workers from domiciliary care providers was carried out in June 2020. The study used a sampling frame of all care providers in England registered with CQC. The study took a 2-stage sampling approach, first to recruit providers and then to recruit staff. Providers were recruited by a combination of purposive, convenience and opportunistic methods. Providers were recruited from London, South East, Midlands, North West, and North East and Yorkshire. Staff were recruited by employers opportunistically.

The number of providers recruited was determined by a sample size calculation. A target sample size of 2589 workers was used based on an assumed prevalence of 0.5% or less among domiciliary care workers, to be confident that prevalence is no greater than 1%.

Self-sample kits were sent to providers for distribution to participants over a 2-week period between 2 and 16 June 2020 and returned by courier by the providers or by participants directly using free post envelopes. All samples were to be returned to PHE Colindale by 24 June 2020 for PCR testing for SARS-CoV-2.

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. Due to the small size of this study it is not possible to investigate regional differences in prevalence. It should be noted that that domiciliary care workers currently off work or self-isolating are under-represented in this survey. This group may be expected to have higher prevalence but are also likely to have access to testing through Pillar 2.

The age profile of the study population is older than that of other sectors is largely female. Demographics of the ONS COVID-19 population prevalence study participants are presently unavailable and therefore is not possible to compare the demographics of these studies directly.

These findings will be a guide for policy makers in making decisions on testing strategies and measures to reduce the risk of transmission of COVID-19 for this workforce.

2. Background and rationale

On 31 December 2019, the World Health Organization (WHO) was informed of a cluster of cases of pneumonia of unknown cause detected in Wuhan, Hubei Province, China. On 12 January 2020 it was announced that a novel coronavirus had been identified in samples obtained from cases and that initial analysis of virus genetic sequences suggested that this was the cause of the outbreak. This virus is referred to as SARS-CoV-2, and the associated disease as COVID-19.[1] As of 24 June 2020 (10.00am CET), 9.2 million cases have been diagnosed globally, with over 477,000 fatalities. In the 14 days to 24 June, 2 million cases were reported.[1] In the UK there have been 307,980 laboratory-confirmed cases as of 25 June (9.00am) and 43,230 fatalities as of 24 June 2020 (17.00pm).[2]

The latest surveillance information in England has estimated the prevalence of COVID-19 in the general population to be 0.09% (95% confidence interval 0.04% to 0.19%) between 8 and 21 June 2020.[4] This is a decline from an estimated 0.25% (95% confidence interval 0.16% to 0.38%) 1 month earlier (between 4 and 17 May 2020). [5] There is evidence from research in the UK and internationally that some occupational groups have a higher risk of exposure and therefore of acquiring COVID-19. Health and social care staff are thought to be at risk of exposure due to the nature of their work where they work closely with individuals to provide personal or health care. A study of health care workers in English acute trusts in late April 2020 estimated prevalence among front line health care workers to be 2.0%.[6] At this time population prevalence was estimated by ONS to be 0.24% (95% confidence interval 0.14% to 0.40%).[7] A study of 250 care staff working in 6 of care homes with known outbreaks of COVID-19 in London over Easter 2020 found that 20.4% were SARS-CoV-2 positive.[8] No population prevalence estimate is available from this time. Whilst providing a first estimate of prevalence among these staff groups it should be noted that these studies may not be representative of the prevalence in these groups nationally or at other time points in the pandemic.

To date there have been no studies of the prevalence of COVID-19 infection or risks of transmission in domiciliary care staff in England.

Domiciliary care is care provided to people living in their own homes who require additional support in order to maintain their independence and quality of life. People receiving care cover the full age range and spectrum of conditions, from learning disabilities or mental health problems to sensory impairment or physical disabilities. The type of care provided includes personal care, such as assistance with washing, toileting and dressing, or household tasks, such as cooking and cleaning. There are currently 9,400 domiciliary care services registered with the Care Quality Commission (CQC) with a workforce of 520,000.[9] Skills for Care estimated that in 2018/19 there is an estimated total domiciliary care workforce of 685,000, taking account of providers not registered with CQC.[10] Given the direct contact with service users from potentially vulnerable groups, characterising COVID-19 in this workforce could be used to inform risk assessments and infection prevention and control recommendations.

The aim of this pilot study is to understand the proportion of domiciliary care workers in England who have COVID-19 infection, with or without symptoms. It will provide the first estimate of the prevalence of COVID-19 infections among domiciliary care workers in England. It will inform testing strategies for domiciliary care staff and measures to reduce the risk of transmission of COVID-19.

3. Methods

3.1 Study population

The study population was comprised of domiciliary care staff employed by domiciliary care providers registered with CQC in England.

3.2 Study design

Cross-sectional descriptive survey of domiciliary workers from a sample of domiciliary care providers.

3.3 Sampling procedure

The study used a sampling frame of all care providers in England registered with the CQC who regulate the sector. The study took a 2-stage sampling approach first to recruit providers and then to recruit staff. Providers were recruited by a combination of purposive, convenience and opportunistic methods. Participants were recruited by employers opportunistically.

Stage 1

Based on available CQC data there are approximately 9,400 providers of adult domiciliary care as their main service with 520,000 staff in direct care roles. This is an average of 55 staff per provider however numbers vary greatly between providers. [9] Sampling was purposive in terms of the attempt to recruit providers employing approximately the same number of staff across the different regions to provide a national picture. Providers were recruited from London, South East, Midlands, North West, and North East and Yorkshire with an aim to recruit approximately 500 staff from providers within each area, meaning providers totalling approximately 700 staff needed to be recruited from each area. The 5 regions were selected based on the incidence of COVID-19 in the general population during the period when the study protocol was being developed. Higher incidence areas based on pillar 1 and 2 testing data were selected for inclusion whilst ensuring geographical spread.

Providers were approached based on convenience initially. Directors of Public Health in parts of the South East and London were approached based on existing relationships and asked if they could provide contact details of providers in their areas for the study. Providers from these regions were contacted and invite to participate in the study. These providers were also asked whether they operate in the other regions of interest. If so, these branches were contacted and recruited.

A list of large national providers was shared by Department of Health and Social Care. These providers were contacted and asked if they operate in the regions of interest. If so, these branches were contacted and recruited. Where further providers were needed, providers were selected unsystematically from the CQC provider directory to be contacted and recruited.

At stage 1, information was collected from the provider about the type of care provided and number of staff providing direct care and agree the logistics of testing.

Stage 2

A convenience sample of staff working for the recruited providers were invited to participate in the study. Staff were invited to participate in the study via their employer and given a participant information sheet. It was suggested that staff were recruited to the study when attending the office to collect personal protective equipment (PPE) or for administrative matters. Staff currently working were therefore only recruited if they attended the office during the study period. Providers were asked to recruit as many staff as possible. Providers were asked to contact staff who were self-isolating about the study and to arrange for a kit to be dropped to their home or posted to their home.

If happy to participate, staff were given or posted a self-administered nasal swab by their employer and asked to complete a short socio-demographics and exposure questionnaire accompanying the sample request form. Informed consent of participants was assumed by their return of the exposure questionnaire and self-test swab.

3.4 Sample size

The number of providers recruited was determined by a sample size calculation. Assuming a prevalence of 0.5% or less among domiciliary care workers, to be confident that prevalence is no greater than 1% a sample size of 2,589 participants was required.

The recruitment rate of staff within providers was expected to be 70% based on the response rate observed in a recent point prevalence estimate among FluSurvey participants undertaken by PHE.[11] It was therefore estimated to be necessary to recruit providers with a total of 4,000 staff to achieve the desired sample size.

3.5 Laboratory specimen collection, transport and analysis

Self-sample kits were sent to providers for distribution to participants over a 2-week period between 2 and 16 June 2020. Samples were couriered to PHE Colindale by employers for PCR testing for SARS-CoV-2. For those self-isolating they were returned directly by the participant using a freepost envelope.

Completed samples were couriered back to PHE Colindale in batches between 4 and 22 June 2020. Postal samples were to be put in the post back to Colindale by 19 June at the latest. Samples were sent out and couriered back in staggered batches in order to provide a steady flow of samples and not overwhelm the laboratory.

All samples were to be returned to PHE Colindale by 24 June 2020. All courier and postal costs were met by PHE.

3.6 Data collection

In phase 1, data were collected from each provider via telephone interview. Data included the number of staff employed, number self-isolating, and information on the domiciliary care services they provide. In phase 2, data were collected from participants recruited by their employers. Data were collected on a paper laboratory request form accompanying the self-sample swab kit.

3.7 Case definitions

The following case definitions were used:

- confirmed case – a staff member with positive PCR test result for SARS-CoV-2 from a sample tested at a PHE laboratory following recruitment to the study, regardless of symptoms
- non-case – staff member who tested negative following recruitment to the study regardless of symptoms

3.8 Data analysis

Data were analysed using Stata 15.1.

3.9 Ethical committee clearance

Research governance approval for this study was granted by PHE Research Ethics and Governance Group (REGG) on 29 May 2020.

4. Results

4.1 Providers

62 providers across 5 regions were recruited to the study. Between 10 and 15 providers were recruited from each region (table 1). The 62 providers recruited employ a total of 4,477 front line care staff. In each region the total number of staff across the recruited employers ranged between 745 and 1,149. The size of individual providers ranged from between 4 and 525 staff with a mean of 72 and a median of 50 (table 1).

Table 1: Number of staff employed by recruited providers by region (n =62)

Region	Number of providers	Total staff	Range	Mean	Median
London	12	1,149	10 - 525	96	49
Midlands	14	813	20 - 243	58	41
North East & Yorkshire	10	768	10 - 130	77	88
North West	15	1,002	4 - 150	67	53
South East	11	745	17 - 160	68	54
Total	**62**	**4,477**	**4 - 525**	**72**	**50**

216 (4.8%) staff were currently off work/self-isolating across the recruited providers. This ranged between 0 and 37.5% across each provider. The median proportion of staff self-isolating is 2.0% (table 2).

Table 2: Percentage of staff self-isolating from recruited providers by region (n=61)

Region	Number of providers	Proportion of staff	Range	Median
London	11	4.1%	0 - 20.0%	1.9%
Midlands	14	3.3%	0 - 11.1%	3.3%
North East & Yorkshire	10	3.1%	0 - 13.3%	1.0%
North West	15	3.7%	0 - 29.2%	0%
South East	11	7.5%	0 - 37.5%	4.4%
Total	**61**	**4.8%**	**0 - 37.5%**	**2.0%**

Most recruited providers deliver more than one type of care. 96.8% of recruited providers report that they deliver personal care, 66.1% domestic care, 48.4% medication and specialist services (such as stoma and catheter care), and 35.5% both 24-hour and sitting services. Additional services delivered by providers include safeguarding, respite care, supported living and end of life care (table 3).

Table 3: Proportion of recruited providers delivering different types of care (n=62)

Type of care	Proportion of providers
Personal care	96.8%
Domestic care	66.1%
Medication & Specialist	48.4%
24-hour support	35.5%
Sitting service	35.5%
Safeguarding	12.9%
Respite Care	11.3%
Supported living	8.1%
End of life	4.8%

Most recruited providers deliver care to more than one client group. The recruited providers report delivering services to a range of client groups. 92.0% of providers deliver care to the elderly, 32.3% to clients with learning disabilities or autism, 30.7% to clients with mental health or complex needs. Additional groups include individuals with disabilities and impairments, dementia, children, palliative care, and re-ablement (table 4).

Table 4: Proportion of recruited providers delivering care to different client groups (n=62)

Client group	Proportion of providers
Elderly	92.0%
Learning disability & Autism	32.3%
Mental health & complex needs	30.7%
Disabilities & impairments	19.4%
Dementia	16.1%
Children	4.8%
Palliative care	3.2%
Re-ablement	1.6%

Most recruited providers deliver care to more than one age group. All recruited providers report delivering services to working age adults and nearly all (96.7%) deliver services to older adults. A small proportion (8.1%) deliver services for children (table 5).

Table 5: Proportion of recruited providers delivering care to different client age groups (n=62)

Age group	Proportion of providers
Working age adults (18-64)	100%
Older adults (65+)	96.7%
Children and young people	8.1%

4.2 Response rate

In total 3,813 swabs were sent out to recruited providers over a 2-week period between 2 and 16 June 2020. The number of swabs sent to providers ranged between 680 and 833 across regions (table 6). 2,015 swabs were returned to PHE Colindale by 24 June 2020 giving a response rate of 52.8%. The return rate ranges from 34.1% in the North West to 66.0% in the Midlands (table 6).

Table 6: Proportion of swabs returned by region of employer

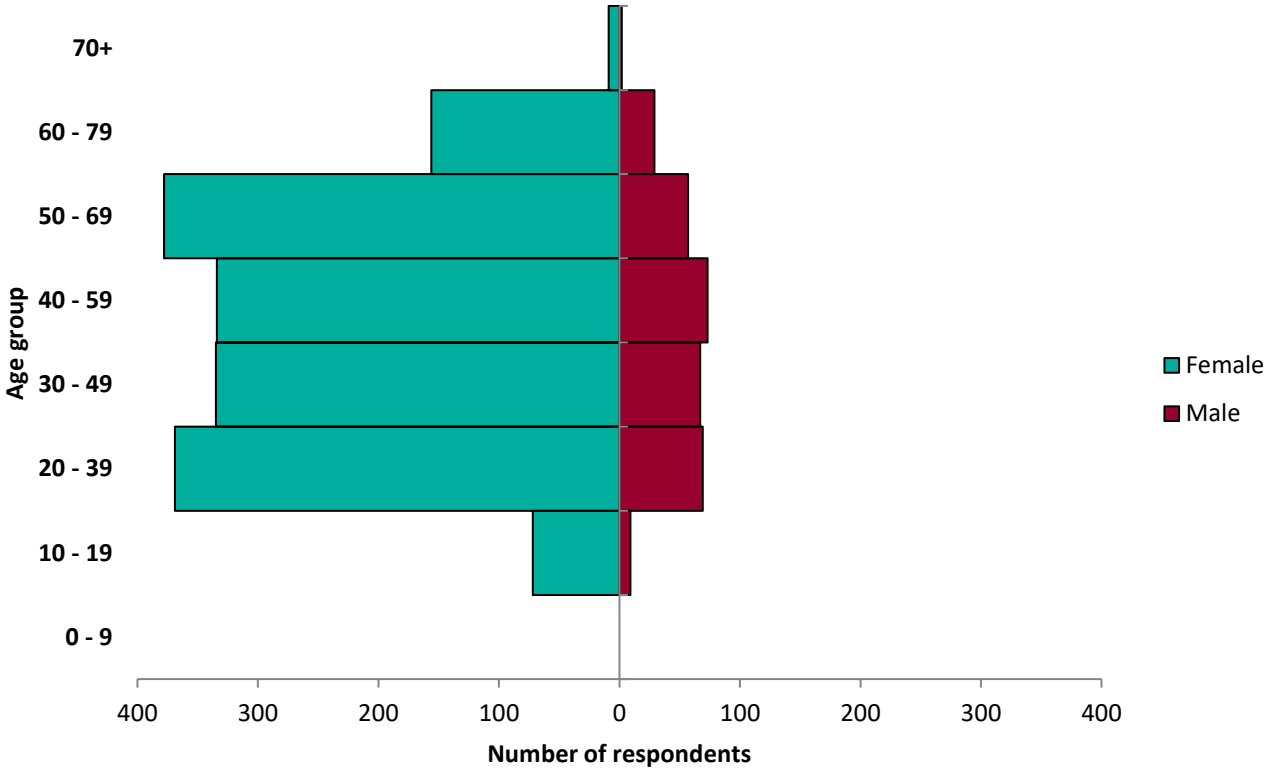
Region	Number of swabs sent	Number of swabs received	Proportion
London	833	500	60.0%
Midlands	724	478	66.0%
North East & Yorkshire	698	379	54.3%
North West	878	299	34.1%
South East	680	335	49.3%
Unknown	N/A	24	N/A
Total	**3,813**	**2,015**	**52.8%**

NB: region of employer not available for 85 participants. For these participants region of residence has been used where available.

4.3 Participants

84.3% of respondents are female (n=1,980). The median age is 41 years of age with a range of between 16 and 79 years of age (n=1,999). The age and sex distribution of participants is shown in figure 1.

Figure 1: Age and sex of participants (n=1,959)



86.7% of participants provided their ethnicity. Of these the majority are from a white ethnic background (75.8%). 14.9% of participants are from a black ethnic background with a smaller proportion (<5% each) from Asian, mixed and other ethnic backgrounds (table 7).

Table 11: Proportion of participants by ethnicity (n=1,747)

Ethnicity	Proportion
Asian	4.3%
Black	14.9%
Mixed	3.6%
Other	1.4%
White	75.8%

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. One of the confirmed cases worked for a London provider and the other a North East and Yorkshire provider. Neither case reported any symptoms or to be self-isolating. One case reported having contact with a confirmed case in the 14 days before the swab was taken (table 12).

Table 12: Proportion of participants by region (n=2,015)

	Number	Proportion	Number positive for SARS-CoV-2	Proportion positive	95% CI
Region of provider	-	-	-	-	-
London	500	25.8%	1	0.2%	0% - 1.1%
Midlands	478	23.7%	0	0%	0% - 0.8%
North East & Yorkshire	379	18.8%	1	0.3%	0% - 1.5%
North West	299	14.8%	0	0%	0% - 1.2%
South East	335	16.6%	0	0%	0% - 1.1%
Total	**2,015**	**100%**	**2**	**0.1%**	**0.01% - 0.36%**

Among all participants, 2% (41/2,015) reported symptoms of COVID-19 in the 14 days prior to the swab being taken. Of these 7.3% (3/41) were reported to be self-isolating. In those reporting symptoms, 62.2% (23/41) reported a cough, 54.5% (18/41) reported a loss of sense of smell or taste, 50.0% (17/41) reported shortness of breath, and 34.4% (11/41) a fever (table 13). Just 13 samples (0.7%) were received from participants self-isolating compared to an estimated 61 staff (4.8%) reported by providers. 0.8% (17/2,015) of all participants reported contact with a case in the previous 14 days (table 13). There were a large number of missing responses to this question which were imputed as “no contact with a case”, a sensitivity analysis was run without these responses in showing that 1.7% (17/1017) of participants reported contact with a case.

Table 13: Proportion of participants by symptoms, contact with a confirmed case and self-isolating (n=2,015)

	Number	Proportion	Number positive for SARS-CoV-2	Proportion positive	95% CI
Symptoms					
Any symptoms	41	2.0%	0	0%	0% - 8.6%
Fever	11	34.4%	0	0%	0% - 28.5%
Cough	23	62.2%	0	0%	0% - 14.8%
Anosmia	18	54.5%	0	0%	0% - 18.5%
Shortness of breath	17	50.0%	0	0%	0% - 19.5%
Asymptomatic	1974	98.0%	2	0.1%	0.1% - 0.37%
Contact with a case					
Contact with a case	17	0.8%	1	5.9%	0.15% - 28.7%
Without contact with a case	1998	99.2%	1	0.1%	0.01% - 0.3%
Self-isolating					
Self-isolating	13	0.7%	0	0%	0% - 24.7%
Not self-isolating	2,002	99.3%	2	0.1%	0.01% - 0.36%

5. Discussion

This pilot study provides a first estimate of the prevalence of COVID-19 among domiciliary care workers in England. The findings provide evidence that the prevalence of COVID-19 among domiciliary care workers is in line with the general population as opposed to a higher prevalence as observed in studies of front line healthcare workers and care home staff. It should be noted that this study took place post the peak of the first wave of the COVID-19 pandemic and at a later point than the referenced care home and healthcare worker studies. Findings of this study are therefore not directly comparable to the care home and healthcare worker studies and a different result may have arisen at the peak of the pandemic. Nevertheless, these findings will be a guide for policy makers and domiciliary care providers in making decisions on testing strategies and measures to reduce the risk of transmission of COVID-19 for this workforce.

We were unable to find any other studies of domiciliary care workers in the national or international literature; therefore, we cannot compare to other findings in a similar population. A study of care home workers mid-April 2020 showed a high prevalence of COVID-19 of 20.4%. [8] No population prevalence is available for this time period however the ONS estimate of population prevalence at the end of April 0.24% (95% confidence interval 0.14% - 0.40%).[7] Studies among front line healthcare workers in late April 2020 have shown a prevalence of 2.0%.[6] Our findings suggest that, in June 2020, prevalence among domiciliary care workers is similar to that of the general population, at least among those currently working rather than self-isolating at home.

The 2 cases detected were detected in 2 different regions, therefore, given the low numbers, we cannot make conclusions around differences in prevalence across regions. Neither of the 2 cases had reported symptoms in the preceding 14 days.

Whilst this study provides a useful first estimate of prevalence among this workforce, it should be noted that there are a number of limitations of this study and caution should be exercised in the use of these results. This study was a small pilot study using a convenience sample and opportunistic methods of recruiting domiciliary care providers and their staff. The estimate of prevalence therefore may not represent the true prevalence of COVID-19 in domiciliary care workers nationally among all providers.

The convenience and opportunistic methods of sampling used in the recruitment of providers in this study may have led to bias. Selection of providers may introduce bias due to the wide range of types of domiciliary care provider (in terms of type of care and client) as well as size of provider, region which they operate, and impact of current infection rates on workload. Limited data are available on the distribution of types of care and clients provided by domiciliary care providers nationally making it difficult to ascertain the representativeness of the sample in terms of types of service provider. In

terms of the size of providers, recruited providers ranged in size between 5 – 525 staff, with a mean of 72 and a median of 50. Skills for care estimate that 65% of providers employ between 1-9 staff, 26% between 10-49 staff, 5% between 50-99 staff, 3% between 100-249 staff, and 1% 250 or more staff.[12] This study has therefore overrepresented large providers. This may also have introduced a bias if small local providers have a different risk of COVID-19 than national providers.

Looking at the demographics of the individual participants, it is reassuring that these are line with the estimates of the workforce by Skills for Care. Skills for Care estimates that approximately 84% of domiciliary care workers are female, with an average age of 43 years old.[13] In this study 84.3% of participants were female with a median age of 41 years. It should be noted that a small number of participants (n=16) were reported to be 70 years of age or over. This appears to be in line with a 2018 study of care workers which included participants up 84 years of age and with several participants in the 60's and 70's.[14] Skills for Care do not have an estimate of the workforce by ethnicity but estimate that 83% of domiciliary care workers are British nationals, 7% are EU nationals (non-British), and 9% non-EU nationals.[13] 75.8% of participants in this study (who reported their ethnicity) were white and 14.9% from an ethnic minority background.

The age profile of the study population and the general adult social care workforce is older than that of other sectors.[14] It is also largely female. Demographics of the ONS COVID-19 population prevalence study participants are presently unavailable and therefore is not possible to compare the demographics of these studies directly however the UK population is noted to be 50.6% female and 62.7% aged 16-64 years of age.[15]

It is possible that different methods for recruiting workers and delivering swab test kits between those who are at work and those self-isolating may have led to a bias. This may have led to a difference in the likelihood of identification of positive individuals among the 2 groups. A smaller number of swabs then expected were received from participants self-isolating, based on the estimated numbers reported by providers. Individuals who are self-isolating (either because they are symptomatic or a contact of a case) are therefore underrepresented in this study. While we found no positives among the 13 participants who were self-isolating, it is likely that, in general, those self-isolating due to symptoms or contact with a known case are more likely to be positive. We may therefore underestimate prevalence in the workforce as a whole. Nevertheless, those who are symptomatic have access to testing through other routes, therefore, policy questions around routine testing in the workforce are perhaps better informed by prevalence estimates among those who are not self-isolating among whom the estimated prevalence was low (0.1%, 95% confidence interval 0.01% - 0.36%).

The response rate in this study was lower than anticipated at 52.8%. As a result, 2,015 completed samples were received. This is lower than the target sample size of 2,589, which was specified to demonstrate prevalence of less than 1% on the assumption that

the true prevalence is no more than 0.5%. As it happened, the observed prevalence was lower still: the exact value is highly uncertain, but a prevalence of over 0.4% can be ruled out based on these data, subject to biases, therefore the sample size was easily sufficient for our target of demonstrating a prevalence of less than 1%. The laboratory test in this study was a PCR test for SARS-CoV-2 RNA. This identified individuals with current infection and not the number who have previously had a COVID-19 infection (that is, have COVID-19 antibodies). This may have affected recruitment to the study among symptomatic individuals as testing for current infection is available by other routes. In addition, recruitment may have been impacted by concern over being excluded from work and resultant loss of income if they are found to be positive for SARS-CoV-2. The demographics of responders and non-responders are unlikely to have been systematically different. It is, however, plausible that there may be a systematic difference between responders and non-responders in this study in terms of being a contact of a case or symptomatic. Despite this, the study provides a high degree of confidence that the prevalence was under 0.4% among domiciliary care workers not currently self-isolating.

Given the small size and the low prevalence, this study was not able to investigate variation in prevalence by region, type of care provided, or type of client. The information presented in table 12 of results by region is presented for completeness only. Due to the small size of this study the regional variation identified in this study is likely to have occurred by chance and should not be interpreted as a difference in prevalence by region. If a nationally representative estimate, regional estimates or other analyses are required a larger study is required.

Whilst this is only a small pilot study, a larger point prevalence study is unlikely to add significant new insights in to the prevalence of COVID-19 unless undertaken during a period of peak incidence. In order to obtain a better understanding of the burden of COVID-19 among domiciliary care workers, a seroprevalence study could be undertaken. A seroprevalence study would give an understanding of the proportion of domiciliary workers infected with COVID-19 over the duration of the pandemic to ascertain if this is different to that observed in the general population. If the study was large enough it may also be possible to identify risk factors for COVID-19 infection within the workforce.

6. Recommendations

Regular testing for the domiciliary care workforce is not recommended unless recommended by local risk assessments or in response to local outbreaks. Symptomatic staff should continue to access priority testing via the pillar 2 testing service.

Domiciliary care providers should continue to ensure that staff are appropriately supported to follow current guidance; that is, staff developing symptoms compatible with COVID-19 self-isolate for 7 days and staff identified as contacts of confirmed cases, promptly self-isolate for 14 days.

Domiciliary care providers should continue to ensure that staff have appropriate PPE and training on its use, following national guidance.[16]

A seroprevalence be commissioned to investigate the proportion of domiciliary workers infected with COVID-19 over the duration of the pandemic to ascertain if this is different to that observed in the general population and to identify risk factors for COVID-19 infection within the workforce.

7. Conclusions

In conclusion, the estimated prevalence of COVID-19 was 0.1% with a 95% confidence interval of 0.02%-0.40%. This estimate is in line with the most recent estimated population prevalence reported by ONS on 25 June 2020, of 0.09% (95% confidence interval 0.04% - 0.19%). This pilot study provides evidence that the prevalence of COVID-19 among active domiciliary care workers is in line with the general population at this time and not a higher prevalence as observed in studies of front line healthcare workers and care home staff observed earlier in the epidemic. Whilst this study provides a useful first estimate of prevalence among this workforce, it should be noted that there are a number of limitations of this study, in particular the possible under-representation of currently symptomatic domiciliary care workers and data collection after the peak of the epidemic, and caution should be exercised in the use of these results.

8. Acknowledgements

The study team would like to thank the providers and the participants of this study for their time and participation. Acknowledgements also go to the data entry staff, laboratory staff, Directors of Public Health and local authority staff who aided the team with the recruitment of providers, and PHE staff consulted in the design of this study.

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