healthwatch
Bradford and District

Airedale and Partners (Vanguard) Telemedicine in Care Homes Service

A Qualitative Evaluation

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THANKS AND ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY & THEMES OF RECOMMENDATIONS

Healthwatch Bradford and District was commissioned by the Enhanced Health in Care Homes NHS Vanguard to evaluate the Telemedicine service provided to care homes by Airedale and Partners Ltd, in partnership with Airedale Hospital NHS Foundation Trust and Immedicare.

Existing quantitative evaluations naturally concentrate on numerical data and the impacts on service usage but contain minimal feedback from residents and others using the service. Quantitative studies indicate that, amongst other benefits, homes with Telemedicine are likely to use urgent and emergency support fewer times than homes without Telemedicine, and that their residents are likely to visit hospital less often.

This evaluation aims to understand how Telemedicine supports and enhances the quality of life and wellbeing of care home residents, by gathering their views and also speaking with their relatives and care staff.

KEY FINDINGS

1. Awareness and Understanding of Telemedicine

- *Residents and relatives had low levels of awareness about the Telemedicine Service*
- *No residents recalled participating in a Telemedicine session (despite the fact that several respondents had definitely received support via the service.) Only one stated that they were aware of the service being available in the care home.*
- *All except one resident (who had seen a documentary on it), struggled to understand the concept.*
- *Staff and relatives found it easy to understand the purpose of the Telemedicine technology and how it is used.*
- *Almost all staff were familiar with the Telemedicine service especially those in senior roles. Levels of understanding and experience in using the service were closely tied to seniority rather than length of service.*
- *Staff who had used the equipment had found it straightforward though some were initially intimidated by the thought of using a computer and camera.*
- *With such low levels of awareness of the service amongst residents with good levels of mental capacity, there is a question about whether consent is not being consistently sought from residents.*

KEY QUOTE: *"I wouldn't know what you're talking about!"*

2. Usage and Accessibility of the Telemedicine Service

- *Approaches to using the Telemedicine service varied widely; there seemed little common understanding between, and even within, care homes concerning who should be involved and when calls should be made.*
- *Most staff had not received formal training and guidance.*
- *Some staff suggested that the Hub serves as a more effective emergency support service than only using 999, especially because it offers a 'first view' of the situation for nurses via the video link.*

- *The evaluation suggests that design of the current service should be made more accessible to a wider range of residents, for example people with hearing impairment.*
- *Interviews also suggest that the Hub and care homes should also explore options for more involvement of relatives in sessions.*
- *In some care homes advanced care planning does not appear to include options for use of Telemedicine.*
- *Some homes were positive about the technology but others reported mixed experiences of support to improve the Wi-Fi coverage required to access Telemedicine.*

KEY QUOTE: *"During the week, you know when the doctor's surgery's open; we'll ring for a doctor...This, for me and I guess for the other seniors and managers, is more for out of hours and weekends. It's one of them. If you can access a doctor in opening hours then we would call them cos you can get doctor's advice from them".*

3. Expectations on Health and Care Services

- *Residents and their relatives reported mixed experiences regarding their involvement in decision making about their care as a whole.*
- *This seemed to negatively affect the sense of wellbeing of relatives more than residents.*
- *Some residents had low expectations of how involved they could be in their care at the home and with NHS staff such as the GP.*
- *Staff from the homes agreed that Telemedicine has the potential to free up their time for more 'hands on' care support. Some argued that one to one attention, in person, is part of what defines 'proper care'.*
- *Staff felt that the Telemedicine service supported them to do their jobs better, especially in non-specialist care homes.*
- *Some residents and relatives were concerned that more reliance would be placed on overworked care home staff.*

4. Impact on Quality of Care

- *Perceptions amongst relatives were generally positive about the potential impact of Telemedicine on care.*
- *The majority of staff view Telemedicine positively and expressed the view that it improves the care that can be provided. A variety of reasons was given, including that it provides additional advice and new support for care staff.*
- *Several staff also felt that the Hub was a more reliable and effective source of support for emergency calls that calling 999.*
- *Telemedicine was generally seen as an improvement in care because it minimises the stress and anxiety that hospital visits can cause, and provides care home staff with expert advice they might otherwise find difficult or time consuming to obtain.*
- *The specialist dementia care staff interviewed did not feel that Telemedicine has an impact on quality of care for residents because they perceived that the necessary skills, expertise and support services were already in place and worked well in the home.*

5. Impact on Quality of Life

- *Most residents could not envisage how Telemedicine might affect their care and quality of life and some were concerned that it might reduce their privacy during clinical consultations because care staff were always present.*
- *Most staff and relatives felt that reducing unnecessary visits to the hospital would improve the quality of life of residents.*
- *Most respondents feel that the care related benefits of Telemedicine might be counteracted by a reduction in one to one contact with clinicians and the associated social and emotional benefits to residents.*
- *Quality of care is regarded by staff as one of the most important factors contributing to quality of life of residents. As Telemedicine is perceived as improving quality of care staff feel it contributes to improving residents' quality of life.*

KEY QUOTE: *"I don't think there seems to be any, or much difficulty anyway. That's what they (the nursing staff) would do; if I needed something and I hadn't got it, they'd make arrangements me to see a doctor or the nurse at either a nursing home or a place where I would go anyway. It [Telemedicine] seems very good but really, basically, if I don't know the nurse I don't know if they were a genuine nurse or they weren't; somebody dressed as one pretending to be one."*

6. The Role of Relationships and Trust

- *Almost every participant highlighted the importance of trusting relationships between residents, care and NHS staff and relatives. Many residents saw Telemedicine as a challenge to their ability to form trusting relationships with clinicians, emphasising the importance of seeing a familiar person consistently, such as a GP.*
- *Residents indicated that trust is of high importance, and it supports their sense of being cared for. Furthermore, not using Telemedicine avoids the stresses and uncertainties of interacting with new people remotely via computer technology.*
- *Most staff were highly supportive of the Telemedicine Service; they felt comfortable speaking with the nurses and trusted the advice. Some suggested that this is a new level of support because it gives them instant access to expert clinical advice 24 hours a day.*
- *Specialist dementia care staff had received advice they did not agree with and this had negatively influenced their trust in the Telemedicine service and staff.*

KEY QUOTE: *"Well you see at 90, I'm used to judging a doctor by his face, and so I didn't come up [grow up] in the modern world" Interviewer: so you like to meet someone? "Yes".*

7. Additional Applications for Telemedicine

- *All care homes could include options for use of Telemedicine in advanced care planning. This would also raise awareness of the service amongst relatives and residents.*
- *The Telemedicine service was perceived by staff and some relatives as providing 'added' value in emergency situations because of the streaming of live pictures of the patient and this should be explored formally.*
- *Access to dieticians and other clinicians, via the Hub, was suggested by a resident with a complex long term physical condition. This could be extended to include a variety of therapists, allied health professionals and mental health specialists. The Hub might be able to provide the level of care needed, but too complex or specialist for care home staff to manage.*

CONCLUSION

- Telemedicine has the potential to support improved services to people in care homes which minimise the need for them to attend hospital appointments. The benefits were especially clear to care staff.
- People living in care homes and their relatives knew little about the service and were sometimes uncertain about whether benefits to the overall system always equate to benefits to residents individually. The low awareness about Telemedicine amongst residents raises a question about the extent of informed consent.
- Many residents could see that Telemedicine offers benefits to overworked care staff but felt uneasy about the thought of receiving care from someone not present. Trust and relationships with clinicians and nurses are important.
- If only staff and relatives were engaged in the evaluation the initial hypothesis (that Telemedicine provides residents with an improved sense of wellbeing, etc.) would have been supported. However, residents did not understand how Telemedicine could improve their sense of wellbeing, and value personal contact as one of the most important aspects of the care they receive, contributing to their quality of life. It is unlikely that residents' perceptions will change until they are more familiar with the service and how it works.

SUMMARY OF RECOMMENDATIONS

A detailed set of recommendations is provided after the Conclusion to this report. These seek to maximise the benefits of Telemedicine, to address the lack of awareness of Telemedicine amongst residents and relatives, and improve consistency in the way the service is used between homes, improving equality of access for residents to the service. The main themes of the recommendations are to:

- Raise understanding and awareness amongst residents, relatives and staff of the potential applications of Telemedicine;
- Encourage consistency of usage and access to the services;
- Ensure that residents, wherever possible, have been asked for their informed consent for the use of Telemedicine;
- Enhance the delivery of care through the development of Telemedicine skills in care homes, the production of "practice guidance" for care staff; dementia care skills and advice in the Hub, and using Telemedicine more effectively to support emergency calls;
- Maximise the positive impact on quality of life (addressing issues of privacy, independence, informed consent, accessibility for people with sensory needs and more);
- Make additional effort to support good relationships and counteract barriers to trust sometimes presented by the technology;
- Explore additional applications for the use of Telemedicine in care homes.

THE REPORT

INTRODUCTION

Healthwatch Bradford and District was commissioned to evaluate the Telemedicine service provided to care homes by Airedale and Partners Ltd, in partnership with Airedale Hospital NHS Foundation Trust and Immedicare. Certain aspects of the service are also supported by the 'Enhanced Health in Care Homes NHS Vanguard' (NHS England, 2015) programme which covers the geography of Airedale, Bradford, Calderdale, Craven, East Lancashire and Wharfedale. The Vanguard programme commissioned this evaluation.

A number of quantitative evaluations are being conducted as part of ongoing evaluations of Vanguard sites, assessing the cost benefit and system wide impact of Telemedicine. Amongst other benefits, they indicate that homes with Telemedicine are likely to use urgent and emergency support fewer times than homes without Telemedicine, and that their residents are likely to visit hospital less often.

Existing quantitative evaluations naturally concentrate numerical data and service usage but contain minimal feedback from residents and others using the service. This evaluation aims to understand how Telemedicine supports and enhances the quality of life and wellbeing of care home residents, by gathering their views and speaking with their relatives and care staff.

WHO TOOK PART

Overall 26 people took part in interviews or focus groups and were connected to four separate care homes, two rural and two urban, across the Bradford and Airedale, Wharfedale and Craven CCGs areas. There is more information on the scope and methods used in this study in the appendix.

Care Homes

Having met the agreed criteria for inclusion, 16 care homes were eligible to participate in the evaluation. It was agreed that homes would be more likely to respond to an initial invitation from Hub or Vanguard related staff than the people conducting the evaluation so the evaluator drafted an email for Hub/Vanguard staff to send to homes.

Of the 16 contacted and invited, four homes eventually took part. Of these, two were in a rural setting near to a North Yorkshire town and two in an urban setting in districts of Bradford City, (near to, but outside, of the city centre).

All homes had Telemedicine installed for at least six months prior to being contacted, and had used the service more than once in the previous three months.

One of the homes solely provided support to people with dementia, (this was registered as a nursing home), while the other three homes provided general care in a residential setting.

One home was run by a local authority and the other three run by private companies.

Residents

People living at three of the four participating homes were interviewed (excluding the dementia specialist home).

- 11 residents participated
- Two men and nine women
- Three residents were identified by staff as exhibiting the early signs of dementia
- Average age: 87.3 years
- Average length of residence at that care home: just over two years
- Two residents had received support via the Telemedicine Hub

Friends and Relatives

We conducted semi structured interviews with five relatives via telephone or in person, three female and two male. Participants were related to five different residents in two of the homes.

Three of the 11 residents interviewed agreed to provide contact details for a friend or relative they felt would be happy to participate in the evaluation. One suggested person declined to take part, leaving two.

A further three friends or relatives were suggested by care home managers and all agreed to take part.

All respondents were aged between 55 and 65 except one aged over 65.

Relationships to residents were:

- Wife (of male resident)
- Daughter in law (of female resident)
- Son (of male resident)
- Son (of female resident)
- Daughter (of female resident)

All were involved in the care of their relative and to varying degrees and were in direct contact with care home staff.

Staff

In total ten staff took part in focus groups. These were held at three of the four care homes (two rural homes and an urban one).

To enable staff to feel comfortable speaking freely, managers were not invited to participate in focus groups. Three managers provided comments informally outside of the focus groups.

All staff taking part in focus groups, and all care home managers, were women. All except one (a cook) had a direct role in providing care to residents. However, the cook had some experience of supporting staff with care and had observed the Telemedicine technology in use.

The job titles of focus group participants were:

- Carer, or Senior Carer
- Cook
- Resource Worker, or Senior Resource Worker
- Independent Living Facilitator

All staff were directly employed by the care home and not agency staff. The average individual length of service across all focus groups was 20 months. Notably, staff at the council run care home had the greatest average length of service: over 8 years.

It is possible that because managers were asked to identify staff participants some bias may be present in the cohort, for example those most able to articulate views on the use of technology.

WHAT PEOPLE SAID - RESIDENTS

Positives	Negatives
The one resident who understood the concept was keen to have access to it	Almost complete lack of awareness of Telemedicine service
Most felt happy about the care they receive from the home and the NHS	Perhaps because of this low awareness the majority were ambivalent or negative about how Telemedicine might affect their care
Some could see benefits of Telemedicine to care home staff, e.g. reducing time spent accompanying residents to hospital	General belief that care homes are understaffed and acceptance that this affects choice and involvement in care
Some were happy at the thought of having to visit the hospital less often	It would be difficult for residents with hearing impairment to engage in a Telemedicine session
	Less face to face contact with GPs and other clinicians was generally not welcomed and connected to the importance of trust based relationships, and opportunities for private discussions

Thinking about being in touch with people, like friends and family, would you say that you are in touch with these people as much as you would like to be?

We were interested to understand some basic information about respondents that could help us to understand their overall sense of happiness and wellbeing. Eight of the 11 respondents reported that they were in touch with friends and family as much as they wished to be.

One person stated that they agreed to an extent that they had enough contact with friends and family, and two stated that they didn't feel they had as much contact as they would like.

Several said that they don't leave the care home because their health is too bad. One resident who had been at that Care Home for around two years stated:

"I've never been out. Well, once for a family dinner. That were one of my birthdays a while since". "It would be nice to go out more but it's difficult with this thing [points to catheter] and their [staff/family] fear is if I fall"

(Rural resident, Male, Aged 92)

Thinking generally about your health, do you find that you regularly need to see a GP or other health care person outside of the care home?

Three respondents stated that they regularly had cause to see the GP or other health professionals for their health problems and the remaining nine residents felt that they didn't regularly need to do this.

It is worth noting here that several residents mentioned not knowing the name of their GP and that this bothered them.

"No, not regularly. He's been this morning as a matter of fact". "I changed GP when I moved here". "I don't know what his name is that's been to see me this morning, its a foreign name".

(Urban resident, Female, Aged 81)

Thinking generally about your involvement in the care and support provided here at [state the name of the care home], would you say that you feel you are involved in decisions about your support and care? In other words, do you have choices and feel that you have a say about your care?

Just four residents felt that they had a say and were given choices about their care. Most felt their involvement in decisions was as good as it was possible for it to be. Many said that this was limited because the home was short staffed, which affects how flexible the care could be. One resident said (when asked if she could choose when to have a bath):

"Used to be once a week but there are other people to think about so we have all got to have a bath as regularly as we can"

(Rural resident, Female, Aged 80)

Two residents stated that wherever possible family make decisions about their care.

"*They handle all of that, money matters and that". "I don't make no decisions whatsoever*"

(Rural resident, Male, Aged 91)

"*At the present time, mostly, my son looks after me and my affairs as far as I know, and I don't care about owt else*"

(Rural resident, Male, Aged 92)

One resident stated that she had a good deal of say over when she washes, eats and so on but felt that this was because of her Parkinson's Disease and the lack of knowledge staff had about it. In other words that staff relied upon her to tell them when food and medications needed to be provided. She felt happy about this but pointed out that:

"I can do that because I don't have a shower until I'm ready, and I have a shower myself. Other people can't because there's a shortage of staff"

"I take my own medication, it was one of the conditions I made on coming here....you've got to take it dead on time otherwise you're 'out' for the rest of the day then. I have to take it every two hours"

(Urban resident, Female, Aged 72)

Would you say that your level of involvement in decisions has any effect on how you feel in yourself?

Of the seven residents who didn't feel they had any or much say in decisions, most stated this had no effect on how they felt in themselves. However, some did qualify this by talking about the staffing levels, their understanding of 'the bigger picture', and how this affected their freedom of choice:

"So long as I get one [a bath] pretty regular - and I have been doing up to recently, I think just this week I've had a bath. Other people have to be considered too, I can't just consider myself any longer. It makes you think, well, I've been fortunate up to now and I've got to consider other people and how they're fixed"

(Rural resident, Female, Aged 80)

"Makes no difference [to how I feel]"

(Rural resident, Female, Aged 84)

The other four residents felt that their level of involvement in decisions, to an extent, negatively affected how they felt in themselves.

"I try to explain but some of them just don't understand and no matter how many times I tell them they don't get it, they don't get it at all"

(Urban resident, Female, Aged 72)

Before we started this conversation had you ever heard of the term "Telemedicine"?

Near the beginning of the interviews residents were asked whether they had ever heard of the term "Telemedicine". We expected some to have heard of it, not because they may have been provided with support via this method, but because we believe that all residents have been asked for consent to access the Hub in order to support them if needed.

"It's going in one ear and out the other"

(Urban resident, Female, Aged 95)

"I wouldn't know what you're talking about. I've never heard of it"

(Rural resident, Female, Aged 84)

"No, I've never heard of Telemedicine"

(Urban resident, Female, Aged 81)

All except one resident stated they had never heard that term before. One resident was able to accurately describe what is meant by the term and this is because she recalled seeing a television documentary about. Interestingly she was also the youngest respondent (aged 72) and appeared to be the only resident who also had her own computer.

Once the concept of the Telemedicine service was described to residents we then asked whether they knew anything about the service. Just one resident said that she thought they had it at the home and that she'd seen it being used (although it is unclear whether she was actually simply referring to the use of laptops generally):

"They have them up in the nurses room….I've seen 'em using it"

(Urban resident, Female, Aged 93)

Do you have a sense of what Telemedicine is? Could you describe it?

Only one resident had definitely heard of the term and they were able to accurately describe the concept of Telemedicine:

"I'd say you get on the telephone, and there's a screen and you talk to a nurse or a doctor at the other end of the line and tell them why you're ringing them… and if you've got anything to show them you show it and they look and assess how serious the problem is and they can advise you on the phone or refer you to somebody else"

(Urban resident, Female, Aged 72)

So, just thinking about the Telemedicine Service, can you think of a time when [state the name of the care home] used this Telemedicine service to get help and support with your care?

Care home staff reported that at least two residents had been present during a Telemedicine session within the previous few months. Despite the interviewers providing a detailed description with visual cues of the service, no one reported having been supported through the service.

It was clear after providing the explanations of the service that many residents found the concept difficult to understand in the abstract, and so in many cases the interviewer devoted significant time to explaining it, and how it is used in context.

"I've never heard of it before"

(Rural resident, Female, Aged 92)

"Not so as I could remember"

(Rural resident, Male, Aged 92)

"Not to my knowledge"

(Rural resident, Female, Aged 84 who HAD received support within the previous few months)

"Oh, no [I haven't]"

(Urban resident, Female, Aged 93 who HAD received support in the past)

Now thinking about Telemedicine and how it helps the staff here to provide care, as far as you can, please tell me how you think it might do that? It's ok if you can't answer this, we want to understand how familiar people are with how it works.

This question was aimed at residents who had a clear understanding of the concept of Telemedicine. One resident possessed a good understanding and they were able to provide a response:

"It would take the pressure off them [care home staff]. Instead of ringing the doctor and getting the doctor to come and look, when somebody doesn't know about the symptoms, whether it's urgent or not…I think it would just help them get on in the day to day coz they could just get on with things, knowing they can pass it on to somebody who can make the decision"

Do you think that having a Telemedicine service has an effect on how well the care home and health services can support your health and care? In other words, do you think it has any impact?

Residents were asked to think about ways in which they could perceive Telemedicine supporting or even enhancing the care and support which they receive from the Care Home.

One respondent identified outdoor activities as being important to her in the context of feeling she was cared for. She could not see ways in which Telemedicine would enhance the care she already received:

"I'm already cared for, I think, emotionally. The thing I like most is looking out and being able to see what's growing outside. I think they'd allow me to have a little walk round and even pick off a few dead heads and things like that"

(Rural resident, Female, Aged 80)

Just one resident could see it having a positive impact on health services providing them with care stating:

"It makes it easier for them [health services]"

(Rural resident, Female, Aged 90)

Other respondents were ambivalent or negative. Some felt that the technology itself might act as a barrier for people who might not be familiar with it:

"No, I don't think so. I don't think it would work in here, I mean, a lot of people won't understand it. Just all elderly, you know. I think it would be too much for them to understand. Residents here would prefer to see the nurse or the doctor, just as you do normally"

(Rural resident, Female, Aged 92)

"I really don't want to get involved with it at all. I can't see it making any difference"

(Rural resident, Male, Aged 91)

The youngest of the respondents could see ways in which Telemedicine might enhance her care but was frustrated that she knew nothing about the service.

"It might do if I was allowed to use it, if I knew about it. I mean, why don't I know about it? Is it because they don't want to use it, or they don't know about it themselves?"

(Urban resident, Female, Aged 72)

If using the Telemedicine service meant that you would have fewer appointments with your GP how do you feel about that?

One of the possible consequences of uptake in the use of the Telemedicine service could be fewer opportunities to be in touch with the GP, for example when previously a GP may have been called to assess and diagnose a problem which is concerning the care home staff, this could be done by the Telemedicine Hub especially on evenings and weekends.

Six of the 11 residents participating firmly felt that fewer appointments with their GP would not be good.

"Don't know because I don't know what my own doctor looks like to be honest, and I could see her if I was having to go regularly. Its a case of having to trust people, that they are what they say they are; doctors and nurses that are caring and looking after you"

(Rural resident, Female, Aged 80)

One resident was asked to elaborate by saying what she would think of seeing the doctor via a video link instead of in person.

"Well you see at 90, I'm used to judging a doctor by his face, and so I didn't come up [grow up] in the modern world. I don't think I'd like that I prefer to see someone in person. My mother taught me you get to know someone only when you can look into their eyes"

(Rural resident, Female, Aged 90)

Another resident had mixed feelings about the idea of using video technology more and having less face to face contact with clinicians:

"For the amount of appointments and the amount of times I see them I don't think it would be any different".

But, she was clear that she would prefer to see her GP rather than a nurse over a screen. She said:

"It's all so strange. When you're getting older you can't take things in the same. You don't feel as though you want to start again with a new thing" so this new technology would be off putting "and you're frightened of doing it wrong". "I would rather speak to my GP because I'm used to it and he's been my GP for 12 years or more" "I trust him"

(Rural resident, Female, Aged 92)

Other residents said:

"Nay, I wouldn't like it" "We've been with Fisher way back since before I can remember. All 'us' family; five lads and five lasses"

(Rural resident, Male, Aged 91)

"I'm not sure because I think it would be good to have continuity, especially with this Parkinson's Disease [Parkinson's is different for everybody]" "It isn't bitty like that, when you talk to your consultant, you know, they get the whole story" "If they can see your medical history and what had gone on it probably wouldn't be too bad but I think it would be nice, from a personal point of view, to see somebody you've seen before. If it was something minor, like bruising....it would probably be alright"

(Urban resident, Female, Aged 72)

One respondent could see clear benefits for certain types of situations and four others either couldn't say because they didn't feel they understood the service, or wouldn't mind one way of the other.:

"Yes, well yes if they're [the resident] not right good [in their health]"

(Urban resident, Female, Aged 93)

Do you feel that receiving some care and support through the Telemedicine service has, or could have, any effect on the quality of your life here?

Having asked the respondents to provide us with a sense of their general levels of wellbeing (by asking about levels of social contact and involvement in decisions about their care), we were interested to discover the extent to which they might see Telemedicine as enhancing that sense of wellbeing.

We asked whether residents felt that Telemedicine could in any way have an effect on their quality of life.

A female resident at one of the urban care homes, who was generally positive about Telemedicine stated:

"Well it could do perhaps, yes". "It probably would [affect people's quality of life] because you'd know that you could get in touch straight away perhaps". "I were just thinking, this might be the thing that's used usually to do, perhaps in another a year or two".

When asked whether it would provide reassurance to know that help from the nurse was available 24 hours a day, she replied:

"Well yes"

(Urban resident, Female, Aged 93)

One other respondent felt positively about the potential of Telemedicine to improve quality of life

"I think it's better here; I've had enough of hospitals"

(Urban resident, Female, Aged 95)

Others struggled to see a connection between the service and their own quality of life and cited other factors that affect quality of life:

"Not personally, I mean, why should it affect me?"

(Rural resident, Female, Aged 84)

"As far as I'm concerned I'm here because somebody wants you out of the way. They don't want 'him' at home. "Get 'im into a nursing home" "Yer in" "That's it. Nobody's bothered either way. You don't know what facilities there are, you just get what they give you"

(Rural resident, Male, Aged 92)

Another male respondent felt that he was happy for his family to concern themselves with his care; he would like everything to remain the same. This echoes things said by other residents who felt that change in itself could be distressing or unsettling for themselves and others.

"I've got into that rhythm where I just leave it to them [my sons] and the service I get here; I'm highly satisfied"

(Rural resident, Male, Aged 91)

Does having Telemedicine here make a difference to how you feel about your care?

Five residents believed that the overall care they receive would not be affected, that Telemedicine would make no difference.

"I could ring the GP I think, if you need to as far as I know. If we were any worse the doctor would have had to come and see us and let us know that they were getting us into hospital and relatives and friends. They [doctors] do their best, sometimes under difficult circumstances. I feel well cared for here."

(Rural resident, Female, Aged 80)

A further four people didn't feel able to give a definitive response because of their lack of knowledge with one wanting to know that she wouldn't be the first person it was used to support.

"I would like to know that somebody else had tried it"

(Rural resident, Female, Aged 92)

The same respondent also said that she would like to know that all the staff were agreeable to using it as she did want to "poke her nose in" or "cause trouble" by asking for it.

"I don't know really. Well, luckily for me I'm OK, you know"

(Urban resident, Female, 93)

The youngest respondent who showed the greatest understanding of the service expressed frustration that she hadn't been offered the Telemedicine service, nor was aware it was available. She was unsure how Telemedicine could have an impact on how she felt about her care when it hadn't been used for her.

"There's a lot of senior carers here, I speak to them all and they've not mentioned it, not one of them has mentioned it and I'm very friendly with some of them"

(Urban resident, Female, Aged 72)

Other Comments on Telemedicine

At all times, all participants were encouraged to make comments and ask questions whenever they wished. In one case a resident who is profoundly deaf pointed out that she would have difficulty engaging in a Telemedicine session and asked whether it had been adapted to enable people with hearing loss to participate:

"People in the care home, and the nurse or doctor can see or hear each other but I can't hear 'love'. Even if I were a millionaire I couldn't hear 'em. ….So, when they're talking to one another do they have subtitles on the bottom of it?" "That's where it would be helpful, for somebody that's totally deaf"

(Urban resident, Female, Aged 81)

"The nursing staff can do that already. They can make arrangements for me to see the doctor or the nurse at a nursing home or elsewhere. It [Telemedicine] seems very good but if I don't know the nurse I don't know if they are genuine, or somebody dressed as one pretending to be one."

(Rural resident, Female, Aged 80)

"It would be difficult for him [my father] and people with sight or hearing impairment. I don't think he's with us anymore…not now. Its fortunate in a way for them, coz they haven't got that worry, about whether people are genuine or they aren't"

(Rural resident, Female, Aged 80)

WHAT PEOPLE SAID - FRIENDS AND RELATIVES

Positives	Negatives
Reduction in hospital visits for people who are distressed by them, e.g. people with dementia related conditions.	Seeing less of a familiar GP or other clinician would not be welcomed by some residents
Opportunity to see new faces (via the video)	More reliance on care home staff is a worry for some
Professional medical and nursing support is easier to access	Awareness was low. No relatives reported any conversations about the service with care home staff and were not aware it was available
All but one relative said that they thought Telemedicine had the potential to improve their relative's quality of life in a care home	
The concept of Telemedicine is easy to understand	
Some relatives could see other useful applications such as access to dietician advice without the need for a hospital visit	

Thinking about being in touch with people, like friends and family, would you say that your "relative" is in touch with friends and family as much as they would like to be?

Most respondents said that their relative really enjoys having visitors and seeing people.

"She would have someone visit every hour of every day if she could"

(Daughter of female resident)

The wife of a male resident reported that she is with him three to four times every week and that he has other friends and relatives who visit. Notably, although not directly related to the question, she also commented that her husband is one of only a small handful of men who live at the care home and said that the men and the women tend to sit in separate groups in communal areas. She was concerned that he does not have much contact with other residents, suggesting that this might be affecting his speech, which seemed to have deteriorated since entering the home:

"As far as I am aware nobody sits and chats with him"

(Wife of male resident)

"Although she is happy at [the care home] she is always asking to come home"

(Son of female resident with dementia)

"I do not feel she sees enough of her family and friends, other than me, my husband, children, and that she would definitely like to see more of them"

(Daughter in law of female resident with dementia)

Thinking generally about the health of your "relative", do they regularly need to see a GP or other health care person outside of the care home?

The wife of a male resident stated that she did not know the answer to this question as she is not told if the doctor or district nurse has been to see her husband. She also said that her husband had been registered with a local GP practice when he became a resident at the home because his previous GP was in another county (near their family home). She stated that she had not been involved in that conversation and this change was made without her knowledge.

The son of a female resident with dementia said that she often had the need to attend hospital appointments for routine check-ups and that she also saw the GP at the care home when needed and the District Nurse on a regular basis.

Another respondent said that, as far as she is aware, her mother in law does not receive regular visits in the care home by her doctor or the district nurses. It is only if something crops up that she will be seen. She went on to explain she had needed to step in to ensure some treatment was provided, for example in relation to a skin condition. The respondent had taken a photo and visited the chemist who advised that it should be looked at by a doctor. She mentioned this to the care home but to her knowledge they never got the doctor out to look at it and added:

"I don't really think they [the care home staff] liked what we had done"

(Daughter in law of female resident with dementia)

The son of a resident stated that his father had not left the care home for any reason since arriving eight months earlier:

"He's never been out of the room"

One respondent whose mother regularly sees the GP and has other appointments to attend felt that her mother sometimes had to attend hospital unnecessarily, for example:

"Bundling her off in an ambulance to go to the hospital to see the dietician will just cause her distress, it seems pointless as it won't make a difference"

(Daughter of female resident with dementia)

Are there times when you might attend medical/health care appointments with your "relative"?

The wife of a resident stated that if he had attended any medical/health care appointments, or a health professional had seen him within the care home, she was not aware of it and nobody has ever asked her if she would want to go with him or be present. She said:

"Nobody has discussed anything about [his] health and I find that a bit worrying, especially when I can see how his speech has deteriorated".

(Wife of male resident)

The son of a female resident said that he and his wife usually attend hospital appointments with her but would not normally be present when the GP or district nurses visit the home for routine appointments. Another respondent, whose father is a resident, also reported not attending routine appointments but occasionally attending others at the home, especially when treatment was being altered.

The daughter in law of a female resident said that she and/or her husband accompany her mother in law to any hospital appointments or healthcare appointments. This is important as her mother in law is quite deaf and cannot remember things. However, she confirmed they have never been asked to attend any appointments with her mother in law since she had been at the care home (four months), so assume her mother in law has not had any medical/healthcare appointments.

Would you say that you feel you are involved in decisions about the support and care provided for your relative?

Responses to this question tended to reinforce responses to the previous question about involvement in attending medical appointments.

A respondent who felt she had been excluded from decisions about changing her husband's GP said she was not involved in decisions about the support and care provided for him by the home and that she was either excluded completely or that:

"They just left me to sort it out"

(Wife of male resident)

She was referring to difficulties in getting access to her husband's regular dentist and identifying a new one for him. She said in that situation she felt the care home should know how to identify a dentist in the area who would be able to treat him, but had not assisted with this.

A respondent whose mother is a resident said that he did not envisage the care home objecting to requests in relation to his mum's care and said:

"We feel we are involved in decisions when we need to be"

(Son of female resident with dementia)

"I don't think we do have a say in decisions really…she was one of the most able people when she went in but now she just sits in a chair unless she goes to the toilet or to the eating area for lunch". "We feel awkward mentioning it because we don't want them to think we are telling them how to do their job".

(Daughter in law of female resident with dementia)

The son of a resident felt he was involved in the sense that he had pointed out times when care could be changed or improved and had been listened to. However, he also stated that his dealings with the local authority around the costs of care had been difficult and:

"I am up to my eyeballs with stress"

(Son of male resident)

"I wouldn't know who to speak to, mum just received an appointment saying the date and time of the appointment and that an ambulance would pick her up."

(Daughter of female resident with dementia)

Does your level of involvement in decisions have any effect on how you feel in yourself?

Levels of involvement in decisions varied and the effect of this on friends and relatives was predictably variable, although only one relative stated that there had been no effect on the way he feels in himself.

One respondent felt that despite her requests that her husband be provided with a haircut, especially because personal grooming is very important to him, her wishes had not been carried out and friends had reported they felt he looked 'scruffy':

"At times I have gone home and felt upset about [his] care".

(Wife of male resident)

Another respondent said that she felt frustration that her requests to the care home for provision of simple care (such as the application of cream for a skin condition) had either been ignored or taken too long to be done. She feels she ought to be raising issues about her mother in law's diet and exercise, but is reluctant to.

However, other respondents felt differently and were content with their level of involvement. One stated that he and his wife like to be involved if there is something serious. He said:

"We try to be involved but not take over from [the care home] because she is in their care now".

(Son of female resident with dementia)

He added that he is

"quite happy with the level of his of involvement".

Another respondent whose father is a resident had the opposite view:

"I do not trust any of them"

(Son of male resident)

He added that he is stressed and anxious because of this.

The daughter of a female resident with dementia was involved in the care plan that was agreed when her mum first went into the home, and felt that this had reduced the number of decisions to be made.

Before we started this conversation had you ever heard of the term "Telemedicine"?

Relatives and friends gave a range of responses to this question:

- GP Practice in Lancashire has the technology, but have not seen it in operation
- No
- No but her mother in law explained she and some other residents had been shown a service something to do with 'sitting around a computer screen'
- Had a vague notion
- Yes

Of the two relatives who had definitely heard the term before, one of them had heard the term mentioned by a health professional during a consultation she had attended with her mother. She said that her mum was visited by someone who she thought was an end of life nurse and that she needed to be present. During this visit the nurse mentioned the Telemedicine service including how and when it might be used. This is the only example of a relative or resident recalling a discussion about Telemedicine and its applications with health and care staff.

Do you have a sense of what Telemedicine is? Could you describe it?

"It is a more simple way and can prevent people having to go to hospital and clogging it up".

(Wife of male resident)

One relative, although not having first-hand experience or discussion with staff, described it as something that enabled staff to connect to Airedale Hospital and where the staff at the hospital can see and speak to the person and give them advice.

The only respondent who had been involved in discussion about Telemedicine with someone connected to the care home described how the staff could use it to get a diagnosis *"over the internet"* if her mum was unwell.

So, just thinking about the Telemedicine Service, can you think of a time when the care home used this Telemedicine service to get help and support with your "relative's" care?

Friends and relatives were generally not aware that the service was available to their loved one. One relative knew that her mother in law had been shown how it could work but she did not think the service was up and running yet. This is actually not the case as the care home in question had been using the service for at least six months, and at a fairly high rate of more than one call per week.

"I wasn't aware they had access to a Telemedicine service"

(Son of male resident)

As far as you can, please tell me about how the Telemedicine service provided help and support. In other words, what happened?

Not applicable

Now thinking about Telemedicine and how it helps the staff to provide care. As far as you can, please tell me how you think it might help staff to provide care? Its ok if you can't answer this, we want to understand how familiar people are with how it works.

Not applicable

Do you think that having a Telemedicine service has an effect on how well the care home and health services can support your "relative's" health and care? In other words, do you think it has any impact on the overall service they provide?

A female respondent whose husband was a resident felt that if something is dealt with quicker, which is possible as there is instant access to the Telemedicine service, this is positive in comparison to waiting for the doctor, or taking the patient somewhere else when it is not necessary.

Another respondent recalled an event requiring a hospital visit. He explained that they were at the hospital for 3.5 hours. He said his mum *"was in a right state, really agitated and stressed"*.

(Son of female resident with dementia)

He said that using the Telemedicine service could have prevented his mother from being in hospital for so long, and therefore it had to be a good thing.

The daughter in law of a resident also felt that the Telemedicine Service was a *"brilliant"* idea. She thought it was good that the care home staff can speak to a fully qualified health care professional and that treatment will be quicker.

"You can get the care needed faster based on a medically assessed diagnosis"

(Daughter in law of female resident with dementia)

Just one relative didn't feel it would make a difference to her relative's care. She felt her mother would be attended to no matter what: *"one way or another someone, either face to face, or across the Telemedicine link"*. Hence she did not think it would affect the level of care her mum would receive.

Others too felt that in principle the Telemedicine service is a good idea, however, there were concerns for some that this relied more on care home staff carrying out instructions and being more responsible for their relatives.

One respondent whose father is a care home resident stated that his experience of care/nursing homes, (his dad has been in two and his mother in one), meant that he would not trust care home staff to use Telemedicine appropriately. He could envisage staff receiving advice from the Telemedicine nurse but not carrying that out correctly and said that in his experience this was *"highly likely"*.

If using the Telemedicine service meant that your "relative" would meet their GP less often how would you feel about that?

"She always wants to see a doctor if something is wrong with her".

A relative of a resident with dementia said that he felt that if the Telemedicine service sometimes saves the GP an unnecessary trip out that has to be good. However, his view was it would be good for the health service but his mum might not be *"too chuffed"* about seeing less of her GP.

Another relative stated that *"she enjoys it when he pops in to see her"*.

(Daughter of female resident with dementia)

She said that seeing someone she knows, "a familiar face", is reassuring for her mum so she felt that not seeing the GP so often would not be a good thing for her mum. She added that her mother becomes nervous and embarrassed when speaking to strangers.

Another relative said that her mother in law doesn't see the GP at the moment, so there wouldn't be a lot of difference. However she also said:

"I don't see it as having a detrimental impact, and do see that it's a bit of a bonus".

(Daughter in law of female resident with dementia)

Respondents who had less trust in the capability of care home staff felt that less contact with medical professionals could adversely affect their relative's care:

"My dad being physically seen by the district nurses and his GP is my insurance policy at the moment".

(Son of male resident)

If your "relative" needed to leave the care home less often because the Telemedicine service reduced the number of appointments they had, how would you feel about that?

Relatives generally agreed that reducing the number of appointments away from the care home would be likely to provide benefits for residents.

"Going into hospital for old people is not good, it is not a good to place to be, it is better to be cared for here"

(Wife of male resident)

Another respondent said his mum does not like leaving the care home, she finds it distressing. He explained that if she is required to leave the home, her dementia condition causes her to forget where she has come from and is returning to:

"Which is unsettling and stressful for her and it can take time for her to settle once she goes back"

(Son of female resident with dementia)

Others also felt positively about Telemedicine and the impact it could have on reducing trips out of the home. The daughter in law of a resident with dementia said that her mother in law worries about going into hospital or to the GP because her mobility is not good, so if the Telemedicine service can be used from her room in the care home and prevent or reduce the number of times she has to leave the home that would reduce that anxiety and stress.

One relative explained how her mum sits in her room all day and does not socialise. Staying in her room is her mum's own decision and anything that takes her out of that environment is distressing for her:

"She feels secure in that room and it's very difficult to get her out of it, though the staff and I do try"

(Daughter of female resident with dementia)

Conversely, a respondent who felt Telemedicine represented greater reliance on the competence of care home staff stated:

"It might reduce the number of appointments but increase the number of deaths." "I think it's a complete non-runner."

(Son of male resident)

Do you feel that receiving some care and support through the Telemedicine service could affect your relative's quality of life at the care home?

All relatives felt that Telemedicine would have an effect on their relative's quality of life. All except one said that the effect would be positive.

The wife of a male resident felt that it was advantageous and could reduce the need for residents to go out of the care home for treatment or diagnosis unless absolutely necessary.

"It will provide instant access to health professionals and reduce the need for residents to go out of the care home"

Another relative felt that Telemedicine has the potential to reduce the number of times his mum has to leave the care home and therefore the associated stress and anxiety. He explained that because she has a dementia related condition, when leaving the home for prolonged periods she can forget where her home is. The anxiety can take time to diminish. He also said:

"Yes if it is used it has to have a positive effect especially for the care home"

(Son of female resident with dementia)

Another respondent felt that her relative would have some familiarity with the technology through using it to Skype relatives overseas (with help from her son), so the concept would be familiar. She also felt that her mother in law would enjoy seeing more people this way and some new faces. She felt strongly that her relative worried about attending hospital appointments because of poor mobility, so a reduction in visits would improve her quality of life.

One respondent felt it would have a negative effect on his father's quality of life and felt that it assumes staff in care homes have an appropriate level of skill to answer health and care related questions, carry out necessary checks and accurately follow the advice given and in his experience this is not the case:

"There is too much margin for error"

(Son of male resident)

Does having Telemedicine affect how you feel about the care provided to your relative?

The wife of a male resident expressed surprise that they had had the service for two years and that the care home hadn't told her about it. She did however feel positive about it saying she could see advantages of having it.

"It is quite reassuring really"

(Son of female resident with dementia)

Others also felt that easier access to medical advice and support for care home staff was reassuring and made them feel better about the care their relative receives. However, one respondent felt that using Telemedicine would not be as good as calling out the doctor. He was not confident that the care home staff have the level of skill and competencies to use the Telemedicine service.

None of the relatives was able to speak from a direct experience of seeing it used and one commented that although she felt reassured by knowing that the Telemedicine service is there if the care home staff need to use it, as far as she is aware it has not been used with her mum and therefore *"it is difficult to say whether it is good or not"*

(Daughter of female resident with dementia)

Anything else you would like to say?

The wife of a male resident explained that she felt positively about Telemedicine:

"Only that it seems to be for the good as people will not be taken off to hospital to wait for hours on end."

(Wife of male resident)

The son of a female resident with dementia said he had used 111 out of hours when his mum was still living at home and that the Telemedicine service seems to be an extension of this

The daughter in law of a resident stated that in some circumstances it might be useful to have a relative present when using the Telemedicine service, and that:

"…relatives might welcome this [involvement in Telemedicine sessions]".

She said that family members, particularly if the patient does not have the mental capacity to participate in the consultation, can provide reliable and accurate information about the patient and their medical history. It was confirmed to the respondent by the interviewer that in the majority of cases the Telemedicine staff would have access to the full electronic patient's record but she felt it might still in certain circumstances be helpful to have a family member present.

"I always wonder if something like this comes about purely to save time and costs within the NHS or purely because of the benefits it brings to patients".

(Daughter of female resident with dementia)

WHAT PEOPLE SAID - STAFF

Positives	Negatives
Reduction in hospital visits is good for residents, especially those with dementia related conditions	Some felt the Hub needed, and did not have, dementia specialist staff
Reassuring to have instant and 24 hours access to expert advice	Inconsistent times and reasons for use provided across and within care homes, indicating lack of clarity on when it should be used
High praise from most for the quality of the service	Felt that homes could do more to provide choices for residents during sessions, e.g. offer privacy where possible
Staff who had used the equipment found it straightforward	Some in each home had initially experienced connectivity and Wi-Fi range problems affecting access to the service
Some felt it offered a new level of support they did not have previously	Some perceived residents would be intimidated by use of the equipment and struggle to understand the concept
Some staff preferred to use the Hub instead of 999 feeling it was more effective in an emergency	Telemedicine support is not routinely discussed in advanced care planning

Focus groups of staff were conducted in three of the four participating care homes, including a nursing home specialising in support for people with dementia.

All of the ten staff who participated across three focus groups were directly employed by the home and none were agency staff.

At the beginning of each focus group we asked:

Who has used Telemedicine?

A total of four of the ten staff had used the service directly. All who had used it were senior staff.

Who knows what the Telemedicine Service is?

First care home: one person felt confident that she knew what the Telemedicine service is and another said she had never seen it being used, despite working at the care home for over ten years and working in a specialist dementia setting

Second care home: two out of three knew something about Telemedicine. The third staff member who had been there less than a week (and had over 30 years of care home experience) was not aware of how it works and when it can be used.

Third care home: all knew something about the service to varying levels. The staff member with the shortest length of service knew the least about it.

Who has received training in using the Telemedicine service?

No one at the first care home had received formal training but they agreed that all staff should be able to access the Telemedicine service when needed and that in house training would improve confidence and uptake. One senior staff member said:

"I think all the seniors and managers have been shown how to use it, because we would be the ones that would really use it, wouldn't we? Because if anything was happening you [junior staff] would come to us and say 'right, so an so' and then we'd take the lead and go through and call the Hub"

(Senior Resource Worker, residential)

At the second care home two staff members thought they recalled receiving some training when Telemedicine had first been installed at the home. The third participant had been at the home less than a week and was not familiar with the system.

"Someone came to give us some training when it was first installed"

(Senior Carer, Residential)

At the nursing home two of the three staff participating in the focus group had been shown how to use the system. The third person had been employed for three months but had not yet been shown. The manager had taken responsibility for showing staff how the system works although prior to installation someone connected to the Hub had provided some training:

"Someone from an outside company came before it was installed, but then our manager has told us and shown us."

(Senior Carer, Nursing)

For those who have used the service, what has been your hands on experience of working with the technology?

Some reported that initially uptake had been slow as staff weren't used to it.

"For the first six months we were, well, not afraid, but not using it as much as we should have done. Definitely now, definitely it's used to capacity"

They said that usage increased eventually and attributed this to better exposure to use of laptops generally:

"Yeah, I think some people were doing course on the laptops and that, I think it's the technology"

"Yeah, it's the technology" [is intimidating]"

"As soon as you'd open a laptop I used to scarper, but now we've got that confidence with doing the online training and that...We do a lot of online training now"

(All staff, Residential)

The equipment itself doesn't seem to present a barrier to use, though some staff had never been shown how to use it, so would not be confident without being shown. Staff state they find the equipment easy and straightforward to use but some reported that it didn't always work, or Wi-Fi coverage wasn't 100% throughout the care home.

"We can access it in the majority of our bedrooms, about 95%"

(Senior Resource Worker, Residential)

Some staff pointed out that sometimes it might be necessary to use the equipment in the grounds of the building, but that this might not be possible given the need to access Wi-Fi.

Most care home staff had high praise for the Telemedicine service and the Hub staff, they were very positive about the quality and friendliness of the service and how it helps them (more comments later in the report).

One staff member had attempted to use the service but had experienced technical issues with her laptop. She had seen others using it too. The technical problem was resolved by the Hub subsequently but this was the only occasion on which that participant had used it.

"I've tried to use it but for some reason I couldn't get the sound"

(Senior Carer, Residential)

Staff at the nursing home were less positive:

"Right, you want us to be honest don't you? When we first got it, it was horrendous because of the internet connection we had…. I wanted to use it in the room but I couldn't because the internet didn't work in that area of the building. Now have internet all around the building. The home has put that in, one for the 'telemed' and one for our CMS system."

(Senior Carer, Nursing)

How often do you use it and how do you typically access the service when you need to? In what sort of situations would you not use Telemedicine support?

Most homes only use senior staff to initiate calls and some juniors were not aware of the service.

"I don't think I've been told I would be able to use it. I always thought it would be the senior."

(Carer, Nursing)

Some homes only used the Telemedicine service at times outside of regular nurse or GP visits, or only out of hours:

"During the week, you know when the surgery's open, we'll ring for a doctor...it's [Telemedicine] more for out of hours and weekends. If you can access the doctor during opening hours then we would call them cos you can get doctor's advice from them"

"It's what we've always done; I don't think we've been advised to do anything differently"

(All Staff, Residential)

They also said that they often call the Hub when they could also call 111 because it was easier and quicker to access, and could provide advice in the first instance:

"I think we use it more if somebody's had a fall or it's the weekend and we think 'let's go via the Hub instead of getting the 111 doctor'"

"We've been advised to do that, sooner than call 111 we go via the Hub"

"You know, we'd sooner do that than call out a doctor, we'd think oh, get some advice first"

(All Staff, Residential)

Residential staff explained that during care planning:

"Some family members request that a GP be called because that's what they prefer and in all fairness they probably don't know about the Telemedicine service"

(Resource Worker, Residential)

Staff at the second residential home said:

"We use it mainly when there's been an accident or somebody's fallen, that's it really"

"Sometimes for illness".

"I'd think it's used about once a month".

"I think if we're going to use it for an illness it's more likely on a weekend"

"Probably weekends or through the nights"

Some staff at two of the homes felt it was more effective to use the Hub than to call 999 because the nurse could see what they were dealing with:

"I'm sure I've been told that if you're worried about something they sort that all out so if you have to show them, explain to them and they just ring an ambulance really. I'm sure that they've said it's quicker…they sort that out. You just show them, they've got a ***first view*** *then. You don't have to explain well 'this person's turning blue' they can see that"*

(Senior Carer, Residential)

However, staff didn't all agree that this is an appropriate response to an emergency situation. One participant who was new to the home, but with many years of care home experience, said:

"By the time I've been messing around with the laptop and that, me personally, I could have a paramedic....it's just wasting time"

(Senior Carer, Residential)

Some liked the way the Hub staff stayed throughout paramedic calls (or whilst waiting) they said it made the feel more confident and that they are happy to explain what's going on in a way which the staff can understand.

"If you're not quite sure what they're [the paramedics are] saying you can ask them to repeat it in a different way, it makes you more confident"

(Resource Worker, Residential)

They seemed to be relieved at the thought of the additional expertise and help the Hub offers.

Although the nursing home had improved their Wi-Fi system:

“We’ve only had the better Wi-Fi for 4-6 weeks and not used it at all. Previously we’d had it for 12-18 months and once every couple of months was the most we would use it.”

(Senior Carer, Nursing)

The staff from the dementia specialist nursing home largely accessed support for issues such as skin tears and falls. They felt that Hub nurses did not have the required dementia expertise. This seemed to be because they had once been advised to take a resident to hospital even though her care plan stated no hospital visits.

One staff member at the dementia specialist home said they would not use the service for ‘intimate problems’ stating:

“I think its quite impersonal and wouldn’t want to point a camera. I’d rather the doctor or nurse come out to see, plus getting consent is difficult.”

(Senior Carer, Nursing)

How often do the residents participate in the Telemedicine sessions? e.g. involved in discussion, been able to understand instructions from the Hub Nurse?

Staff at a residential home pointed out that participation is supported if the resident is well enough, but dependent on them having good hearing and their overall capacity:

"Where they can hear clearly and they're not cognitively impaired then they do [actively participate] or otherwise we act on their behalf… I think they realise that they're speaking to a nurse. I don’t think the fact it’s virtual has an impact.”

(Independent Living Facilitator)

Staff at the second care home largely felt the same:

"Even if that person couldn’t properly communicate with the person on the ‘Telemed', if it’s like an accident, they've cut themselves, you’d still be able to show them, explain to that resident 'I just want to show the Nurse that you've got a skin tear' or something like that".

(Senior Carer, Residential)

These staff also stated that when able to participate, residents do.

However, one staff member who was less familiar with the Telemedicine service felt that some residents might find the technology a barrier to participation, especially some people with dementia related conditions such as Alzheimer's.

"They aren't gonna talk to a laptop are they?! People with dementia...they have a lot of trouble explaining what their symptoms are, face to face, without having to talk to a laptop. I'm just speaking personally, I would prefer a face to face, but that's just me"

(Senior Carer, Residential)

A colleague said:

"The little bit I do know about it, I think it's a marvellous idea"

(Carer, Residential)

She felt that it also helped residents to get prescriptions sooner, explaining that prescriptions through the Telemedicine service could be available the same day whereas going through the GP could take several days.

Dementia specialist staff said:

"Depends how far the dementia is, some of them [residents] might participate and we would keep them near, but some would be suspicious of the computer and camera." "If they answer the nurse they may not answer correctly and it's often hard for them to answer accurately. It would be the same if the doctor or nurse was here."

They added:

"Technology isn't anything that they understand." "They don't know what a mobile phone is."

(All staff, Nursing)

In what ways does having access to the Telemedicine service affect your role?

Many staff were very positive about the benefits Telemedicine brings to their role:

"It makes you feel more confident because you know they're there, explaining things to you"

Another staff member from the same home said it was a backup and provided security to have instant access out of hours and no waiting times:

"I just see it as a positive"

Sometimes staff use the Hub to get advice they would not have otherwise contacted ('bothered') the GP about, so get advice in a situation they probably wouldn't have otherwise.

A colleague who had a lot of care experience, (although none in using the Telemedicine service), said she felt it was daunting to be taking on some of the responsibilities which nurses or doctors might usually have although she understood that nurse support was part of the service provision.

"I think it's a bit daunting, you know, well when we're not used to doing the medical side of things, obviously we have nurses and so on but…"

(Resource Worker, Residential)

Others said it backs them up and speeds up response and treatment.

“By the time I speak to 111 I could have spoken to a [Hub] nurse and got the doctor out in the same time”

(Senior Carer, Residential)

Some staff noted that the service relies upon the knowledge of staff at the care home and their relationship with residents. This was particularly relevant for residents with conditions such as dementia, who might be unable to participate and interact directly with the Hub Nurses.

“You might not have explained the symptoms properly and the person can’t explain their symptoms, then it relies on the member of staff knowing how to explain or knowing the person well enough.”

(Carer, Residential)

One of the youngest participants in the staff focus groups across the three homes who participated was generally uncomfortable with the use of technology in this way:

”It’s difficult for me, I’m old school and believe in face to face”

(Carer, Nursing)

One of her colleagues felt Telemedicine had no effect on her role:

“As a senior I don’t think it has any effect on me. It’s no different from picking up a phone.”

(Senior Carer, Nursing)

In what ways does having access to the Telemedicine service affect how well the care home and health services can support the health and care of residents? In other words, do you think it has any impact?

Most staff felt it had a largely beneficial effect. When asked to think about two care homes, one with Telemedicine and one without, and whether there would be a difference in the overall quality and effectiveness of the care a resident would receive, the majority said they see it positively and that it improves the care than can be provided. When asked why they felt this, the main reason was access to advice and support that they wouldn’t have otherwise because sometimes they call the Hub with things they wouldn’t bother the GP with (again, this contradicts statement about using only out of hours).

"Even though I have a lot of experience in care, sometimes when you ring somebody up they say something that you might not have thought of. It reminds you of the checklist of things you should go through".

(Senior Carer, Residential)

Other staff also felt that Telemedicine support could save them time when accessing medical support, and therefore allow more time for them to care for the residents, and that the whole place would run more smoothly.

“The actual running of the place would be smoother”

(Carer, Residential)

Dementia specialist staff did not see that it has an impact on the overall care received by residents.

“I don’t think it makes any difference at all.”

“No, I agree. We’re trained as well so we don’t always a need extra help.”

“Maybe if our clientele was different it might be different. It’s a small care home, we know our residents.”

(All staff, nursing)

Are there any negative impacts on quality of care for the resident?

Some felt it might seem a less personal service and recognised that for some people that's all part of what they see as care:

"For the elder person, that’s what they like, it’s what they're used to [a more personal level of service]" "My granny wasn’t happy unless she saw him [the GP] every week"

The same staff felt that ‘elders’ value personal contact more than the current generation will when they are at the same age. Staff felt that residents already feel they might not have many opportunities to speak to a doctor, let alone meet them in person. Finally they felt that for some residents it’s really important that they see the same GP consistently but that there are fewer opportunities for this now.

One staff member who had experienced difficulties with the equipment felt that if it went wrong in front of a resident they may lose confidence in her.

“There’s nothing worse than going into a resident’s room with the computer and not being able to use it. They would lose confidence in me if I couldn’t use it”

(Carer, Residential)

One staff member reported that a member of their night staff had called the Hub and was advised they take the resident to the Emergency service at Airedale Hospital. However the resident had a note on their record saying that there weren’t meant to go to attend hospital in certain situations. Staff felt this shouldn’t have been possible and felt that the level of care sometimes depends who is on duty and the extent to which they check the patient record.

In what ways does having access to the Telemedicine service affect how the residents feel about the care they receive here?

Staff were generally less positive about how residents would feel about the use of Telemedicine but some agreed that it would give residents reassurance.

"For us to explain that they're going to see the doctor, that's reassurance. They're going to speak with a third party who's more professional in their eyes."

(Senior Carer, Residential)

One home had concerns about residents' feelings towards the technology and that it might be 'frightening'.

All of the homes commented that personal contact is important to many residents:

"It's a big shift from their perspective – a lot of people go on touch when the doctor taps them on the arms, a lot of these people are used to that, the era they grew up"

(Senior Carer, Residential)

In another of the homes the issue of privacy arose when staff realised that residents weren't routinely asked if they wished to speak to the Hub on their own. They felt it could be an option offered to residents, where they had the necessary capability (some residents could be too unwell or simply unable to communicate sufficiently).

Staff only working with people with dementia felt that residents would probably be unaware of the role of Telemedicine in their care and therefore it would not affect how they felt about their care.

Telemedicine means residents are likely to leave the care home less often. What do you think about that statement? What do you think the residents' perspective would be on that?

Staff largely said that this was a good thing because many residents didn't like to leave the care home anyway. They said that many have 'advanced care plans' in place that state they wish to be cared for at home.

Many staff said that residents with dementia often get distressed if they have to leave the care home because it's difficult for them to understand what is happening, even when it is explained. They might also get distressed by hospital settings, or by seeing certain types of people (e.g. men). This was backed up completely by the care home supporting only people with dementia. They said that sometimes when people with dementia return to the home they retain the insight, but struggle to make sense of what has just happened.

Some light hearted observations were made about a minority of residents who like opportunities to 'visit' the hospital, in one instance staff said a resident explained it was because:

"she liked the coffee… she liked a trip out'"

All staff felt that on balance, the service was most effective and helpful for people who did not wish to, or could not leave the home:

"For those who don't like a trip out, then not visiting A&E would be good"

*" Those that are near end of life, they don't want to go out and spend *@$ knows how long in hospital"*

"Dementia patients (depending on what degree) would probably prefer not to leave because the care home is familiar surroundings…they don't want the upset"

(All staff, Residential)

Staff working with people with dementia did not wholly favour the use of Telemedicine but said:

"A lot [of residents] don't like going outside".

"Going to hospital isn't something a lot of them would like."

(All staff, Nursing)

"If the statement was true it would be better for the residents to not have to leave… To take them out after an incident has just occurred could cause more distress."

(Senior Carer, Nursing)

However, one made the point that she felt in a better position than Hub staff to make care decisions about residents:

"I wouldn't dismiss all of the advice but I know the person better."

(Carer, Nursing)

Anything else you wish to say?

Staff at the first two homes took a further opportunity to say how positively they feel about the Telemedicine Service:

"I think it's a marvellous thing. I can't praise it enough to be honest."

"I just love it! It's just letting the other staff you know have a go, they don't mind you having a go. We do test it once a week to make sure it's working."

"The staff are providing a really good service."

(All staff, Residential)

Some at the second home asked about Goldline at home, another service provided by the Hub at Airedale Hospital and provided to individual patients directly.

Speaking generally about the use of internet and Telemedicine related support one staff member said:

"I think it's the future really"

(Senior Carer, Residential)

When asked for final comments, staff at the dementia specialist home were generally negative about how their residents would benefit from Telemedicine. One carer felt strongly that the definition of 'care' includes making time to spend time with residents on a one to one basis.

"Elderly people are forgotten about and not given enough time in person with people".

"I don't like the computers and stuff."

"They would have walked to the doctor and had a chat but now there's no time. Being one to one is part of the care."

(All staff nursing home)

CASE STUDIES

ROSEMARY

Rosemary is in her mid 80s. She has lived in this residential care home for about a year. Prior to that one of her children had been her sole carer for many years. Telemedicine equipment had already been installed in the home when Rosemary arrived. Staff at the home say that Rosemary had a fall recently and hurt her arm, the Telemedicine service was contacted, and that Rosemary was very grateful to have received the help.

Rosemary doesn't feel she is isolated and says that she is quite happy with the level of contact she has with friends and family. Her daughter feels that Rosemary would be happiest if she constantly had visitors.

She finds that she needs to see health professionals quite often and they usually come to the care home for the appointments. Rosemary feels that she has choices about the care home support provided to her and is happy with the amount of involvement she has in this. However, she doesn't feel that this affects how she feels in herself. Her daughter says that her mum doesn't like to leave her room often and can get distressed if she has to.

We ask Rosemary whether she has ever heard of the term 'Telemedicine'. *"I wouldn't know what you're talking about. I've never heard of it".* Rosemary's daughter remembers someone talking to her and her mum about it a few months earlier.

With the help of a leaflet explaining it and some photographs of people using the laptop or taking a call at the Hub, we describe the service to Rosemary. Then we ask her if she recalls having used a service like this. [shakes head] *"Not to my knowledge"*.

We ask Rosemary how she would feel if Telemedicine meant she could potentially have fewer medical appointments. She doesn't like the idea of seeing doctors and other professionals less often in person. *"You want the personal attention don't you….if that doesn't sound silly"*. She feels that it is more personal when you're in the same room as someone rather than talking over a video link. Her daughter says that Rosemary isn't keen on meeting new people, and it makes her mum nervous. She also says that Rosemary really likes seeing *"a familiar face"*.

Rosemary feels that seeing the doctor or nurse is a private thing. She says she can't understand why it's necessary for care home staff to sit in on appointments. *"It's a personal thing" "to have [staff] sat in with you with the doctor; I don't see why that's really necessary unless its a case of, well, I don't know..."*

Her daughter feels that anything, such as Telemedicine, that minimises hospital visits has to be good for her mum. Rosemary feels Telemedicine wouldn't affect her quality of life, positively or otherwise. *"Not personally, I mean, why should it affect me?"*

Rosemary finds it difficult to imagine that Telemedicine would affect her but indicates that she would not be in favour of seeing her doctor, for example, less often. Her daughter also feels that Rosemary would like to continue seeing her usual doctor and other health professionals familiar to her. But, she does think her mum's quality of life would improve in other ways, such as reducing her number of hospital visits.

Overall, Rosemary cannot relate the Telemedicine service to her quality of life; she sees no connection between them.

Rosemary's measures of quality of life relate to her whole life, not solely her healthcare, to the extent that she sees no connection between the two. Her relative and the staff feel the clinical benefits of Telemedicine would naturally improve Rosemary's quality of life.

KENNETH

Kenneth was born in the 1920s. He's been at the care home for less than a year and when he arrived the Telemedicine service had been in place there for over two years. He is regularly visited by his siblings and children and is satisfied about the amount he's in touch with friends and family.

When the staff in the home aren't able to provide the necessary care, the GP comes out to see Kenneth on occasion. Kenneth doesn't feel that he is involved in decisions about his care but is happy that his children act on his behalf *"They handle all of that, money matters and that". "I don't make no decisions whatsoever"*. There's a problem with his bathroom equipment and he's asked that it is replaced, but has been waiting.

Kenneth hasn't heard of the term 'Telemedicine' and when he's given some information about what it is, he doesn't feel it would have an effect on his care, saying *"Oh, I don't think I'm bothered with that". "I can't get into it, I leave everything to [my children]"*. He feels that he already has access to a service like this from his GP. *"They [care home staff] ring the doctor for advice and he will say whether he needs to come out or not"*

The local GP practice has been Kenneth's 'family practice' for *"donkey's years"*, since he was a child. We ask how he would feel if he saw his GP and other health professionals less often, *"nay, I wouldn't like it"*. He adds that he's *"highly satisfied"* with the service he gets at the care home and is happy to carry on *"with things as they are"*. One of his children says that Kenneth hasn't needed to leave the home to attend any appointments and health professionals visit him more than once a week. This provides his family with reassurance they require that Kenneth's care is being monitored. They have concerns about the quality of Kenneth's care and worry that staff members sometimes don't follow instructions from professionals.

Kenneth's daughter says that the idea of Telemedicine sounds good in principle but they haven't heard of it and weren't aware it was available. However, *"my dad being physically seen by the district nurses and his GP is my insurance policy at the moment"* They also feel that the Telemedicine service could have a negative effect on Kenneth's quality of life; *"there is too much margin for error"* and it assumes that staff in care homes have an appropriate level of skill to carry out necessary checks and accurately follow advice.

Being in regular contact with the GP and other health professionals is important to Kenneth and he and his family have a close relationship with the local GP practice. For differing reasons, Kenneth and his family both value him having regular contact with health professionals: Kenneth's quality of care, and his longstanding family/social ties with the local GP practice. Both are concerned that less regular contact in person with professionals could negatively affect his care and quality of life.

ANALYSIS AND ISSUES EMERGING

This part of the report is divided into 7 main sections as follows:

1. Awareness and understanding of Telemedicine
2. Usage and accessibility of the Telemedicine service
3. Expectations of health and care services
4. Impact on quality of care
5. Impact on quality of life
6. The role of relationships and trust
7. Additional applications for Telemedicine.

Each of these main sections starts with a short overview and is further sub-divided to describe the findings and issues that emerge.

1. AWARENESS AND UNDERSTANDING OF TELEMEDICINE

Overview of this Section

Residents and relatives had low levels of awareness about the Telemedicine Service but most staff were familiar with it, especially those in senior roles.

All except one conversation with residents were hypothetical. No one recalled participating in a Telemedicine session despite at least two respondents having received support via the service. Only one resident stated that they were aware of the service being available in the care home; this was because she had seen the equipment in one of the offices.

One relative was aware that the home provided Telemedicine support, and two others had heard of concept but did not know it was available to their relative.

Almost all staff were aware of the Telemedicine Service. Levels of understanding and experience in using the service were closely tied to seniority rather than length of service. One carer with over ten years' service was not familiar with it.

Staff and relatives found it easy to understand the purpose of the Telemedicine technology and how it is used. Staff who had used the equipment had found it straightforward though some were initially intimidated by the thought of using a computer and camera.

All, except one resident who had seen a documentary on it, struggled to understand the concept of Telemedicine.

Awareness of the Service

Levels of awareness were extremely low amongst residents, even those who had been supported via the service. This might in part be attributable to the poor health people are usually in when the service is called, affecting their general levels of awareness or the levels of cognitive impairments amongst some residents.

Understanding the technology used for Telemedicine support is probably a barrier to understanding the wider role of the service. Even those who were able to understand the concept were not aware it was available to them despite, theoretically, all having given consent via the care home, for its use.

No residents reported having seen it in use except for one who had co-incidentally watched a TV programme a year or so earlier. If it is important for residents to be aware that this service exists, (see comments relating to how it make them feel about themselves and levels of care), then we need to address the question of how to ensure that residents know this exists.

Most friends and relatives were also not aware that the Telemedicine was available to their loved one. Just one person reported that they had been involved in a discussion about Telemedicine with staff connected to her mother's care.

Most care home staff were aware that Telemedicine was offered to their residents although notably, one staff member with over ten years' service had never been shown how to use it or seen it in operation despite providing direct care to people with dementia.

Understanding the Technology

Use of modern IT equipment, although not asked directly of residents, seemed low with many, indicating they did not understand computers, smart phones and so on. One person pointed out that lack of contact with their younger relatives meant lack of exposure to modern technology. This is an interesting point and may be relevant to many care home residents who have limited interaction with people beyond their circle of carers.

It is apparent that it is difficult for many residents to understand the concept of Telemedicine support per se, especially if they have never used it, or think that they haven't.

It is also clear that difficulty in understanding the technology, per se, is a barrier to residents' understanding of the service generally.

Simple and consistently applied solutions could be devised either by the Hub, care home or both in partnership, to improve awareness amongst residents, and ensure informed consent is obtained. This may be as straightforward as the provision of a short 'hands on' session with the technology on arrival at the home.

It is also possible that improved understanding of the service and technology, making it less 'alien' to residents, would prompt a positive shift in attitudes towards it and even a broader perception that having Telemedicine positively contributes to the quality of care received.

It is possible that generations of residents to come will have less difficulty in understanding Telemedicine because they will have been more exposed generally to the use of computers and IT equipment in everyday life. However, technology continues to develop rapidly and even those

who are currently ‘up to date’ with IT developments might in future lose touch and become alienated from developments.

Friends and relatives seemed to generally find the concept of Telemedicine support straightforward to grasp and the majority demonstrated this by providing an email address for future correspondence despite having the option of providing postal contact details.

Staff in one home reported that when they first had access to Telemedicine, uptake of the service was slow for the first six months. This seemed largely to relate to lack of familiarity with using laptops but this changed when some had attended a course requiring the use of a laptop. Help to become familiar with laptops might help with early take up of Telemedicine once installed.

2. USAGE AND ACCESSIBILITY OF THE TELEMEDICINE SERVICE

Overview of this Section

Approaches to using the Telemedicine service varied widely. There seemed little common understanding between, and even within, care homes concerning who should be involved and when calls should be made. Most staff had not received formal training and guidance.

Although there was disagreement, some staff suggested that the Hub serves as a more effective emergency support service than only using 999, especially because it offers a ‘first view’ of the situation for nurses via the video link.

The design of the current service should be improved with some adjustments to make it accessible to a wider range of residents, for example people with hearing impairment. Individual access for residents with a predetermined need, and the right level of technical know-how should be explored. The Hub and care homes should also explore options for more involvement of relatives in sessions.

No residents could recall participating in a Telemedicine session and were often negative about the idea. Staff indicated that two residents interviewed had received support this way. Staff were happy to support resident participation in sessions.

In some care homes advanced care planning does not appear to include options for use of Telemedicine and this should be rectified. Inclusion in advanced care planning discussions would also helpfully serve to raise awareness of the Telemedicine service amongst relatives and residents.

The Telemedicine Service depends upon a good IT infrastructure within the care home, with 100% Wi-Fi coverage. Some homes were positive but others reported mixed experiences of support to improve their infrastructure.

Usage Patterns – Which Residents and When?

Staff described a broad set of reasons they might access the Telemedicine service including time of day, the nature of the medical problem and their own seniority within the care home.

Some homes reported using Telemedicine in one room, not the resident’s, perhaps because of Wi-Fi access or other technical reasons.

Times of day or the week can affect when it is used e.g. this might be a natural consequence of availability of other care home staff; in one home it seemed the night staff would be more likely to use it (but they were the ones with the least understanding to how to use it). Another home said they would only use it if the district nurse or GP wasn't visiting the next day (as part of regular routine of visiting).

All homes indicated that in practice it was only senior staff who initiated calls but they also stated that all staff were permitted to initiate calls.

One home said they only called the Hub for skin tears and falls and others in the group said they wouldn't use it for any "private or intensely personal" problems as they would not be comfortable with "pointing the camera" on personal areas of people's bodies.

One staff group said that they would use it more likely on a weekend than weekday and see it very much as an out of hours service, preferring to call a GP when possible.

Staff reported that relatives have sometimes requested that the home **only** call the GP, but acknowledged that relatives were probably unaware of the Telemedicine service.

Accessibility for Residents

Staff pointed out that hearing impairment was a barrier to participation for residents in Telemedicine sessions and a resident made a similar point. A resident with hearing impairment would require assistance such as sub titles or someone to write things down and this should be provided to ensure that the fullest possible involvement in sessions is supported for all residents.

Staff working with people with dementia pointed out how much more difficult it is for their residents to provide ad hoc consent to use the Telemedicine service for intimate and personal medical issues. The need for consent at that level presents a potential barrier to accessing the service for people with dementia or other cognitive impairment

Who Uses Telemedicine?

There is a lack of consistent approach in how, why and when Telemedicine is used by care homes. There are some similarities in terms of the delineation between staff who do and don't initiate calls, as it is usually senior staff who do this. However, there were variations in opinion between staff as to whether the service should be used only out of hours, in emergency situations and for other reasons based on the type of medical situation and underlying health of the resident concerned, especially whether they have dementia, tied with perceptions of the expertise of Hub nurses.

A few care staff had not been shown the equipment and did not know how the service should or could be used. Differing approaches to its use in practice amongst the care homes will directly affect levels of access to the service for residents; logic suggests that the provision of clear guidance for all care home staff might provide more consistency and equality of access for residents.

Involvement of Residents and Relatives

A resident who easily grasped the concept of Telemedicine felt she should have been offered it in a previous medical situation. This resident was highly capable and went further in asking whether she could directly access the service if needed. For residents with the capability and need, such as those with complex health conditions that may be difficult for care home staff to support (e.g. Parkinson's Disease), there is a case for investigating the possibility of direct resident access.

Relatives and friends reported mixed experiences of involvement in decision making, even within the same care home, with some being deeply involved and others feeling they were never included in discussions or were left to sort out problems with finding services such as a dentist. The differences in levels of involvement may be a reflection of differing levels of capability of residents, although some respondents whose loved one has some cognitive impairment felt they were not at all involved.

Relatives who felt less involved in decision making reported that this had a negative effect on how they felt in themselves and their sense of wellbeing.

One relative felt that it might be beneficial to the care of their loved one to have relatives involved in a Telemedicine session and that even though the Hub staff may have access to their relative's records, their own in depth understanding of the medical history would help in ongoing diagnosis in treatment. This consideration would have to be weighed against the fact that calls are sometimes made in an emergency situation and are not planned for, therefore making it difficult to have relatives participate too.

If relatives had a better awareness of the service then discussions could take place with them regarding their potential involvement in future sessions. For example, perhaps they could be included via telephone where appropriate and practical to do so.

Advanced Care Planning

Staff at one of the residential homes indicated that relatives sometimes request the GP is called, instead of paramedics, in urgent or emergency situations. However, staff accepted that relatives and other loved ones may not be aware of the Telemedicine service and it is not routinely included as an option in advanced care planning.

If relatives are unaware of Telemedicine then it cannot form part of the decision making on care and is excluded as a viable option.

IT Infrastructure

At two care homes staff reported that Wi-Fi infrastructure had to be improved in order that Telemedicine could be used. At one home, although Telemedicine was being used, not every part of the building had Wi-Fi. The provision, or support for provision, of Wi-Fi in all areas is important and would be most effectively done by the Hub at the installation stage.

Differing levels of Wi-Fi access can affect how and where in the building Telemedicine is used. This affects resident access, especially for people unable to move to a different part of the building.

As an aside and more general point, lack of resident access to Wi-Fi in their own room prevents them from accessing a range of online services, information and communication available to most of the general population. It could be regarded as a type of deprivation. As care home populations naturally change and a growing number of residents are familiar with using the internet, improving Wi-Fi coverage in care homes would therefore support the deployment of Telemedicine and residents' ability to use a range of methods of communication with 'the outside world'. The notion of universal internet access is important.

3. EXPECTATIONS OF HEALTH AND CARE SERVICES

Overview of this Section

Residents and relatives perceived care home staff and GPs as having great pressures on their time and availability, and largely believed that Telemedicine might help relieve those pressures. Residents and their relatives reported a mixed set of experiences regarding their involvement in decision making. This seemed to negatively affect how relatives felt in themselves (their sense of wellbeing) to a greater extent than residents.

Some residents were notably understanding, and had low expectations of how involved they could be in their care at the home and from NHS staff such as the GP, focussing on the broader picture of support rather than the everyday details.

Staff from the homes spoke much less about their time pressures but agreed that Telemedicine has the potential to free up their time for more 'hands on' care support. Some argued that one to one attention, in person, is part of what defines 'proper care'.

Staff felt that the Telemedicine service supported them to do their jobs better, especially in non-specialist care homes, but some residents and relatives were concerned that more reliance would be placed on the skills of overworked care home staff.

Staffing and Time Pressures

Residents had low expectations of how involved they could be in their care at the home and to an extent, from NHS staff such as the GP. Their comprehension of pressures on NHS services seemed lower than of constraints of care homes.

Perhaps relevant to this general acceptance of the limitations of care home services was the fact that all except one resident was over 80 years of age, so was at least 12 years of age when the NHS was first created in 1948. Some recalled how life was before the inception of the NHS and felt gratitude to have access to universal health and social care, focussing on the broader picture of support rather than the everyday details.

The single resident who saw Telemedicine as having a positive effect on their overall level of care said that this was because it would alleviate some time pressures on health services generally. Future residents may have a similar understanding of the pressures on NHS services, such as the GP and urgent care, as the problem grows and is more widely reported in the media. Greater awareness of system wide pressures might positively affect how future residents feel towards Telemedicine.

Conversely, one resident who hadn't been offered Telemedicine in the past and now felt she could have been, wondered whether staff shortage might actually cause less use of Telemedicine because it was simply another service they had to support.

Competence of Care Home Staff

Relatives had mixed feelings about the role Telemedicine can play in supporting care home staff skills. Some felt that it would enable the provision of a better service with more medical and nursing input whereas others felt that Telemedicine places more emphasis on the need for care home staff to follow instructions, and feared that not all staff would be able to do this correctly. One of the residents voiced a similar concern.

One relative, whose trust in care home staff was already low and who had a poor relationship with them, spoke at length about how problematic it could be to rely too much on care home staff competence and he was worried that although the Telemedicine service might reduce hospital appointments it could see a rise in deaths at the home.

Staff generally felt that the Hub supported them to do their jobs better although one agreed that more direct reliance on care home staff, albeit under clinical supervision via video, was an intimidating thought. A minority of staff felt they were more competent to support the residents than the Hub nurses.

4. IMPACT ON QUALITY OF CARE

Overview of this Section

Perceptions amongst relatives were generally positive about the potential impact of Telemedicine on care.

The majority of staff view Telemedicine positively and that it improves the care than can be provided. A variety of reasons was given, including that it provides additional advice and support for care staff which is, in some ways, a new level of support.

Several staff also felt that the Hub was a more reliable and effective source of support for emergency calls that calling 999.

Specialist dementia care staff did not feel that Telemedicine has an impact on quality of care for residents because they perceived that the necessary skills, expertise and support services were already in place and worked well and they felt Telemedicine would benefit care by non-specialist care homes the most.

More Time for Care Home Staff to Support Residents

Some residents and staff perceived that Telemedicine support might free up staff time which would otherwise be spent attending hospital appointments.

Perceptions amongst relatives were generally positive about the potential impact of Telemedicine on care, largely because it minimises unnecessary hospital visits but they also felt contact with clinicians in person was important for some residents and didn't wish to see that reduced.

Better Support and Advice For Staff

The majority of staff see Telemedicine positively and that it improves the care than can be provided. A variety of reasons was given, including the value of constant and instant access to advice from Hub nurses, which some found reassuring. Particularly interesting was a comment stating their main reason for this is the access to advice and support that would have otherwise not been sought.

It appears that staff call the Hub about matters they 'wouldn't bother the GP with'. This demonstrates that some staff see the Hub as providing a **new level of support not already available** within the system and thus potential improvement to overall care. This statement conflicted with others from the same group however, indicating Telemedicine was only accessed out of hours.

Improved Responses in an Emergency

Staff from two of the homes said that it made contacting 999 easier because the Telemedicine staff would make the necessary arrangements. This support for emergency care is valued, particularly because Hub staff can see and more accurately assess the situation than a 999 operator whilst the ambulance is on the way.

Greatest Benefit to Non-Specialist Homes

Dementia specialist staff felt they already had access to appropriate services via the district nurse and GP, however their overall view had been affected by one negative experience of the service. This group felt that the Telemedicine service might be of most help in other less specialist care homes, but that their own expertise adequately supported residents.

It appears that one negative experience, plus a perception that people with dementia might find the equipment intimidating, led the dementia specialist staff group to struggle to see wider benefits for people with dementia. In fact their negative experience had given them a perception that the Telemedicine service might even encourage unnecessary hospital visits.

5. IMPACT ON QUALITY OF LIFE

Overview of this Section

Most residents could not envisage how Telemedicine might affect their care and quality of life and some were concerned that it might reduce their privacy during clinical consultations because care staff were always present. However, most staff and relatives felt that reducing unnecessary visits to the hospital would improve the quality of life of residents.

Most respondents agreed that the care related benefits of Telemedicine might be counteracted by a reduction in one to one contact with clinicians and the associated social and emotional benefits to residents. It was apparent that this was the case regardless of how much other social contact residents had in their lives.

Quality of care was regarded by staff as one of the most important contributing factors in quality of life of residents. Telemedicine was generally seen as an improvement in care because it minimises the stress and anxiety which hospital visits can cause, and provides care

home staff with expert advice they might otherwise find difficult or time consuming to obtain. Relatives all agreed with this (except for one), citing improvements in care as synonymous with improvements in quality of life.

Social Contact

From the outset it was clear that Telemedicine use, by its nature, might affect levels of personal contact between residents and health and social care staff because its aims include a reduction in the need for hospital visits and calls to the GP.

For some residents, regular contact with their GP or even a trip to hospital could be a welcome opportunity for social contact. We explored how attitudes to this related to underlying levels of satisfaction with levels of contact with loved ones. There was only some correlation; most residents were happy with the amount of time they spent with loved ones but most also felt that less personal contact with the GP was not good. This suggests that negatives feelings about the impact of Telemedicine on interaction with GPs and other clinicians does not clearly relate to general feelings of isolation.

Some residents and staff perceived a connection between social contact with young people, and residents' understanding of technology such as computers and smart phones; it's therefore fair to conclude that older people in care homes probably stand less chance to keeping up to date with IT developments.

One relative felt that Telemedicine would offer her relative the chance to interact with more people, thus improving her quality of life.

Staff acknowledged residents would find it difficult to understand the technology and that some would not like a less personal approach, but generally felt that Telemedicine represented an improvement in the overall care the resident would receive at the home.

The perspectives of residents and staff seem to differ in terms of what should be measured when thinking about a person's quality of life. It would seem that residents' focus is not so much on quality of care but more generally on high quality interactions with health professionals and good quality personal relationships with the people who are a major part of their lives.

Residents with dementia might be more likely to get the personal benefit from Telemedicine as often a trip to hospital is distressing. However, dementia specialist care staff, whilst agreeing that hospital trips should be minimised where possible, felt that one to one, in person support is an important aspect of care for their residents and in general.

Quality of care is one of many factors enabling a good quality of life for residents, it is an important one, and simple elements such as personal interaction with health staff has a significant effect, this should be considered in tailored approaches to providing the Telemedicine Service, especially the degree to which it is part of care for people with dementia.

Maintaining Identity

Some residents noted that care home staff are likely to only see their identity as it is in the present context with little or no awareness of their life history and overall identity. A sense of identity is important and it is possible that some older people, for whom IT has never played a significant role, could find that embracing new things such as the use of IT affects that sense of identity. Several residents expressed a general resistance to embracing change and new ideas.

Preserving Privacy, Independence and Dignity

Privacy during medical appointments was raised as a concern by more than one of the residents and could be a factor affecting their overall quality of life. It was also considered in discussions with staff.

To an extent residents can have privacy for GP appointments; staff indicated that residents were usually asked whether they wished to have privacy. Some residents however stated they sometimes wished for privacy but it was not offered.

Staff made conflicting statements about providing the option of privacy during medical consultations and all indicated that they had not considered doing this during Telemedicine consultations. It was agreed that when the Telemedicine service is used it is often in an emergency, or when the resident does not have the capacity to participate in a session without support from staff.

There seemed to be confusion about whether staff should be offering privacy for Telemedicine sessions, where practical. Their general response was to state that the care home had a duty to know what had been said during medical consultations. Dementia specialist staff said it was especially difficult to obtain ad hoc consent to use Telemedicine for deeply personal or private issues and so they tended not to do that. Most staff however agreed about the need to at least discuss options that could be provided to residents who want to speak to the Hub nurse in private.

With a loss of privacy could come a loss of a sense of independence for some residents. Several reported that they rely on family for decision making but some demonstrated the desire and ability to act and think independently. It is likely this would be reinforced by having the opportunity to attend medical appointments and participate in Telemedicine sessions without a carer present.

Based on the prominence of this issue during interviews and focus groups, approaches to privacy should be considered within a tailored Telemedicine Service and related practice guidance for care homes.

Consent

General difficulty for residents in understanding IT and the Telemedicine service raises questions about how best to ensure that truly informed consent is obtained and more broadly, how best to raise awareness of the service and its potential role in care.

Low levels of awareness amongst residents could also indicate issues around current practice in obtaining consent.

If residents don't believe that they have access to a service how is it possible to say that they have given consent? Most respondents did not appear to be suffering from memory issues. The resident who was easily able to describe and understand the concept of Telemedicine was unaware that the service was available to her; this too begs the question of how and when consent had been obtained.

Dementia specialist staff stated that obtaining consent was especially difficult and they did not indicate that discussions had taken place with loved ones or other nominated carers about it. They felt that Telemedicine support for intimate, personal medical issues would not be possible. The implication here is therefore that the need to obtain consent from people with limited capacity to understand, and difficulty in doing so, could present barriers to accessing the service.

Update: Prompted by our concerns and questions in this report around issues of consent, the programme team looked into their process. Evidence shows that there is a clear process for obtaining consent to share records with the telemedicine hub. Further work will look at how to improve and increase understanding of the telemedicine service with residents.

Balance of Benefits

Residents value personal contact over efficient service however staff and relatives often stated that a resident's experience of care and overall quality of life/wellbeing would be positively affected by the use of Telemedicine. Residents naturally see the whole of their emotional life as contributing to their overall quality of life, especially for people with dementia as it would reduce the number of potentially distressing hospital visits.

It is clear from other findings in this evaluation that the Telemedicine service offers a range of benefits. It also has the potential to take away some aspects of care which are valued, especially by residents, such as regular contact with a GP or visits to a consultant.

Throughout discussions with all participants it was clear that positive or negative feelings towards Telemedicine, were based either on how it would affect care delivery, or how it would affect social contact and relationships. Residents, relatives and staff cited these to varying degrees as key in thinking about a resident's quality of life.

For people with dementia Telemedicine potentially offers tremendous advantages over traditional care. For all respondents referring to people with dementia there was consensus that fewer trips to hospital represented a positive change that Telemedicine offers. However, some shared concerns about how residents with dementia would feel when meeting new people through using the Telemedicine service, and that they benefited from seeing familiar faces such as their GP. A balance should be struck between the removal of face to face contact with

familiar clinicians against the need to minimise hospital visits for many people with dementia, who find it distressing.

It is important in considering the 'benefits' of Telemedicine that consideration is given to its impact on wider aspects of residents' lives, not just their care. A balance should be struck in determining the impact of Telemedicine on quality of life generally. This approach will ensure that residents are understood beyond being a 'receiver' of care or a 'user' of services.

6. THE ROLE OF RELATIONSHIPS AND TRUST

Overview of this section

Almost every participant highlighted the importance of having trusting relationships between residents, care and NHS staff and relatives. Many residents saw Telemedicine as a challenge to their ability to form trusting relationships with clinicians and mentioned how important it is to see a familiar person consistently where possible, such as a GP.

Residents indicated that familiarity and consistency in support helps to build trust, which is of high importance, and it supports their sense of being cared for. Furthermore, not using Telemedicine avoids the stresses and uncertainties of interacting with new people remotely via computer technology.

Most staff were highly supportive of the Telemedicine Service; they felt comfortable speaking with the nurses and trusted the advice. Some suggested that this is a new level of support because it gives them instant access to expert clinical advice 24 hours a day. However, specialist dementia care staff had received advice they did not agree with and this had negatively affected their trust in the service and staff, preferring instead to use more traditional approaches to care.

Residents, Relatives and Staff

The importance of seeing the same clinicians and building a trusting relationship with them was high amongst residents. For example, the role of the "family" doctor is important to many, and is valued as being more than just 'seeing the doctor' with some people having been with the same surgery all their lives, as well as their parents before them.

Residents also perceived a significant difference between communication that takes place in person, and that which takes place using a video link. Meeting someone in person was seen by some residents as essential to being able to trust them.

It is possible that using the Telemedicine service could interfere with a resident's ability to develop trusting relationships with clinical staff as they might be different or unfamiliar each time the service is used. It seems important to provide continuity of personnel who advise and see the resident. Continuity, however, in terms of nursing staff at the Hub would be difficult to achieve.

It seems that using Telemedicine could have the side effect of causing a potential break in continuity or relationships between residents and other clinicians such as GPs, specialist nurses and consultants.

Some staff felt that their involvement with the process of a Telemedicine session was heavily reliant on **their own relationships** with some residents and their ability to explain the problem to the Hub nurses, so it was important to the overall success of the Telemedicine service that they have good relationships with their residents.

Staff in the dementia specialist home felt that the closeness of their relationship with residents, coupled with their own expertise in dementia, made them better placed than Hub staff to make care decisions. They also felt that one to one support is 'part of care' and what is expected by residents.

Some questions arose from residents and staff about whether Telemedicine nurses have specialist training in the conditions they are likely to encounter in care home residents. Conditions mentioned were dementia and Parkinson's Disease.

Where there was little involvement of relatives in joint decision making with the care home, there also seemed to have been a break down in trust. This appears to have an effect on levels or stress and anxiety for relatives generally.

Several relatives reported having a poor level of communication with care home staff and not knowing what care their relative was receiving. There was also a feeling among some that they did not know the people involved in caring for their relative and this bothered them.

Some relatives said they wouldn't know where to find out about any care being arranged outside of the home, in hospital, or elsewhere.

One relative had a poor assessment of the level of care provided to his father. This and experiences at other care homes affected his trust in the staff and his faith in how Telemedicine would be used by them. He was concerned that staff were unlikely to follow instructions from the Hub or use the service correctly.

A member of staff who had experienced problems with Telemedicine equipment said this could prove problematic if a resident saw that they were having difficulty with it and would lose confidence in the staff member. This was only mentioned once but may be an important clue regarding encouraging uptake and widespread use of the technology by staff. In essence, ensuring staff are fully competent and confident with the equipment is important for a wide variety of reasons that include the supporting the relationship between care home staff and residents.

Care Home and Hub Staff

Naturally, it was important to care home staff that they could trust Hub nurse advice and that they had confidence in them. Many staff said that the service gave them confidence in their own role. Most were very positive about the overall service and the way in which it is provided.

A few staff and residents queried whether the level of speciality of Telemedicine nurses enabled them to support people with dementia, Parkinson's Disease and other conditions. A resident said that they already get specialist support from a Parkinson's nurse. She also feels she naturally understands her condition better than her carers.

With Telemedicine calls initiated by staff, and residents not always active participants, it is possible that care home staff will call the Telemedicine service and speak on behalf of residents who understand their condition better than the carer.

7. ADDITIONAL APPLICATIONS FOR TELEMEDICINE

Overview of this Section

The Telemedicine service was perceived by staff and some relatives as providing 'added' value in emergency situations because of the streaming of live pictures of the patient and this should be explored formally.

Access to dieticians and other clinicians, via the Hub, was suggested by a resident with a complex long term physical condition. The Hub might be able to provide the level of care needed that is too complex for care home staff to manage.

All care homes could include options for use of Telemedicine in advanced care planning.

Two homes stated that sometimes they preferred to call the Hub instead of 999. Although they had also stated that they would use 999 in all emergencies. This approach was discussed by staff at another care home and one said that she would be happy to use it instead of calling 999. There was disagreement though and uncertainty about whether this was the correct approach.

The daughter of a female resident felt that a trip to the hospital for a dietician appointment was needless. This is potentially the type of support which could be delivered via Telemedicine.

Some staff suggested that prescriptions were more quickly obtained via the Hub rather than the GP. This is a further example of the benefits of service and perhaps another area for further exploration and planning.

CONCLUSION

Telemedicine has the potential to support improved services to people in care homes which minimise the need for them to attend hospital appointments. The benefits were especially clear to care staff.

Most residents were completely unaware of the Telemedicine service and its role. Once they had been provided with further information on the service, and an opportunity to ask questions, most found the concept difficult to grasp. Many had little contact with telecommunication and information technology. Almost all residents felt generally ambivalent or negative about the role Telemedicine could play in their care and quality of life. These responses were often influenced by people's wish to receive support in person from trusted and familiar clinical staff. Once the concept of Telemedicine was explained, residents could however see some benefits to care staff and generally exhibited an understanding of staffing and resource issues that care homes face. Although residents could see that Telemedicine offers benefits to overworked care home staff, many felt uneasy about the thought of receiving care from someone not present.

The low awareness about Telemedicine amongst residents raises a question about informed consent.

Friends and relatives also had low awareness and knowledge about the service but when given more information generally felt positive about the potential of Telemedicine to assist in the care of their loved one. They were able to see the system level benefits, to care homes, GP's and urgent and emergency services, and some could also envisage benefits for their loved one. These benefits were especially clear for residents who would find leaving the care home distressing, for example people with dementia related conditions.

Amongst the few negatives expressed by relatives was a feeling that their relative would be unhappy about having less face to face contact with clinicians and therefore feared Telemedicine could impact negatively on quality of care and life generally. Others felt Telemedicine places greater reliance on care home staff to deliver higher level clinical care and this was a concern.

Staff in care homes were generally positive about the role Telemedicine could play in delivering improved quality care for residents, particularly in minimising visits to hospital, which can be distressing. They also acknowledged that fewer hospital visits might enable them to spend more time providing hands on care in the home. Many provided very positive feedback about the Hub staff and service.

Staff were not universally positive however and some echoed concerns of relatives regarding greater reliance on their own clinical skills. Dementia specialist care staff, whilst accepting that reduced hospital visits was likely to benefit people with dementia in particular, felt that their own expertise in understanding the needs of residents, and existing access to clinical support from GPs and District Nurses, provided sufficient opportunities to minimise visits to hospital.

If it were only staff and relatives who were engaged in the evaluation, the initial hypothesis that Telemedicine provides residents with an improved sense of wellbeing would have been supported. However, residents themselves did not see how Telemedicine could improve their sense of wellbeing; they often valued personal contact as one of the most important aspects of

the care they receive, contributing to their quality of life. It is unlikely that residents' perceptions will change until they are more familiar with the service and how it works.

Solutions to raising awareness and understanding of the service could be straightforward but need to be delivered consistently to ensure equality of access to the service for all residents in homes where it is available. However, the Hub should also consider tailoring the role of Telemedicine in relation to individual resident's needs, especially regarding access for people with disabilities and obtaining consent from people with dementia.

RECOMMENDATIONS

RAISE AWARENESS AND IMPROVE UNDERSTANDING OF THE SERVICE

1. **Hub and care homes should work together to develop a range of information materials in accessible formats aimed at informing residents and relatives / friends about what the Telemedicine service is and how they can be involved in using it. These should be made available to all care homes participating and be produced both in paper formats and in audio/visual formats on care home websites (in line with the Accessible Information Standards).**
2. **Each care home should have a process to ensure that all potential beneficiaries (friends, relatives, residents and staff) are given this information and are made aware that the service is available within the care home concerned. This process should include opportunities to resolve any questions or concerns residents or relatives might have.**
3. **The Hub should work with care homes regularly to raise awareness amongst residents including "come and try" sessions. This might need to be repeated at regular intervals and should involve a demonstration of the equipment.**
4. **The Hub should ensure that care home staff are kept aware of the developments to the service in order to ensure accuracy and consistency in raising awareness. One option would be for the Hub to send a regular e-bulletin to each care home for the manager to brief staff and keep front line workers (and hence residents) up to date.**
5. **Care homes to consider inclusion of Telemedicine use in design stage of care plans. This would have additional effect of raising awareness with relatives/loved ones because they would be involved in the care plan design.**

ENCOURAGE CONSISTENCY OF USAGE AND ACCESSIBILITY TO THE SERVICE

6. **Hub to provide a simple and short description for staff of how Telemedicine can be used by the care home and a generic "Telemedicine Practice Guide" to support care staff in using the service consistently, most effectively and with whom. This guide should include support in the use of the technology.**
7. **Each care home to use the Telemedicine Practice Guide in staff induction, training and supervision. Also for each care home to provide opportunities to care home staff, either at implementation or six to eight weeks after installation in using the equipment and/or using laptops generally.**
8. **Steps should be taken to improve accessibility of Telemedicine for residents with hearing or other sensory impairments, enabling them to participate more fully in their own care discussion.**
9. **Hub and care homes should explore possibilities of residents to access directly where appropriate based on resident capability and need. Where possible the software could be loaded on to resident's own laptop (resident would have to supply necessary equipment and receive familiarisation session).**
10. **Hub to explore options for involvement of relatives in Telemedicine sessions.**
11. **Hub to be proactive in managing IT infrastructure issues pre installation and ensure Wi-Fi in all parts of building.**

SUPPORTING ENHANCED QUALITY OF CARE

12. **Care homes to embed development of Telemedicine skills (supported by "Telemedicine Practice Guides") in training and wider quality improvement initiatives.**
13. **Work should be done to a) ensure Hub nurses have the necessary specialist knowledge of dementia and dementia care, and b) that care home staff are given confidence in Hub staff expertise in dementia by being provided with further information on this.**

IMPACT ON QUALITY OF LIFE

14. **Tailored Telemedicine services should be delivered in ways that support privacy, promote independence and retain and enhance residents' dignity. Care homes should explore possibilities for some residents to access Telemedicine in private, whilst recognising that Care Homes need to understand details of clinical advice to patients.**
15. **Care homes should ensure that informed consent for use of Telemedicine is obtained from each and every resident, or someone who can act on their behalf if capacity is an issue.**
16. **The way in which Telemedicine is used should be tailored for particular patient groups, for example to support people living with dementia or people with learning disabilities. Hub and care homes to develop specific 'practice guidance' that differentiates between a service for people with additional needs and those without.**
17. **The Hub to devise and enact measures which ensure the "balance of benefit" of Telemedicine is evenly spread between the quality of care and the residents' quality of life.**

SUPPORTING RELATIONSHIPS AND TRUST

18. **Hub and care homes to explore potential ways of familiarising residents with Hub staff.**
19. **Ensure care home staff are fully confident and competent so that the Telemedicine service enhances and supports good relationships between care home staff and residents.**
20. **If the Hub does not use dementia specialists, it should consider employing some specialist staff alongside enhanced training for all. The Hub should also raise awareness amongst staff in specialist homes of the clinical background and expertise of Hub Nurses.**

EXPLORE ADDITIONAL APPLICATIONS

21. **All care homes could include options for use of Telemedicine in advanced care planning. This would also raise awareness of the service amongst relatives and residents.**
22. **Hub to explore potential for Telemedicine to support emergency calls. "First View approach" if they haven't already.**
23. **Hub to explore additional applications for the service such as support in issuing prescriptions and sessions with dieticians, speech and language therapists, other allied health professions and mental health services.**

APPENDICES

BACKGROUND AND CONTEXT

WHAT IS TELEMEDICINE?

'Telemedicine' is a term used for a wide range of medical and health related services delivered remotely using audio/visual equipment. As technology is used more commonly to deliver health care and support, the terminology will develop and become more descriptive. Currently, other terms such as 'Telehealth' and 'Telecare' are also used interchangeably.

These terms describe services that include remote monitoring of health indicators such as blood pressure and blood sugar levels. In this evaluation the term 'Telemedicine' relates to the provision of clinical advice and help via a two way video link between a senior nurse and a residential or nursing home. The support is delivered by the Airedale and Partners Telemedicine Service and is staffed centrally at a 'Hub' based in Airedale Hospital (Ward, 2014).

The Telemedicine Hub at Airedale Hospital can be contacted 24 hours a day, seven days a week. It handles calls from a range of locations and people, including individuals in their own home (known as 'Gold Line') through to staff in prisons. Included in this range of provision is a service specifically for care and nursing homes.

The aims of the service are to:

- **"Provide, safe, effective high standards of care**
- **Support residents to stay at home**
- **Support residents, nurses and carers in the planning, and delivery of care**
- **Escalate to community teams out of hours"** (Tuggey, 2015)

Staff in care homes can access the Telemedicine Hub for help and advice regarding the care of residents and the Hub will coordinate other services, such as pharmacy or GPs, where necessary.

Telemedicine provides an opportunity for care home residents to benefit from accessing NHS Services without needing to leave the home and potentially offers a reduction in unnecessary urgent and emergency hospital visits. The Airedale Hospitals website explains:

"**Telemedicine provides remote video consultations between healthcare professionals and patients either in patients' own homes, nursing homes, hospitals to GPs or hospitals to prisons. It helps to reduce patients' lengths of stay in hospital and also supports care outside hospital, including early discharge, or avoids unnecessary visits and admissions to hospital**" (Airedale NHS Foundation Trust, 2016)

The service provides support for all health conditions but according to a presentation by Airedale Hospital in June 2015, the following are typical reasons for calls to the Telemedicine Hub:

- **"Falls**
- **Laceration**
- **Painful shoulder**

- **'Chest Pain'**
- **Evolving stroke**
- **Drowsy / 'off legs'**
- **Medication error"** (Tuggey, 2015)

Care staff usually initiate calls to the service with the resident present throughout. The laptop and camera are mobile so can be moved to where the resident is located. If possible residents may participate in the Telemedicine session but this can be difficult if the resident is especially unwell or has other health conditions, such as dementia, which affect their ability to understand the situation.

WHY THE NHS IS INVESTING IN TELEMEDICINE

Early evaluation findings indicate that benefits of Telemedicine could be felt across the wider health system, reducing demand on urgent and emergency care and at a personal level by care home staff who could now access instant clinical support at any time of day or night. Many residents, especially with dementia, can find hospital visits distressing, so reducing the need for this and providing alternative support is important. Alzheimer's Society estimates that up to 80% of care home residents have a dementia related condition. (Alzheimer's Society, 2013)

The NHS England website (Vanguards section) explains:

"Through the Vanguard programme, partners intend to go further and develop a more proactive health and social care enabling model focusing on optimising residents' individual capabilities and building new clinical models of care. This model will be enabled through technology and an extended use of Telemedicine, providing a single point of access to all aspects of specialist health and care advice.

This will mean, for example, that a patient with Parkinson's disease living in a residential home will be able to access clinical advice and support through secure video conferencing at any time of the day or night. So in the event of a fall, an experienced nurse in the Telehealth Hub will be able to assess the patient using the video link and after consultation with an A&E consultant will be able to arrange for them to be cared for in their familiar surroundings, rather than transferring them to A&E".

"The Airedale Partner's Vanguard objective is to enhance the quality of life, and end of life experience of thousands of nursing and care home residents living in Bradford, Airedale, Wharfedale, Craven and East Lancashire" (NHS England, 2015)

Much 'grey literature' exists on the internet including presentations, government case studies and project summaries, quantitative evaluations and so on. These reports and presentations provide helpful insight into the aims of the Telemedicine Service.

The reports sometimes make statements about perceived preferences of residents, relatives and care home staff on the delivery of care and attitudes towards the role of Telemedicine in this:

"Our patients, their relatives and the nursing or care home staff say they would prefer to receive more specialist care without having to leave their home – so it's been down to us to change the way we work to meet their needs."

"The message we hear back constantly is that patients and carers feel assured just by having access to Telemedicine from their home and knowing that if they need to see a nurse they can at the touch of a button." (Airedale NHS Foundation Trust, 2014)

WORKING WITH THE NHS

Working in partnership with NHS colleagues to conduct this evaluation was essential. It ensured simplified access to information about potential care homes that could participate, and acted as a check and balance on the project in terms of the overall approach and procedures around confidentiality, data protection, safeguarding and consent.

Discussions with the Director and the Evaluation Lead on the Telemedicine in Care Homes Vanguard programme assisted in defining the parameters of the evaluation and ensuring that 1) the scope did not overlap with other evaluation work, and 2) the aims of the evaluation were achievable in terms of accessing necessary information and support.

Assistance was provided wherever possible and was gratefully received. However, constraints on the availability and time of Hub and Vanguard staff had an impact on the delivery of the evaluation, especially in the early stages of identifying and recruiting participant care homes, and this contributed to delays in completing the evaluation within agreed timescales.

From the outset of designing the evaluation it was clear that we would be working with people in a vulnerable position, perhaps unwell, potentially discussing personal and sensitive issues. It was important that the evaluation could demonstrate compliance with NHS standards and legal requirements around information governance, data handling, confidentiality and safeguarding issues. Working closely with NHS colleagues, including the Information Governance Manager for Airedale Hospital NHS Foundation Trust ensured a rigorous process was put in place.

At the time of writing many changes are taking place in the way NHS services are funded and commissioned. The long term future of Vanguard projects is unclear and funding to them has significantly reduced since this evaluation commenced.

EXISTING EVALUATIONS AND RELATED STUDIES

Several evaluations of the Airedale and Partners Telemedicine service have been conducted. They almost all examine the impact of Telemedicine on use of urgent and emergency services. They are conducted from a system wide perspective, looking at the economic and practical impact for services across the health and social care economy, in particular on NHS run services.

The evaluation work across the Care Homes Vanguard is generally in the early stages and overall, the Vanguard evaluation work will fall into two major areas:-

- researcher in residence model - focusing on implementation processes and structure
- summative evaluation - focusing on outcomes and outputs (this will include an economic evaluation)

Healthwatch Bradford and District wanted to evaluate Telemedicine as seen from the perspective of its users, to understand their experience of it, perceptions and feelings towards using the technology itself and the wider effects this approach to delivering care and support might have on their everyday lives. We evaluated how people who use it, or could use it,

perceive its impact on them personally. The people we have spoken to are care home residents, their relatives, and staff working at the care homes.

A range of other evaluations are currently underway. They are largely quantitative studies, some of which are looking at the economic benefits of Telemedicine system wide. It seems that most are not yet concluded. It is difficult when using a quantitative approach to gain in depth insight into people's views and experiences and to "hear" their voices. This evaluation therefore aimed to gain an in depth understanding of people's views and experiences by using a qualitative approach.

The evaluation being conducted by Healthwatch Wakefield which takes a more general look at patient/resident experiences of Vanguard Care Homes was not fully underway. A pilot was conducted and some fundamental changes have been made to its design.

Key learning from work in Wakefield was that the role of volunteers needs to be carefully managed. The Wakefield pilot has shown that levels of depression amongst some residents could cause distress to volunteers conducting research. It had also indicated that care should be taken in how the evaluation itself is explained to participants in order to avoid confusion or worry.

It was agreed to keep the Vanguard Evaluation Lead involved in this evaluation to ensure that it did not duplicate other evaluation work and that the findings are, as far as a possible, complementary to other findings and can be collated with other data/outcomes.

The Vanguard Evaluation Lead felt it would be helpful to consider a paper from 2014 on research led by the York Health Economic Consortium who, with support from Airedale Hospital conducted an evaluation of the economic benefits of Airedale, Wharfedale and Craven Telemedicine support on acute services indicating that:

"care homes with Telemedicine showed a 39 per cent reduction in the costs of emergency admissions and a 45 per cent reduction in ED attendances after Telemedicine installation" (Hex, et al., 2015).

Other evidence suggests wider considerations are equally important. A 2008 article from Help the Aged suggested that older patients might suffer from the lack of contact with 'real people' that can result from using Telemedicine.

"the 'success' of automation removes, at least partially, a level of social interaction between older people and their carers or other health professionals. In many cases, this link with the outside world is highly valued by patients, and replacing it with an electronic device is not considered a welcome trade-off" (Royer, 2010).

Looking further we found an American study from 2013 exploring experiences of patients, caregivers and healthcare personnel staff with a program that provides Telemedicine-enhanced emergency care to older adults living in 'senior living communities' . The main conclusions were that Telemedicine did have a beneficial role to play in emergency care but barriers to use existed around the technology itself and training. (Shah, et al., 2013).

Additional background information has been produced by the American Telemedicine Association who have compiled a series of case studies on the topic examining the range of potential benefits. Although compiled from the point of view of providers and therefore having

a built in bias, the range of applications is useful to understand. All of the data is available via their website (American Telemedicine Association, 2016).

SCOPE AND METHODS OF OUR STUDY

Our reference point in this evaluation was to look at the aims of the Telemedicine Service itself and how Telemedicine can positively impact on care home residents, their relatives and staff. In other words, what the service itself sets out to achieve and then examine the feedback provided by people who use it or receive support through it in some other way. In addition, this report will highlight key themes that have emerged from speaking with the various groups of people we have approached.

In order to achieve the aims of the evaluation, to produce and analyse qualitative evidence, providing in depth insight into the impact of Telemedicine on the wellbeing and quality of life of care home residents, Healthwatch Bradford was keen that within the final report the voices of residents, their relatives and care staff could be clearly heard. It was therefore agreed that a series of semi structured interviews should be conducted with as many participants as necessary and within the timescale and resources available.

It was thought that formulating a type of hypothesis around which to conduct the work would be helpful and the following was agreed with the Vanguard Evaluation Lead:

Telemedicine in care homes provides residents with an improved sense of wellbeing and encourages a perception that they are well cared for

We discussed the added value of the qualitative approach and agreed that this form of narrow but deep qualitative research has three key benefits:-

1) The "why" - generally speaking, qualitative evaluations provide context and meaning to more statistically based work. They flesh out the data. The findings of qualitative research can complement those of quantitative work.
2) Incidental discovery – the benefit of having open questions is that it makes "incidental discovery" much more likely. It provides the opportunity for space, trust and dialogue to be created in which participants can have more control over the topics discussed. This potentially reveals facts about their experience that might not otherwise have emerged but might be crucial in developing understanding of the user experience and ways it can be enhanced.

It is also important that decision makers are able to easily engage with and understand the Telemedicine project and the "lived experience" of its users. This makes for better, person centred decision making.

The evidence for evaluation would be gathered from three main groups: care home residents; relatives of residents; and care home staff. This would be supported by background information provided by the Telemedicine Hub and Vanguard staff or that was generally available.

A detailed agreement was reached between the Evaluation Project Lead and Vanguard Evaluation Lead regarding the necessary scope and limitations of the evaluation.

Wellbeing was measured using an ASCOT (Adult Social Care Outcomes Toolkit) based approached, in line with NHS England current practice. ASCOT questionnaires measure a person's 'Social Care Related Quality of Life' (SCRQoL). See guidance for more information (Personal Social Services Research Unit, University of Kent, 2015). However, it was necessary to

adapt this for the evaluation. This measure required alteration to ensure that questions on wellbeing could not cause distress and that they complemented the rest of the questionnaire

Gaining insight into perceptions of the technology and its impact, even for people without direct experience, was relevant. Overall 26 people took part in interviews or focus groups and were connected to four separate care homes, two rural and two urban, across the Bradford and Airedale, Wharfedale and Craven CCGs areas. Of the 26 participants, 11 were residential care home residents, ten were care home staff (excluding managers) and five were related to residents including two residents who had also been interviewed. The numbers of participants exceeded the minimum required by the Vanguard programme.

Care/Residential Homes

As this was a qualitative study we were not looking for "statistical representativeness" in the choice and number of care homes. We acknowledge that there are a large number and range of homes involved in Vanguard but we wanted to explore in depth the experience of residents, relatives and staff. We agreed with the Evaluation Lead that as we were not looking for statistical evidence, only two or three homes needed to be involved. We interviewed people living in or attached to 4four care homes.

Care would be required to ensure minimal disruption and distress to residents and staff, for example, by providing helpful and easy to understand information about the evaluation and the people conducting it.

The full list of care homes using Telemedicine in the relevant geographies was provided by Telemedicine Hub, which included details of location and number of residents.

Individual Participants

The number of people participating was likely to be relatively small. Anything between three and ten residents would be acceptable to the Vanguard programme. It was agreed to ensure that people with dementia were represented where possible and that the overall mixture of men and women was balanced. Wherever possible they were to be directly engaged via use of semi structured interviews. Initially it was not possible to be more specific than this because:

1) we could not access private/sensitive information about people's health conditions
2) we would not have been able to engage with a large enough number of people for the sample to be representative of all care home residents

Family carers would be involved, likely via focus groups or phone interviews, and not at the same time as residents.

Staff would be engaged too, again, away from residents and either via focus groups or questionnaires/semi structured interviews.

Our methods recognised that some residents may become tired easily and that we may have to visit them more than once. We also offered to meet with residents informally once before actually conducting the research. This would enhance their understanding of our work and build trust.

CRITERIA FOR INCLUSION

The geographies covered by the Airedale, Wharfedale and Craven, and Bradford City and Bradford Districts CCG's encompass a wide range of landscapes, industries and demographies and include the City of Bradford, Keighley, market towns of Skipton and Settle, and numerous villages, hamlets and farms. Large parts of the AWC CCG area are also moorland.

To ensure that we spoke to the correct mix of staff and residents it was agreed that efforts would be made to achieve equal representation from rural and urban based care homes.

Care Homes

This variety of settings made it important to ensure that when identifying care homes, geography was accounted for as a possibly influential factor in staff and resident demographics.

Some work had to be undertaken to analyse the location of each potential home and categorise as being rural or urban. For the purposes of this evaluation urban was defined as being within the boundaries of Keighley or the city of Bradford and rural as being on the outskirts of surrounding towns (Skipton, Settle or Ilkley) or in a more remote setting.

In order to ensure that Telemedicine was likely to be well understood and embedded in staff practice, it was agreed that care homes would be approached only if they had Telemedicine installed for more than 12 months and had used the service within the preceding three months. In practice these criteria were too tight and provided just six potential homes who could participate. The criteria were relaxed to include any homes that had been using Telemedicine for more than six months. Fortunately this produced a list of around 16 possible homes.

Due to the large proportion of care home residents who have a dementia related condition we felt that it important to ensure that a home that provides support to people with dementia was included, so we could gain views from the staff.

Other care home related Vanguard evaluations showed it was important that staff and residents had not recently been involved in any CQC or similar inspection exercise, as this had inadvertently caused distress, confusion or misunderstanding amongst participants.

In summary, the general criteria for inclusion in the evaluation included:-

- Telemedicine has been installed and used in the care/nursing home for a period greater than six months so it is well embedded and used.
- The Hub has received more than one call from the care/nursing home since the beginning of February 2016. In other words, they have been in touch recently.

Once we had a list of homes matching both of the above criteria, we sought to know the following details by a mixture of information provided by the Hub and our own research via the CQC website:

- Private or council funded facility, or a mixture of both
- Rural or urban location
- Dementia specialist facility (aiming to include at least one home where all residents are people with dementia)
- No CQC inspection within the previous three months

Exclusion

- The evaluation would not be including people with learning disabilities, so any facilities where all residents are people with learning disabilities were excluded.

Additional criteria were considered important but the information needed to apply these was not available via the Hub or CQC website. These were:

- The general demographic makeup of the residents.
- Staffing: of the care homes on the list what is the staffing make up? Are the staff all agency workers, a mixture of agency and directly employed? Criteria had originally included approaching at least one home where all staff are agency.

Residents

Although not a quantitative evaluation, and therefore not relying on gaining a statistically representative sample of residents, it was hoped that general demographic data about residents could be used in defining the final cohort of care homes and supporting the evaluation to engage with homes supporting a variety of populations. The Hub was asked to provide:

- The total number of residents in each home on the list
- A breakdown of the ethnicity, age groups and gender split
- Any demographics which would also potentially be useful

General demographics of care home residents were not available because they were not collected by the Hub and so the Hub was only able to provide figures on the numbers of residents at each of the identified homes.

It was agreed that we would not be speaking to care home residents with any significant memory or mental capacity issues because of constraints on time and no immediate access to the specialist engagement expertise. However, around 80% of residents in care homes have dementia related health conditions or significant cognitive impairment (Alzheimer's Society, 2013).

From the outset it was agreed that speaking with people with dementia was 1) beyond the expertise of the staff involved, and 2) unnecessary given that Alzheimer's Society will be doing that in the future and 3) would render it almost inevitable that no respondent would recall any experience of Telemedicine. We were hopeful that some respondents would be able to speak from first-hand experience.

Although unable to engage residents with dementia directly, staff and relatives with understanding of the condition and how Telemedicine might affect care were approached.

We therefore requested that the care home identify three to four residents with no significant memory problems or difficulty in maintaining a prolonged conversation. Care homes were asked to identify potential participants and to seek their consent to participate. This is an excerpt of the email the care homes received once they had expressed an interest in participating:

“We are seeking residents who have the capability to participate in an interview, if they've actually experienced Telemedicine that's great, but not essential. The interviews should last about 40 minutes. Ideally, the resident should be able to answer most questions without assistance, we are very happy for residents to bring a friend (but not a staff or family member, we hope to speak to those groups as well) if they feel they'd like to.”

Friends and Relatives

Where possible the relatives of residents we had spoken to were approached. However, it was not essential that only relatives of residents interviewed were included. This narrowing of the criteria would have limited the overall potential number of participants to impractical levels and excluded relatives of people with dementia related conditions. Only identifying friends and relatives by asking residents might also have biased the sample towards relatives with good to high levels of involvement in their lives and care.

No additional criteria were considered relevant because of concerns that, given the relatively small number of residents we would be speaking to, any further limitation might leave too small a number which could be included.

Relatives were identified using two approache:; residents interviewed were asked for permission to contact a relative and care home managers were asked to make contact with potential participants and drafted an email for them to send out.

Excerpt from email to relatives and friends sent on our behalf by care home managers:

“The service we are evaluating is called "Telemedicine" and [this care home] is one of the many homes where this support is available. You may have heard about it? Attached is a leaflet which explains more about the research, Healthwatch Bradford and about Telemedicine….

It is possible that Telemedicine will be used more widely across the country in the future, so our aim is to ensure those plans are influenced by the views of residents, staff and family and friends of residents. Whether or not you know about this service we would be interested in speaking with you over the telephone to hear your views. We will shortly produce a report which will be read by the people who run the Telemedicine service, and by those who provide the funding for it. Your comments will be kept completely anonymous; no individuals will be identified in the report.”

Staff

It was important that any staff with knowledge or experience of using Telemedicine were engaged in the evaluation. Therefore any staff who had a direct role in providing care to residents were encouraged to participate.

Once care homes had agreed to participate, by necessity, care home managers were asked to identify staff who might be able to take part in a one hour focus group on the day we would be visiting the home to interview residents.

The only relevant variable identified across homes was the nature of the location, as there was the possibility that staffing would be affected by a rural versus urban location and therefore

that staff attitudes and experiences of Telemedicine could be affected on the basis of the location of the home. We expected that the cohort would be a mixture of agency and directly employed staff but it was not possible to obtain information about this breakdown in staffing so this selection criterion could not be applied.

QUESTIONS AND SCHEDULES

The questions used for semi structured interviews with residents were designed first. All other questionnaires or other types of evidence gathering would need to be relevant to the feedback provided by residents, so their designs were closely related.

The design of the questionnaire for residents was completed in collaboration with Prof Gerry Armitage (University of Bradford) with input from Healthwatch staff. Other NHS England funded evaluations needed to be considered and the Vanguard evaluation lead suggested that questions relating to wellbeing measures should use the system currently accepted by NHS England.

The semi structured questionnaire for residents broke down into two parts:

Measuring wellbeing/establishing a baseline, without wishing to cause distress. Direct questions concerning levels of happiness and wellbeing questions were asked to establish satisfaction with:

- Levels of social contact
- Involvement in care and decisions and how it affects how feeling in oneself
- Exercise of free will and involvement in hobbies/elected activities

Establishing whether Telemedicine and its perceived impact had an effect on the resident's sense of wellbeing, the interview included some direct questions relating to experiences and attitudes towards Telemedicine.

Questionnaires for relatives were similar to those for residents, largely focussed on perceived effects for residents and their care. A few additional questions sought to understand any impact on relatives and their sense of wellbeing, and the extent to which they were aware of the service.

Staff were also asked to think about the impact of Telemedicine on residents and their quality of life at the care home. They were also invited to talk about their own experiences and perceptions of the services. A focus group schedule was drawn up in advance as a guided conversation rather than a set of questions.

All participants were provided with opportunities throughout the discussion to raise issues not already covered by the questions or to elaborate on responses. Where new topics were raised participants were encourage to discuss further.

ANALYSING THE RESULTS

Responses were typed into tables grouped by the type of respondent. The text of a range of responses to one discussion area or question could easily be viewed as a whole. In all cases except telephone interviews with relatives, an audio recording was also made and used to double check what had been written in the response tables.

Evidence gathered from all participants was analysed mainly using a thematic top-down approach, comparing the range of responses to questions across participants. Emerging themes that hadn't been anticipated initially were also captured.

This semi structured approach enabled the identification of predetermined and emerging themes. It provided some fixed responses to questions, complemented by an opportunity at every stage for participants to elaborate on the response. We therefore ended up with fixed and free text responses to guided areas of discussion.

Braun and Clarke's six processes of thematic analysis were the basis for interpretation of contributions from participants:

"Analysis phases and their description

1. Familiarising with data. *Transcribe the data; read through the data thoroughly a few times; note down initial thoughts and ideas.*

2. Generating initial codes. *Use codes for interesting features of the data systematically across the entire data set; and then collate data that's relevant to each code.*

3. Searching for themes. *Start to draw potential themes from the codes; gather together all data that is relevant to each potential theme.*

4. Reviewing themes. *Check if the themes work in relation to both the coded extracts across the entire data set; generate a thematic map.*

5. Defining and naming themes. *Continue with ongoing analysis for refining each theme, and the overall story emerging from the analysis; generate clear definitions by titling each theme.*

6. Producing the report (recommendations). *Select the most compelling extract examples, followed by a final analysis of the selected extracts. Relate and link the analysis back to the research question and literature. Finally, produce a report or summary of recommendations from the analysed data"* (Braun & Clarke, 2006).

GOVERNANCE OF SAFEGUARDING, CONSENT, DATA PROTECTION AND CONFIDENTIALITY

From the outset of designing the evaluation it was clear that we would be working with people in a vulnerable position, who were perhaps unwell, and potentially discussing personal and sensitive issues.

Healthwatch Bradford supported the evaluation by providing access to their locally developed procedures relating to other work in care homes. Colleagues working for Airedale Hospital and The Telemedicine in Care Homes Vanguard Programme requested a statement and procedure relating to the evaluation specifically and regarding the privacy and safety of people participating in the evaluation.

The statement and procedure was compliant with NHS requirements and signed off and agreed by the Airedale Hospital Lead for Information Governance and the Lead for all Evaluations of the Telemedicine in Care Homes Vanguard. Healthwatch Bradford is happy to provide a copy of the statement on request.

MATERIALS FOR PARTICIPANTS

- Leaflet for Participants
  The leaflet outlined the role of Healthwatch, the Telemedicine Service and the staff involved in the evaluation. The leaflet also explained that no one was obliged to take part and that all participants would remain anonymous, assuring them that their personal data would be handled according to best practice.
- Further Information for Participants
  A second leaflet was available if required, providing information about NHS Vanguard and further background on the Airedale and Partners Telemedicine Service and Healthwatch.
- Visual Cues
  Photographs of staff and residents using the Telemedicine Service, which were publicly available and originating from the service itself, were used as visual cues. With the exception of interviews via telephone, the cues were used to help explain the Telemedicine Service to anyone not familiar with it.

SCHEDULES, QUESTIONNAIRES ETC

- Residents - semi structured interview schedule
- Friends and relatives - semi structured interview schedule
- Care home staff - focus group schedule

LIMITATIONS OF THE EVALUATION

- The evaluation took place over a five month period and was largely conducted by a lone worker. There was some assistance to conduct the interviews and produce the materials for participants. This level of capacity caused necessary limitations on the range and number of homes and people engaged to provide their views.

- Help in accessing care homes was provided by Vanguard and Telemedicine Hub staff, which was welcomed but also put this aspect of the recruitment out of the control of the evaluation team.
- Criteria for inclusion to ensure a representative sample of people were more general than would have been for any larger cohort.
- Selecting participants (residents, relatives and care home staff) was limited by the extent to which care homes wished to participate and were able to support the process during the five to six hours the researchers were present. It was not possible to stipulate criteria regarding residents' health conditions or other personal or sensitive information because of considerations regarding confidentiality and data protection.
- The numbers of staff participating in each focus group was limited by practical considerations regarding the care home and their ability to continue providing care whilst staff took part in the focus group.
- We have limited some details about individuals to ensure that they cannot be identified. In one instance we have had to remove reference to the possibility that a resident has dementia because their relatives had not been informed.

DISTRIBUTION OF THE EVALUATION REPORT

- All participants (accessible version of the Executive Summary)
- All staff/freelancers who assisted
- Airedale NHS Foundation Trust Telemedicine Hub Staff
- Airedale and Partners Telemedicine Vanguard Programme team
- University of Bradford, Faculty of Health Studies
- Airedale Wharfedale and Craven CCG
- Bradford Districts CCG
- Bradford City CCG
- Bradford Council (Department of Adult and Community Services)
- Healthwatch England

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