healthwatch

Virtual Wards

Qualitative evaluation of non-users' views on virtual wards in Croydon, Merton, and Wandsworth

Contents

Executive summary

Overview

A joint research project between South West London Healthwatch (Healthwatch Croydon, Healthwatch Wandsworth, and staff from the South West London coordination team) and the Health Innovation Network has been conducted to understand why individuals would reject the offer to be admitted onto a virtual ward as well as general views and perceptions of the model. We spoke with 29 participants during this study. Twenty-three 1:1 structured interviews were conducted with: A hospital inpatient who have rejected an offer to be admitted onto a virtual ward; individuals in the community with a long term physical condition and/or frailty who had never used a virtual ward; and carers of these individuals. We also engaged an additional six carers in focus group discussions.

Key Findings

General thoughts about the virtual ward model: Across the board, participants expressed a positive attitude towards the virtual wards model. Participants said that the virtual ward model allowed for individuals to avoid the stress of hospital environments. Carers specifically mentioned that being at home has extra benefits for those who suffer with conditions such as Alzheimer's disease, or individuals with learning difficulties.

General thoughts about the term 'virtual wards': Though some participants found the term 'virtual wards' likeable, participants did suggest names that they felt were more suitable such as 'Hospital at Home,' 'Care in Comfort,' or 'Home Treatment.'

Perceived benefits of virtual wards: Both participants with long term conditions, and carers of individuals with long term conditions, expressed that virtual wards would provide the opportunity for individuals to receive extra support in the comfort of their own home. Two participants particularly mentioned an older form of support named convalescent care and likened the idea of virtual wards to this process.

Perceived challenges of virtual wards: One major challenge that was mentioned across groups (participants from the community with a long term condition and/or frailty, carers of individuals with a long term condition, and one hospitalised patient who rejected using a virtual ward) was the use of technology. Participants mentioned that the technological aspect of virtual wards may prove difficult for individuals who struggle with digital technology or need extra assistance using devices.

There were some worries around individuals who are elderly or vulnerable (those with mental or neurological conditions), being left alone which could increase the risk of harm.

One carer was concerned about the skillset of staff visiting patients at home, and if they would have the education to interact with individuals who have learning disabilities.

Some carers were optimistic that virtual wards could reduce their workloads and provide them with more freedom to go about their day to day, particularly if they had reassurance that they would be contacted if the patient's condition changed. Others suggested however that virtual wards might mean that they would have less freedom and flexibility compared to when the patient is hospitalised. They would also need to learn how to use equipment and provide more oversight of paid carers to ensure that they used this equipment appropriately, which would add to their work and stress.

Background

What are virtual wards

Virtual wards also known as 'Hospitals at Home', is an opportunity for patients to receive treatment at home, allowing them to leave the hospital early, or to avoid going into hospital at all[1].

Care on a virtual ward may include different monitoring devices to be used at the patient's home such as an oximeter, a blood pressure monitor, and a peak flow monitor[2]. Virtual Wards may also include an element of remote monitoring through wearable devices, tablets, or phones[2].

After admittance onto a virtual ward, patients are regularly monitored through the equipment provided for them at home[2]. Patients are also provided the option to be phoned or visited by healthcare staff where they may struggle with technology. Patients are also phoned or visited if there are signs of worsened health. Typically, once recovered, patients are discharged 14 days after being admitted onto a virtual ward.

Virtual wards in south-west London

Currently in Southwest London there are four different models of the virtual ward running across Croydon, Merton & Wandsworth, Sutton, and Kingston & Richmond [3]. Monitoring of the four models is conducted centrally via the Centralised Remote Monitoring (CRM) Hub[3]. The aim of the Hub is to provide continuous 24/7 monitoring of patients through the technological devices provided[3].

Evaluation Aim

Despite the general acceptability of patients onto virtual wards, it is important to further understand why some individuals reject the offer to be admitted onto a virtual ward. The aim of this research is to understand why individuals may reject use of virtual wards when offered as well as to understand general views and

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[1] NHS (2023). *Virtual wards*. NHS England. Retrieved December 7, 2023, from https://www.england.nhs.uk/virtual-wards/

[2] NHS (2023). *What is a Virtual ward?*. NHS England. Retrieved December 7, 2023, from https://www.england.nhs.uk/virtual-wards/what-is-a-virtual-ward/

[3] HIN (2023). Virtual Wards Models in South West London Evaluation. The Health Innovation Network. Retrieved December 7, 2023, from https://healthinnovationnetwork.com/resources/virtual-ward-models-in-south-west-london-evaluation/

perceptions of this model. This has been explored by understanding the experiences of an inpatient who rejected a virtual ward placement.

As the population of patients who have rejected a placement is small, we have also spoken with people in the community who have never been offered a virtual ward placement. We explained what virtual wards were and listened to their views about the acceptability of the model and the perceived facilitators and barriers to using a virtual ward. We selected people who had higher than average likelihood of one day being invited to use a virtual ward, because of frailty or chronic physical illness, and the carers of such people.

This evaluation focused on two out of the four models: Wandsworth & Merton (which share a common model) and Croydon.

Methods

Eligibility criteria

The populations recruited for this evaluation have been categorised as the following:

- Patients with lived experience: patients who have been offered a virtual ward but ultimately rejected this placement at Croydon University Hospital or St George's Hospital.

- Carers with lived experience: carers of patients with lived experience. (We were unsuccessful in recruiting anyone in this category).

- Proxy patients: people from the community within Merton, Wandsworth, or Croydon who have *not* been offered a virtual ward placement, but who have a chronic health condition and/or frailty. Frailty has been defined as: experiencing slowing in movements, falls, and/or needing to ask others for more support with daily activities compared to when the individual was younger.

- Proxy carers: carers of proxy patients.

Design

One-to-one interviews were conducted with participants in areas where the two different virtual ward models (Wandsworth & Merton and Croydon) are located. Each participant was given an information sheet about the research being conducted, a document explaining virtual wards, a consent form to sign. Survey questions were determined pre-interview and each interview lasted about forty minutes.

An additional focus group was conducted with individuals considered as proxy carers. This focus group was conducted at St Georges Hospital. Participants divided into two groups of three carers, with each conversation lasting around forty minutes. Before the discussion the virtual wards model was described to

participants using the Health Innovation information sheet. There were also four NHS workers who had a good understanding of virtual wards present to describe the process in more detail to participants.

Virtual Ward – Interview Findings

Overall Demographic summary

Twenty-three participants took part in the 1:1 interviews. The overall demographic data is presented here; disaggregated demographic data by cohort is presented in subsequent chapters. Note that we did not collect demographic data for the six focus group participants.

Type of participant:

1 patient (1 individual from Croydon)

18 proxy patients (12 individuals from Wandsworth, 6 from Merton)

4 proxy carers (2 from Wandsworth, 2 from Corydon)

Fourteen participants (88% of those reporting) are from neighbourhoods of deprivation within South West London

We collected information on neighbourhood of residence from participants as a proxy measure of socioeconomic status.

Merton

Modern: 1 proxy patient

Mitcham: 3 proxy patients

Mitcham common: 1 proxy patient
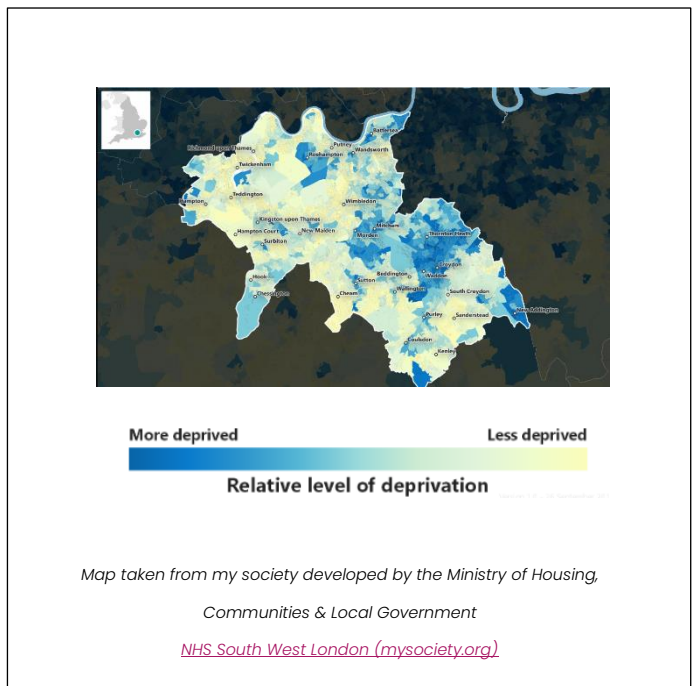
Other (Merton) 1 proxy patient

Wandsworth

Battersea: 8 proxy patients

Croydon

Shirley: 1 proxy carer

Selhurst: 1 patient

Map taken from my society developed by the Ministry of Housing, Communities & Local Government

NHS South West London (mysociety.org)

Overall ethnicity data (56% from non-White backgrounds; 22/23 reporting):

Asian/Asian British- Pakistani: 1 (4.5%)

Black/black British- African: 3 (13.6%)

Black/Black British-Caribbean: 5 (22.7%)

Black/Black British Other: 2 (9.1%)

Other: 1 (4.5%)

White- British/English/Northern Irish/Scottish/Welsh: 9 (40.9%)

White Irish: 1 (4.5%)

Patients with Lived Experience

Summary

interview results

Total number of responses

Demographics

- This participant resides in Croydon and has a carer.

- Age: 655-79 years

- Male

- Ethnicity: White – British/English/Northen Irish/Scottish/Welsh

- Offered step down care to leave the hospital onto a tech enabled virtual ward.

- Medical condition: Heart failure

Rejection of virtual wards

Summary themes:

One participant was offered the opportunity to be admitted onto a virtual ward but rejected placement.

- **Necessity:** They questioned the necessity of using a virtual ward as they are independent on their own and would want to maintain this.

- **Environment:** Space was a concern for the participant who has mobility issues has equipment to help them move around.

- **Support:** The participant already found it difficult contacting health care professionals when the right medication or help was needed. This left room for concern that this would continue to be the case after being admitted onto a virtual ward.

"My flats is so small, [I have a] mobility scooter [and] Zimmer frame. [I'm] holding onto the door frame to get around"

"I want my independence"

"There are challenges in getting medication [and] calling GPs"

Communication of virtual wards by hospital staff

Summary themes:

- **Clearer explanation:** The participant noted that there was a lack of information given in regard to virtual wards, and there was a lack explanation of how to use the kits provided.

Negative perceptions towards virtual wards

Summary themes:

- **Quality of care:** The participant expressed that a virtual ward would not be necessary if proper care was initially given. As a result this led to a lack of openness to the idea of being admitted onto a virtual ward.

- **Technology:** Technology was a deterrent, as they did not envision how a digital intervention would aid their circumstance.

"Totally against digital [technology]... [I] don't see the use of it"
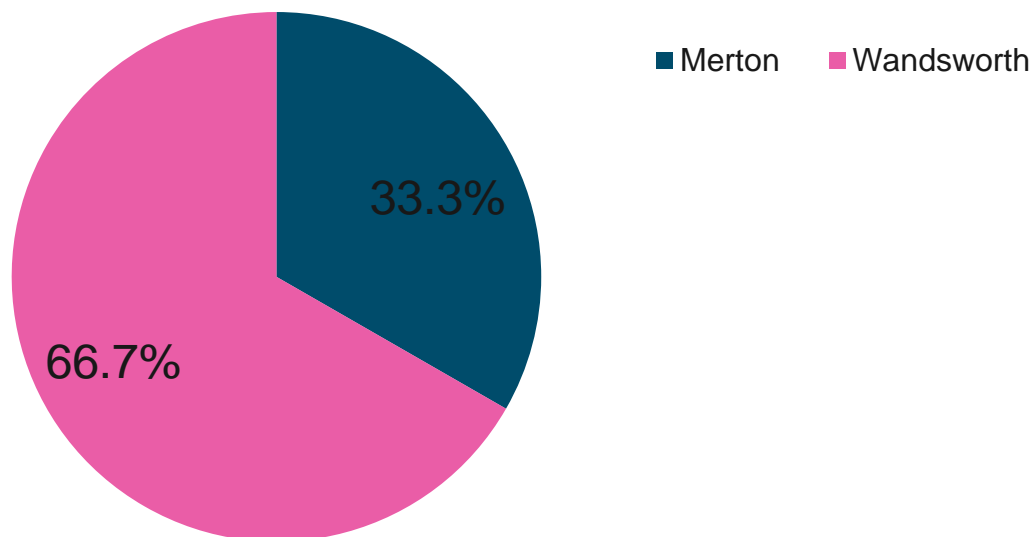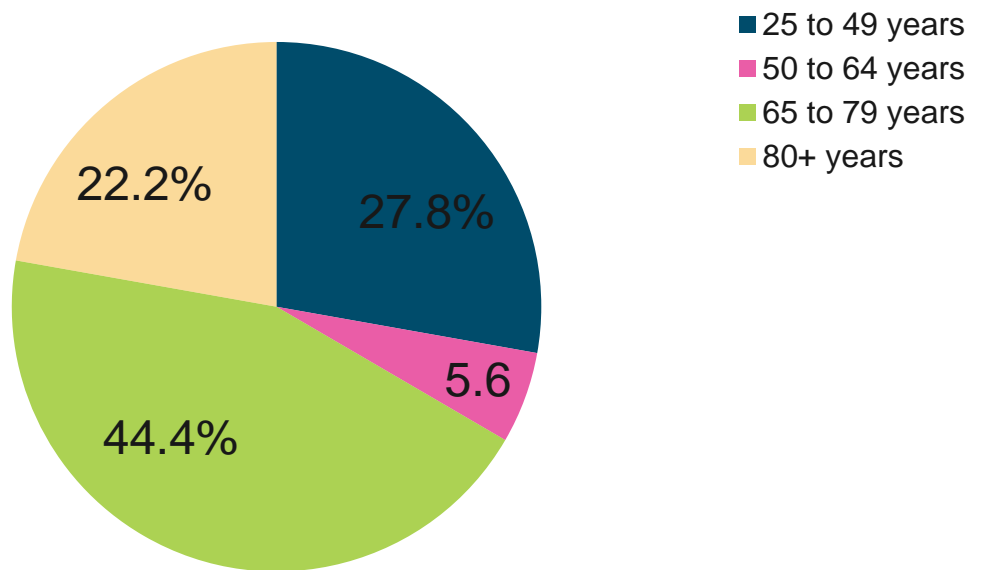
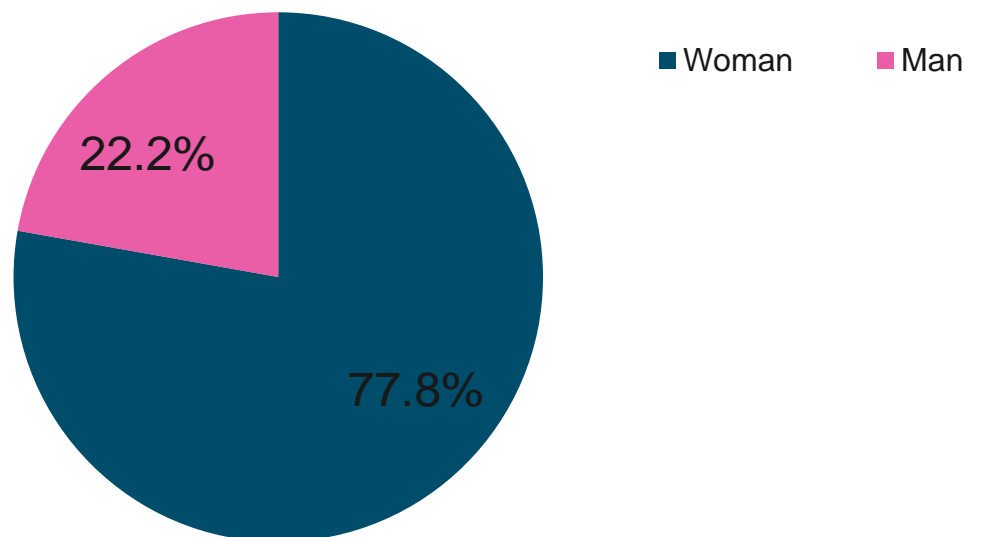# Proxy Patients
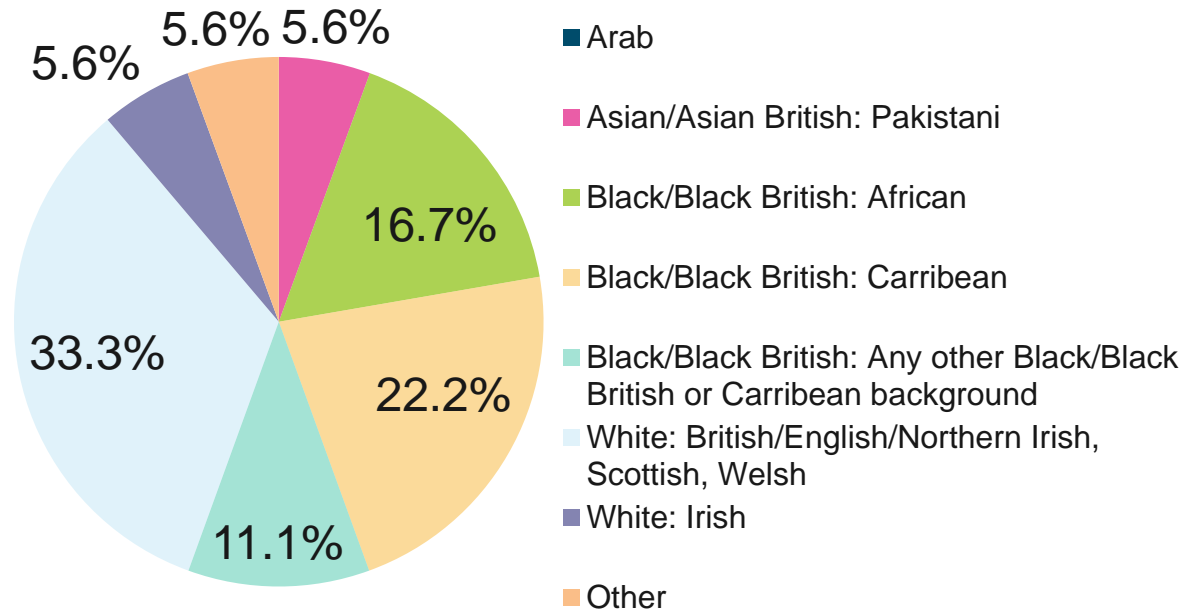
Summary of responses

Total respondents:

18

Demographics

Residence

33.3%

66.7%

■ Merton ■ Wandsworth

Age

Legend:
- 25 to 49 years
- 50 to 64 years
- 65 to 79 years
- 80+ years

27.8%
5.6
44.4%
22.2%

Gender

Legend:
- Woman
- Man

22.2%
77.8%

Ethnicity

■	Arab
■	Asian/Asian British: Pakistani
■	Black/Black British: African
■	Black/Black British: Carribean
■	Black/Black British: Any other Black/Black British or Carribean background
■	White: British/English/Northern Irish, Scottish, Welsh
■	White: Irish
■	Other

5.6% 5.6% 5.6% 5.6%
16.7%
33.3%
22.2%
11.1%

Hospitalisation in the past year

16.7%
83.3%

■ Yes
■ No

Chronic Physical Condition or Age Related Mobility Issues

■ Age-related Mobility issues
■ Chronic Physical Condition
■ None

25%

25%

50%
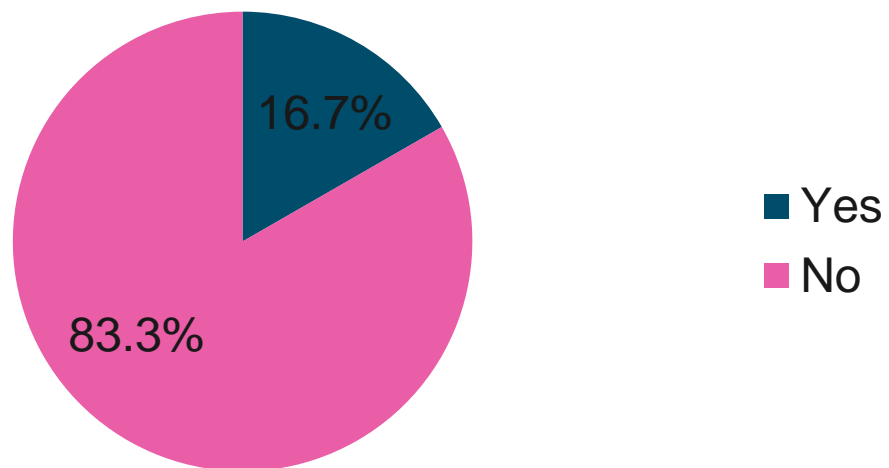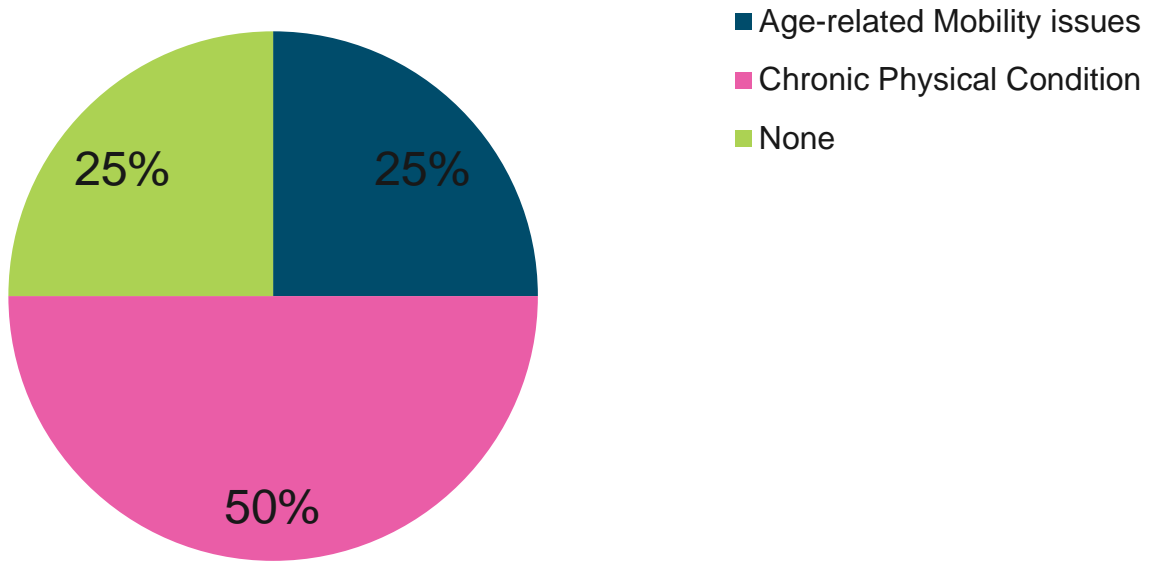
Participants with carers

■ No   ■ Yes (family/friend)

8.3

100%
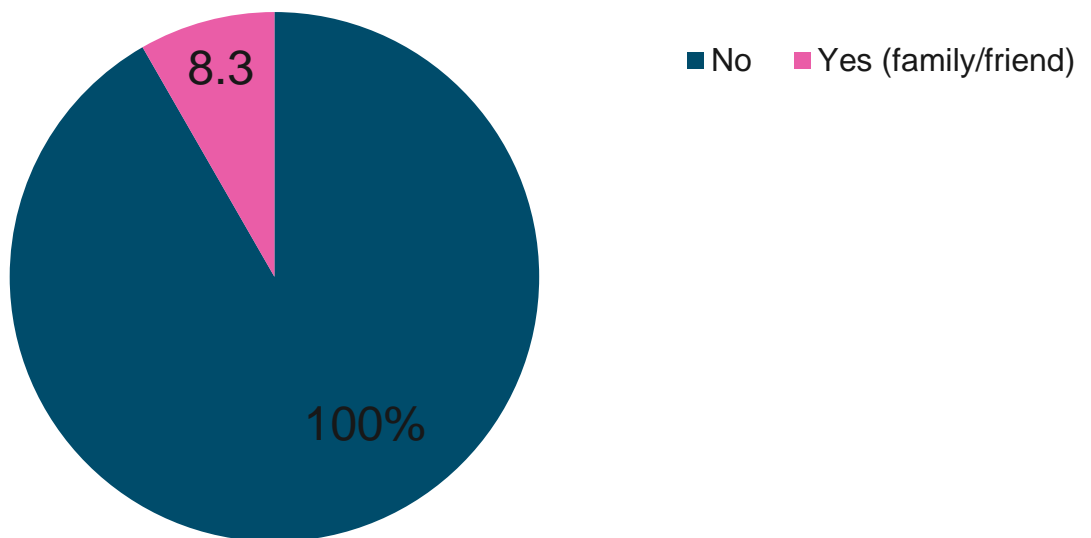
Interview themes

General thoughts about the model of care that virtual wards offer

Summary themes:

- **Good idea:** Most participants (n=13) responded positively towards virtual wards. There was acknowledgement that there are benefits to saying at home such as: avoiding the stress of hospitals; avoiding infection from long term hospital stays; and receiving treatment in the comfort of your own home.

- **Openness:** There was a general receptiveness to the idea of a virtual wards. Good communication was highlighted as contributor to the success of virtual wards. For example, providing information verbally and also in writing will ensure that the right and necessary information is shared with patients.

- **Religion:** One participant expressed that at home there is privacy for patients to engage in the normal routine of their faith, where they may not be able to do so in a hospital.

- **Reservations:** A few participants (n=5) showed some reservation around the motivations for virtual wards. There were reservations that virtual wards were just another way to save money. There were also concerns around whether people would be able to use the technology involved. One participant expressed that there should be proper testing of virtual wards.

- **Concerns:** One key point that was stated is the importance of honesty and trust between health care professionals and patients. There were some concerns behind the motivating factor for establishing virtual wards, and how high the quality of remote care would be. One participant questioned how someone would be monitored if they were not at home. Another participant was concerned about the lack of physical presence of a healthcare staff and how safe it is for individuals with a heart condition.

- **Adequate assessment**: One participant shared the importance of assessing individuals quickly and assessing the condition of each person being admitted onto a virtual ward.

"People recover better at home"

"It's a new and innovative thing"

"Religious practices are hard to do in hospital"

" Is it just another way of keeping people out of hospital"

"What happens when you go out on a daily walk?
Are you being monitored?"

"[It] just feels a bit scary to think the doctor is not going to be right there to help you, not sure how safe it would be with a heart condition."

Case study

We spoke to a female 71 year old participant from Merton who has a musculoskeletal condition and previously worked in the mental health sector.

She felt that virtual wards were a good idea as it allowed patients to be in the comfort of their own home where they will be monitored. *"it's a good idea, I know a lot of patients want to be looked after at home…when you're staying at home people know how to get to their own loo and get to their own bed. "*

However, as a former mental health professional, the participant highlighted how the term 'virtual ward' may have different implications across different settings *"A ward to me implies a hospital…[The term] 'Hospital at Home' is probably better…virtual ward in mental health meant 'awaiting admission.'"*

Considering the benefits, the participant felt that when people are at home, they have more opportunity to keep moving. Additionally, people can avoid getting an infection (which is a potential risk with long hospital stays). *"Hospitals are not the place to solve problems necessarily, they can make more problems like acquired infection."*

There were some concerns about how older people will cope with the technology provided on virtual wards. *"People older than me will probably find technology quite difficult as I do. unless they'll be trained."*

Overall, there was a positive sense of acceptance towards the use of virtual wards, especially where communication between patient and staff is maintained. *"Just good communication, [is] really important"*. The participant highlighted the importance of getting all information across to patients especially in different formats such as verbally, through email, and through written letters.

General thoughts towards the term "virtual wards"

Summary themes:

- **Ambiguous:** There was some lack of clarity towards the term 'virtual wards'. Some participants (n=4) highlighted that once the term is explained, only then does it match the concept of a virtual ward. One participant mentioned that definitions of the term 'virtual wards' may vary from person to person. Another participant who was previously a nurse mentioned that the term has other implications within mental health care.

- **Better alternatives:** Several participants (n=7) suggested alternative names to the term 'virtual wards' that would better explain the idea. Several participants preferred the name "Hospital at Home". Other suggestions included "Care in Comfort", "Health Visitors" and "Home Treatment".

- **Likeable**: Despite some ambiguity, some participants (n=9) did express their agreement with the term "virtual wards".

"Hospital at home is probably better"

"As long as this [virtual wards] is explained to you"

"I think it [the name] describes it [virtual wards] well"

"It's clear, but depends on the individual person on what they think that [virtual wards] actually means"

"The name is vague …. It is associated with wards …the name needs to be realistic."

"Virtual wards? Not for me… what does that mean?"

Perceived benefits of Virtual Wards

Summary themes

- **Extra support:** One key point was the importance of having extra support and monitoring at home. This is priority for individuals who may struggle with mental health conditions, who do not want to leave their house. One participant highlighted the benefits of a virtual ward post discharge from a hospital and into the community. There were also discussions around the benefits of monitoring certain conditions, such as respiratory conditions with the equipment provided, at home.

- **Safety:** Discussions around feeling safe at home was a key point raised by participants. Virtual wards may provide the opportunity for individuals who have mobility issues/prone to falling, to have regular check-ins. Virtual wards create an environment of safety by providing equipment at home to help monitor progress. One participant mentioned that patients are less likely to get sick, compared to if they stayed in a hospital.

- **Home Comfort:** Several participants (n=11) welcomed the possibility of receiving care from the comfort of your own home. Especially as it can provide the opportunity to be around their family. Participants also highlighted that they would not have to wait extended periods of time in a hospital environment to be attended to. One participant welcomed the idea, as they could rest better at home.

- **Staying out of hospital:** Another key discussion point was the importance of providing alternative environments for individuals who do not like going into hospital.

"You are in the comfort of your own home"

"Would help me avoid a hospital stay"

"I think that I would be able to rest better at home"

"It [virtual wards] will be a good idea between a patient discharge. It's like a community nurse follow up"

Perceived challenges of virtual wards

Summary themes

- **Technology:** Some participants (n=3) expressed concerns about the accessibility of the technology and equipment used on virtual wards. Some participants suggested that people may struggle with using equipment on their own and at times may require family members to help with using apps on mobiles devices.

- **Loneliness:** There were some worries around the elderly being left alone, which could result in serious harm or death. Some participants (n=3) expressed thoughts around decreased accessibility to staff. Being at a hospital allows ease of accessibility with staff, as patients can receive answers to any questions they may have much more quickly than if they were at home.

- **Living environment/Costs:** Participants (n=3) highlighted the importance of understanding the living environment of individuals. Some individuals may not have the space to use certain types of equipment, which may pose a fall risk. There were also concerned about how individuals will cope at home with the cost-of-living crisis and the additional costs that may be incurred with having equipment at home, especially energy costs.

- **Patient-Staff partnership:** One participant expressed that there should be some assurance that if a patient changes their mind about where they want to be cared for, this would be taken into consideration. Where possible, decisions should be made in partnership with patients, rather than on the behalf of the patient.

- **Limited access to interventions and staff:** One participant mentioned that blood tests, urine tests, and x-rays cannot be done in a home environment. Therefore, virtual wards only provided limited types of care at home. Some conditions require a hospital visit. Another participant questioned how staff would be able to provide immediate help when needed.

- **Support:** One participant felt virtual wards may be an inconvenience when going out and doing activities away from home.

"It can get lonely...this wouldn't help with recovery"

"You don't have the same service as you do in hospital"

"Some people worry if they go home they will die"

"Should be an individual choice"

"[Virtual wards are] a bit of an inconvenience if you're out and about"

"There are cases where you need a nurse immediately so [I] don't understand how that would work"

Factors that might influence one's decision to leave hospital early ('step-down' care)

Summary themes:

- **Family:** For individuals who had family at home or someone to look after them, this would be a big motivating factor to leaving a hospital early. However, there was concern for individuals who have no one at home to monitor them physically as it was believed that a phone call might not be adequate to assess a patient's condition.

- **Environment:** Participants (n=8) highlighted that personal home environments are more comfortable than hospital ward environments. However, when cared for at home, any equipment needed should be set up and ready to use.

- **Severity of condition:** Stage of recovery and severity of condition was a factor that would influence whether participants would go onto a virtual ward. Participants stated they would be more likely to go onto a virtual ward where their health was in a better state.

- **Support**: Some participants (n=6) expressed that having the right support when at home, the right home adaptions, and having prior education on how to use equipment at home, would influence their decision to go onto a virtual ward.

- **Expert advice**: One participant highlighted the importance of healthcare staff recommending the use of virtual wards in influencing their decision to be admitted onto one.

"To be around my own children"

"It depends on what is going on with me at the time, depends on how serious it is"

"When I have been in hospital I can't sleep as it's noisy"

"Assurance that any adaptations...are done beforhand"

"If I'm fit enough to go, or I can do it myself …. then yes"

"If I felt well enough and I'm basically 80/90% well"

"The influence will be what the doctors say. "

Factors that might influence one's decision to go onto a virtual ward and avoid hospitalisation ('step up' care)

Summary themes:

- **Support:** There was a preference to receive treatment at home if the right support was provided. For example, having the right medication at home, knowing when the health professionals would visit, regular monitoring and having the right equipment at home. A comprehensive explanation should be given about what type of support and equipment would be offered.

- **Environment:** Being in the comfort of one's home was a big factor that would influence participants' decision to go onto a virtual ward. Receiving treatment at home was especially appealing to an individual who struggles with anxiety and crowds. Though one participant expressed concern about the cost of living, and how staying at home may impact their living costs.

- **Severity of illness:** Knowing the state of one's own health was a big deciding factor for choosing a virtual ward admission. If there were improvements in health, with no signs of worsening symptoms, then hospitalisation would not be necessary.

- **Family:** Being treated at home offers flexibility to have family members at home and unlimited visitors compared to a hospital ward.

- **Efficiency:** There were thoughts around the efficiency of the health care system. One participant felt being treated at home may result in receiving more attentive care. Another participant also stated it would help with creating more available bed space for individuals most in need.

- **Expert advice**: One participant expressed that they would rely on the advice of healthcare staff to determine their use of virtual wards. Additionally, assurance from a healthcare professional that it was safe for patients to be at home was important.

"I would only use the hospital if I am really unwell"

"It depends how bad you are. Is it really that you really need to go hospital"

"If my Doctor thinks it's [Virtual wards] safe"

"How often will I be visited and when?

"[There's] no time limit for visitors"

"If I was only a little bit unwell maybe [I wouldn't go to the hospital]"

Disability and virtual ward use

Participants who have a disability (n=11) shared their thoughts about findings from a UK survey showing that support for virtual wards is higher among disabled individuals.

Summary themes:

- **Travel & Mobility:** Participants highlighted that travelling long distances to get to a hospital may not be the most feasible for patients with a disability.

- **Home environment & Support:** Participants shared that individuals with disabilities need additional support and to have adaptations within their home, to help them with this.

"Because they [individuals with disabilities] can't get out and about so much...if it's virtual it would benefit people, especially if you're disabled"

"They [individuals with disabilities] are probably fed up with going to hospitals"

Disposable income and virtual ward use

Participants who live in areas that were more deprived in comparison to other areas of southwest London (n=14)* shared their thoughts about findings from a UK survey. Survey findings showed that individuals with less disposable income showed less support for virtual wards.

*We used area of residence as a proxy measure for socioeconomic status

Summary theme:

- **Living Costs**: Participants expressed that there may be concerns about the additional costs care at home may bring, such as the electricity costs for running the equipment, especially given the current economic climate.

"Fear of extra costs while in a cost of living crisis"
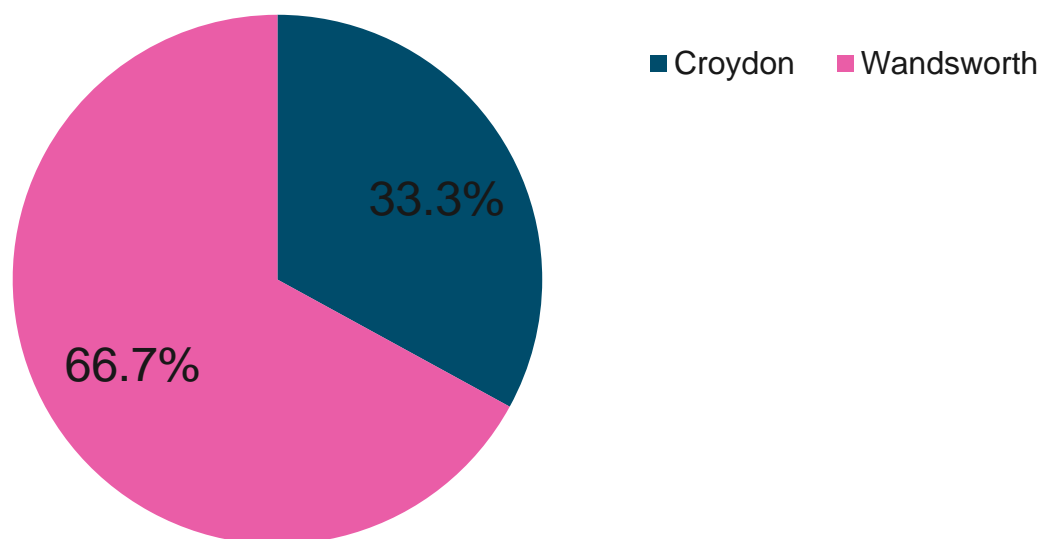
Proxy Patient-carers 1:1 interviews

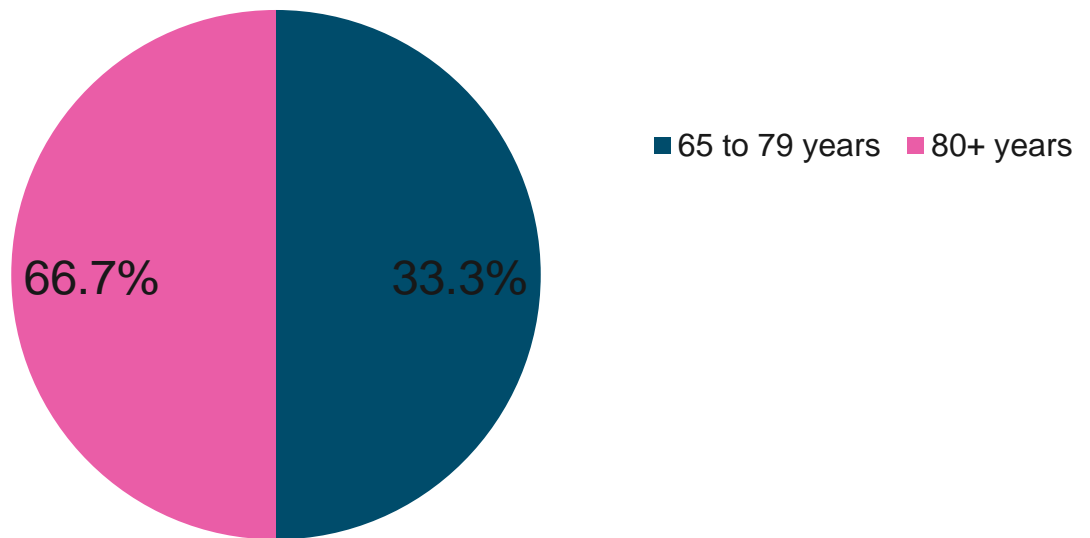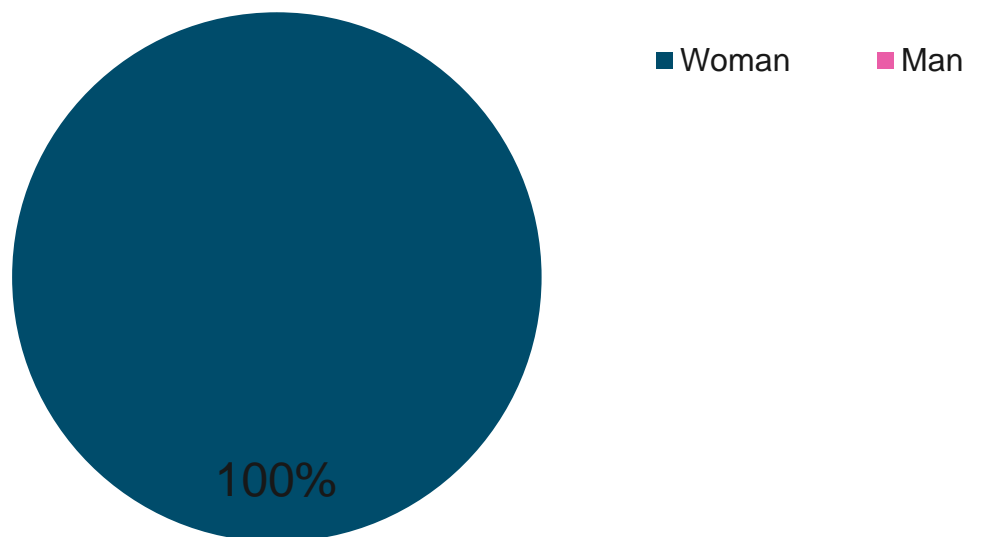## Summary

Interview results
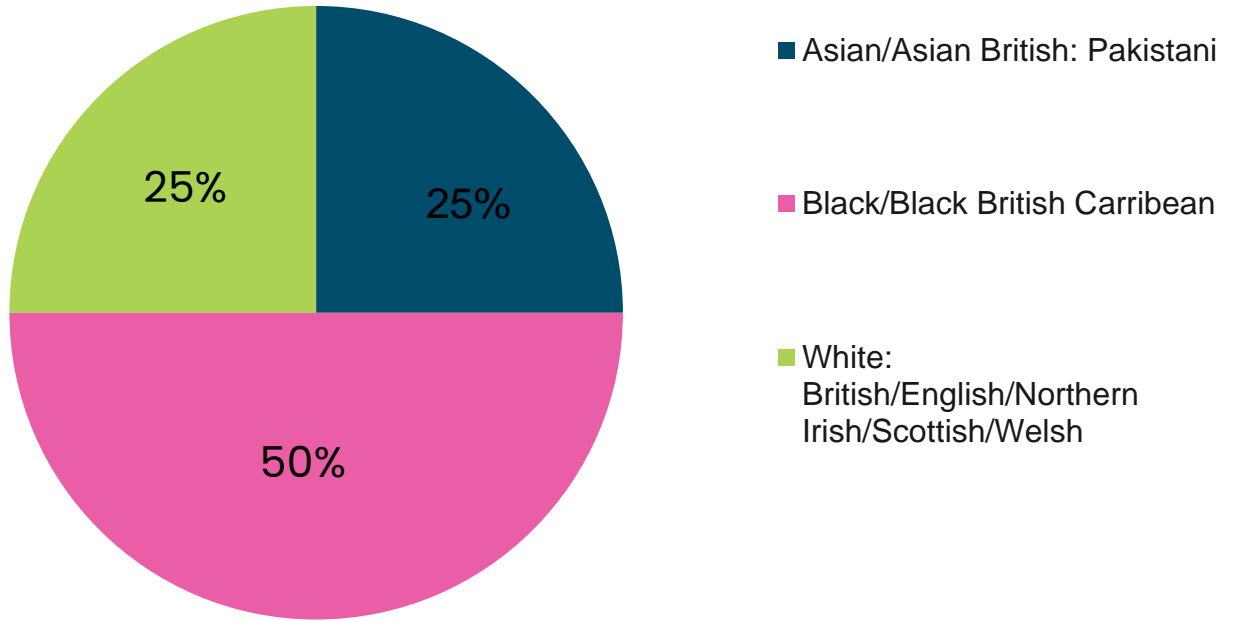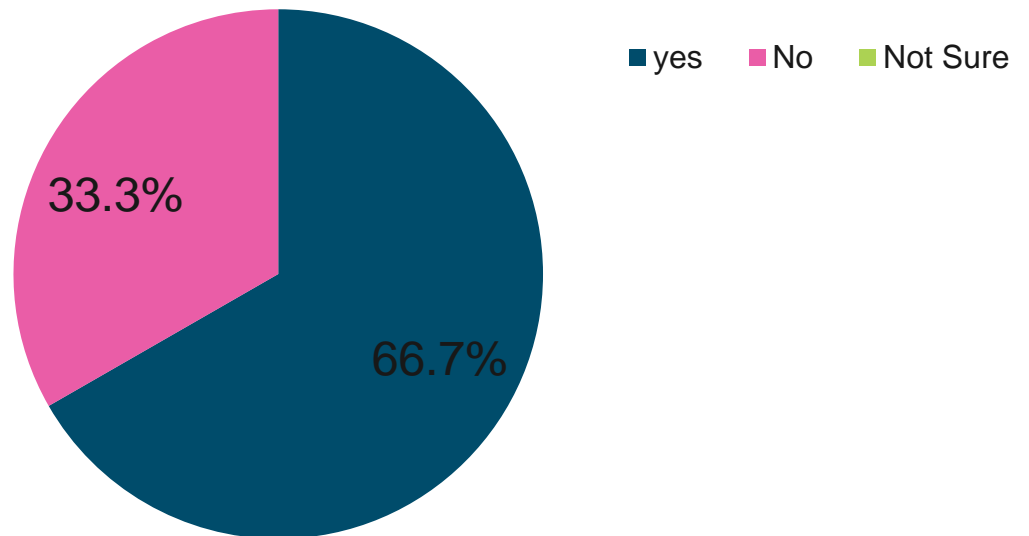
Total number of responses

Demographics

Residence

■ Croydon   ■ Wandsworth

33.3%

66.7%

Age

65 to 79 years ■ 33.3%
80+ years ■ 66.7%

Gender

Woman ■ 100%
Man ■

Ethnicity

- Asian/Asian British: Pakistani
- Black/Black British Carribean
- White: British/English/Northern Irish/Scottish/Welsh

25%
25%
50%

Hospitalisation in the past year (individual cared for)

- yes
- No
- Not Sure

33.3%
66.7%

Chronic Physical Condition or Age Related Mobility Issues

- Chronic illness
- Mobility issues

33.3%

66.7%
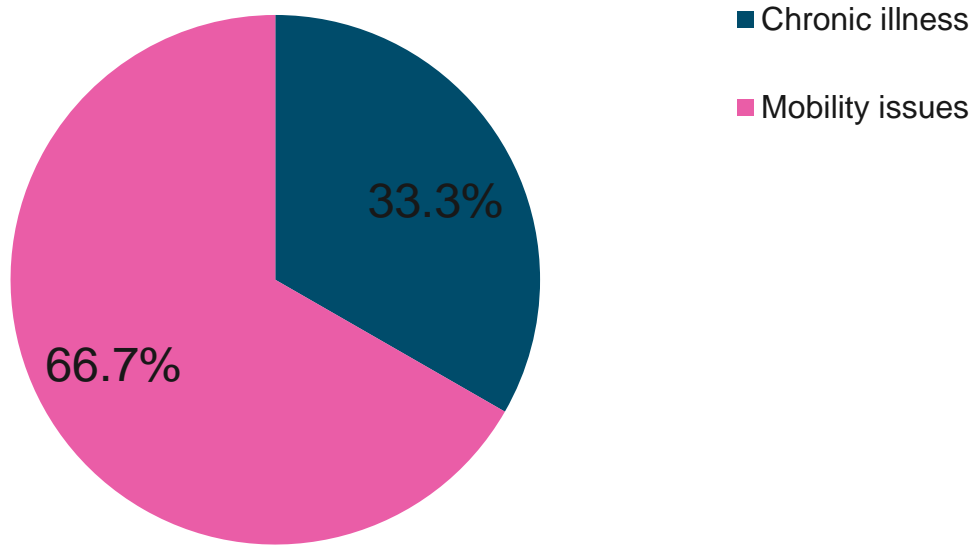
Relationship with cared for person

- Spouse/Partner
- Parent
- Friend

33.3%

33.3%

33.3%
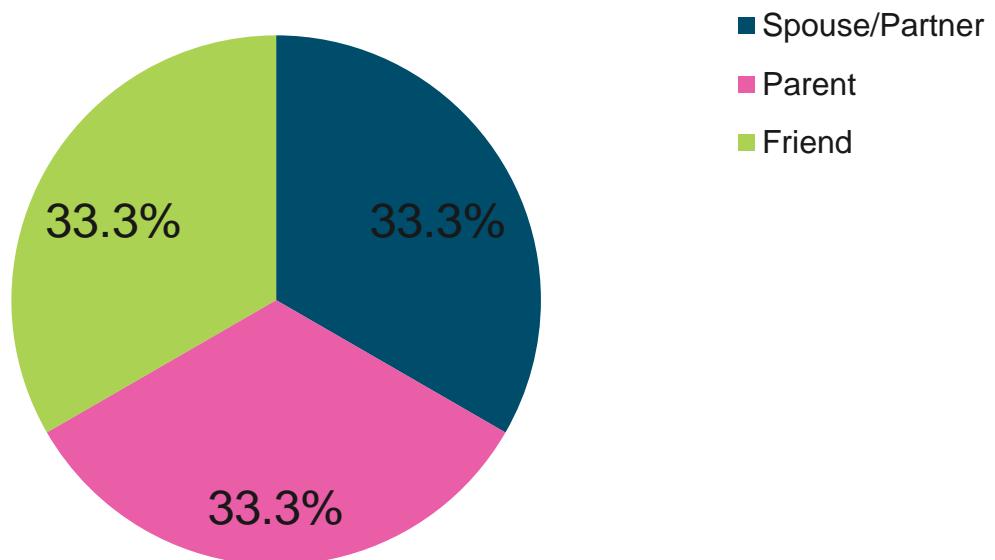
Interview themes

General thoughts towards virtual wards:

Summary themes:

- Good idea: Generally, there was a positive reaction towards the virtual ward model. Discussion points highlighted how individuals who struggle with health conditions such as Alzheimer's disease and learning difficulties, will be better suited to being in the home environment over the hospital environment.

- Concerns: One participant is a carer for an individual with Alzheimer's disease. They worried about how practical it would be to monitor such an individual if they were alone, as it could be dangerous. Another participant worried about how individuals who are bedbound would get help in an emergency.

- Technology: One participant highlighted that it would be important to distinguish between those who can independently navigate the equipment provided, and those who cannot, to reduce the risk of harm at home.

"I think it's a wonderful idea"

"I care for my daughter who has learning difficulties...and does not like to be separated from me"

"My husband has Alzheimer's, if he was on his own...it would not be easy to monitor him"

"What if the person is bedbound and alone how would you get to the door in an emergency"

> **Case Study:**
>
> We spoke to a female carer (80+ years) from Croydon, who looks after her husband who has been diagnosed with Alzheimer's disease.
>
> She would rather use a virtual ward for herself, as she isn't dependent on anyone else for care. However, she is her husband's carer 24/7, and would want to ask healthcare staff about any concerns she may have where she does not have true medical knowledge. This is easily done if he is admitted onto a hospital ward, but may not be the same on a virtual ward. *"My husband has Alzheimer's, if he was on his own, it would not be easy to monitor him. He would need 24/7 care any way."*
>
> She worried that virtual wards would create more responsibility as a carer. One particular concern was around the skills required to use the different equipment involved in monitoring patients on the ward. In addition, she raised concerns about how this would work practically for individuals who are dependent on others. *"I would have more responsibility… It's different when he can't think for himself."*
>
> Despite some concerns, there was an openness to the idea of having equipment that would monitor and send information about patient's wellbeing to the hospital directly. But there have been issues in the past where her husband has experienced discomfort with hospital equipment around his wrist. There was some concern about ensuring the patient would not take off the wearable device and the practicality of this. *"If the things [technological devices] are linked up and linked to the hospital, it would be easier… Wearable technology[?] now that's okay as long as they're not taking it off."*
>
> The participant also had concerns about the use of technology for individuals who are dependent on others, like her husband. **"Smart phones and tablets wouldn't be any good for the patient. [There are] individual circumstances, and abilities. Some people won't have carers, or family members at home".**

General thoughts towards the term "virtual wards"

Summary themes:

- **Clear wording**: Upon reading the process of how a virtual ward operates, all participants (n=4) agreed that the term 'virtual wards' represented the idea well.

Perceived benefits of Virtual Wards as a carer

Summary themes:

- **Ease of responsibilities:** There was a sense that a virtual ward would help with the role of a carer, especially in the case where a child would not be comfortable with being cared for by others.

- **Remote monitoring:** One participant highlighted the benefits of remote monitoring of patients. As information and tests are sent to health care professionals throughout the day, it makes reporting of such information easier for carers.

- **Time saving:** One participant stated that a virtual ward would allow the carer to spend less time travelling to the hospital and have more time to do tasks at home.

"Yes [virtual wards would be helpful] as they [cared for person] rely on me...and wouldn't let anyone else help them"

"If the things [technological devices] are linked up and linked to the hospital...it would be easier [as a carer]"

"[There will be] more time at home to get on with anything else"

Perceived challenges of Virtual Wards as a carer

Summary themes:

- **Skillset:** One participant showed some concern that admission onto a virtual ward would add to the workload. There were some hesitations around whether they would have the right skillset to provide this care.

- **Visitations:** Some participants (n=2) expressed concerns about the effects of having new people visiting their homes, especially for patients with learning disabilities.

- **Additional costs:** One participant was concerned about the hidden costs that virtual wards may present, especially as a carer that gets additional support from a care company. There were some concerns that the type of additional care support would need to change to a more specialist role to support the patient better.

- **Additional support:** Considering the nature of virtual wards, one participant did question whether they would need to stay at home or seek for an additional individual to watch over the person the care for.

"I haven't got the skills for that"

"[My daughter] Not liking having someone in our home"

"Would I need to get a specialised carer...which would cost me more money"

"Maybe you would be bound to be at home, [and] would need to find someone to supervise the person"

Virtual wards, NHS assistance, and the carer role

Summary themes:

- **Consistency:** Discussions showed that it is important to have the same people visit patients, especially for individuals with learning disabilities, who require a regular routine in their day-to-day activities.

- **Monetary aid**: One participant mentioned that the NHS could cover the costs of respite, by providing funds to hire a specialist's carer who had knowledge of how to use the equipment and monitor patients who cannot be left alone with the equipment provided.

- **Support**: One carer suggested providing additional healthcare staff to help support carers.

"Ensure that if someone is visiting, that it's the same person"

"The help they [NHS Assistance] could give is the cost of respite...for someone to be in the house to monitor the equipment"

"Perhaps by providing [a] home care nurse when needed"

Virtual wards and carers perceived benefit for their cared for individual

Summary themes:

- **Environment:** The importance of how the home environment can positively affect one's mental health and physical health when considering virtual wards emerged as a key point. Receiving care at home may help speed up recovery; may feel safer for those who do not like hospital environments; and allows individuals who may suffer from conditions such as Alzheimer's to feel more settled as they recognise the lay out of their own home.

"Being in their own environment... will mean a speedy recovery"

"They [cared for person] will feel safer..."

"...As they [cared for person] does not like hospital environments"

"He [cared for person] was very confused in hospital they lost him one day" "

"I think they [cared for person] would be better and more comfortable at home."

Virtual wards and carers - perceived challenges for the cared for individual

Summary themes:

- **Quality of care:** Carers shared their thoughts around the quality-of-care patients on virtual wards would receive. There were some concerns that patients would no longer be a priority and would be forgotten about. There were also some concerns about whether healthcare professionals who visit homes will be well-prepared to communicate with a patient with learning difficulties. Additionally, one participant felt there may be a lack of medical care, and a delayed response in attending to patients on a virtual ward.

"[I worry about the hospital] sending them home and forgetting about them"

"[The staff] not having skills to communicate with patient...who has learning difficulties"

Factors that would influence carers' decision to encourage or discourage their cared for person to go onto a virtual ward

Summary themes

- **Financial costs:** one factor that may influence whether a carer pushes for or discourages the use of a virtual ward for their cared for person is the costs associated with staying at home and using a virtual ward.

- **Severity of condition:** Some participants (n=2) were happy to encourage their cared for person to go onto a virtual ward as long as their condition wasn't getting any worse.

- **Support and personalised care:** Some participants (n=3) recognised that virtual wards provide extra support for patients and can be used as an avenue to recover at home from certain types of treatment. Participants would encourage the use of virtual wards so long as there is an understanding and support of the needs of each individual. This is especially important when it regards individuals who are dependent on others for day-to-day tasks.

"I would be quite happy for him to go on it [virtual ward] ...once I know he is stable...and able to have in home care."

"I would encourage them [cared for person] ...as they will receive extra care ...and it will help them get better quicker"

Proxy patient-carer focus group

Six individuals who were carers were split into two discussion groups. We did not collect demographic data. None of these carers supported patients who have been on virtual wards, and none of these carers participated in the 1:1 interviews. Of note, in the discussions, carers often vacillated between describing their own perceptions of virtual wards (as potential patients) as well as considering the impact of the wards on their caring role.

Key messages

Perceptions of the name 'Virtual Wards'

- Participants did not like the term 'virtual wards,' though they said that hearing a description of what it is put them more at ease.

Benefits of virtual wards

- Participants stated that virtual wards could give carers more control and freedom over their lives, particularly if they had reassurance that they would be notified if the patient's condition changed.

Challenges of a virtual ward

- One participant said that she would not use a virtual ward as a patient because she was uncomfortable with the idea of health staff not being able to see her. She did not think that the monitoring equipment would provide enough reassurance that she was okay. Identifying something going wrong might be easily apparent just by looking at a patient but not detectable by a machine.
- One participant highlighted that not all carers are relatives – they were supporting neighbours because their children lived in another country. This can bring up issues around how much they are involved in conversations and issues about disclosing information if they aren't a next of kin.
- Some people who live alone and who have spent time in hospital may have issues such as the electricity having gone off whilst they've been away. Some carers could be concerned that it adds additional responsibilities.

- Many carers mentioned the impact of caring on mental health and exhaustion. It would be important to make sure that additional responsibilities, admin or expectations are not overwhelming.

Assessment before admission

- Assignments to virtual wards needs to be made on a case-by-case basis and consider the patient's need to understand how to use the equipment. Things that might impact ability to use the equipment include having a learning disability, having Arthritis, or some other disabilities.
- Carers need to be included in the decision and choice about whether a patient accesses a virtual ward. Carers might not be able to manage, for example, if they have other commitments. Carers might feel more comfortable with the patient being looked over in a hospital setting and might feel tethered to the patient's home if they were in a virtual ward, which might in turn interrupt their ability to go about their day to day, including going to work.
- It also needs to be assessed whether carers are comfortable with the monitoring equipment.

Training of equipment use

- Paid carers often do not speak English as a first language. Reassurance is needed that they understand how to use the equipment properly otherwise this may put an increased burden on the unpaid (family/friend) carer.
- It needs to be clear what paid and non-paid carers will do (in many situations there will be both). When a paid carer doesn't arrive or doesn't do something the paid carer will have to do things so they always need to be kept in the loop.
- People need to be reassured that they know how to use the equipment and have confidence that the equipment is working properly, both taking readings correctly and transmitting these to the central monitoring hub.

Communication

- There might be more than one carer/family member or friend involved. There needs to be consideration around how communication with and between health care providers, paid carers, and family/friend carers would operate.

Proposed FAQs

- Participants felt that it would be good to have a **frequently asked questions sheet with case studies** that responded to the following concerns that people have about virtual wards:
  - What happens in an emergency? Will an ambulance be called, and will I need to wait a long time for treatment in A&E? (If it will help avoid A & E carers would be interested to know this.)
  - What or who can help me with the monitoring equipment?
  - Where are the people monitoring me (*i.e.,* where is the central monitoring hub?)
    - How long will it take for someone to respond if I need help?
    - How many people is the Hub monitoring? How can I be confident that someone will notice if things go wrong when they are monitoring many people at once?
  - Do patients need to pay for the monitoring equipment?
  - What are electricity costs of using the equipment per day?
  - What happens if the equipment is broken or stolen? Will the patient need to pay?
  - Do people need internet access?
  - Is the patient's data secure? What information is shared?
  - How much space is needed to have the equipment at home?
  - Will carers be updated by the Central Monitoring Hub if a patient's condition worsens? Will this information be available in languages other than English?
  - Can non-native English speakers use virtual wards?
  - Can people who are blind use the equipment?
  - Can you provide me with a named person that I can contact if things go wrong or if I have any questions?
  - Is it monitored and will I be notified if the patient has fallen?

Research limitations

The following limitations have been noted:

- Only one patient who had rejected virtual wards was identified and interviewed. No carers of such patients were identified.
- We discovered near the conclusion of our interview that one 'proxy carer' had, in fact, been the carer to someone in a virtual ward. While this should have excluded the carer based on our participant eligibility criteria, we nevertheless decided to include this person's views in the study as we judged them to be useful to the overall research.
- During the focus group discussion, while all participants were carers, people sometimes considered virtual wards from the standpoint of being patients in addition to considering the specific concerns of carers.

Recommendations

'Virtual ward' terminology

- Consider renaming 'virtual wards' to something that better describes the model. 'Hospital at home,' a term that is already used, was seen as more appropriate. Participants also suggested some novel names, such as 'Home Treatment' or 'Care in Comfort.'

Considerations around admission onto virtual wards

- Hospital staff should consider a patient's degree of independence, isolation, mental capacity, suitability of the home environment, and financial wellbeing (for example, ability to pay for heating for patient comfort/health and for added electrical costs of running any virtual ward equipment) in decisions about whether to offer a virtual ward placement.

- Decisions about offering placement should be made jointly with the carer and should consider the carer's ability to cope with the responsibility of supporting the patient in a virtual ward setting. Their ability to learn how to use any equipment as well as their mental and physical wellbeing should be assessed.

- As friends and family carers (what we refer throughout this report simply as 'carers') are often supported by paid carers, hospital staff should initiate conversations about how the care responsibility will be shared in a virtual ward setting. This will help patients and their carers assess the feasibility of, and help ensure the best possible outcomes during, a virtual ward placement.

Communication

- Patients and carers need clear communication about what virtual ward placement will mean for them so that they can make a considered decision about whether to take up a placement. Our focus group participants asked a series of questions that could be captured in an FAQ document (pp 40-41).

- This communication must be provided in an accessible way and consider, for example, language, learning disabilities, sensory disabilities, neurological conditions.

Technology

- Proxy patients and carers told us that they are concerned that they will not have sufficient training to use the equipment correctly or that the equipment will not work. Training must be clear and ensure that patients and/or their carers are confident that they can appropriately use the equipment and that the equipment itself is reliable. Patients and carers should have a clear pathway to report any issues or concerns whilst admitted onto a virtual ward.

Safeguarding

- If not already in practice, routinely check that a patient's virtual ward environment is safe; for example, that they are using their heating on cold days, that there are no domestic disturbances, that there is no evidence of neglect, and that the equipment is not causing a wire trip hazard.

- Even if a person has a carer, it is important not to assume that the carer will always be present. If not already in routine practice, monitor whether the patient has stopped using the equipment.

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