WORLD
HOSPITAL
at HOME
COMMUNITY™

Full Q&A responses from the recent WHAHC webinar

“Virtual Care, a Reality not a Dream! Cambridge University Hospital Virtual Ward Implementation Model”

Start

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Equipment / Technology

Questions...

1. Do you have the facilities for remote blood sampling or diagnostics?
2. How do you monitor intake and output of fluids?
3. How does it work with equipment? Are you finding kit is being lost or broken, or experiencing delivery issues?
4. How are infections controlled in virtual wards, and how is the equipment decontaminated?
5. How did you decide on the selection, set-up, and integration of systems? Is the sensor system interoperable with your EHR?
6. How does interoperability impact the virtual ward and the delivery of virtual care?
7. In virtual wards, is there any indication for remote blood sampling? If so, how is this done?
8. What impact does Hospital at Home (HaH) have on medical equipment that needs to transfer from hospital to home?
9. How have you managed the change of technology for both nursing and medical staff?
10. For your impact dashboard, do you combine or separate your specialties for length of stay (LOS) and readmission rate?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Equipment / Technology

1. Do you have the facilities for remote blood sampling or diagnostics?

Answer:

We have an INR poc and are aiming to use CRP, FBC AND U&ES POC in the next 18 months. We can use ECG monitoring remotely.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Equipment / Technology

2. How do you monitor intake and output of fluids?

Answer:

The patients are asked to use the same size cup each time they drink and document each time they have a drink. For patients with additional ways of feeding/ fluid input i.e. peg feeding, any flushes these are also documented by the patient. For output the patient is asked to use a measuring jug, or we provide one to monitor output of fluids and again ask the patient to document this. We ensure the patient does this from Midnight to midnight to ensure accurate fluid balance can be calculated.

When we speak to the patient, we will ask for a run down of any inputs and outputs if this is part of the care plan to ensure the patient is not in a large negative/ positive balance so we can act on this if required before the overall 24hour balance. Patients would be taught how to empty drains, catheter etc.

Equipment / Technology

3. How does it work with equipment? Are you finding kit is being lost or broken, or experiencing delivery issues?

Answer:

The technology has been great and we have a close working relationship with our provider. We have robust processes in place in terms of retrieving the equipment. Patients sign consents before they are onboarding and equipment is arranged to be collected or delivered once they are discharged. We are just in the process of working through a process with our volunteers, on a equipment collection plan.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Equipment / Technology

4. How are infections controlled in virtual wards, and how is the equipment decontaminated?

Answer:

Infections are managed in the same way you would on a traditional ward setting – hand washing, provide infectional control advise to patients and wear a mask if required. The continuous monitoring is disposable and the intermittent equipment is cleaned using antibacterial cleaning products when returned to the hub. If a piece of equipment is not able to be cleaned to the standard expected we would dispose of this item.

Equipment / Technology

5. **How did you decide on the selection, set-up, and integration of systems? Is the sensor system interoperable with your EHR?**

Answer:

We reviewed products available on the market for remote monitoring, I attended technology conferences where I was able to review and try many products intended for the use of remote monitoring. The MASIMO product was an option for us as the company has been established since 1987, has a good reputation within our trust and some products have been used within our trust in different areas before i.e. theatres.

The products dashboard was easy to use, the products were comfortable to wear, the application for the smart phones was easy to understand for our patients and the Bluetooth communication between the devices was quick and efficient. MASIMO as a company listened to our needs and how we wanted our care plans set up for the patients to use. There are many products on the market, but I would recommend using a company who have experience in developing remote technology.

Our MASIMO build is now integrated into our electronic patient record and will go live this month.

Equipment / Technology

6. How does interoperability impact the virtual ward and the delivery of virtual care?

Answer:

The remote technology does not currently link with our electronic patient record system yet. This is being worked on so that all observations will automatically feed through into our EPR which will be significant resource/time saving.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Equipment / Technology

7. **In virtual wards, is there any indication for remote blood sampling? If so, how is this done?**

Answer:

There is definitely the potential for remote blood sampling, this would enable patients to take their own samples and have instant results sent to the hub for review. The risk would be that the patient does not perform the task correctly, however with teaching and if the patient is able this is definitely an option that should be explored. This is beneficial for the patient and the activity on the VW.

Equipment / Technology

8. What impact does Hospital at Home (HaH) have on medical equipment that needs to transfer from hospital to home?

Answer:

The medical remote monitoring is enabled by Bluetooth technology and a patients' smart phone, therefore the patient leaves the hospital with the devices already paired and interacting with the dashboard. Regarding equipment, patients may require such as oxygen, parenteral feeding there is no impact.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Equipment / Technology

9. **How have you managed the change of technology for both nursing and medical staff?**

Answer:

The technology was embedded into the service from the start of the virtual ward. The nursing team was given full training and have refreshers and updates on the technology. The nursing and medical team have embraced the use of remote monitoring to provide care to patients in their own homes. Of course, there has been some skepticism, but this is to be expected when we are asking professionals to care for patients in a non-traditional way. However, having champions of the technology, sharing feedback from patients and clinicians who have used the equipment/ technology is a good way to support and demonstrate positive outcomes and change.

We offer a 'show and tell' demonstrations to showcase the technology and give nursing and medical staff the opportunity to come and see the equipment and how it works. It is important that the medical professionals know that the nursing team are monitoring the dashboard 24/7 and can recognise when a patient's health may need intervention, and of course promoting the use of technology requires reassurance that a nurse/doctor is providing care to the patient holistically and that care is not just about the monitoring. This is just part of providing excellent quality care and helping us make decisions on how a patient is managed as you would in a traditional ward setting.

Equipment / Technology

10. For your impact dashboard, do you combine or separate your specialties for length of stay (LOS) and readmission rate?

Answer:

Currently they are all combined but we are able to separate patient groups out and as the ward has expanded, we are starting to monitor this more closely. There are definitely different groups of patients that tend to stay longer on the ward.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

RPM

Questions...

1. How do you see the importance of 'acute' remote patient monitoring for virtual ward initiatives?

2. How do you find interoperability? Does your RM product directly transfer data to your EPR?

3. Why did you choose Masimo over other remote monitoring systems, and is there support to determine which device or supplier is best to use?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

RPM

1. How do you see the importance of 'acute' remote patient monitoring for virtual ward initiatives?

Answer:

RPM is a helpful way of monitoring early detection of deterioration but also patient improvements. RPM is also a good tool to use alongside patients symptoms and how we need to manage the patients.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

RPM

2. How do you find interoperability? Does your RM product directly transfer data to your EPR?

Answer:

The RM tech does not yet feed through to the electronic patient record. This is something we are working on which we anticipate having in place by the spring.
All results are manually entered to the EPR currently.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

RPM

3. **Why did you choose Masimo over other remote monitoring systems, and is there support to determine which device or supplier is best to use?**

Answer:

We reviewed products available on the market for remote monitoring, I attended technology conferences where I was able to review and try many products intended for the use of remote monitoring. The MASIMO product was an option for us as the company has been established since 1987, has a good reputation within our trust and some products they have had been used within our trust in different areas before i.e. theatres. The products dashboard was easy to use, the products were comfortable to wear, the application for the smart phones was easy to understand for our patients and the Bluetooth communication between the devices was quick and efficient.

MASIMO as a company listened to our needs and how we wanted our care plans set up for the patients to use. There are many products on the market but I would recommend using a company who have experience in developing remote technology.

Data safety

Question...

1. How do you ensure that patient data remains safe during teleconsultations?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Data safety

1. How do you ensure that patient data remains safe during teleconsultations?

Answer:

There are robust processes that any tech companies working with the hospital and any internal systems have to go through before being utilised. Patient data is very carefully managed.

Financial

Questions...

1. How is the virtual ward charged to the patient?
2. How do you calculate bed days saved?
3. What are the other benefits of delivering virtual care — where do you save money?
4. Can you share any details on the business case(s) you created to present to your hospital executive teams?
5. Is there data that shows the cost benefits of virtual care?
6. Did the physician payment model need to be updated to support caring for patients in a virtual ward?
7. How do you scale and maximise operational efficiency to control costs?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Financial

1. How is the virtual ward charged to the patient?

Answer:

This is directly funded via the NHS. Nil cost to the patient unless you are an overseas traveller.

Financial

2. How do you calculate bed days saved?

Answer:

We compare diagnosis codes of patients. For example, a patient that comes in for knee replacement surgery (within an age category) without the Virtual ward, may stay in hospital for 2-3 days. If the same patient instead of going into a hospital bed, goes straight to the Virtual Ward, that's 2-3 bed days saved. We do this for every single patient that gets admitted to our ward to calculate overall days saved.

There are opportunity costs as well for releasing those beds, for example it enables the hospital to carry out more surgery as there is bed capacity.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Financial

3. What are the other benefits of delivering virtual care — where do you save money?

Answer:

We've found that there are multiple advantages of delivering Virtual care:

1. Patient experience
2. Patient outcomes (although we specifically cannot evidence this yet)
3. Freeing up capacity in the hospital
4. In a year of operating, we can see that a virtual ward bed is cheaper than a physical bed (we estimate a third)
5. There are opportunity costs as well, for example the ability to reduce waiting lists and carry out more surgery

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Financial

4. Can you share any details on the business case(s) you created to present to your hospital executive teams?

Answer:

I cannot share the actual business case, but I think we have highlighted during the presentation the themes we focused on and the impact we've had on the hospital. We are now in a period of business planning where we want to expand further which I highlighted in my next steps slide.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Financial

5. Is there data that shows the cost benefits of virtual care?

Answer:

We've highlighted how we saved bed days during the presentation, there is still a lot of work nationally to do to recognise the full cost savings of a virtual ward.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Financial

6. **Did the physician payment model need to be updated to support caring for patients in a virtual ward?**

Answer:

No, our doctors are paid under the same terms as doctors working in the Acute hospital. Many of our doctors do multiple roles, for example work on the wards and Virtual care.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Financial

7. How do you scale and maximise operational efficiency to control costs?

Answer:

I think it's quite straightforward to scale the model to produce efficiency costs. For example, if we doubled the number of beds available, we would not need to double the staffing. It's not quite that straightforward for physical beds.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Patient' Inclusion and Exclusion

Questions...

1. What are your inclusion and exclusion criteria? Have you ever received feedback that your patient criteria are too general, or not clear enough?

2. What are the criteria to choose those patients?

3. Do you take patients to the virtual ward at the very start of the hospitalisation, as well as in the middle of their hospitalisation?

4. Is having a home carer a prerequisite for admission to the virtual ward?

5. Is it only in-hospital patients that can be referred to the virtual ward?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Patient' Inclusion and Exclusion

1. What are your inclusion and exclusion criteria? Have you ever received feedback that your patient criteria are too general, or not clear enough?

Answer:

We've operated in two separate ways...

1. Sat down with each specialty and worked out specific pathways which we created operating procedures and expectations around.
2. Generalised pathways which allow doctors to refer on a non-specific criteria but an agreed plan for the patients (these are more popular amongst the clinicians).

Our general exclusion criteria is as follows....

- The patient is injured, e.g. long bone fracture, and requires emergency care intervention and an admission into a secondary care bed.
- The patient is experiencing a mental health crisis and requires referral/assessment by a specialist mental health team that cannot be supported in the community.
- The patient needs acute/complex diagnostics and/or clinical intervention that can only be offered in hospital. This can become a shared risk with the patient if they do not wish to be admitted.
- For safeguarding reasons, it is not safe for a person to remain in their home or usual place of residence.
- Readmission to hospital.
- The patient has not consented to admission to the virtual ward or cannot provide informed consent.
- The patient requires care in an area outside of CUH district general catchment area which cannot be provided by local teams.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Patient' Inclusion and Exclusion

2. What are the criteria to choose those patients?

Answer:

There isn't a specific criteria to choose patients. We take patients from all specialties across the hospital. If the clinician reviewing the patient feels that they can be safely managed/monitored at home, they refer the patient. We will then review the patient to ensure we can manage that patient and ensure there are no other needs that have been overlooked.

We have a set of exclusion criteria highlighted above.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Patient' Inclusion and Exclusion

3. Do you take patients to the virtual ward at the very start of the hospitalisation, as well as in the middle of their hospitalisation?

Answer:

Yes, we regularly take patients from our Emergency Department or Medical decisions unit, if an admission can be avoided. Similarly, patients that are planned pre-operatively will sometimes be told as part of their recovery, they will likely be managed on the Virtual ward @ home after surgery.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Patient' Inclusion and Exclusion

4. **Is having a home carer a prerequisite for admission to the virtual ward?**

Answer:

Patients do not have to have a carer at home, this is only needed if a patient requires a carer/ care package not related to the admission to the VW or this has been set up for the patient if it is thought to be necessary to enable the patient to be at home. For patients that live alone we manage them the same as we would a patient who lives with someone.

The virtual ward does not provide carers to the patients but can support in referring patients to teams who arrange carer if needed to avoid hospital admission due to a social situation if it is deemed safe to do. The virtual ward does offer assistance to access voluntary services for shopping, food packages and cleaning.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Patient' Inclusion and Exclusion

5. Is it only in-hospital patients that can be referred to the virtual ward?

Answer:

Currently we are only taking patients from within the hospital but are working on an admission avoidance pathway that allows us to take referrals from the community.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Logistics / Process

Questions...

1. What are the logistics to get the devices to the patients?

2. Do you have any issues with patient transportation back to the unit if needed?

3. What is your onboarding process? Do you function like a closed unit, where you receive consults from other physician/services, or do you seek out patients followed by a number of services?

4. How many staff do you use for 24/7 support? What happens in an emergency at home, and how long does it take to get to the patient?

5. How do doctors carry out physical exams, and how is the patient experience?

6. What are the key success factors to generate doctor buy-in?

7. Is there a comprehensive range of home care services? If so, how is the cooperation?

8. Is this an acute care service? How is in-home care provided, and by whom? What worked best to get MDs to refer in?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Logistics / Process

1. What are the logistics to get the devices to the patients?

Answer:

The onboarding process normally takes place before the patient leaves the physical hospital bed and equipment is given to the patient with education then. However, if a patient is onboarded to the VW when they are at home a nurse will visit the patient in their own home to set up the equipment or courier the equipment to the patient and set up and teach the patient using video calling.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Logistics / Process

2. **Do you have any issues with patient transportation back to the unit if needed?**

Answer:

We have an agreement with the ambulance service- if a patient becomes unwell, we are issued category 1 ambulance dispatch. Every patient's need is measured on an individual basis to decide what is the safest option for them if they need to return to the hospital. Some patient families will bring them, we have transport that we can arrange as not all patients need an ambulance.

We try to avoid re-admission via ED and instead bring our patients back to our day unit to see a Dr to decide if needs a physical admission or can remain on the VW.

Logistics / Process

3. What is your onboarding process? Do you function like a closed unit, where you receive consults from other physician/services, or do you seek out patients followed by a number of services?

Answer:

Clinicians from the physical wards or clinics refer patients to us by placing a 'virtual ward order', the VW nurse will then send a form to the referring team- this form allows the team to tell the VW what is needed for the patients in terms of monitoring, bloods and imaging. The VW nurse will visit the patient to do an assessment and onboard- creating a care plan: how many times a day we will call them if voice or video chat is needed, where they will attend for treatments, venipuncture.

What monitoring is required. The teaching about the monitoring will be given at this stage. The patient gives consent to being on the VW and both the patient and the nurse sign an agreement. We accept referrals from all specialties across the trust. No specialty is excluded.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Logistics / Process

4. How many staff do you use for 24/7 support? What happens in an emergency at home, and how long does it take to get to the patient?

Answer:

Staffing model discussed in presentation. If a patient deteriorates at home depending on the emergency- an ambulance is called and is a category 1/2, a patients relative or carer may bring the patient in. If this situation is life threatening the patient attends ED, if the situation can avoid ED the patient attends our day unit for review and intervention.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Logistics / Process

5. How do doctors carry out physical exams, and how is the patient experience?

Answer:

We have a day unit in the hospital that we can bring patients to for review/ treatment. In some cases, we will go to the patients homes as well. You will have seen from the slides our patient experience feedback has been really positive. A 97% positive feedback and nil complaints for over 1000 patients.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Logistics / Process

6. What are the key success factors to generate doctor buy-in?

Answer:

We found that exploring patient pathways with doctors gave an opportunity for the clinicians to think what patients might be suitable. As soon as a patient was referred and cared for, we started collating patient experience/feedback. Once the patient was discharged, we sent the whole story back to the referring doctor highlighting what a great experience their patient had had.

We have been relentless with our feedback and communication across the hospital, and it has seemed to have worked. We still have a long way to go, however.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Logistics / Process

7. **Is there a comprehensive range of home care services? If so, how is the cooperation?**

Answer:

Primary and secondary care providers need to learn to communicate better to support the patient at home and not have repeated work being done. However, since the VW has started there has been improvements in care between both providers which has enabled care improvements across both sectors. We engage with primary care services daily.

Primary care comms is sent out monthly and we invite primary care teams to our clinical governance meeting and core planning groups monthly to share information. We are working hard to ensure the two systems integrate care.

Logistics / Process

8. Is this an acute care service? How is in-home care provided, and by whom? What worked best to get MDs to refer in?

Answer:

Yes, this is an acute step-down service from physical hospital beds. Our patients are discharged from the hospital with the RM tech, and we manage them virtually. Some patients receive home visits and some patients come into our day unit. See below regarding referrals.

Caregiver / Patient' experience

Questions...

1. Have you had much feedback from family and primary caregivers in the home? Do they experience an increased workload in their usual care?

2. How do patients experience the virtual ward? Does it affect communication with their HCP?

3. In your experience, what is the 'patient adherence' rate to being monitored remotely?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Caregiver / Patient' experience

1. Have you had much feedback from family and primary caregivers in the home? Do they experience an increased workload in their usual care?

Answer:

We've not explored this yet, but we are about to undertake a patient forum in March where we will be discussing the impact on caregivers and family. It's a really important issue to highlight.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Caregiver / Patient' experience

2. How do patients experience the virtual ward? Does it affect communication with their HCP?

Answer:

You will have seen from the slides our patient experience feedback has been really positive. 97% positive feedback and nil complaints for over 1000 patients.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Caregiver / Patient' experience

3. In your experience, what is the 'patient adherence' rate to being monitored remotely?

Answer:

Patients want to go home and enjoy taking ownership of their own care. Patients adhere to our professional recommendations to enable them to recover at home. Very few do not follow adhere to the technology, if this happens, we advise them to reattend the hospital for their safety or we re-explain the service and the importance and then the patient engages in the service.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Workforce / Training

Questions...

1. What are your thoughts on virtual training and real-time scenarios?
2. Have you found that the virtual ward empowers new ways of working?
3. How do you train your nurses? Is it done during their orientation or on an ongoing basis?
4. Does the virtual ward provide home health aides? How do you screen for adequate caregiver support?
5. Did you create a care programme for every specialty?
6. How are doctors involved in your virtual ward?
7. How do practitioners experience the virtual ward?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Workforce / Training

1. What are your thoughts on virtual training and real-time scenarios?

Answer:

Virtual wards are the future and are delivering care to so many patients. Educating doctors and nurse and including virtual training and scenario-based learning into universities and trusts is an excellent way of introducing staff to virtual care. We are currently working on a programme for the nursing university to allow student nurses to learn about VHC as part of the training.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Workforce / Training

2. **Have you found that the virtual ward empowers new ways of working?**

Answer:

Staff enjoy the new way of working and being part of a new way of caring for patients. Staff have the opportunities to learn about lots of different medical and surgical specialties, which is brilliant for PD. Staff work in the hub, day unit, home visits and onboarding- a variety of ways of working on the ward.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Workforce / Training

3. How do you train your nurses? Is it done during their orientation or on an ongoing basis?

Answer:

The nurse completes a ward induction and has supernumery time of 2 weeks to learn about the service, the expectations, the different processes and pathways for the specialties, how to onboard a patient, how the equipment works, how the computer systems we use work and how the hub, day unit and home visits are done, including what is done in these areas vs what can be managed remotely.

We have a competency pack the nurse would complete. As nurses we are a profession where we are continuously learning and developing and the VW is a place that enables and promotes that.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Workforce / Training

4. **Does the virtual ward provide home health aides? How do you screen for adequate caregiver support?**

Answer:

The VW does not provide home health aides, however we have access to refer to rabblement and community nurses. We use volunteer services who can assist patients with shopping, food packages, home jobs such as cleaning and company.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Workforce / Training

5. Did you create a care programme for every specialty?

Answer:

No, only the teams that have requested it.
We've operated in two separate ways...

1. Sat down with each specialty and worked out specific pathways which we created operating procedures and expectations around.

2. Generalised pathways which allow doctors to refer on a non-specific criteria but with an agreed plan for the patients (these are more popular amongst the clinicians).

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Workforce / Training

6. How are doctors involved in your virtual ward?

Answer:

The doctor plays a vital role in the virtual ward. Completing ward rounds with the nursing team, completing remote consults with patients and face to face if required. Makes plans for the patients, orders scans, review bloods results, prescribes medication, decides when the patient can be discharged from the service.

A virtual way of providing care but the principle is the same as a traditional ward doctor.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Workforce / Training

7. How do practitioners experience the virtual ward?

Answer:

Practitioners that work on the virtual ward are engaging and embrace the new way of delivering care. Practitioners who have referred to the ward are offered the opportunity to provide feedback to the service by completing a questionnaire.

All health care practitioners are invited to show and tell stalls for learning and sharing experiences.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Related services / Implementation

Questions...

1. Is Hospital at Home popular amongst geriatric patients?
2. What is the home care nursing role?
3. Is there a virtual ward for paediatric infectious diseases?
4. Is the virtual ward suitable for pre-anaesthesia visits?
5. Could remote monitoring be used in sleep clinics for patients with sleep disorders?
6. What are the challenges around initiating a new home-based palliative care service?
7. How can a developed country implement this type of service?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Related services / Implementation

1. Is Hospital at Home popular amongst geriatric patients?

Answer:

The frailty services refer the most patients to us and it's very popular amongst patients, care homes, care givers and clinicians referring.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Related services / Implementation

2. What is the home care nursing role?

Answer:

The nursing role is to always provide safe quality care to patients using remote monitoring and a holistic approach. Caring for patients as you would in a traditional hospital setting but allowing them to take ownership of their health and be in their own environment. The nurse triages the referred patient to the VW to ensure the service can meet their needs and completes the onboarding process.

A nursing team works from the hub, monitoring the dashboard and having interactions with the patient up to 4 times a day, the patients have access to the nursing team 24/7. Multi-disciplinary team ward rounds take place to discuss each patient and their needs. Actions completed as required. Home visits are done for patients who require face to face interventions, patients also attend our day unit if required for iv therapies, doctor reviews and imaging.

Related services / Implementation

3. Is there a virtual ward for paediatric infectious diseases?

Answer:

We are currently developing a pilot for a paedicatric VW.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Related services / Implementation

4. Is the virtual ward suitable for pre-anaesthesia visits?

Answer:

Yes, virtual ward could support this depending on the requirement and would this be considered admission avoidance. If the VW could enable patients not to need to stay overnight before an operation and requires monitoring before the procedure, then yes.

There is always a time for open discussions about virtual care and who it would benefit if it means a patient avoids a hospital stay.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Related services / Implementation

5. **Could remote monitoring be used in sleep clinics for patients with sleep disorders?**

Answer:

Remote monitoring is definitely an option for sleep clinic/ studies. The patient could sleep in their own bed and be monitored remotely by the clinic.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Related services / Implementation

6. What are the challenges around initiating a new home-based palliative care service?

Answer:

We do not currently have a palliative care service for virtual ward, however there is definitely potential in using remote technology and virtual care for this group of patients. We work closely with haematology and oncology and this group of patients have benefited from our service. The use of remote monitoring has allowed immunocompromised patients to be at home reducing their risk of developing hospital acquired infections and improved the general wellbeing of the patient whilst remaining under the care of the hospital, providing reassurance that they are being closely monitored.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

Related services / Implementation

7. How can a developed country implement this type of service?

Answer:

I think this model of care is something that can be mirrored across many countries. There are particular advantages of virtual care for patients that live in remote areas but access to technology could be a limiting factor.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

Questions...

1. How many patients have been through the ward?
2. Are you able to share your escalation rate? (i.e. % of patients transferred back to brick-and-mortar hospital for a higher level of care/monitoring)
3. What are the top three specialties you see most frequently?
4. What is the SOP document in your developmental process?
5. What is your target for the number of patients treated on the virtual ward?
6. What is the average length of stay for patients on the virtual ward?
7. What do you feel accounts for the increasing readmission rates (30 days)? Is there one specialty that has a higher-than-average readmission rate?
8. Regarding governance, if there is a problem or an adverse event, does it fall under the hospital trust or primary care?

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

1. How many patients have been through the ward?

Answer:

In the 14 months of being operational, we have now seen 1300 patients.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

2. Are you able to share your escalation rate? (i.e. % of patients transferred back to brick-and-mortar hospital for a higher level of care/monitoring)

Answer:

This has changed over the duration of the project but currently about 1-2% of our patients are transferred back to hospital for Emergency care.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

3. What are the top three specialties you see most frequently?

Answer:

Frailty refers the most patients to us, followed by General Medicine, Cardiology and now Orthopaedics.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

4. What is the SOP document in your developmental process?

Answer:

SOP stands for Standard Operating Procedure and it's an agreement between us and that Specialty on the pathway, who is responsible for each stage, what the escalation process is, any exclusion and inclusion criteria.

It's a transparent way of both services agreeing who is going to do what for the patient.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

5. What is your target for the number of patients treated on the virtual ward?

Answer:

Our goal by September 2023 was to have 45 patients on the ward. We overtook this significantly by October and are currently sitting at between 70-80 patients. Our aim for next year is to increase our capacity to 120 beds which account for 30-40 beds per 100,000 of our population.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

6. What is the average length of stay for patients on the virtual ward?

Answer:

This varies per patient group, for example Cardiology patients generally stay between 7-10 days, similarly Oncology patients. However, Orthopaedics and General Medicine are with us a lot shorter.

Our overall average length of stay is between 7-8 days.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

7. What do you feel accounts for the increasing readmission rates (30 days)? Is there one specialty that has a higher-than-average readmission rate?

Answer:

Our re admission rates for 30 days after discharge from the virtual ward sit at around 11%. That figure has been lower at different points in the year, but we cannot see any common themes in regards to this.

The hospital average is a similar figure, which is reassuring and we monitor in our monthly governance meetings. Our Frailty patients are the most common group of patients to be readmitted.

All questions have been answered by Gemma Czech, Clinical Nurse Lead for Virtual Wards and Andy Bailey, Operations Manager Virtual Wards from Cambridge University Hospitals NHS Foundation Trust.

General

8. **Regarding governance, if there is a problem or an adverse event, does it fall under the hospital trust or primary care?**

Answer:

This falls under the Acute hospital. We have a monthly governance that all stakeholders are required to attend.

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