

The Docobo Remote Monitoring and Virtual Care platform from Graphnet is market-leading and has been trusted by the out-of-hospital care sector since 2001. Providing remote patient monitoring, virtual care and screening capabilities across the NHS, these solutions improve the quality of life of patients, carers and clinicians.

Our technology is designed to keep people as healthy as possible and plays a crucial role in proactive and preventative care. The Docobo Remote Monitoring solution is used across the NHS to monitor people who have been discharged from hospital but require a level of monitoring to maintain their safety at home. We work with ICSs, hospitals and other organisations to deploy remote monitoring and virtual care, which is used in care homes, primary care settings, patients' homes and hospitals for high quality care at home and supported discharge.

Our remote monitoring, virtual ward and opportunistic screening capabilities offer innovative ways to improve integrated care, reduce pressure on the healthcare system and enhance patient outcomes.

The Docobo Remote Monitoring platform supports care professionals to understand the integrated care needs of patients and reduces demand on the entire care system, while transforming the delivery of care and enhancing quality of life for patients outside of clinical settings, whether this is at home, in care homes or any other preferred place of residence.

### An end-to-end solution

When used in conjunction with our Graphnet Shared Care record and Population Health platform, health and care providers are presented with data-driven insights needed to identify those most in need of proactive support, in addition to tracking their impact. Our end-to-end solution breaks down barriers between healthcare organisations, enables professionals to access patient information from multiple care settings, facilitates online interaction between patients and clinicians and ensures that patients receive appropriate care when they need it.



## 20 million people

Our shared care solutions hold records for 20 million people



### 150,000

Remote monitoring over 150,000 citizens



20,000

Around 20,000 patient care encounters are assisted by the use of our shared record every day



17.3 million

17.3 million citizens benefit from planned care using our population health management

# **Remote Monitoring**

Remote monitoring supports healthcare professionals to proactively and efficiently monitor health conditions while providing needs-led and person-centred care, increasing independence and autonomy of long-term conditions. Many clinical areas benefit from using the Docobo Remote Monitoring platform including cardiac, respiratory, diabetes, oncology, MND, mental health, dementia, end of life and more.

By using our tools, care professionals can better understand their population's healthcare needs, reducing the strain on the entire care system. Our technology enables clinicians to provide improved care to more patients, helping tackle hospital admissions, free up beds and tackle backlogs while enhancing patient outcomes.

Our Docobo Remote Monitoring solutions are designed to engage individuals in self-care and become pro-active partners in their health and wellbeing.

By using Docobo Remote Monitoring within the Graphnet Population Health platform, care professionals can identify those who will reap maximum benefits as well as reducing demand on the entire care system.

The Docobo Remote Monitoring platform improves the quality of life for patients and their carers, often supporting the wishes of people to remain at home or within residential care, reducing hospital admissions and length of stay for those who are admitted. For clinicians, remote monitoring when used in conjunction with population health, offers a means of reducing unnecessary hospital stays, freeing up valuable clinician time and beds whilst ensuring patient safety is central.

These digital solutions enable health teams to remotely monitor patients with long-term conditions across a wide range of health services:



Respiratory



Cancer



Cardiac



**Paediatrics** 



Diabetes



Learning disabilities



Motor neurone disease



Elderly care



Frailty



Post-treatment monitoring

Our remote monitoring solution focusses on subjective patient-reported data which is submitted via questionnaires or interviews, collecting objective health data, including heart rate, breathing rate, blood oxygen saturation, blood pressure and more.

"The system is amazing! It saves a massive amount of admin time, so we no longer have to stay in a telephone queue for the GP for hours. It's really so helpful!"

Sharon Flint, Manager, Haldane House



# **Long-Term Conditions**

According to NHS England, there are over 26 million people in the UK who live with at least one Long-Term Conditions (LTC) and 10 million who have two or more [1].

The NHS is proactively looking for innovative ways in which to provide support that works best for each patient, whilst reducing waiting lists and ensuring that patient safety is paramount. Those with long-term conditions often feel that frequent visits to GP surgeries and hospitals affect the quality of their life. However, identifying people with LTCs who are best suited for remote monitoring and implementing this means of management often delivers a sense of freedom and control over their health.

The Docobo Remote Monitoring solution is used to manage a range of long-term conditions across a wide range of health services including diabetes, heart failure, respiratory conditions and cancer.

"It really has improved my daily life and I appreciate the service. Firstly, it saves you from having to go to the GP surgery so often. It's lovely to know that someone is there, keeping an eye on my breathing, and if there are any problems arising from my readings, I will get a phone call."

Feedback from a patient with a Long-Term Condition



# **Opportunistic Screening**

Keeping people as healthy as possible by picking up potential clinical issues before they happen means fewer hospital admissions and more positive outcomes for the individual, making a significant difference to the health of the nation.

Opportunistic screening – or opportunistic assessment as it is sometimes known – is a way of identifying patients who may have an undiagnosed medical problem. We have extensive experience of doing just this with our Graphnet Population Health platform, which supports health teams to proactively intervene in flagging potentially fatal conditions for 17m+ people.

Stroke and heart attack prevention is just one way that our opportunistic screening programme can be used. By screening cohorts of people at risk, our technology can dramatically reduce life changing illnesses and even prevent deaths. Our stroke prevention programme uses monitoring devices such as ECG monitors, oximeters or blood pressure monitors to collect health data across a range of people, some of whom may have an undiagnosed medical condition.

## Why opportunistic screening?

As well as being devastating for patients and their families, strokes are estimated to **cost the NHS around £3 billion per year**, with additional costs to the economy of a further £4 billion in lost productivity, disability and informal care <sup>[2]</sup>.

Screening supports the management of patient care in a proactive way. Screening flags up potential issues earlier. In essence, screening is a proactive process where health teams collect data and monitor the health of a community. Opportunistic screening provides benefits both to patients and care teams. Proactive stroke and heart attack prevention leads to healthier communities and supports health teams to focus on those most in need, it also frees up hospital beds and vital resources within the health system.

## Where screening can be used

Patient surveys that can be completed within GP surgeries or pharmacies while people are waiting for their appointment are examples of opportunistic screening. Individuals can securely add their information on a tablet in a private area or in a community setting while waiting to see a pharmacist. It is not only about collecting clinical information, surveys can be about lifestyle or mood and more.

We work in a number of specialist areas, including KCCQ, EuroQoL and P3CEQ (national standard surveys for managing heart failure patients).

# **Benefits of Opportunistic Screening**

Opportunistic screening collects a few simple measurements that may establish an undetected health concern for specific individuals. Benefits include:

- Managing community care proactively rather than reactively
- Capturing data that supports early interventions may lead to better health outcomes
- An opportunity to discuss and support education of healthy lifestyle choices
- Improving public health

# **Virtual Wards**

Virtual wards can reduce pressure on hospital beds and offer GPs a 'step-up' level of care. The Docobo Virtual Ward solution is used across the NHS, enabling patients to be cared for at home, enhancing integrated health and social care and promoting multidisciplinary team working.

### How the virtual ward works

Acting like a hospital at home, patients can be physically discharged to their home environment, but their care and clinical responsibility remains with the hospital until clinical discharge.

Clinicians assess patient risk to establish if it is safe to monitor the patient at home. Graphnet manages the logistics for your virtual ward, sending out the right equipment to the right place at the right time.

"Hospices nationally are currently struggling with projected deficits and risk of future sustainability. The virtual ward provides a different model of care, offering choice for patients and those important to them and a different financial model.

The Palliative Virtual Ward has provided a supplementary service to support patients living with a palliative diagnosis and those important to them. Through the use of advanced digital technology we have been able to support an increased numbers of patients and families to enable their loved ones to remain at home."

Sara-Marie Black, Chief Operating Officer, St. Rocco's Hospice

### Our virtual wards solution:

- Enrols numerous patients quickly and easily
- Olosely monitors patients at intervals outlined by clinicians
- Generates alerts to support clinicians to manage any health concerns
- Offers seamless 'step down' to primary care long-term condition monitoring
- Should it be required, 'step up' capability is available
- Patients can be discharged from virtual wards within minutes

## What are the benefits of virtual wards?

There are a wide range of benefits when it comes to treating patients using virtual wards:

- Shortens the length of stay in hospital reducing pressure on beds
- Offers a new level of intermediate care (e.g. for GPs and others to refer to)
- ▶ Information recorded is more frequent providing richer analysis
- ▶ Helps keep people at home (where most prefer to be and recover more rapidly) and home is usually better for their mental health
- Facilitates timely and safe discharge
- Encourages collaborative patient care
- Improves communication between all services, patients and carers

Patients who may otherwise be re-admitted to hospital are being supported in the community, reducing the re-admission rate and could anticipate better titration of medications. All our compatible medical device accessories are stringently tested to ensure compliance with our digital toolkit.

# **Paediatric Virtual Wards**

Paediatric virtual wards enable patients to be discharged home while still under the care of the specialist clinical team and are an essential tool in managing bedflow.

The Docobo Remote Monitoring solution is used to monitor children who have been discharged from hospital but require a level of monitoring to maintain their safety at home.

### How virtual wards work

Monitoring patients on a virtual ward enables children to safely remain in their home environment while regularly sending, and digitally storing necessary data to the specialist clinical team. It can also allow patients to leave hospital sooner rather than later, freeing up a bed for another child.

- Suitable patients for paediatric virtual ward monitoring are identified within the ward round, using specific criteria and a multi-disciplinary risk assessment.
- Parents/ guardians of the patient are fully informed about virtual ward monitoring and given the opportunity to discuss any concerns or objections. Informed consent is obtained prior to admitting a child to the virtual ward.



A referral is completed to inform the virtual team and ensure all relevant information has been considered and effectively communicated.

Patients are enrolled on the programme. Parents/ guardians are given training and demonstrations, ensuring they are confident with obtaining physical observations as well as how to use the technology prior to commencing remote monitoring for their child. In addition to this, training videos are available on the device.

Parents/ guardians are responsible for completing the relevant question sets whilst their child is at home. Data is completed on a smart device which is immediately accessible to all monitoring clinicians of the virtual ward.

◆ Alerts are set to ensure that any results outside of expected parameters are immediately highlighted to the team – alerts, interventions, outcomes and notes are all digitally recorded.

Question sets are scheduled to be completed within specific windows throughout the day, while 24-hour access to paediatric telephone support remains available for any time it may be required. Parents/ guardians receive regular telephone contact from their specialist team to discuss any concerns and to review the child and relevance of the virtual ward service. When discharge from the virtual ward has been agreed, the equipment is collected and returned to the hospital, where it is appropriately sanitised and made available to other patients.



#### **Benefits**

There are a wide range of benefits for patients and families using the virtual ward service, including:

- Reduced length of stay in hospital children and young people can safely return to their homes sooner.
- Early evidence has suggested there is also a marked reduction in risk of inpatient re-admission after discharge from the virtual ward.
- Children and young people can reside in their own homes with the people who know and care for them best while continuing to receive specialist support – which offers a far better patient experience.
- Peace of mind for parents/ guardians and families specialist clinical support remains accessible throughout the virtual ward process. Should any result be outside of the patients' usual parameters, parents/ guardians immediately receive a telephone call from their specialist team to discuss.
- ▶ Reduces anxiety enabling care to be less intrusive for the child's usual lifestyle, and for the parents/ guardians who have additional responsibilities to maintain (such as work, other children etc).
- Ontinuity of care for children and young people.
- The child being more comfortable in familiar surroundings and the parent being able to maintain their routine.

Both the child and parent being less stressed than they were or would be in hospital surroundings - including benefits for eating (child) and sleeping (child and parent, with poor parental sleep associated with having a child on the inpatient ward).

The parent(s) being able to care for the child's sibling where there was another child in the family unit.

- Clinical hours released.
- Hospital benefits.

"Now my son is on the virtual ward I can record his observations as many times as I want throughout the day, and a member of staff calls me twice daily which reassures me that he is safe in our home environment. The new virtual ward is great for me and my family as it stops my son staying in hospital longer than he needs to."

Mother of a virtual ward patient

"We initially thought a paediatric virtual ward would be useful to manage the anticipated increase of children being admitted with Respiratory Syncytial Virus (RSV), but it proved invaluable for children being stepped down from higher dependency care, as well as managing patient flow in the trust. By giving access to support by expert clinicians, we are giving children and young people a better patient experience and care tailored to their conditions."

Dr Paul Hudson, operational medical director, **Dudley Group NHS Foundation Trust** 

### Sources:

[1] https://www.england.nhs.uk/blog/making-the-case-for-the-personalised approach/#:~:text=Two%20of%20 the%20speakers%20at,who%20have%20two%20or%20more

[2] https://www.england.nhs.uk/2019/05/nhs-stroke-action-will-save-hundreds-of-lives/#:~:text=As%20 well%20as%20being%20devastating,productivity%2C%20disability%20and%20informal%20care.

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