

SCHEDULE 2 – THE SERVICES

A. Service Specifications

Service Specification No.	11J/0200
Service	Telehealth
Commissioner Lead	Principal Programme Lead – NHS Dorset CCG
Provider Lead	Dorset Healthcare University NHS Foundation Trust
Period	01 September 2016
Date of Review	31 August 2019

1. Population Needs

1.1 National/local context and evidence base

Technologies such as Telehealth have the potential to transform the way people engage in and control their own healthcare, empowering them to manage it in a way that is right for them.

Tim Kelsey, National Director Patients and Information said, “Digital technology offers new opportunities for transforming the outcomes and experience of patients and citizens – and of supporting those who care for them. The Five Year Forward View promotes the importance of prevention and of new models in care in designing sustainable, high quality health and care – an essential precondition will be giving service users more control and professionals the data they need. Commissioners should prioritise their strategies for putting data and technology to work for citizens and local communities.”

NHS England’s ambition through the Technology Enabled Care Services (TECS) programme is to ‘create the right commissioning environment that supports and encourages the innovative use of technology to improve health outcomes for patients with long term conditions and deliver more cost effective services. We believe that by embracing this sort of technology, we can empower millions of patients to own their own care and transform the way we plan and deliver services to create a sustainable NHS for the future’.

Telehealth for Dorset was launched in February 2012 with the purchase of 500 pods; focusing primarily on patients who have Chronic Obstructive Pulmonary Disease (COPD) and/or Chronic Heart Failure (CHF)

Respiratory conditions such as COPD are the most common cause of death in England and Wales killing more than 23,000 people each year. Morbidity is high with patients requiring frequent primary and secondary care input. The population prevalence of COPD is expected to increase over time due to ageing of the population, and the cumulative effect of smoking.

Both nationally and locally, COPD is one of the highest causes of unplanned admissions. Locally there were 2,421 emergency hospital admissions for patients with COPD in 2012/13 which rose to 2,686 in 2014/15. Furthermore patients with COPD continue to experience longer lengths of stay with an average length of stay of 6 days in Dorset. This hasn’t changed in the last three years. There is a growing need for community services across Dorset to up skill their knowledge for respiratory conditions and have the right resources to prevent avoidable admissions and to support people back into the community earlier after an acute admission. Telehealth supports the

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patient to manage their condition thereby reducing emergency admissions and enabling an earlier discharge from hospital and allowing community key health workers to support a wider group of patients.

Heart failure affects at least one in every 100 people in the UK, increasing steeply with age to about 7% in men and women over 75 years. The number of patients with heart failure is set to rise in the next twenty years, due to the combined effects of improved survival in patients who develop cardiovascular disease, such as heart attacks, and an ageing population. Heart failure is one of the most common reasons for emergency medical admissions (about 5%), readmissions and hospital bed-days occupancy. (NHS Information Centre, National Heart Failure Audit (2010)). The national recorded prevalence (1.8%) of heart failure is lower than expected (2.3%), with 140,000 fewer people than estimated reported as having heart failure, indicating that improvements in diagnosis are required. (NICE Chronic Heart Failure Clinical Guidelines CG108 2010). Locally emergency admissions have risen from 1,507 in 2012/13 to 1,826 in 2014/15 with an average length of stay in hospital of 10 days.

The Review of Telehealth Services in Dorset (March 2015) recommended that the service for patients with COPD and CHF moves from project stage to being provided by a clinical hub within Dorset Health Care Trust. This was supported by the NHS Dorset Clinical Commissioning Committee.

2. Outcomes

2.1 NHS Outcomes Framework Domains & Indicators

Domain 1	Preventing people from dying prematurely	✓
Domain 2	Enhancing quality of life for people with long-term conditions	✓
Domain 3	Helping people to recover from episodes of ill-health or following injury	✓
Domain 4	Ensuring people have a positive experience of care	✓
Domain 5	Treating and caring for people in safe environment and protecting them from avoidable harm	✓

3. Scope

3.1 **Aims and objectives of service**

- To provide individualised technological support for patients to enhance their care management within a community setting for a specific time period.
- To provide personalised care planning to enable patients to self-care and manage their own condition proactively.
- To provide patient focused interventions across the disease trajectory from health promotion and disease prevention to monitoring and support.
- To enable key health workers to support a wider group of patients in the community through prioritising home visits, facilitating proactive reviews within the community hub, and delivering patient centred, evidence based medical interventions and support.
- To improve the quality of life for patients with long term conditions in particular Chronic Obstructive Pulmonary Disease (COPD) and Chronic Heart Failure (CHF) through self-awareness and self-management of their condition. The service will extend to support people living with other long term conditions for example Mental Health, in the future.

- To allow continuity of care to support a wider group of patients and therefore offer care closer to home and assist with directing clinical resources where they are most beneficial/required.

3.2 Service description/care pathway

There are 4 main elements to the service;

- The clinical interface between the patient and their key health worker
- The clinical interface between the key health worker and the telehealth clinical hub
- The clinical and technical interface between the telehealth clinical hub and the referral centre/ the provider of technical support
- The contractual interface between Dorset HealthCare and the provider of technical support.

This requires robust system management including;

- a. patient co-ordination and progress updates
- b. clinical advice
- c. supported discharge from hospital and/or patient referral to other services
- d. prevent/reduce unnecessary/inappropriate hospital admissions

The role of the Patient

On commencement of Telehealth it is explained to the patient that Telehealth is an enabler for them to gain a greater insight into their condition and the onus is on them to be proactive in their approach in terms of recognising the abnormal readings and taking the appropriate action. The appropriate action will depend on the individual patient and also the level of variance on the readings; however this will be agreed with the key health worker on commencement of Telehealth and as part of the ongoing reviews.

Telehealth allows patients to monitor their own health by using electronic devices in the home; this enables patients with long term conditions to self-manage with reference to the Patient Activation Measure (PAM) as this is introduced into the service over the term of the contract. PAM is a validated tool for measuring self-management, capturing the extent to which people feel engaged and confident in taking care of their health and wellbeing thereby enabling professionals/services to 'meet people where they are' and therefore tailor support and services to meet their needs. This in turn leads to improved patient outcomes, enabling people to make more positive choices about their health and wellbeing and a reduction in unplanned admissions as health literacy improves.

The device is installed in the patient's home and typically connected to a telephone line or broadband service so that the data collected can be transferred to a central monitoring centre. Readings are often taken daily, but the frequency can vary and is determined by consultation between patient and key health worker.

Examples include:

- digital thermometer
- weighing scales
- blood pressure cuff
- oxygen reader
- pulse reader/oximeter

NB: This is not an exhaustive list as the service will expand out to other disease groups and additional peripherals may be required for effective and efficient monitoring of these conditions.

Once undertaken the readings are sent to the telehealth clinical hub. If the readings are not within the pre-determined parameters for the individual patient, this could indicate a deterioration of their condition and an alert is raised for the clinical hub to make a judgement on any action that should be taken. Early intervention to make a change to medication is one example, which could lead to the prevention of an emergency admittance to hospital.

The role of the Key Health Worker

The referral is undertaken by the key health worker; generally this is the person who has most contact with the patient. These include:

- Community Matron
- District Nurse
- Practice Nurse
- Specialist Nurse (Respiratory/Heart Failure)

In order to refer someone for Telehealth monitoring the key health worker will have undergone Telehealth training to be able to understand the requirements/parameters and service delivery model. The key health worker will require access to a PC/Laptop for the web-based Clinical User Interface to undertake the remote monitoring. The telehealth clinical hub/provider organisation will ensure all key health workers will have access to training.

Before referral, the key health worker will discuss the Telehealth system with the patient and/or their carer and provide them with the Telehealth leaflet which is designed to aid their understanding and answer any frequently asked questions. The discussion will also include the need to identify objectives/goals/care plan and step down procedure to be achieved as a result of Telehealth monitoring being undertaken. It must also be made clear that Telehealth monitoring is a short term step to enable patient's self-care and proactive management of their condition with reference to the individuals Patient Activation Measure (PAM) status. The aim with all patients commenced on Telehealth is that they will acquire sufficient confidence, insight and knowledge into their illness to enable self-care without the assistance of the Telehealth technology within a mutually agreed timescale.

Following the initial discussion and agreement to commence Telehealth monitoring, the patient/carer and key health worker will complete the following:

- Referral Form
- Patient Consent Form
- Patient Care Plan, one copy of which will remain with the patient in their home

During the completion of the referral form the key health worker will explain to the patient:

- Individual alert parameters
- Help desk facility including opening times
- Who will review the readings and the security of the data
- When to undertake the readings
- Questions which will be asked daily and whether any individual patient questions should be asked and if so what they are likely to be (outside the normal question sets)
- Telehealth documentation
- Training/ installation arrangements
- Procedure to undertake when readings are outside normal parameters
- Confirmation of self-care/self-monitoring and the individual goals for the patient
- Step Down Process on achieving final goals with reference to the individuals Patient Activation Measure (PAM) status.

On completion of this the key health worker will leave the patient with a leaflet which clearly describes who to call in each situation.

The key health worker will send the referral documentation to the telehealth clinical hub and a

copy to the patients GP. The document can be sent in one of the following ways:

- By email
- By fax
- And/or via GP System

The key health worker will respond to alerts raised via the telehealth clinical hub. On review of the individual patient's records, the key health worker should take the appropriate action with the patient and/or other health colleagues and record this activity on the CUI (Telehealth system) to provide an audit trail of activity and also ensures that other colleagues involved in the patients care are aware that intervention has taken place.

The role of the Telehealth Clinical Hub

The Telehealth Clinical Hub will undertake the following:

- Check all details are correct and patient suitable to be referred for Telehealth
- Check key health worker has received Telehealth training and has access to the Clinical User Interface (CUI) and/or GP system.
- Send patient 'Welcome to Telehealth letter' explaining the service and installation process
- Record referral details including equality data for onward transmission to the provider of technical support/referral centre and liaise where necessary.
- Inform key health worker when the referral is completed and when installation is complete.
- The telehealth clinical hub has responsibility to review patients Telehealth activity via the secure server. Upon log in to the secure server every patient allocated to the key health worker will be visible and an 'alert' system will be in place that clearly identifies any activity/non activity that needs review. The telehealth clinical hub will make initial contact with the patient and timeframes to make contact will be based on clinical risk/management plan outlined in the patients care plan. Patient non-compliance will be monitored and flagged to the relevant Key Health Worker where necessary and/or direct contact will be made to the patient.

The role of the Referral centre/Technical support

On receipt of a new referral the referral centre will:

- Receive referrals for Telehealth installation via the telehealth clinical hub.
- Check whether the equipment prescribed is available for the patient
- Arrange delivery and training appointments for the patient
- Enter all patient details onto the Clinical User Interface

The delivery and training appointment with the patient will be undertaken by an Engineer and include:

- Installation of the equipment including peripherals into the patients home
- Verification that equipment is functional and can communicate with the centre, is able to transmit and receive data.
- Train the patient and/or carer on how to use the equipment and peripherals
- Reaffirm who to contact if the equipment malfunctions
- Provide the patient with the training booklet for future reference

Discharge processes

For each patient, objectives will be discussed and agreed at the referral stage of Telehealth between the key health worker and the patient and/or their carer. This will be entered into the CUI. This is to ensure progress is made and that patients are preparing for discharge from the

programme with reference to the individuals Patient Activation Measure (PAM) status. This progress is monitored by the telehealth clinical hub/key health worker and the patient and reviewed regularly.

On attaining the personalised goal whilst using Telehealth the key health worker should ensure that the patient “steps down” with reference to the individuals Patient Activation Measure (PAM) status. The Key Health Worker completes the relevant form to ensure the equipment is removed from the patient’s home and prepared for another patient to use. Advice should be given to the patient on continuation of self-monitoring their specific condition without the requirement for the Telehealth service.

Days/hours of operation

As a non- emergency service, the telehealth clinical hub will initially operate between the hours of 9am till 5pm, Monday to Friday (excluding bank holidays) initially. Moving to 7 day provision in line with other community services.

Response time and prioritisation

- To provide the patient with Telehealth equipment within 5 working days from key health worker referral.
- Priority is to be given to patients discharged from hospital and those requiring a 24 hour installation either as part of the hospital discharge plan or other care plan. NB: This is not an emergency service and as such the installation of telehealth equipment should be seen as one of a suite of tools to support patient discharge.
- For those situations whereby the patients readings have given cause for concern the response times by individuals need to meet the medical requirements of the patient/their individual readings and any potential medical emergency. Any alerts will be triaged and communicated to key health workers via the telehealth clinical hub within 2 hours.
- Any malfunction/breakdown of Telehealth equipment will be reported to the provider of technical support during office hours (9am-5pm Mon-Fri excluding bank holidays) directly to attempt to resolve the problem remotely. If the problem cannot be resolved remotely an engineer visit will be arranged within 2 working days. Issues/problems can also be reported via the telehealth clinical hub.

3.3 Population Covered

Dorset has a population of around 754,000 and is significantly rural in parts.

At the time of the review there were 356 COPD Telehealth patients recorded on QOF registers in Dorset from a COPD list size of 14,120 (2013/14) = 2.5%. This specification aims to increase this to 4.3% of registered COPD patients being on Telehealth

Likewise, at the time of the review there were 257 CHF Telehealth patients recorded on QOF registers in Dorset from a CHF list size of 6,700 (2013/14)= 3.8%.This specification aims to increase this to 8.8% of registered CHF patients being on Telehealth.

Locality	The conditions of all telehealth patients from March 2012- March 2015				Percentage of all telehealth patients against registered patients	
	COPD	CHF	Other	No of patients	COPD	CHF
Bournemouth North	47	29	2	69	4.3%	6.2%
Central Bournemouth	33	20	0	43	3.1%	4.0%
Christchurch	20	46	4	69	1.9%	8.8%
Dorset West	5	2	1	8	0.6%	0.7%
East Bournemouth	22	12	2	33	2.0%	2.6%
East Dorset	20	39	4	59	1.7%	5.6%
Mid Dorset	15	7	0	21	2.1%	2.3%
North Dorset	28	10	0	37	1.9%	1.4%
Poole Bay	49	24	0	64	4.0%	3.5%
Poole Central	45	16	0	53	3.6%	2.3%
Poole North	8	16	0	21	1.0%	3.5%
Purbeck	14	18	0	31	1.9%	5.7%
Weymouth & Portland	50	18	24	84	3.0%	3.2%
Total	356	257	37	592	2.5%	3.8%

The aim is to enable all localities to reach the top percentage locally i.e. 4.3% of COPD patients and 8.8% of CHF patients. This correlates to an additional 258 patients with COPD and 336 patients with CHF. See table below.

Percentage and number of additional patients required for all localities to reach current maximum level (4.3% COPD, 8.8% CHF)		
Locality	No. of COPD patients required to reach current maximum level	No. of CHF patients required to reach current maximum level
Bournemouth North	0	13
Central Bournemouth	13	24
Christchurch	26	0
Dorset West	31	25
East Bournemouth	26	29
East Dorset	31	22
Mid Dorset	16	19
North Dorset	36	53
Poole Bay	5	37
Poole Central	9	45
Poole North	25	25
Purbeck	19	10
Weymouth & Portland	22	32
Total	258	336

This population will be extended to include Mental Health and Oncology patients in addition to COPD and CHF.

3.4 Acceptance and exclusion criteria.

- Patients with a diagnosis of COPD or CHF who has had an unplanned admission to hospital within the 12 months prior to referral for Telehealth, has many appointments with their GP or is considered to be unstable in relation to their health condition and would benefit from additional support to monitor/control their health.
- Patients must be registered with a GP within Dorset.

An ideal patient is someone who will meet an element(s) of the statement below:

- A patient who is willing and able to use the technology, and who will have an improved understanding and ability to self-manage their condition following and/or during the use of Telehealth.
- A patient who will see benefits to their health/condition following and/or during the use of Telehealth including; meeting their personal goals, a reduction in unplanned admissions to hospital, and a reduction in their dependency of health professionals with reference to the individuals Patient Activation Measure (PAM) status.

Exceptions are to be discussed and agreed between the Clinical hub and the key health worker.

3.5 Interdependence with other services/providers

In order to provide a fully working and successful service effective working relationships have been established, and will need to be maintained with:

- Technology Providers
- Primary Care
- Secondary Care delivered COPD and CHF services/DAIRS/Heart Failure nurses on Wards/Oncology Consultants
- Community Mental Health teams
- Ambulance Service
- Integrated locality multi-disciplinary teams/locality hubs

3.6 Service Development

Dorset CCG's ambition by 2020 is to establish a fully integrated digital pathway for management of a full range of long term conditions. This will enable people to live as independently for as long as possible, and for frontline staff to take a more preventative approach and to focus and prioritise their time on people who require active intervention.

By expanding our current Telehealth and assistive technology services, moving to a model which is proactive, and utilising a range of interoperable wearable devices and self-management options, our goal is to develop the next generation of digital health and care solutions which offer greater choice to people in how they manage their health and wellbeing, and to empower clinicians and practitioners to be more effective in their role.

The Telehealth service will develop within existing resources to support people living with different long term conditions across a range of differing service pathways i.e. Mental Health ensuring holistic care is delivered closer to home that is patient centred and recovery focussed.

4.1 Applicable national standards (eg NICE)

- Five Year Forward View. NHS England. October 2014
- NHS Dorset Clinical Service Review
- Integrated Community Services
- NHS England Patient Activation Measure (PAM)

<https://www.england.nhs.uk/ourwork/patients/patient-participation/self-care/patient->

activation/

6. Location of Provider Premises

Dorset HealthCare University NHS Foundation Trust HQ
Sentinel House
Nuffield Industrial Estate
Nuffield Road
Poole
BH17 0RB

Appendix 1

Telehealth Clinical Pathway

Telehealth patient identified by key health worker and referral process undertaken including personalised care planning with patient



Telehealth Clinical Hub receives referral and undertakes checks before passing to Referral Centre/provider of technical support who will then allocate equipment and input patient data onto the system



Appointment booked with patient for delivery at a suitable time and training provided on usage within 5 working days of referral. Key Health workers can request "urgent referral installation" which will be prioritised to be installed within 24 hours.



Patient commences use of Telehealth to monitor their condition and assist with self-management of care, contacting their telehealth clinical hub when readings are outside agreed parameters

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The Telehealth Clinical Hub monitors patient's readings on a regular basis to ensure patient is undertaking readings and where there are alerts the patient is initially contacted by phone. Where intervention(s) take place the Telehealth Clinical Hub records intervention on CUI. Where a patient is non-compliant and has not taken their daily/weekly test the telehealth clinical hub will intervene and make contact with the patient and/or the Key Health

Patient learns to self- manage/care for their condition on Telehealth and reaches their personalised goal. Patient "steps down" from Telehealth and equipment returned to be processed for issue to another patient