



Wessex
Academic Health
Science Network



Telemedicine for care homes: a strategic scoping guide

August 2020 Version 1



[@WessexAHSN](https://twitter.com/WessexAHSN)
[wessexahsn.org.uk](https://www.wessexahsn.org.uk)



TheAHSNNetwork



Hampshire Hospitals
NHS Foundation Trust












North Hampshire
Clinical Commissioning Group



West Hampshire
Clinical Commissioning Group

Contents

| | | |
|---|---|-----------|
| | Introduction to the care home telemedicine project | 3 |
|  | Case of need: benefits | 5 |
|  | Finance and activity | 12 |
|  | Workforce | 14 |
|  | Digital | 16 |
|  | Care home preparation | 19 |
|  | Service and clinical pathways | 21 |
|  | Quality improvement | 23 |
|  | Evaluation | 24 |
|  | Communication and engagement | 29 |
| | What next | 30 |
| | Contributors | 31 |

Introduction to the care home telemedicine project

In April 2020, a new telemedicine service which provides instant advice for care home residents (with and without nursing care) was launched by Hampshire Hospitals NHS Foundation Trust (HHFT), North and West Hampshire CCGs and other local organisations, including Wessex Academic Health Science Network (AHSN).

Initially accessible between 8am and 8pm every day, the service provides faster access to care and advice in care homes, to avoid unnecessary ambulance call outs, attendance to the Emergency Department (ED) and admissions. It is important to note, the telemedicine service provides urgent advice for care homes and does not replace routine GP face-to-face or virtual consultations or emergency care.

In the UK, **405,000 older people** (aged 65+) currently live in care homes. This represents **16%** of older people over the age of 85 (British Geriatrics Society 2020). Within Wessex, there are around **23,500 care home beds**. Within Hampshire there are approximately **13,900 beds** across **354 care homes** (Care Quality Commission 2020 and health data library) ► <https://bit.ly/3fy32Gx>.

The telemedicine project, due to launch later in 2020, was accelerated to help provide care for some of the most vulnerable people in the community during the Covid-19 pandemic. A phased, but rapidly increasing approach, has seen the service initially launch in 104 care homes in Hampshire. As the service grows, it will be accessible to care homes all day, every day, across all of Hampshire and the Isle of Wight (HIOW) - approximately 650 care homes.

The service means care homes can virtually talk to a specialist clinical team, in the event of sudden and unexpected deterioration or health event. This includes falls, trauma, new confusion, pain management, breathlessness and suspected infections (not exhaustive).

Clinicians working on the telemedicine service can also prescribe medication and send prescriptions electronically to a chosen pharmacy, meaning there is no need to visit a hospital or wait for an out-of-hours GP to visit. This makes treatment or symptom control much faster. Mutually-agreed care plans are also securely emailed to the care home at the end of the call, and automatically uploaded to the Care and Information Exchange (CHIE), meaning GPs and community teams will be able to view what the outcome of the consultation was online.

The North and Mid Integrated Care Partnership (N&M ICP) agreed seven key change programmes for joint delivery across the system to attain financial and operational sustainability. The funding for this business case has been awarded by the HIOW Sustainability and Transformation Partnership (STP) - Health System Led Investment Fund. HHFT will allocate this resource over a three-year period. Robust data analysis and evaluation methodology has been set-up to inform the long-term funding required for the service.

To date (July 2020), the service has:



8

avoided ambulance conveyances per week



6

preventions of admissions to ED per week



4

preventions of admissions to hospital per week



15

calls into the service per week

This scoping guide will take you through a process, and outlines the things to think about when developing a telemedicine service for care homes, allowing you to develop a service that works for you.

It has been designed as a system-wide strategic resource for Integrated Care Systems (ICS), Sustainability Transformation Partnerships (STP), Integrated Care Partnerships (ICP), Clinical Commissioning Groups (CCG) and acute NHS trusts to use when planning telemedicine services for care homes (with or without nursing).

It is not a prescriptive pathway; the guide takes you through each stage of the process and outlines the key workstreams to consider, allowing you to develop a service that works locally but is developed on best practice. If you like, a **blueprint** for service development.

It contains:

- ✓ Guidance for scoping and planning
- ✓ Links to a range of resources to support and inform thinking
- ✓ Case studies from Hampshire Hospitals Foundation NHS Trust and West Hampshire CCG to show how this works in practice

A health warning

Thinking needs to be system-wide within an STP footprint, including local authority, and multiple health organisations to ensure intra-operability and maximise benefit, sustainability and affordability. Setting-up localised services to care homes on an ICS or Primary Care Network (PCN) footprint runs the risk of the homes being overwhelmed by different operating systems, stakeholders and worsening communication. It will also be more costly overall and harder to sustain.

This guide is aimed at a strategic level, to help develop and implement telemedicine services by collating all the resources and lessons learned from service development in the Hampshire and Isle of Wight STP in one place.

This is a working document, developed in collaboration with Hampshire Hospitals NHS Foundation Trust and West Hampshire CCG.

We hope you find the guide useful. If you have any feedback or suggestions for future updates, please get in touch with us at healthyageing@wessexahsn.net.

This guide has been developed alongside a staged implementation of a telemedicine service hub in the Hampshire and Isle of Wight STP footprint, which was fast tracked as a result of Covid-19.

This guide should be read in conjunction with telemedicine for care homes: a strategic implementation guide ► <https://bit.ly/2CnjRWB>.

“As an operational manager I would have been delighted to be given a guide like this! It tells me everything I need to consider when setting-up telemedicine services.”

Acute Emergency Department Operational Lead

Case of need: benefits



What is telemedicine?

Telemedicine is a service allowing real-time assessment and clinical support of residents using telecommunications technology, when the clinician and resident are not physically in the same place.

It is different to telehealth and telecare in the following ways:

Telehealth involves the use of telecommunications and virtual technology to deliver health care outside of traditional healthcare facilities. (WHO ► <https://bit.ly/3cPEk2T>)

Telecare is the term that relates to technology that enables patients to maintain their independence and safety while remaining in their own homes. Examples are personal alarm triggers, falls detectors, linked smoke detectors. There are a number of telehealth providers, for more information on two used within Wessex, visit ► <https://bit.ly/3dHBGwS> and ► <https://bit.ly/3imGkE2>

What does telemedicine for care homes look like?

Telemedicine services for care homes generally take two forms:

1. Access to a central 'hub' (a specialist team) for urgent and emergency situations, and the wider acute and community multidisciplinary teams, and;
2. Instigated by primary care to support GP home rounds, care home rounds, medicines reviews, and routine consultations

For the purpose of this guide, the focus is on the first example, but the principles can be used for developing an approach within primary care and primary care network (PCN) settings.

Why have a telemedicine service for care homes?

A telemedicine service for care homes helps care for people in the **right place** and at the **right time**, providing access to specialist service and teams and signposting where appropriate. Evidence shows that attending, or being admitted to, a hospital setting can cause emotional distress, confusion and agitation to older individuals, which can lead to serious incidents like falls, infections and deconditioning.

The Covid-19 pandemic shone a light on care homes, highlighting the reactive nature of managing deteriorating residents. In May 2020, primary care was asked by NHS England to develop **proactive** services for care (► <https://bit.ly/2B1FPy4>). Telemedicine services fit perfectly within this approach.

It is important to note, a telemedicine service for care homes should not replace routine GP face-to-face or virtual consultations.

A telemedicine service should enable the **best care** to be delivered in the **best place** at the **right time**, proactively supporting a resident's health and wellbeing, and choices in matters such as being able to die where they choose.

However, to be effective, telemedicine services fit into an overall strategy and integrate within the whole system.



What are the system and individual benefits of a telemedicine service for care homes?



Benefits for residents

- Allows residents to have urgent or regular reviews and routine consultations without leaving their home.
- Allows residents to be cared for according to their wishes, e.g. End of Life Care plan, Anticipatory Care Plan (ACP), Power of Attorney (PoA), and to die in their place of choice.
- If a resident needs to be seen face-to-face, this can happen sooner; they can be taken to the right place to see the right person directly.
- The service is reliable, secure and confidential.
- Direct admission to specialty wards; bypassing ED (Emergency Department).
- Medicines can be electronically or remotely prescribed so treatment can begin quickly.
- Residents are less likely to become agitated, disorientated or delirious if they are within familiar surroundings.
- Reduced rates of hospital acquired infections, falls and deconditioning.

Benefits for care homes

- A quick response service with direct access to clinical evaluation and escalation to a member of the medical team if required.
- Avoids the need to call 111 when concerned about residents, increasing staff confidence and competence.
- Removes the need for staff to accompany residents to appointments.
- Residents are more settled and routines are not disrupted unnecessarily by conveyance to hospital.
- Enhanced support for End of Life Care.
- Facilitates a two-way discussion in real-time to address immediate concerns about a resident and a follow up plan, which includes the facility to speak to the same person again.
- Provides support for care home staff to care for residents who are unwell, safely and with access to clinical advice and management.
- Allows the development of an agreed risk sharing plan to manage the resident. The service is reliable, secure and confidential.
- Medicines can be prescribed and prescriptions sent electronically to a local pharmacy avoiding long waits.
- Improved care for residents as a result of closer working between the home, acute providers, and GP practice.
- Offers a new medium to accessing new learning and non real-time training and education.
- Provides support for care home staff to care for residents who are unwell, safely and with access to clinical advice and management, including when primary care is unavailable (weekends/overnight).



Benefits for urgent and emergency care and acute hospitals

- Improved collaboration and integrated services.
- Reduces the conveyance of residents to hospital for assessment and discharge back to the care home.
- Reduces demand on 111 and 999 services.
- Reduces overnight admissions for observation, improves bed flow and increases system resilience.

Benefits for primary care and GPs

- Streamlines workflow.
- Reduces travel time, enhancing clinical time.
- Facilitates a timely plan to address immediate concerns about the resident, providing a comprehensive follow up plan for the GP.
- Provides a consistent service to care homes when primary care is unavailable (weekends/overnight).



Setting-up the steering group



Before commencing the scoping of the telemedicine for care home service, the setting-up of a steering group is vital to ensure system support and leadership.

Below are suggestions for membership, there are likely to be others depending on local service delivery.

“The first step is to set-up a steering group to develop telemedicine for care homes across a geography (ideally an STP area). Identifying the stakeholders (and there will be many) and appointing people to lead on scoping, modelling and implementation.”

Senior Commissioning Manager

- Clinical Lead
- STP System leaders e.g. Quality, Medical Director, Emergency Department leads
- Transformation leads
- Primary Care development leads
- Primary Care lead from each CCG
- Innovation lead from each CCG/Trust in the area
- Local Medical Committee representatives
- PCN representatives
- Communications and engagement representatives from host and partner organisations
- Digital leads from STP, host and partner organisations
- Care home digital champion
- Financial leads from host and partner organisations
- Local Authority Adult Services, safeguarding
- Care homes association
- Community Pharmacy (Local Pharmaceutical Committee)
- CCG pharmacist
- Care home pharmacist
- Ambulance service
- Out-Of-Hours service/111 Service
- Clinical leads for primary care and acute
- Commissioning Support Unit (CSU)/ Business Support Unit (BSU)
- Evaluation representative/data analyst
- Patient and Public Involvement (PPI)
- Healthwatch member

You may also wish to consider including:

- Allied Health Professionals
- Social Prescribers
- Voluntary Sector representatives

Visit ► <https://bit.ly/2W4v5q1> to find a stakeholder map to help you identify key partners

“You will need multiple leaders from different system partners at all levels who will engage and commit. Ask people to lead and identify experts within each area.”

Senior Communications Manager



An outline plan for scoping telemedicine for care homes



Below is a framework that Hampshire Hospitals NHS Foundation Trust and West Hampshire CCG developed to scope and understand the telemedicine for care homes service they wished to commission. It is a recommended best practice approach to ensure all aspects of the project are considered.



Step 1: Project set-up

- Establish and agree the aims, objectives and benefits of the service
- Use data and organisational intelligence to identify the cohort of patients and/or care homes who will use this service
- Link in with other trusts who have set-up a similar service for support, best practice guidance and lessons learned
- Divide the project into workstreams (recommended workstreams detailed below)
- Identify key stakeholders for each workstream from all system partners involved
- Use this scoping and our implementation guide to help you navigate each workstream. We have developed both guides into digestible sections to compliment your workstreams
- Set-up a steering group to maintain communications and agree frequency and format of meetings
- Link with Integrated Care Systems (ICS), Integrated Care Partnerships (ICP), transformation and quality forums

Step 2: Suggested workstreams and outputs

Finance

- Agree and set-up a sustainable financial model
- Develop a financial tracking approach
- Identify future cost savings and how these will be realised
- Identify prescribing costs and impact on organisation
- Explore opportunities for digital funding
- Explore hidden costs of developing the service

Data

- Development of a logic model
- Agreement of quantitative and qualitative success metrics
- Method of data collection
- Collection of baseline data of agreed outputs and outcomes (including ED attendance and admissions from care homes)
- Agreement of evaluation approach

Care home preparedness

- Link with colleagues who have responsibility for working with and supporting care homes
- Training and service awareness
- Pre requisites for participating in the service (digital requirements, GDPR, clinical skills and documentation)

Estates

- Consider the location of the service: it is important to consider co-locating near urgent emergency care services if extra clinical support is required
- Identify whether broadband is available in your chosen location(s)

Workforce

- Recruitment (including prescribers) and ongoing strategy to run a 24/7 service
- Medical support structure
- CQC requirements
- Consider how to build a workforce with scope for development, career progression and training
- Will the organisation support individuals to train to be an Advanced Care Practitioner?
- Will the workforce need to have achieved prescribing competencies?

Digital

- Method of contact to and from service (telephone and Microsoft teams)
- IT equipment required internally and externally (hardware and connectivity)
- IT procurement
- GDPR
- Information Governance and future solutions (innovations)
- Method of sharing information
- E-prescribing method
- Compatibility of systems and licensing
- Patient record systems

Clinical pathways

- Escalation of any changes in clinical pathways that impact on other hospitals care provision
- Clinical pathway alignment for each acute trust
- Admission and discharge pathways for each acute trust
- Arrangement of electronic access to Advanced Care Planning documentation and the ability to update electronically e.g ReSPECT
- If the above is not possible, Advanced Care Plan - standardised method
- Onward referrals to community
- Agreed processes for direct admission
- Directory of Service (DOS) / MIDOS
- Agreement of clinical documentation method

Communications and engagement

- Understanding catchment area - key stakeholders (Primary Care, CCG, ICP, STP, Ambulance Service, local authorities and internal)
- Create a communications plan to ensure consistent message across the systems
- Launch events and forums
- Expression of Interest (EOI) letters to care homes to include upgrade of service options (Microsoft Teams)
- Engagement log



Case of need: existing plans and stakeholders



To set-up an effective telemedicine for care homes service for care homes, there are a number of component parts to consider. Services are broadly an alternative to calling 111/999, or for GP practices, to provide day-to-day care, 'ward (home) rounds' and medicine reviews.

While there are different models, these should not replace urgent care provision.

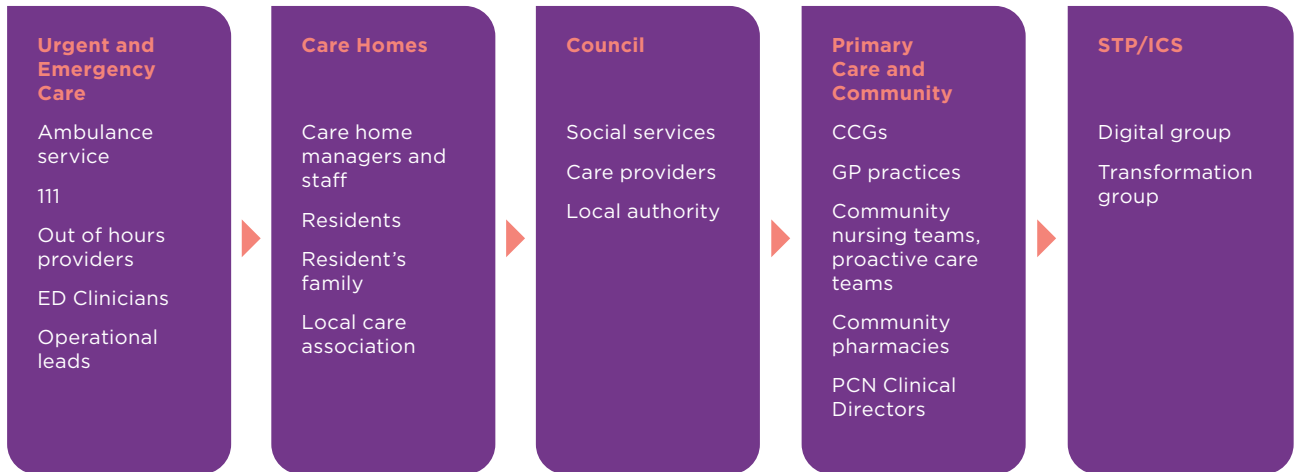
Scoping what is already happening in your area, and getting all stakeholders involved early to prevent duplication is key.

The questions below act as prompts for you to consider with organisations you are collaborating with:

- Who are the stakeholders? How will you involve them from the start? (See suggested steering group membership on page seven and system stakeholders on page 10).
- What is their likely impact/involvement? How can you identify this? We recommend using a stakeholder mapping template (NHS Improvement ► <https://bit.ly/2AWkBRZ>) in conjunction with the template. ► <https://bit.ly/2ZfCUv9>.
- Consider the STP or ICS footprint; what partners are there to enhance service resilience?
- Identify whether this is a quality improvement project or savings project. Improved quality in services will result in savings, but highlight approaches to delivery and measurement may be different.
- How does telemedicine for care homes fit with the STP/ICS Digital Strategy or road map?
- What are neighbouring areas doing? How can your plans align to theirs, how can you complement and integrate services? Are there any economies of scale?
- Do primary care providers have plans to do care home consulting virtually? How will these integrate or complement with the telemedicine service?
- Evaluate what Covid-19 measures were put in place and how effective/user-friendly/practical these were, considering what to continue, what needs to adapt or change, and what should stop. A crisis response assessment grid is available to help you identify this. ► <https://bit.ly/2UxNVov>.
- If there is some telemedicine provision already, what video conferencing tool are they using? Is it secure and fit for roll out further?
- What do you want to use the telemedicine video conferencing tools for? An urgent and emergency care service may have different requirements to GP-led care.
- What are the potential risks in developing a telemedicine service?



Examples of system stakeholders to engage with:



“You cannot underestimate the need to involve stakeholders early. Collectively identify and agree your case for change and therefore your common purpose.”

Programme Director



Finance and activity



Having scoped what kind of service you need the next step is to work up the different options to identify what the costs are and what savings might be generated, so that the model is affordable and realistic. Identifying a financial lead with experience of system wide modelling is key.

How will the telemedicine services be financed and who will work up the system savings?

- Identify funding source, e.g. CCG, STP, ICS. Are there any other finance sources available?

How much will it cost to run the service?

- Identify how much it will cost to develop a 24/7 service for an STP/ICS. Then develop a Funding Options Appraisal (with a recommendation) that should be considered at STP/ICS level.
- Scope the staffing model, is there an example financial model you can work from on this?
- Scope what expenditure is required to set-up the service e.g. overheads, hardware, software, staffing, training, communications.
- Consider whether you have a model of what the service costs per patient to deliver, or do you have a financial envelope?

Review current emergency department/conveyancing costings to the system – what will the ‘savings’ be?

- Work with your local Commissioning Support Unit (CSU) to identify current ED attendance, admission trends, and 111 calls in and out of hours from care homes. Identify areas of opportunity and savings utilising the resultant Healthcare Resource Groups (HRGs) to identify present payment levels.
- Seek to identify a way to understand activity impact on primary care and community services.
- Model different scenarios to identify the optimal impact to the system in reducing attendances from care homes and reduction in out-of-hours calls from care homes to fully understand implications.
- Align these scenarios to the cost of delivering the service to identify the savings, what will it cost to run the telemedicine service?

How will it be paid for?

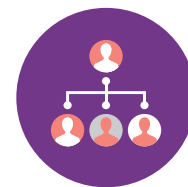
- Will the savings cover the costs of your preferred model? Consider how will it sit in the future commissioning structure and STP/ICS model.
- Will savings be shared across the system? Hold discussions with CCG/STP/ICS on how the service will be paid for before you commence the implementation of the project.
- What are the possibilities for the service to be commissioned once by an STP/ICS and overseen by strategic commissioning? If this isn't possible, how will the model be sustained?
- How will the service be funded by the system, does it adequately cover the level of service given?
- Are there existing funding models that could be used e.g. ED/emergency same day care tariffs. How is the pathway you are aiming to change currently funded?
- How will prescriptions be funded?

How will savings be identified and who gets them?

- Could these proposed savings fund a system-based service? What is the gap? Who could fund this gap?
- If savings are to be shared, how will this be monitored and allocated across the system?
- As part of scoping, plan how the uptake and activity data will be measured. How will it impact on Urgent and Emergency Care, Out of Hours, Admissions and GP services etc. Ensure baselines are set at the implementation stage.
- How will quality of the service be monitored? How will this be identified?
- Consider how you would support care homes who are later at adopting new systems and may still be using 111, how would this be addressed as financial modelling depends on them using it? What levers for change are there?



Workforce



A multi-disciplinary workforce provides an opportunity to innovate and be collaborative with a system-wide model which could increase system buy-in.

To ensure a telemedicine service achieves the aims set out for it, scoping what workforce is needed is key. Each setting (e.g. acute/primary care) will have different workforce needs, but scoping should include existing workforce and training needs as well as recruiting new workforce, sourcing and training.

For each type of setting we have identified key workforce scoping questions for the workstream to discuss. Consider how you will recruit without depleting staff in other trusts or one speciality area. Consider what workforce model will offer greater system buy in, e.g. if GPs are part of the workforce mix, might this increase primary care engagement?

Could other rotational posts such as paramedics or specialist nurses work?

Is there anything specific or unique to your area or possible service model?

Strategic service leadership, expertise and management

Although you will have a strategic steering group, you will need experts to ensure that the all the component parts are effectively scoped for strategic decision making to be possible.

- What skills are needed for overall management of the service both strategically and operationally? For example, who will lead with engagement with stakeholders; who will act as strategic representation for the STP/ICS Steering Group?
- Communication expertise and resource will be needed for marketing the service. There will be a lot of communications required in different formats to a wide range of stakeholders.
- Include an expert in digital/IT training to ensure robust system choice, set-up and delivery, including intra-operability is paramount. You will also need to consider options for IT support for the workforce once service is live.
- Clinical leadership for the development of service and clinical pathways, which will include coordinating and consulting across multiple organisations and specialities.
- Expertise in social care and care homes to ensure aspects such as safeguarding are considered.
- Have you undertaken a system co-produced event to understand the needs of the system and to listen to what care homes need?
- Invite lay members to ensure the interests of care home residents and their families are addressed. Do they need to have expertise in any particular area to undertake this role for this service development?
- Data and financial analysts are key stakeholders when scoping the future service. They are required to model the services, determine system savings and monitor to establish whether these are being realised. What experience and skills set do they need?

Telemedicine hub

Identify the training and skill sets required and model options for delivery of the acute telemedicine service. What staffing is required to safely deliver the telemedicine service?

- Which professions do you wish to recruit to the team? What are the planned pay bandings? Do you have a competency framework or do these need to be developed? What training is required and how will this be developed/delivered?
- What is the core skill set for the telemedicine service e.g. virtual assessment, expertise in virtual consultation? What additional clinical skills and or support may the workforce require?
- Will all staff need to have key core skills or can you have a skill mix?
- Could you upskill staff once in post (formal or informal training – formal training usually has a cost associated, informal training time required to deliver and attend).
- How can existing workforce and roles support telemedicine? Could you develop a rotational model using GPs with special interest, paramedics, community nurses, acute staff, advanced nurse practitioners, etc?
- Be aware that the hub team may need to provide remote help to the care homes on IT, resident assessment and equipment use, so additional training may need to be provided.

GP practice

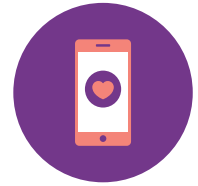
- What workforce is required to deliver your desired outcomes?
- Will the service be for an individual practice, Primary Care Network (PCN) or CCG wide?
- How will workforce be determined and sourced for each scenario above?
- What skills do the service lead/service delivery partners need?
- Who will scope the training needs and source/develop training? For example, telemedicine system, other IT training, new assessment and communication skills.
- What guidance, Standard Operating Procedures (SOPs) and pathways need to be put in place for the workforce to operate safely and inclusively?

Care homes

- Who will scope current workforce skills, including what training is needed and who needs training?
- Who is available to provide training and competency assessment, e.g. in clinical assessment, IT equipment, assessment equipment?
- What training is available already? (e.g. Restore 2™ ► <https://bit.ly/3dogc7Y> and ► <https://bit.ly/2YJmeMw>)
- Who will be their link for queries, follow up and training? Do you have Nurse Facilitator roles to support this?



Digital



To develop a robust and secure telemedicine service, there are a number of digital aspects that both the care home and the service need to consider.

Training



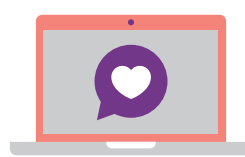
Training on devices, both IT and clinical assessment for clinical and non-clinical staff

Connectivity



Reliable broadband / SIM signal

Hardware



What equipment does the home need? Who will provide? Review the NHS Digital programme website for further information
▶ digital.nhs.uk

Software



Set-up of apps / programmes supporting remote communication / monitoring

Support



Ongoing support to troubleshoot issues

Strategic

- Purchase of kit – costs, supply, ownership, what’s appropriate/practical for each setting (laptops, tablets, etc.) Who is responsible for maintenance?
- Intra-operability, Information Governance (ensuring transfer of information using generic NHS.net email). Who will be responsible for trouble shooting IT problems? Will it be the telemedicine service or hospital IT service desk, GP practice or another provider?
- Software: What software, if any, will be used? Examples could be eConsult ▶ <https://bit.ly/37j4D0g>, Attend Anywhere ▶ <https://bit.ly/3cTXkNK>. How do these fit with existing practices and systems? Is there an opportunity to get the whole STP using the same system, which will have benefits in terms of training and staff familiarity with a system?
- Accessibility – what version of Windows does everyone have? Do they need an upgrade?
- Is Microsoft Teams or another virtual conferencing tool going to be used as a tool ▶ <https://bit.ly/2AUztQS>? Is any training needed, what level does everyone have, are they the same?
- How will an electronic prescribing system work?

“Undertaking a digital scoping exercise was fundamental to us understanding which care homes needed additional resource and support.”

Digital Project Manager



IT hardware, software and connectivity

- Choice of IT system and equipment is important when setting-up an effective telemedicine service. It needs to be fit for purpose, robust and sustainable.
- Linking in with the ICS overall Digital Strategy is vital ensuring alignment and digital interoperability.
- What software will you need to run the service? Will it include telephony/call centre options?
- Scope what is happening in GP practices and primary care (PCNs) if they are also setting-up remote consulting/virtual wards, etc. and understand opportunities for aligning digital solutions.
- Consideration needs to be given to equipment in all settings and an awareness of aspects such as WiFi signals, interoperability and ease of use. How will you address insufficient local hardware and connectivity?
- Is a digital scoping exercise required? Consider:
 - WiFi upload and download speeds.
 - Where areas of poor WiFi connectivity are within the home and how access will be addressed.
 - What mobile devices are available in the home and what needs to be procured?
 - Where IT/mobile devices are available; do they have a webcam and microphone?
 - What provisions have been made for privacy and confidentiality in the care home?



Telemedicine hub/GP practice

- Choosing a video conferencing platform – e.g. Microsoft Teams, Zoom. What is being used for hospital outpatient/remote consultations? Is there a system wide preference? If not, should there be one?
- What does the conferencing platform need to be able to do?
- What IT equipment and software is needed? If you need to procure, who will fund and purchase this?
- How will consultations be recorded and shared as required, and added to shared records? What are the General Data Protection Regulation (GDPR) implications of this? How will generic NHS.net email accounts be set-up? Who will do this?
- Are there any interoperability issues? What platform should be used to electronically share the patient record - the Primary Care system (e.g, EMIS or SystemOne) or the hospital based system? What are the benefits and drawbacks of each?

Care homes

- Check that a Data Privacy Impact Assessment (DPIA) has been completed. This is part of the Data Security and Protection Toolkit which all Care Homes need to complete.
▶ www.dsptoolkit.nhs.uk.
- What hardware and software is already in place? What needs to be reviewed, procured or upgraded?
- Have you agreed how care homes will consent to share information with the service? How will the information be shared and documented?
- How will the transmission of care plans and action plans be made?
- Can records be shared?
- What is the level of digital literacy within the care home? Will the care home need additional support?
- Information for residents and their families. What can families and carers access?

Care home preparation



As this service is aimed to support care homes, engaging and listening to their experience and expertise at the start of the scoping process is vital.

Identify who has responsibility for working with and supporting care homes. These colleagues will have existing relationships with the homes, understand their challenges and will be a key conduit in engaging with care home managers and workers.

Below is a care home readiness checker to help support the project team identify the additional support care homes may need prior to implementation of a telemedicine service:

Information Technology

- What equipment do they have? Is it fit for telemedicine? Do they need portable devices (tablets or a laptop trolley) to enable consultation at the residents location, e.g. within the residents room?
- Is the WiFi signal available across the whole care home or just one particular area?
- What video conferencing platform will be used? If primary care is also doing video consultations ensure the same platform is used. It will not be helpful to care home staff to have one system for GPs and one for Urgent and Emergency Care.
- Who will provide training in how to set-up and use the IT equipment and video conferencing service?
- Who will troubleshoot any problems with IT once the service is live?
- What standard operating procedures might be needed for the care homes to work to?

Information governance

For more information visit NHS England resources ► <https://bit.ly/2UxPPG5>

Consider:

- What information governance procedures and processes are already in place, what needs to be completed?
- How will consent to share information be gained and documented?
- How will the transmission of care plans and action plans be shared safely and securely?
- What arrangements are there for shared records access?
- What information will be needed for residents and their families to reassure them that their information will be dealt with securely and confidentially?
- Ensure the care home has a generic NHS.net email account to allow safe transfer of confidential information which is accessible as needed within the care home.
- It is important to complete a Data Privacy Impact Assessments (DPIA) to support evaluation (ICO example ► <https://bit.ly/2UxVnAm>).



Assessment of residents

- Are the care homes and their teams prepared to assess residents? If not, what is needed to get them on board and trained?
- What equipment do the care homes have (thermometer, blood pressure machine, pulse oximeter, etc)? What do they need to purchase? Do they need training on how to use and care for it? Who will deliver this training?
- What experience/training do they have in clinical assessment and reporting, how is competency assessed and who by? If not, who can deliver this?
- Are they familiar with NEWS2 or RESTORE2™, etc. ▶ <https://bit.ly/38UAC89>? If not what is needed to get them prepared? (Other soft sign tools are available for use ▶ <https://bit.ly/3fitvZc>)
- Are they skilled at infection control procedures for residents and equipment?
- What documentation do they have to record and communicate concerns? E.g. NEWS charts and Situation, Background, Assessment, Recommendation (SBAR) forms ▶ <https://bit.ly/2CT5utB>. Are these electronic or paper? How are they added to the residents' records?

Care planning in care homes

- What service information and flowcharts do the care homes need?
- Have they considered residents and family members wishes such as Power of Attorney (PoA), Advanced Clinical Practice (ACP), Treatment Escalation Plans (TEP) and End of Life Care as appropriate? Tools to support this process are outlined on page 30.
- How can the health and social care system work together to improve care planning, moving from reactive to proactive care?
- Do they have a leaflet or similar that they are using to support communications with families and patients? Do they need to write one? Are there possibilities for being creative, e.g. producing an information video or arrange an online session or a question and answer awareness session?
- Agree an Advanced Care Plan (ACP) approach for the system, e.g. ReSPECT ▶ <https://bit.ly/3fEP6Lo>. The teams will then become practiced at completing one, and feel more comfortable amending or creating them.

Service and clinical pathways



Once the type of service is determined, scoping clinical pathways will shape the service and identify further stakeholders for implementation. Both types of pathway (service and clinical) will depend on your workforce model. You also need to consider how clinical pathways will operate across an ICS/STP geography, with multiple acute trusts and providers.

As this guide is focusing on care homes, look at what pathways currently serve them

- Service pathways will be underpinned by clinical guidance. NICE have produced a Guidelines manual (PMG6) which may be of help ► <https://bit.ly/2YmXAQ9>.
- A framework from the Institute of Medicine defines six domains of healthcare quality and is a useful guide to develop quality, patient-centred services ► <https://bit.ly/3cUkxzm>.
- Consider how your proposed service will interface and complement what is currently available, consider process mapping to understand interdependencies.
- How will onward referral to specialists be agreed across multiple providers and geographies?
- How can the Primary Care Networks (PCNs) support? For example, many are developing multi-disciplinary teams. How can the telemedicine service support this?
- Scope the most likely local pathways for care home residents and then agree with system clinicians the pathways into the local acute trusts.
- How do services interact with social services and voluntary care? If they don't presently, how could they interact?

Service pathways to consider are:

- From the care home to a telemedicine hub
- From the care home to GP practice or from GP to care home
- From the telemedicine hub to other services
- Internal escalation within the telemedicine hub.

“There are a number of different service pathways you need to consider and have an updated plan for. We re-mapped our clinical pathways from the telemedicine hub to other services, from the care home to the telemedicine service, from the care home to GP practice, GP to care home as well as ensuring there is a robust internal telemedicine escalation plan.”

Clinical Lead



Onward referrals from the telemedicine service also needs to be considered. Early engagement with supporting services is key during the scoping stage to ensure implementation of approach. For example, consider the pathways into the acute and community settings:

- How will the service refer to community nurses, occupational therapists, physiotherapists, dietitians, care home pharmacists, community pharmacists, older persons mental health teams, acute and community geriatricians?
- For equipment supply, e.g. Zimmer frames, wheelchairs. How can the service access the equipment?
- Onward referral for holistic End of Life Care, what are the pathways for the different levels of care e.g. Specialist community palliative care team; or hospice support/admission.
- What transport arrangements are there for urgent or non-urgent conveyance to hospital/ED? Are they different (Patient transport, ambulance, etc.)? Are changes needed to the criteria, for example who can order transport both to the acute and then back to the care home setting (the two processes may be different)?
- What are the current admission routes into the acute setting? If direct admission is needed how does this work? Do admission routes and criteria differ across the STP/ICS footprint and are there different admission routes between trusts? Can they be standardised?
- Are there differences across the system between available services in hours and out-of-hours for visits/admissions/routes or to arrange care?
- How are investigations such as bloods, swabs, etc. managed currently? Does access to these services need to be reviewed?
- How are prescriptions or oxygen organised? Does the pathway need reviewing and updating?
- How are medicines supplied, medication reviewed and prescribing managed? Where will you get urgent medicines during out-of-hours for end of life care?
- How is social care presently accessed? Is the pathway criteria clear and shared across the system? What is the process if there are safeguarding concerns?
- Voluntary sector support also needs to be considered – what is available within your area and how does the telemedicine team contact them to access and arrange support?
- Consider having a directory of services across the STP/ICS (also consider who will maintain it and keep it current) ► <https://bit.ly/2EmpENd>.
- Confirm what additional support services care homes may link into across different regions.



Quality improvement



The term ‘quality improvement’ (QI) refers to the systematic use of methods and tools to try to continuously improve quality of care and outcomes for patients.

Combining QI approaches alongside traditional project management allows rapid evaluation of ideas and suggestions, and supports the scoping and implementation of a robust service model.

Planning to use QI approaches during the scoping phase is essential in determining how you will measure outcomes and respond to issues that arise.

Plan, Do, Study, Act (PDSA) cycles occur in all aspects of a project from designing a form to designing a service. Seeking input from those who will use the service is important to make sure you are delivering what was intended.

Useful links to help with quality improvement approaches

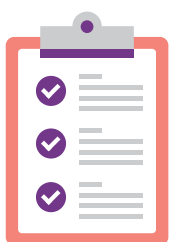
- **The IHI Model for Improvement**
▶ <https://bit.ly/2BO9Ird>
- **Health Foundation**
▶ <https://bit.ly/2XTwLUN>
- **Wessex Academic Health Science Network QI hub**
▶ <https://bit.ly/2COaXhX>
- **Co-production resources**
▶ <https://bit.ly/3gMdk76>



Below is a guide to undertaking an evaluation and an example of a logic model and evaluation questions and metrics. For further information and tools to support the development of a robust evaluation approach please visit ► <https://bit.ly/323NGXd>.

Undertaking an evaluation: basic steps

Planning



- Complete logic model(s)
- Investigate data availability and collection required
- Document data flows
- Establish Information Governance requirements

Scoping



- Define evaluation questions
- Define what's not being evaluated (out of scope)
- Decide appropriate methods (e.g. surveys/activity data/interviews, etc)
- Set timelines for data collection and analysis/reporting

Findings



- Analysis of data (quantitative and qualitative)
- Synthesis of available evidence
- Conclusions and recommendations
- Reporting

Example logic model: telemedicine for care homes service in Hampshire and Isle of Wight

With increasing pressure on secondary care, a new teleconferencing service is planned between care homes and acute hospitals. This will facilitate the assessment and treatment of deteriorating patients in their care home whenever possible, or return patients requiring hospital services to their care home as soon as possible.



Example evaluation questions:

Is there evidence of system benefits?

- Avoided costs due to a reduction in unnecessary ED attendances and emergency admissions and/or reduced length of stay (reduction in excess bed days).
- Freed up capacity due to reduction in GP/OOH/111/999 calls and ambulance conveyances.

Is there evidence of patient and staff benefits?

- Reduction in time spent in hospital (ED and in-patient)
- Reduction in deaths in hospital
- Increased management and treatment of patients in care home setting
- Improved patient experience and outcomes
- Improvement in the number and quality of ReSPECT forms (in terms of completeness)
- Upskilling of staff
- Improved staff satisfaction.

What is the pattern of utilisation of service? Is a 24/7 service required?

What do staff perceive as the important mechanisms that lead to the intended outcomes, i.e. the active ingredients for successful implementation?

Is there evidence of any impact on specialist palliative care activity and/or community nursing activity?

Are there any unintended impacts? How can these be captured?

“The benefits were demonstrated within the first few days of going live: a reduced need to take older patients into hospital for care they can now receive in their care home and a smoother admission pathway for those that do need to be admitted. Agreeing our evaluation questions during the scoping stage has been imperative in ensuring a comprehensive evaluation.”

Programme Director



Example metrics for evaluation of a telemedicine service

Service-level data

Number of video conference calls

Number of telephone calls

Source of referral

Number of calls where RESTORE2™ wasn't used

Number of medications prescribed by the acute hospital

Number of ReSPECT forms created as a result of calls

Number of ReSPECT forms amended as a result of calls

Number of treatment plans created as a result of calls

Number of patients managed and treated in care home setting as a result of calls

Number of onward referrals facilitated as a result of calls

Number of ambulance conveyances as a result of calls

Number of unnecessary ambulance conveyances avoided as a result of calls

Number of touchpoints in end to end pathway

Time of day of calls

Activity data

Number of out-of-hours (OOH) calls

Number of OOH visits

Number of 111 calls

Number of 999 calls

Number of unplanned GP call outs

Number of ambulance attendances

Number of ambulance conveyances

ED attendances:

- Number
- Time to be seen

Emergency admissions:

- Number split direct and via ED
- Length of stay (hours and days)
- Emergency excess bed days

Number of deaths in hospital

Delayed Transfers Of Care (DTC)

Number of care home re-assessments

Specialist palliative care activity

Community nursing activity

Communication and engagement



This is integral to keep all stakeholders and the public updated. A robust strategy has three phases:

1

Strategic decision: gathering an overarching steering group and making sure the correct people are around the table to agree to implement a telemedicine service.

2

Scoping the service: the members of the overarching steering group are able to bring in and/or communicate with all relevant parties and has the capability to engage the right people for scoping.

3

Implementing the service: communications and engagement will be focused more at launching the service and communication to potential users, or those affected by it, and who need to know what the service is, how to access it, etc.

In the scoping phase, consider:

- Who are the internal and external partners that need to be engaged with?
- Who needs to be engaged with designing the service? Co-producing a service with the system is paramount.
- Would the service would benefit from a relationship manager to support communication with care homes and the wider system?
- What form the communications should take: papers to stakeholder forums, presentations and newsletters.
- Has the voice of the care homes and their residents been considered? Is there representation from local care associations?
- Who will lead on developing the communications for each phase and audience?
- Who should send them out to get greatest coverage and buy-in?
- How will communications be tailored to different audiences?
- Stakeholder mapping to determine interest, influence and impact on the project.

Useful links

- **NHS Improvement resources on engagement and communications**
▶ <https://bit.ly/2YmJ8rq> and here ▶ <https://bit.ly/37jLdse>.



What next?

Once you have finished scoping your plans for a telemedicine for care homes service for care homes, we recommend you review the available resources below to begin preparing for the implementation stage.

A telemedicine for care homes: a strategic implementation guide is available to support you through the next stage of your journey to mobilise your service ► <https://bit.ly/30aHBH4>.

Resources to support development and delivery of telemedicine services

There are a wide range of resources, implementation guidance and training packages already in existence to help the set-up and delivery of telemedicine services.

Here are a few useful websites:

Telemedicine for care homes models

- **Airedale NHS FT**
 - <https://bit.ly/2XVSnaO>
 - <https://bit.ly/3dXe3Bk>
- **Hampshire**
 - <https://bit.ly/2UEsFOh>

Digital links

- **NHS Digital**
 - <https://bit.ly/37p4b0B>
 - <https://bit.ly/3e8OUDX>
 - <https://bit.ly/30zgy8T>

Shared Care Records (CHIE)

- <https://bit.ly/30H2r1D>

Assessment of residents health

- **Distribution of the National Early Warning Score (NEWS) in care home residents paper**
 - <https://bit.ly/37nR1Rz>
- **RESTORE2™**
 - <https://bit.ly/2AYFzzR>
 - <https://bit.ly/3cUSuQx>

Anticipatory care planning

- **ReSPECT**
 - <https://bit.ly/30EPAwH>
- **ACP for residents with dementia**
 - <https://bit.ly/2MSFeRL>
- **Gold standards framework**
 - <https://bit.ly/3funU1Z>
 - <https://bit.ly/3fokL3H>
- **A framework for planning difficult conversations**
 - <https://bit.ly/3hmmDLV>
- **Training staff in how to have difficult conversations**
 - <https://bit.ly/30AbukP>

Mental Capacity Act

- <https://bit.ly/37vT9qA>
- <https://bit.ly/3cQF1sU>

Contributors

Annemarie Aburrow, Consultant Dietitian, Wessex Academic Health Science Network

Htwe Armitage, Project Manager, Transformation Team, Hampshire Hospitals NHS Foundation Trust

Sarah Bradburn, Chief Nursing Informatics Officer, University Hospital Southampton

Jackie Chandler, Programme Manager, Insight Team, Wessex Academic Health Science Network

Geoff Cooper, Programme Manager, Patient Safety Collaborative, Wessex Academic Health Science Network

Cheryl Davies, Programme Manager, Wessex Academic Health Science Network

John Duffy, Medical Consultant, Hampshire Hospitals NHS Foundation Trust

Dan Forster, Consultant Geriatrician, University Hospital Southampton

Marie Garrett-Marley, Nurse Facilitator, West Hampshire CCG

Beverley George, Nurse Facilitator, North Hampshire CCG

Joe Gregory, Communications Lead, West Hampshire CCG

Nadia Kuftinoff, Programme Co-ordinator, Innovation Adoption, Wessex Academic Health Science Network

Brian Martin, Technology Enabled Care Manager, The Hub, Isle of Wight NHS Trust

Kat McCulloch, Senior Communications Officer, Wessex Academic Health Science Network

Philippa Moran, Senior Programme Manager, Insight Team, Wessex Academic Health Science Network

Gina Nash, Transformation Manager, South Eastern Hampshire and Fareham and Gosport Fareham and Gosport CCG

Linda du Preez, Programme Co-ordinator, Wessex Academic Health Science Network

Naomi Ratcliffe, Project Director/Senior Programme Manager, Hampshire Hospitals NHS Foundation Trust

Susan Richardson, Nurse Facilitator, West Hampshire CCG

Nicki Rogers, Nurse Facilitator, West Hampshire CCG

Vicki Rowse, Senior Programme Manager, Wessex Academic Health Science Network

Don Shenker, Senior Project Manager, Health Innovation Network

Andrew Sibley, Programme Manager, Insight Team, Wessex Academic Health Science Network

Rebecca Wheeler, Senior Commissioning Manager, West Hampshire CCG



Wessex
Academic Health
Science Network



NHS
West Hampshire
Clinical Commissioning Group

The AHSN Network

NHS
Hampshire Hospitals
NHS Foundation Trust