

Managing Long Term Conditions

# Innovative telehealth solutions

Making best use of NHS resources

Improving quality of care and clinical outcomes



icp integrated care platform - interactive telehealth solutions from Tunstall Healthcare



All the reassurance you need

**Tunstall**

## What are the benefits of telehealth?

With appropriate clinical support, telehealth enables individuals to better manage their own long term condition effectively at home and can result in early diagnosis of unforeseeable health related problems as well as empowering patients to take a more active role in their care.

The available evidence from Tunstall's telehealth projects demonstrates:

- More effective management of long term conditions
- Increased medication compliance
- Improved self management
- Reductions in unplanned hospital admissions and A & E visits
- Efficiency gains from reduced nurse and GP visits and a more organised workload
- Increased capacity for case managers
- Reduction in demand on unscheduled care
- Savings across the health economy

*“Telehealth helps patients to monitor and understand their conditions and stay well and ultimately at home”*

Dr Marcus Van Dam,  
GP, NHS North Yorkshire and York

## Using telehealth to better support patients with long term conditions

There are currently 17.5 million people in the UK living with a long term condition<sup>1</sup> such as heart failure or COPD (Chronic Obstructive Pulmonary Disease) and by 2025 if trends continue about half of the population will be living with at least one long term condition<sup>2</sup>. The treatment of people with long term conditions currently accounts for 70% of the total health and social care spend in England<sup>3</sup>, and in order to be able to continue to deliver support to this growing cohort of patients, methods of service delivery and care pathways need to change to increase economic efficiency.

When embedded as part of system reform, telehealth has proven to be an enabler in transforming support for people with long term conditions, allowing their care to be managed in the community thereby reducing cost and improving outcomes.

Telehealth helps to support people with long term conditions by monitoring a patient's vital signs and symptoms from a distance, with the reassurance that if these exceed pre-defined parameters a clinician will be alerted and then be able to respond appropriately.

Tunstall's **icp integrated care platform™** comprises of a range of medical devices and software solutions which communicate to provide a full picture of a patient's wellbeing, providing clinicians with timely, accurate data to inform their decisions and support the delivery of community based healthcare.

Telehealth empowers patients to understand their condition and the effects their behaviour has on their health, enabling them to feel more in control. It also provides great reassurance to patients and their carers, reducing anxiety which in itself can improve symptoms.

Care pathways which include telehealth at the appropriate touch points optimise patient care and help to make efficient use of clinicians' time, allowing them to identify which patients are managing well and which need more support. Existing telehealth services show reduced unplanned hospital admissions and fewer visits to A&E for patients using the service.

<sup>1,3</sup> Improving the health and wellbeing of people with long term conditions - Department of Health report

<sup>2</sup> The Patient Perspective, General Medical Council, 2008

## Who is **mymedic** for?

The **icp mymedic™** telehealth monitor is designed to support those living at home with single or multiple long term conditions, including Chronic Heart Failure (CHF), COPD, diabetes, and hypertension. Up to date patient health data can lead to proactive decisions and timely interventions, whilst the patient benefits from an improved understanding of their health.

## How does it work?

On a regular basis, at a pre-set time, **mymedic** telehealth monitor alerts the user that it is time to conduct their health interview.

The **mymedic** health interview guides the patient, using its clear text display and audio announcements, through a series of measurements such as blood pressure, blood oxygen level and pulse and asks pre-set health interview questions.

The patient's health interview information is automatically transmitted to the **icp triagemanager™** clinical software for review and processing by health professionals. Any deviation outside the pre-set parameters will alert clinicians so that treatment can be modified, stabilising the patient's health. As data is collected over time, **mymedic** also supports trend monitoring, enabling early intervention.

**mymedic** telehealth monitoring provides health professionals with an insight into the patient's health whilst reducing patient anxiety levels and promoting self care.

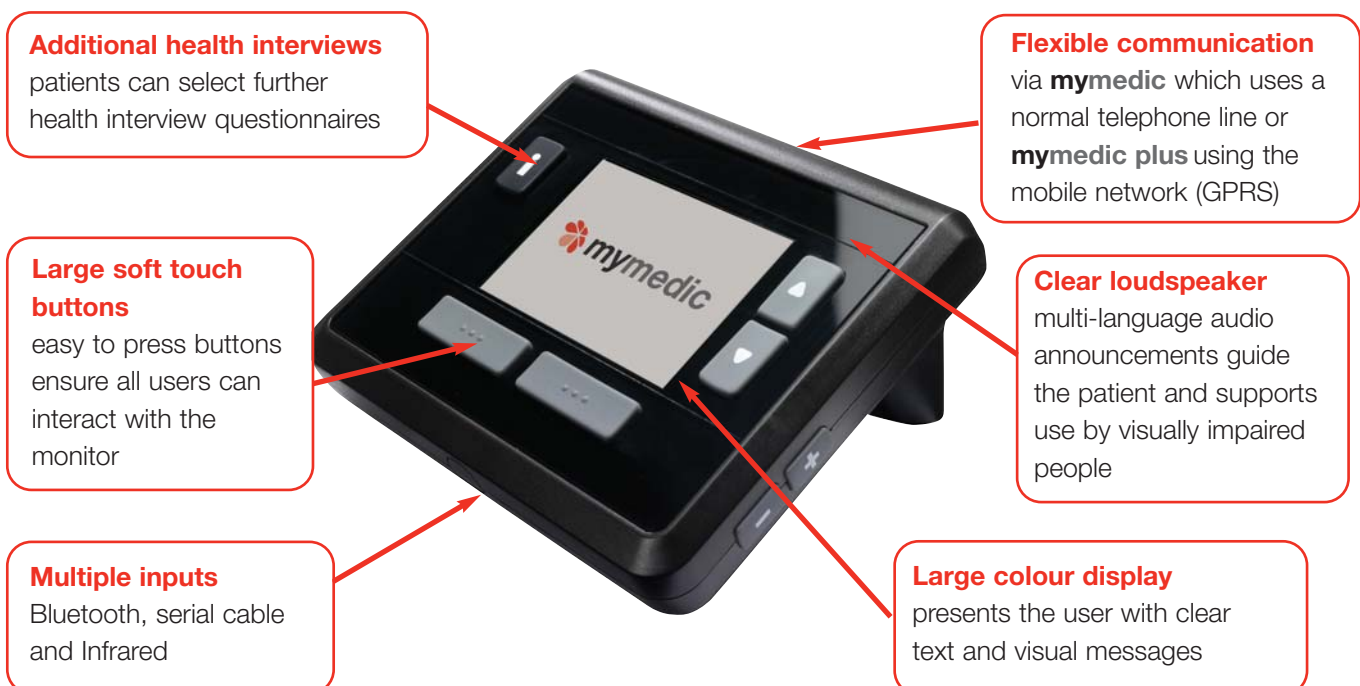
**mymedic** and **triagemanager** provide:

- Increased support for evidence based decision making
- Fewer unplanned hospital admissions and A&E visits
- Less inconvenience to patients.

## Key features

**mymedic** telehealth monitors are flexible and easy to use with the ability to tailor care delivery to each patients' needs.

- Vital sign and health interview sessions can be configured to collect vital signs measurements and data that are specific to each patient's needs
- Customisable patient self care advice and reminders using both a text and audio prompt at pre-set times
- Questionnaires for COPD, CHF, diabetes, hypertension and stroke, based on the NICE clinical guidelines and verified by health professionals
- Language support - the monitors can support a wide range of languages.



## Who is myclinic for?

**icp myclinic™** is a multi user solution which enables a group of patients within a common location (extra care facility or residential home for example) to participate in a telehealth programme. Patients have individualised monitoring plans, but share the use of a terminal and medical device peripherals.

**myclinic** provides a cost effective way of delivering telehealth services to a wider group of potential patients, enabling early intervention and preventative care.

Traditionally, residential care homes are associated with a high rate of non elective hospital admissions, and **myclinic** allows providers to deliver proactive and efficient care into a high resource demand community location.

## How does it work?

Each patient has a card with barcode, and placing this under the inbuilt barcode reader on the integrated PC/monitor gives access to their individual health interview.

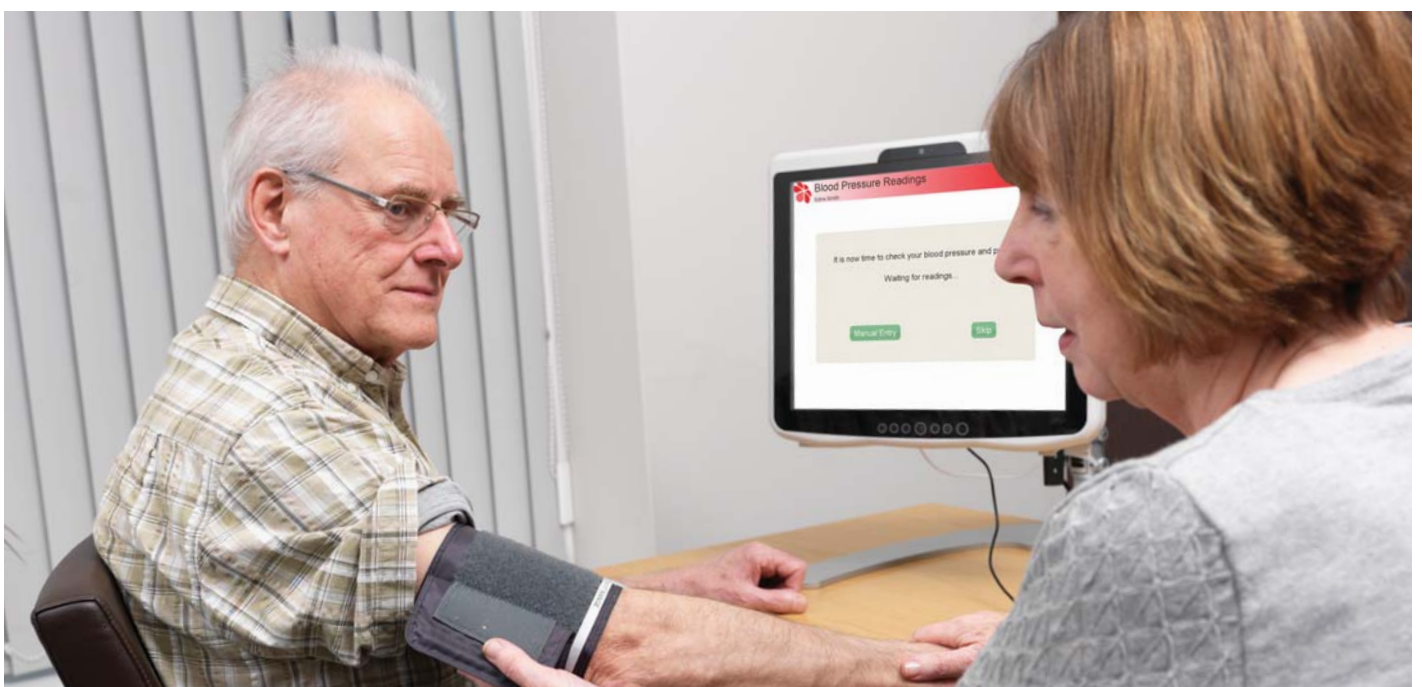
The patient or clinician can then take the patient's vital signs using the peripherals relevant to them and answer a series of tailored health questions using the touch screen monitor. This information is then transmitted to the **triagemanager** software in the same way as it is from **mymedic** units.

This proactive approach helps to reduce the need for visits to and by clinical staff, reducing the demand on the healthcare system and supporting people in a community setting. Telehealth can help to improve the quality of care by anticipating possible exacerbations before they occur, reducing non-elective admissions to hospital and addressing those patients who, without intervention, may become future high intensity users.

**myclinic** is supplied as a kit, which includes medical device peripherals with Bluetooth pairing – blood pressure monitor, weighing scale, thermometer, pulse oximeter.

## Key features

- Medical grade PC with GPRS link to **triagemanager**
- 17" touch screen displaying clear text and on screen buttons
- Trolley option available to enable the technology to visit the patient
- Manual data entry option enabling readings from other devices to be entered onto the system
- Barcoded patient ID card uses NHS Number / CHI Number / H&C Number to uniquely identify patient
- Additional configurable PIN code
- Patient driven mode and supervisor driven mode
  - Patient mode allows a patient to conduct a session independently
  - Supervisor mode allows a supervisor, manager, clinician to lead a session
- Supported in **triagemanager 1.2**
  - **myclinic** can be fully configured and updated remotely from **triagemanager** software
  - All patient data securely hosted in N3 environment



**icp triagemanager™** is the software solution which provides triage for patient data received from **myclinic** and **mymedic** units. Patients' readings exceeding parameters set by clinicians will raise an alert on the screen which can then be verified by monitoring centre personnel and forwarded to the relevant clinician for action if required.

**triagemanager** triages the health interview data by severity and prioritises care delivery through colour coding each patient to enable quick identification of patients most in need of attention, and flagging up incomplete or missing readings.

Health professionals with relevant access permissions can also access patient data remotely at any time to identify trends over time and keep in touch with patients status' between visits.

**Manage** - enables a quicker way to evaluate data and take proactive action by adjusting care provision.

**View** - the intuitive monitoring dashboard and reporting tool helps to easily view a patient's health data, providing real time data to accurately and promptly assess and triage the patient's health status.

**Share** - sharing of patient information with health professionals to ensure consistent and managed care.

**Scale** - designed for small, medium and large telehealth deployments, with no restrictions on size providing ability for rapid scalability.

**Audit** - the system provides a full audit trail and can generate management reports including service level compliance.

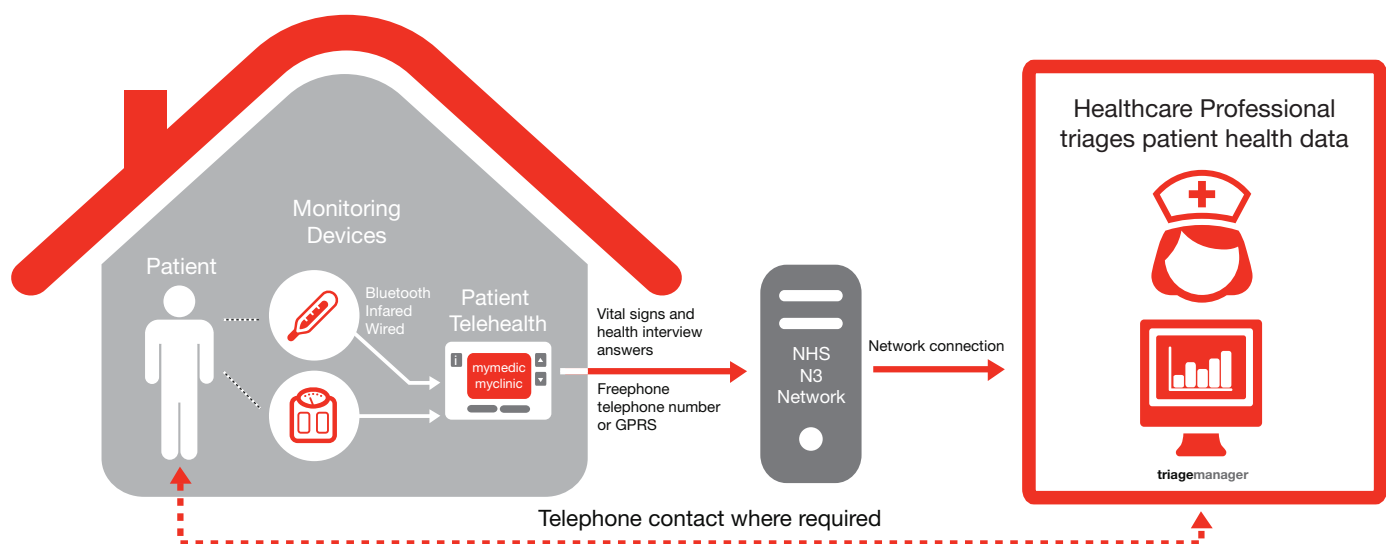
**IT** - as part of the Tunstall telehealth solution we provide an NHS approved managed data and networking service hosted within the N3 environment. This involves Tunstall managing the telehealth IT infrastructure which enables the receiving and routing of data from the **mymedic** and **myclinic** monitors and the provision of **triagemanager**.

Tunstall also provides a framework for managing workflows associated with delivering an efficient telehealthcare service. It is customised to the individual organisation and can automate specific tasks such as scheduling installations or preparing standard correspondence.

Tunstall's **icp gateway** is a portal which enables professionals using a telehealth service to access information and materials and make requests relating to that service online via a web browser, from either the N3 network or the internet.

## Key features

## How **mymedic**, **myclinic** and **triagemanager** work



## Case Study

Mr L is a 68 year old man with COPD and Type II diabetes, who is also hard of hearing. He lives with his wife who helps to care for him, and in the six months prior to the introduction of telehealth he was admitted to hospital seven times with an average stay of between three days and two weeks. He sometimes suffers with anxiety which exacerbates his illness and often found it difficult to distinguish between feeling anxious and a change in his condition.

Mr L was offered an **mymedic** unit, along with blood pressure cuff, thermometer, weighing scales and pulse oximeter. With the help of his wife he takes his readings everyday and answers the questions asked of him via the **mymedic**.

Should his readings exceed the parameters set for him, the local monitoring centre will call Mrs L and ask her to help her husband re-take his readings. If they remain outside of the limits agreed in his care plan, Mr L's Case Manager will be contacted and she can then log into the system to view the results. His Case Manager will then call Mr and Mrs L to talk to them about symptoms, and may advise additional medication or pay them a visit.

*"My husband had been in hospital seven times in six months, averaging from a few days to ten days. He would come home for a couple of days, and then everything was back on the treadmill again, and I would be travelling back and forth to the hospital and worrying about him.*














*But since we've had telehealth in, he hasn't been in hospital at all, so it's given me real peace of mind. I've got no anxious moments now, and his mind is at ease because he knows that he's got nothing to worry about - if there is any problem the telehealth people phone and ask me to retest. It's given us a new lease of life, the pair of us." Mrs L, wife and carer*

*"My anxiety levels have reduced and my confidence has really improved. I feel like I'm in control of my health for the first time in a long time." Patient*



Select **mymedic**, **mymedic plus** or **myclinic** monitor according to patient circumstances, then identify the appropriate package of peripherals and health interview questions for each patient.

 <b>mymedic</b> or  <b>mymedic plus</b> or  <b>myclinic</b>	 Blood Pressure Monitor	 Pulse Oximeter	 Thermometer	 Weighing Scales	 Peakflow Monitor/ Spirometer	 1 lead ECG	 Blood Glucose Meter	 Coagulation meter	Intelligent Health Interview
<p><b>COPD</b></p> <p>The core Chronic Obstructive Pulmonary Disease (COPD) package is designed to provide people with early onset of COPD with a health session</p>	•	•							•
<p><b>COPD+</b></p> <p>Designed for people with more severe COPD, building on the core COPD package</p>	•	•	•						•
<p><b>COPD Advanced</b></p> <p>Designed for people with severe COPD requiring breathing monitoring</p>	•	•	•		•				•
<p><b>CHF</b></p> <p>Designed for Chronic Heart Failure (CHF) patients that are at risk of or showing early signs of CHF</p>	•	•		•					•
<p><b>CHF+</b></p> <p>Designed to better monitor patients who experience Atrial Fibrillation. It indicates if AF was present at the time of taking the vital sign measurements, or whenever the patient feels an AF event</p>	•	•		•		•			•
<p><b>CDM</b></p> <p>The CDM (Chronic Disease Management) package is a general purpose telehealth solution which can be used for monitoring a range of long-term conditions</p>	•	•	•	•					•
<p><b>Diabetes</b></p> <p>*<b>mymedic</b> is compatible with a range of glucometers (not supplied)</p>	•	•					•		•
<p><b>Coagulation</b></p> <p>Designed for patients on Anti Coagulation therapy</p>								•	•

## Why Tunstall Telehealth Solutions?

Tunstall's many years of experience as the market leading telehealth provider means we can provide the support and resources to ensure telehealth is embedded into your service delivery pathways in the most effective way to maximise the benefits to patients and clinicians.

Tunstall also has experience of integrated social and health

partnerships, where joint funding and partnership working have delivered joined up telecare and telehealth projects.

Mainstreaming at scale is a complex process that requires innovative pathway redesign specific to your locality. Tunstall has the knowledge and expertise required to effect change management with you in order to

deliver a successful telehealth service. This can bring maximum benefits to you and your community in the shortest possible time frame.

If you would like to talk to Tunstall about telehealth then please contact your account manager on 01977 660479. Alternatively email [enquiries@tunstall.co.uk](mailto:enquiries@tunstall.co.uk)



[www.tunstall.co.uk](http://www.tunstall.co.uk)

Tunstall is a founder member of the Continua Health Alliance

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