



The forecast is for a winter of unprecedented pressure

The Tunstall remote patient monitoring and management platform is a comprehensive and versatile telehealth solution that can be deployed quickly and easily to help you protect vulnerable patients – and your staff

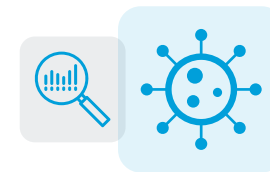


With forecasts of unprecedented pressure on the NHS this winter, the role of robust telehealth solutions has never been better recognised – nor the need for them more acute.

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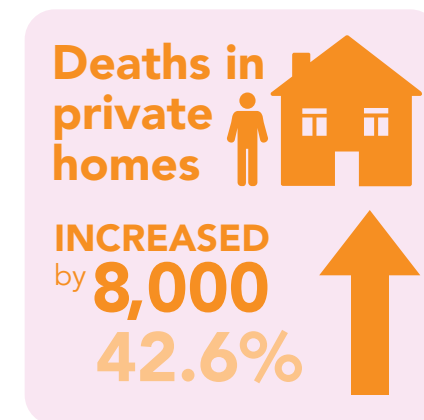
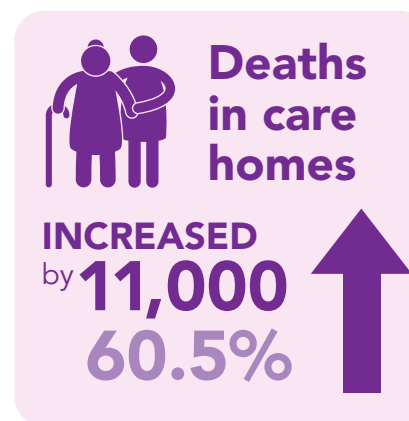
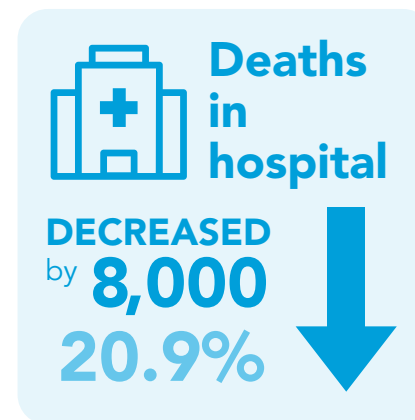
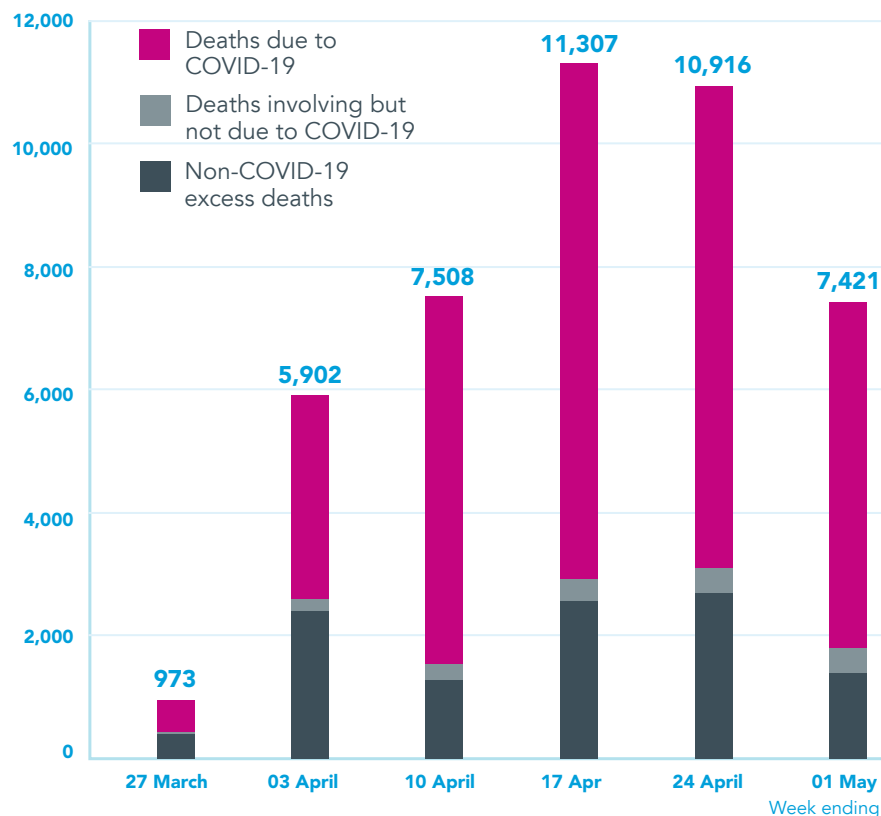
COVID-19 peak: what did we learn?



COVID-19 first peak – excess deaths

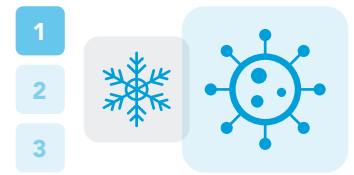
Weekly deaths above 5-year average in England and Wales

Source: Office for National Statistics – Analysis of death registrations



- During the peak of lockdown, a significant proportion of excess deaths in England and Wales were not from COVID-19 – possibly due to the lack of availability of routine care for long-term conditions and/or a resistance to seeking acute care.
- Increased deaths occurred not in the acute-care setting, but in the community – the majority in residential care homes.

Living with COVID-19 this winter: what should we expect?



When asked by the Government's Chief Scientific Advisor to look ahead to winter 2020/21, The Academy of Medical Sciences identified four serious challenges:¹

1



Rising cases of COVID-19
peaking in January/February 2021

up
to **119,000**
hospital deaths*

2

NHS disruption
caused by COVID-19



Reorganisation of staff, beds and services



The challenges of dealing
with non-COVID-19 patients

3



Backlog of routine care
NHS waiting lists could increase from

4.2 million
(pre-COVID-19)

to **10** million by
end of 2020

4



Winter flu season

is likely to coincide with
another wave of COVID-19

seasonal
flu led to **17,000**
excess deaths in 2017/18

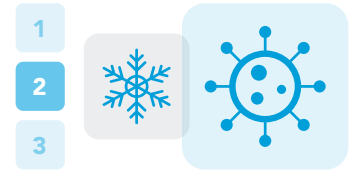
“

The UK must prepare now for another potential wave of COVID-19 this winter that could be more serious than the first. Combined with a growing NHS waiting list, the disruption to the delivery of care caused by the first wave of the coronavirus and the risk of a winter flu epidemic, this poses a serious risk to health. We do not have long to act...

* Worst case scenario, not accounting for new drugs/treatments/vaccines and assuming no lock-down as strict as March 2020



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'Long COVID' is now a recognised challenge – many survivors in the community require support and monitoring of physical or neurological symptoms²



More
than **95,000**
hospitalised in England
with COVID-19 – most have
been able to leave hospital³



Private homes



Care homes

“““

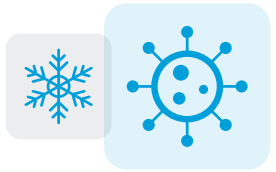
It is clear that for COVID-19 survivors, the virus and the treatment required to combat it will have a lasting impact on their health.³

1. Preparing for a challenging winter 2020/21. The Academy of Medical Sciences. July 2020. Available to download [here](#)
2. Greenhalgh T et al. Management of post-acute covid-19 in primary care. BMJ 2020;370:m3026. Available to download [here](#)
3. Aftercare needs of inpatients recovering from COVID-19. August 2020. NHS England publication reference 001559. Available to download [here](#)



Living with COVID-19 this winter: what should we expect?

1
2
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up to **119,000**
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It is clear that for COVID-19 survivors, the virus and the treatment required to combat it will have a lasting impact on their health.³



There is increasing awareness of the negative impact of COVID-19 on mental health and wellbeing^{4,5}



People with
LTCs nearly **2x**
as likely to report
having difficulty coping*⁴

46% worry
about
exacerbating
existing mental
health conditions⁴



The Centre for Mental Health recommends **proactive mental health support**⁵ for specific groups, including:



Those with
existing mental
and physical
health conditions



Those treated
for COVID-19
in ICU

“““

Additional mental health support is also needed for people with long-term physical and neurological conditions whose mental health has worsened during the pandemic.⁵

LTC: Long-term condition

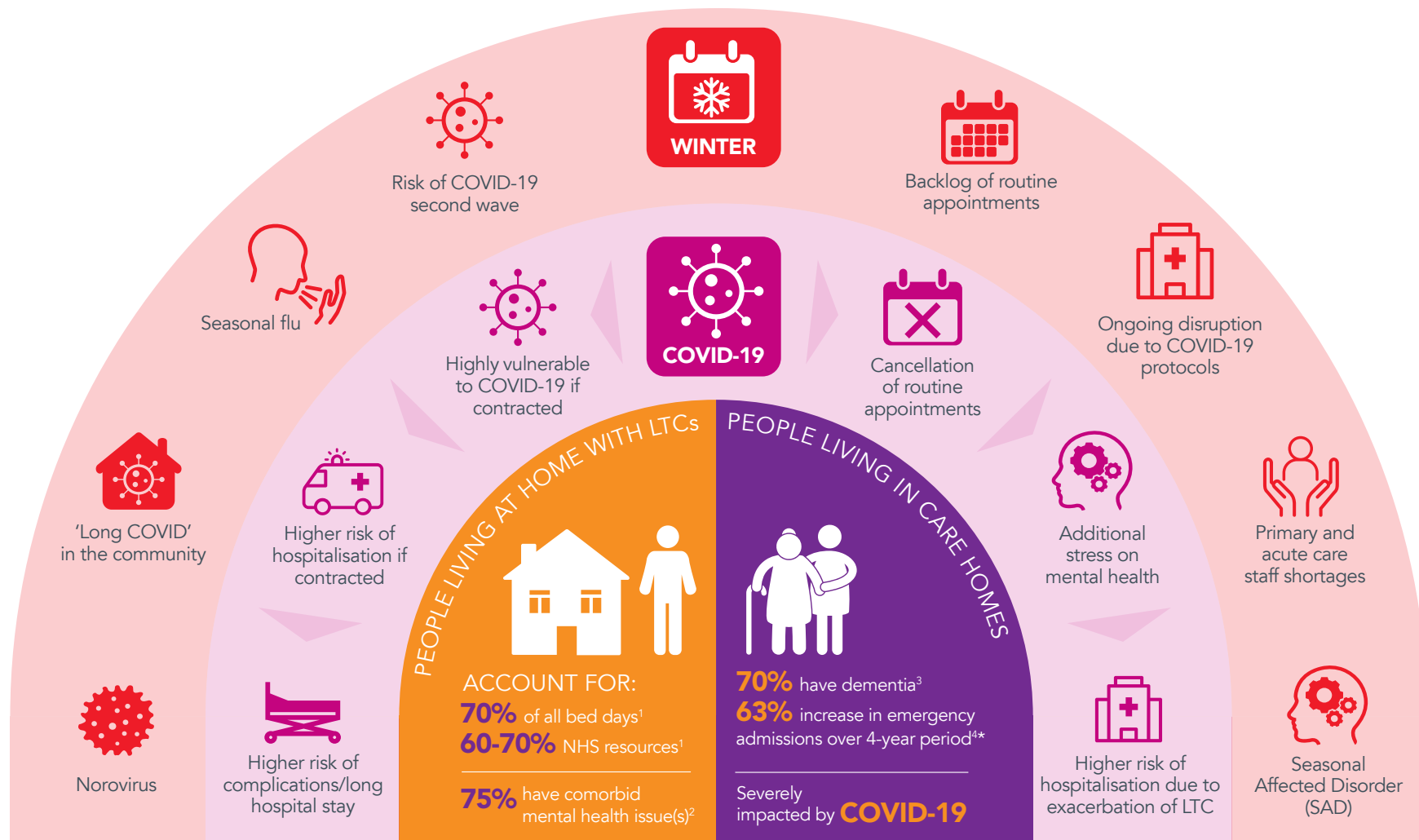
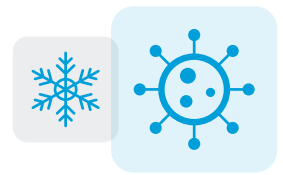
* Compared to the overall population (26% vs 14%)

1. Preparing for a challenging winter 2020/21. The Academy of Medical Sciences. July 2020. Available to download [here](#)
2. Greenhalgh T et al. Management of post-acute covid-19 in primary care. BMJ 2020;370:m3026. Available to download [here](#)
3. Aftercare needs of inpatients recovering from COVID-19. August 2020. NHS England publication reference 001559. Available to download [here](#)



4. The Mental Health Foundation Report: Coronavirus - divergence of mental health experiences during the pandemic. Available to download [here](#)
5. Centre for Mental Health Briefing: Covid-19 and the nation's mental health. July 2020. Available to download [here](#)

The NHS will face unprecedented layers of pressure this winter

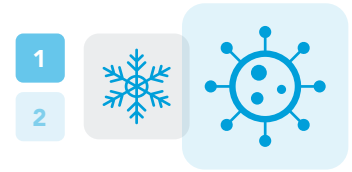


*from 13,906 in 2010/11 to 22,682 in 2014/15

People living at home with long-term conditions and those living in residential care already constitute a major challenge for the NHS. The pressures of COVID-19 have increased their vulnerability. It is likely that winter 20/21 will do so further.



A COVID-19 winter: a compelling case for telehealth



Telehealth programmes that enable remote patient monitoring protect the wellbeing of vulnerable patients without the need for face-to-face contact with primary or secondary care teams. They are proven effective for:

- Improving outcomes in patients with long-term conditions, empowering them to take responsibility for managing their care and reducing the risk of emergency hospitalisations
- Monitoring at-risk patients in the community for physical or mental health issues
- Enabling faster discharge of patients from hospital and reducing the risk of readmission by providing continued monitoring and management in the community



“““

The use of Digital Health Technology to support patients is a key part of the novel coronavirus (COVID-19) standard operating procedure: Community Health Services.

Vicki Slade

Digital Health Lead, Cornwall
Partnership NHS Foundation Trust



“““

This remote monitoring approach is helping us during the pandemic, but will also enable us to provide more proactive care over the longer term, improving the wellbeing of residents and helping to reduce the pressure on primary and secondary care.

Joanne Dorsman

Bolton NHS Foundation Trust



“““

Remote patient monitoring appears to be an effective approach for managing COVID-19 symptoms at home.¹



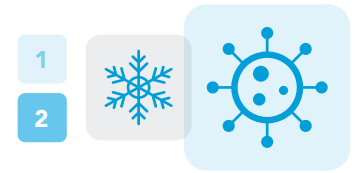
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This program provided a safe and satisfying experience for patients while minimizing COVID-19 exposure and in-person healthcare utilization.¹



Telehealth with remote patient monitoring improves outcomes and drives efficiencies in the management of patients with long-term conditions living at home or in care. It is now also being successfully used to monitor vulnerable patients for signs of infection and to manage those infected with COVID-19 in the primary-care setting.¹

A COVID-19 winter: a compelling case for telehealth



The Government has announced an additional £588 million, available to CCGs via the NHS until 31st March 2021, to help cover the cost of recovery and support services for up to six weeks following discharge from hospital.¹

HM Government

NHS

Hospital Discharge Service Requirements

CCGs & LOCAL SYSTEM COMMISSIONERS

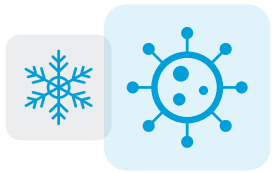
What will I do differently?

- You will expand the use of telecare and telehealth where possible.
- Support greater use of personal health budgets and individual service funds to support mainstream care at home, provided by directly employed carers.

Graphic adapted from: *Hospital discharge service requirements: action cards for staff.*
Available to download from <https://www.gov.uk/government/publications/hospital-discharge-service-action-cards>¹



A COVID-19 winter: a compelling case for Tunstall



Trusted by providers and patients around the world and successfully used by NHS Trusts for a variety of needs, Tunstall offers a proven, easy-to-use and versatile telehealth solution with remote patient monitoring (RPM) and management.

While many systems look at individual conditions, Tunstall's RPM platform can be personalised to monitor underlying health issues with complex comorbidities – and has the flexibility to incorporate screening for any emerging risk to physical and/or mental wellbeing.

Backed by our experienced UK-based Workflow Consulting Team, dedicated programmes can be developed and deployed quickly, and scaled and adapted responsively according to clinical need, seasonal and environmental risks, and technological innovation.



Class 1
Medical
Device



Tried and trusted platform



informed by insights and learnings from over

12 countries and
10,000 users
(patients and clinicians)

Effective in monitoring and management of vulnerable patients:



- Long-term conditions (LTCs)
- Complex comorbidities
- Infection risk



Workflow consulting, system integration and ongoing support

from our experienced clinical and technical teams



Personalised, holistic solutions

monitor overall patient wellbeing rather than a single condition



Versatile, scalable and responsive

Tunstall's RPM platform can be deployed rapidly with remote updates that are quick and easy to implement



You can be confident in the proven Tunstall remote patient monitoring and management platform – and there is still time to implement a programme to support and protect your patients and staff this winter.



Tunstall

The Tunstall remote patient monitoring (RPM) and management platform



At the heart of the Tunstall RPM platform is **Triagemanager™** – a world-leading, clinical triage system that effectively stratifies risk and prioritises NHS Trusts' resources and action across any combination of existing or potential physical and mental-health conditions.

The Tunstall RPM platform

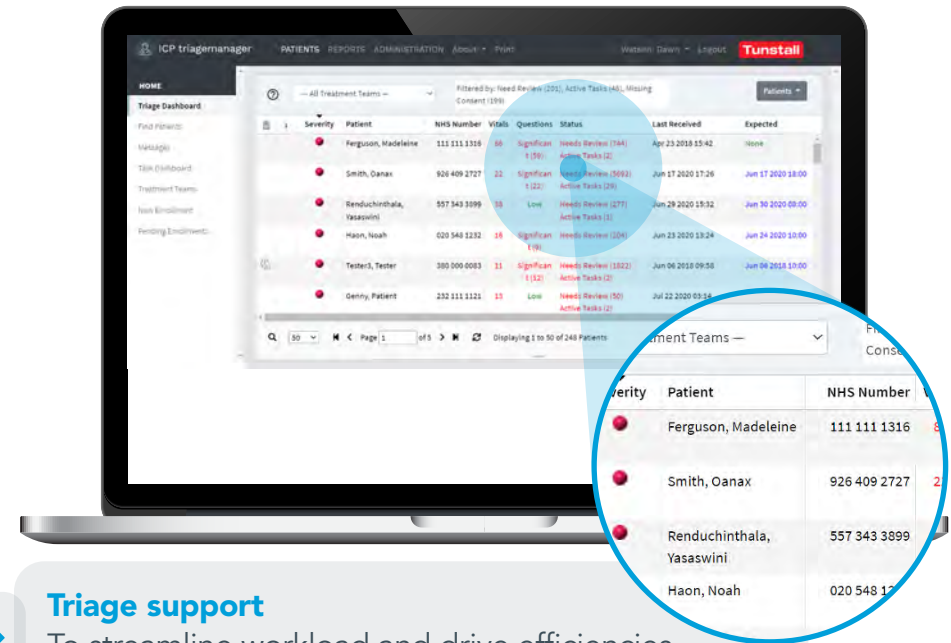


Triagemanager™



Triagemanager enables remote monitoring, risk stratification and management of patients by your clinical and service teams with:

- Customised or pre-approved questionnaire templates for:
 - Long-term conditions such as COPD, asthma, heart failure and diabetes
 - Existing or potential physical and mental comorbidities
 - Symptoms of infection (COVID-19, seasonal flu, norovirus, other)
 - Recovery of patients discharged into the community after hospitalisation
 - Mental health conditions, including eating disorders and loneliness
- Traffic-light prioritisation system that triages patients, enabling users to identify those most in need of intervention
- Video-conferencing and bi-directional messaging to allow direct communication without the need for face-to-face contact
- Library of educational content that can be selected and made available to patients to improve their awareness and responsibility for self-management



Triage support

To streamline workload and drive efficiencies, Tunstall can complete technical triage to understand missed readings or lost contact from patients

New questionnaire templates for customisation include:

Monitoring mental wellbeing of patients



Monitoring for COVID-19 symptoms



Monitoring recovery of COVID-19 survivors



Monitoring for seasonal flu symptoms



Pre COVID-19

COVID-19 first peak

Living with COVID-19

People with long-term conditions (LTCs)

ACCOUNT FOR:

70%
of all bed days¹

60-70%
NHS resources¹

75%
have comorbid
mental health issue(s)²



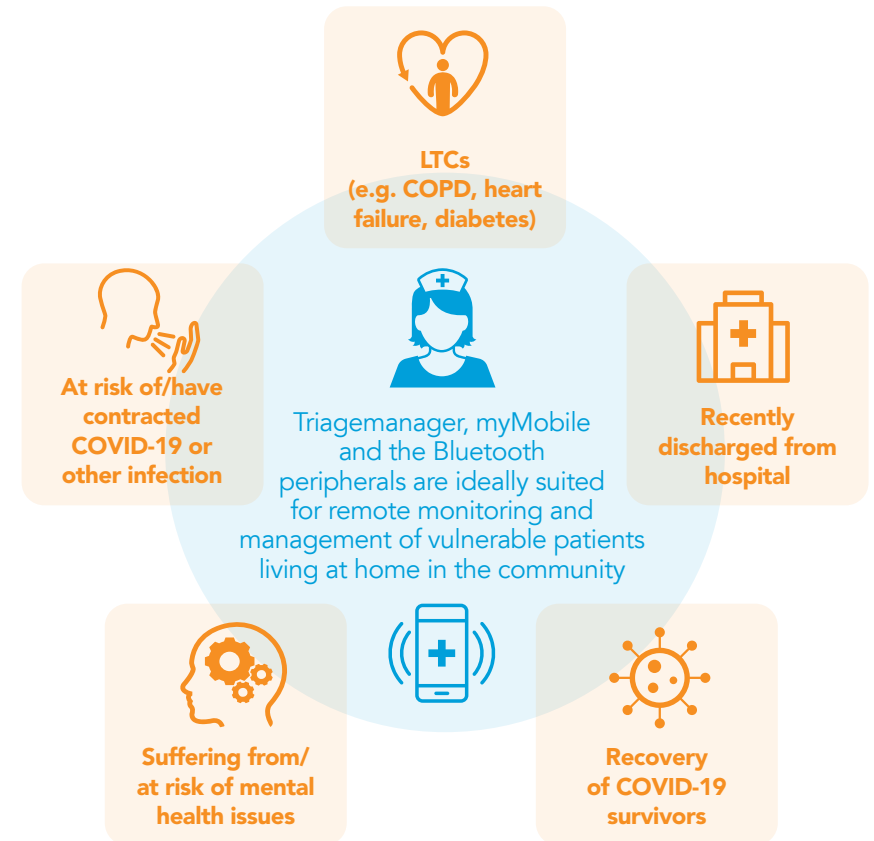
**During lockdown,
deaths in
private homes**

INCREASED
by **8,000**³
42.6% ↑
vs 5-year average

Cornwall Partnership NHS Foundation Trust

extend their use of the
Tunstall RPM platform
to include children with
eating disorders.

**VIEW
CASE STUDY**



1. Unlocking the power of information smart guide to engagement. Available to download [here](#)

2. NHS England website: www.england.nhs.uk/mental-health/adults/iapt/mus

3. Office of National Statistics Report: Analysis of death registrations not involving coronavirus (COVID-19), England and Wales: 28 December 2019 to 1 May 2020. June 2020. Available to view [here](#)



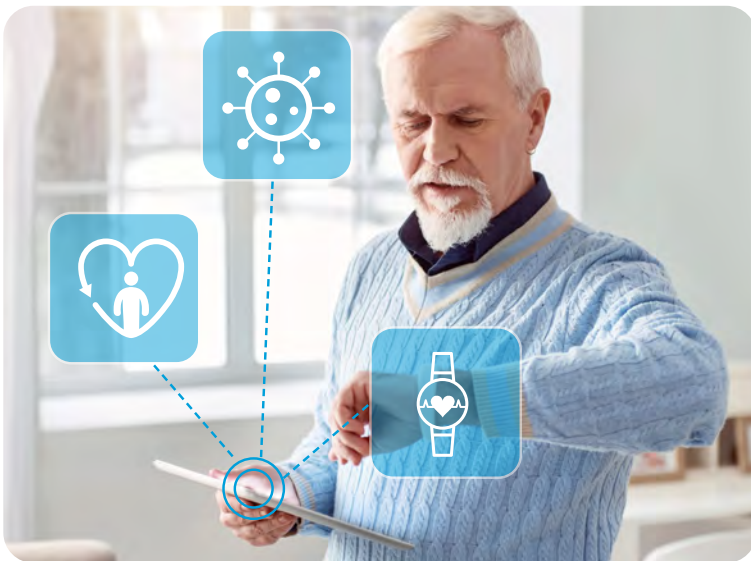
myMobile

single-user app developed for individuals in the community



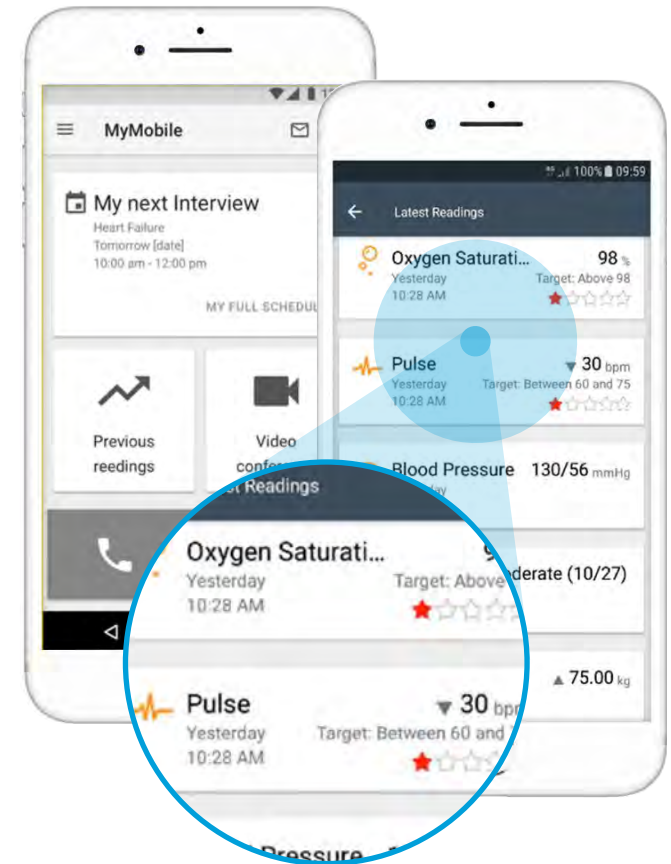
myMobile is an easy-to-use and intuitive app that enables patient engagement in the management of long-term conditions, comorbidities and risk factors.

- Versatile, easy-to-adopt system that uses:
 - Patient's own device(s) or supplied tablet to host the app
 - Patient's own smart watch or supplied best-in-class peripherals to record vital signs
- Customised health questionnaires that capture clinical and other wellbeing information not recorded by peripheral devices
- Video-conferencing and bi-directional messaging to allow direct communication without the need for face-to-face contact
- Educational content and engagement in recording relevant measures encourage patient awareness of factors impacting their condition and increased responsibility for self-management



No Wi-Fi required

myMobile is supported by Android OS and iOS devices and operates with 3G, 4G or Wi-Fi connectivity



Personalised, holistic solutions

Single app monitors overall patient wellbeing rather than single condition



Pre COVID-19

COVID-19 first peak

Living with COVID-19

People living in care homes

Over **425,000** elderly and disabled people are in **residential care** in the UK¹

Over **405,000** are aged **65+**¹



70%

have dementia²



There was a **63%** increase in emergency admissions from care homes over 4-year period^{3*}



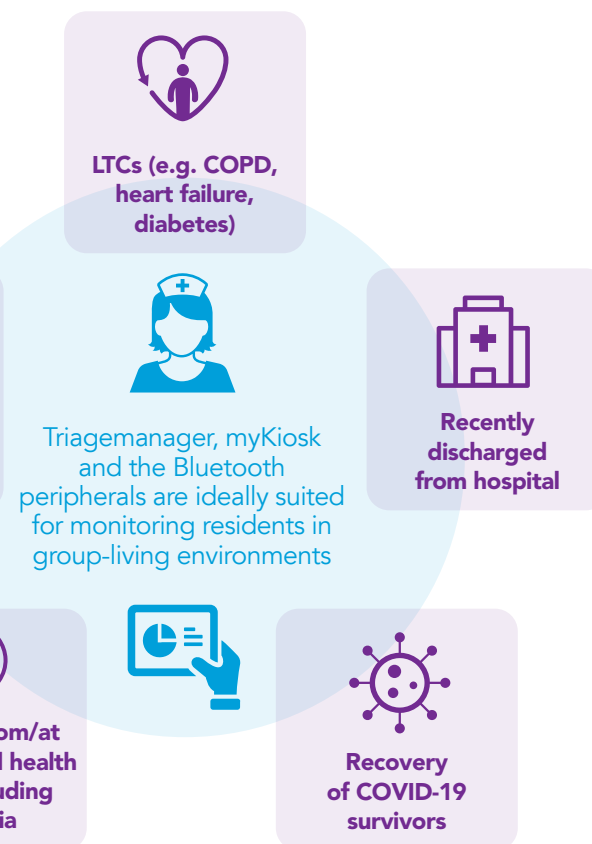
During lockdown for COVID-19, deaths in care homes **INCREASED** by **11,000**⁴ **60.5%**



Bolton NHS Foundation Trust

deployed myKiosk programme into care homes with the Admission Avoidance Team monitoring residents via Triagemanager.

VIEW CASE STUDY



*from 13,906 in 2010/11 to 22,682 in 2014/15

myKiosk

multi-user app developed for group-living environments, such as care homes



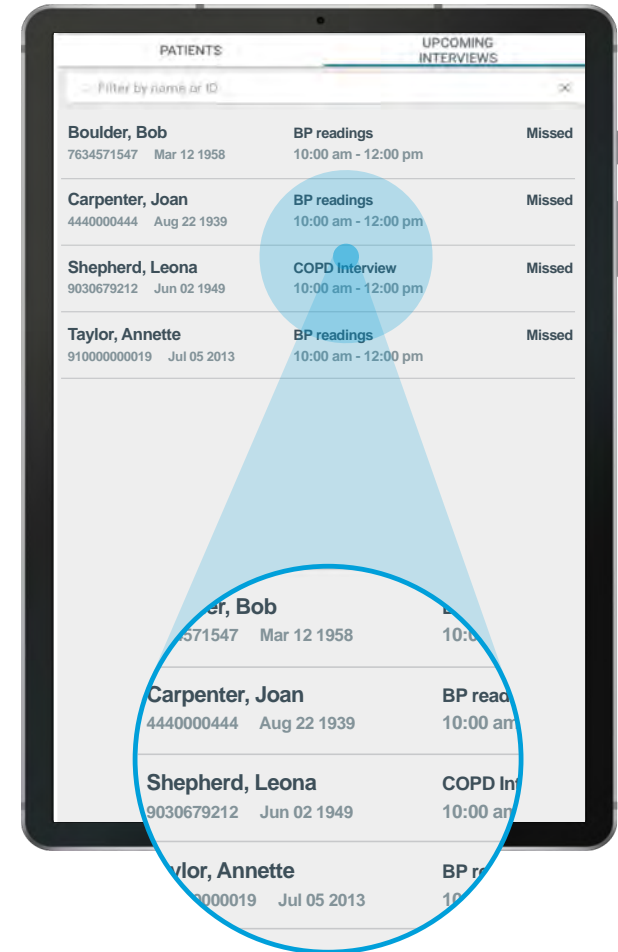
myKiosk is an intuitive multi-user app, specifically designed to monitor residents in group-living environments, and ideal for use in care homes. It is well established that care-home residents are particularly at risk from seasonal infections, and that the impact of COVID-19 has been devastating on this vulnerable population.¹

- Staff gain increased awareness of residents' health after training on best practice for managing infection risk, with an easy-to-use app that records:
 - Vital signs from Bluetooth-enabled monitoring devices
 - Observations from other questionnaire-based health measures
- Data is automatically transmitted to Triagemanager, where the level of risk and need for intervention are assessed by clinical staff without the need for face-to-face contact, and potentially reducing the need for acute-care admissions
- Data is also collated for the home, providing a clear picture of each resident's health as a valuable reference for discussion with other medical professionals, such as GPs



No Wi-Fi required

myKiosk is supported by Android OS or iOS devices (supplied by Tunstall or by the home) and operates with 3G, 4G or Wi-Fi connectivity



In a Good Practice Guide published by the British Geriatric Society, *Managing the COVID-19 pandemic in care homes*, key recommendations include training staff in measurement of temperature and other vital signs to facilitate triage and prioritisation of resources.¹

Key recommendations

1. Care homes should have in place standard operating procedures for individual residents with suspected and confirmed COVID-19 infection, including appropriate infection control precautions to protect staff and residents.
2. Care home staff should be trained to check the temperature of residents displaying possible signs of COVID-19 infection.
3. Where possible, care home staff should be trained to measure other vital signs including blood pressure, heart rate, level of consciousness, new confusion, pulse oximetry and respiratory rate. This will enable external healthcare practitioners to triage and prioritise support of residents according to need.
4. All staff working with care home residents should recognise that COVID-19 often presents atypically in this group. An isolate and test approach, e.g. on the side

Graphic adapted from: *Managing the COVID-19 pandemic in care homes*¹

Tunstall support



It is estimated that 80% of technology projects in healthcare fail – one of the key reasons being the challenge of integrating technology into clinical workflows.¹ With Tunstall, you have the support of our clinical and technical teams to ensure rapid deployment as well as smooth integration and uptake of programmes that are precisely matched to your needs.

Clinical consultation

Our clinical team will work with you to define precisely the questionnaire(s) are required for your patient population



Implementation support

Facilitates rapid deployment and integration of new workflows and processes

- Project management
- Software implementation
- Supply of tablets and best-in-class peripherals as required



Education

Helps drive adoption and improves skill levels, knowledge, morale and productivity of staff

- Clinical and operational training
- Clinical champion education



Workflow consultation

As clinical and operational workflows change, we will work with you to optimise staff and system productivity and enhance the user experience



Triage support

To streamline workload and drive efficiencies, Tunstall can complete technical triage to understand missed readings or lost contact from patients



Technical support

Reduces unplanned downtime and enhances usability throughout lifecycle

- Multi-level managed services and support





Case study: Remote patient monitoring for eating disorders using myMobile and Triagemanager™

The challenge

Children with eating disorders would normally receive clinic-based care, but with the onset of the COVID-19 pandemic, an alternative approach was needed.



Background

Cornwall Partnership NHS Foundation Trust has a well-established Digital Health Service which provides remote patient monitoring to patients with respiratory and cardiac conditions using Tunstall Triagemanager and myMobile.

The Trust's eating disorder service offers treatment and support to children over the age of 11 with a range of eating disorders including Anorexia Nervosa, Bulimia Nervosa and Restrictive Eating Disorder. The normal care pathway includes children attending clinics for monitoring of their vital signs and symptoms, however, due to the pandemic and the risks to patients and staff, this was no longer possible.

What we did

Tunstall worked with the Trust to introduce remote patient monitoring, using the myMobile app and Triagemanager software. A special health interview was developed in conjunction with the Tunstall Clinical Team, based on the Junior MaRSiPAN (Management of Really Sick Patients with Anorexia Nervosa) risk assessment framework. Once a week, patients use devices to take their vital signs (blood pressure, weight and temperature) and answer symptom-related questions. Through a patient dashboard and alert system, Triagemanager enables clinicians to monitor progress and prioritise patients for intervention.



Results

32* high-risk caseload patients have already been referred, and feedback from clinicians is very positive. Outcomes are expected to include:



REDUCED
hospital
admissions



EARLY
intervention

INCREASED

wellbeing of patients and families as stress of exposure to infection eliminated...



...while maintaining monitoring and management of eating disorder

IMPROVED
self-management



INCREASED
concordance
(with medication)

“

The children we support are extremely vulnerable, and any delay or interruption to the treatment they receive could have serious implications for their recovery. Being able to deploy a solution so rapidly to enable us to continue helping them has been a real relief; it's been amazing just how quickly we've been able to adapt.

Michele Boyce Service Lead Nurse, Kernow Health

* Figure correct as of May 2020

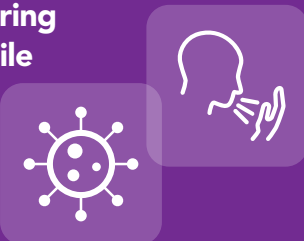




Case study: Safeguarding care home residents and professionals using myKiosk and Triagemanager™

The challenge

Care-home residents are at particularly high risk during the COVID-19 pandemic. Bolton NHS Foundation Trust and Bolton Clinical Commissioning Group needed a way of delivering quality care while minimising the risk to residents and staff.



“

The COVID-19 crisis meant it became critical to look at ways we could use technology to deliver more care without face-to-face contact. We have accelerated the transformation of our model of care, and the aim is to change working practices for the long term, improving outcomes using technology and multi-disciplinary teams.

Paul Beech Head of Strategic Commissioning, Bolton Clinical Commissioning Group

What we did

The Tunstall team worked with care-home staff to train them on the system and to measure vital signs using Bluetooth-enabled peripheral devices.

34* care homes in the area have been provided with tablets loaded with myKiosk, along with peripheral medical devices



Thermometers



Pulse oximeters and blood pressure monitors



Staff use the myKiosk tablet to record residents' vital signs and help them to answer questions about their health and symptoms using the touch screen. The information is then monitored via Triagemanager, and results which breach the parameters set for that patient raise an alert. This enables Advanced Nurse Practitioners to review the data and make an informed decision regarding next steps in the patient's care.

Results

The Tunstall Triagemanager and myKiosk system is enabling closer monitoring of vulnerable residents; care-home staff have been upskilled and the need for clinical staff attendance has been reduced. It is also helping clinicians to prioritise residents' care, as the system clearly identifies those most in need of interventions.

The success of the programme will be measured over time, with metrics such as reduced ambulance call-outs, resident outcomes and the impact on caseload management.

“

The systems give us objective information to support effective clinical decision-making. This remote monitoring approach will help us during the pandemic, but will also enable us to provide more proactive care over the longer term, improving the wellbeing of residents and helping to reduce the pressure on primary and secondary care.

Joanne Dorsman Bolton NHS Foundation Trust

* Figure correct as of May 2020

Summary



This winter will be challenging, but there is still time to protect vulnerable patients and your staff with the Tunstall remote patient monitoring and management platform that is trusted around the world to ensure quality care.

Class 1
Medical
Device

Tried and trusted platform

with clinical algorithms informed by insights and learnings from over

12 countries and 10,000 users
(patients and clinicians)



Workflow consulting, system integration and ongoing support

from our experienced clinical and technical teams



Versatile, scalable and responsive

The Tunstall RPM platform can be deployed rapidly with remote updates quick and easy to implement



Personalised, holistic solutions

monitor overall patient wellbeing rather than a single condition



Funding for CCGs available now

until March 31st 2021 to invest in telehealth



The Tunstall RPM platform



myMobile
single-user app



Triagemanager



myKiosk
multi-user app

Contact us for more information

call: **01977 660206**

email: **Hello@tunstall.com**

or talk to your local account manager



Tunstall

About Tunstall

Tunstall has been at the forefront of technology innovation for the health, housing and social care markets for over 60 years. Its pioneering software, hardware and services enable new delivery models which can transform services across the care continuum, and empower people to live independently and with an improved quality of life.

Tunstall works with social care providers, healthcare services, housing and retirement living providers and charities in 38 countries, improving the lives of more than five million people, including those living with dementia, learning disabilities, physical disabilities and long-term health conditions.

Tunstall's innovation-led, person-centred Connected Care and Health solutions connect people and integrate services, enabling early intervention to avoid or mitigate adverse events, and improve outcomes. As technology advances, we have the capability to not just react to events, but to predict and even prevent them using data-driven insights. The Tunstall Cognitive Care approach can help to create intelligent, personalised care programmes and effectively allocate resources, making sure those in need have the right levels of support and reassurance.

Our policy of continual development means that product specification and appearance may change without notice. Tunstall does not accept responsibility for any errors and or omissions contained within this document. This document should not be relied upon for product details, and reference should be made to current specifications.

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The Tunstall logo, consisting of the word "Tunstall" in white, bold, sans-serif font, centered within a red rounded rectangle.