



Connected Health

Strategic, innovation-led digital health solutions for now and in the future

Revolutionising connected health

For over 60 years, Tunstall Healthcare has pioneered the use of technology to improve positive outcomes across health, housing and social care.

The facts:

47% increase expected in Europeans over age 60 with dementia between 2020-2030

86% of US health expenditure is on patients with chronic health conditions

Co-morbid mental health problems cost at least **45%** more for each person with a long-term condition

By adopting a digital, patient-centred approach, it is possible to:

- Reduce pressure on the health and social care system
- Explore new models of care which connect health, care and housing sectors around the individual
- Enable more proactive and preventative approaches to healthcare
- Embrace technology and accelerate data-enabled innovations

A recent study in England* identified that if we could delay institutionalisation by just **12 weeks** on average through digital engagement, this would free up approximately **6 million** bed days with close to **£500 million** of capacity released.

* NHS Demand Management from Care Homes, Tunstall 2018



Delivering health and care differently

At Tunstall, our vision is to empower people through interconnected, preventative and proactive care to continue to live as independently, healthily and securely as they are able, in the most appropriate location.



Patient-centred healthcare solutions

Tunstall supports patients in the community by helping manage long term conditions with remote patient monitoring and administrative clinical support. We deploy medically approved devices that generate accurate, actionable and clinically reliable data, supported by a set of flexible managed services.



Transforming health by connecting cycles of care

Tunstall's approach to remote care and health monitoring using digital technologies, has proven to:

- Keep patients out of hospital for as long as possible
- Improve the quality and efficiency of care
- Reduce costs



A proven track record in connected health

- 60 years of experience – a strong brand and trusted reputation
- Nearly 3,000 employees across 17 countries
- 1.4 million end clients directly monitored from Tunstall's 15 response centres around the world



Unique capabilities to deliver Connected Health

With experience in supporting the health, housing and social care sectors around the globe, we can connect patients and carers, integrate devices and monitor wellbeing to enable better informed clinical decisions.

Responding to Healthcare Challenges



A patient-centred approach

Through a range of interconnected devices and platforms, we are able to put people at the centre of their care. Our aim is to care and maintain an individual's normal health range. Using connected health solutions, multi-disciplinary health and care teams can establish health goals and implement management strategies tailored to the individual to provide the most appropriate and efficient level of care.

Connected Health Conditions

Using the latest digital technology, our solutions help manage long term medical conditions including COPD, Diabetes and Dementia. In both community and clinical settings, our remote patient monitoring and data capture abilities help to provide efficient, high quality care and maximise clinical capacity across:

- Chronic Disease Support
- Complex Care Management
- Transitional Care

Find out how we have achieved a...

44% decrease in emergency admissions, ↓

106% increase in uptake of home dialysis ↑

and a **59%** decrease in cost of care on **page 11**.

<p>Apps and Software</p> <ul style="list-style-type: none"> • MyMobile • ICP Triage Manager • ICP Suite • BYOD 	<p>Assistive Technology</p> <ul style="list-style-type: none"> • Personal monitoring devices • Medical peripherals • Environmental sensors & controls 	<p>Workflow Consulting</p> <ul style="list-style-type: none"> • Clinical workflow assessments & design • Change management • Education 	<p>Managed Services</p> <ul style="list-style-type: none"> • Tele-assistance & triage services • Technical service management • Patient access centres
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Professional Services: Programme Design, Project Management & Implementation

Data Management & Analytics



Apps and software

Tunstall provides a range of intuitive, user-friendly apps and software designed to support stakeholders within the healthcare process.

MyMobile

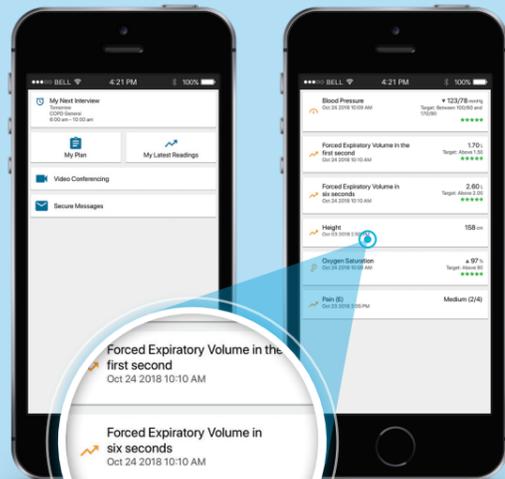
An intuitive patient app that runs on approved mobile and tablet devices which enables self-management and monitoring. The app collects data from connected monitoring devices on vital signs and health questionnaires for other clinical information. It provides automated alerts and activity reminders for improved adherence to protocols, as well as bi-directional messaging and video conferencing for clinical interaction.



User:
Patients



Platform:
Smartphone and tablet app



Forced Expiratory Volume in the first second
Oct 24 2018 10:10 AM

Forced Expiratory Volume in six seconds
Oct 24 2018 10:10 AM

Height
Oct 03 2018 2:50 PM

ICP Triage Manager

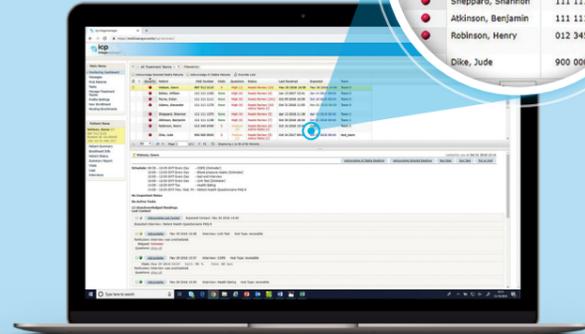
Our software platform enables clinical and service teams to monitor patients remotely. An automated prioritisation tool and traffic light system helps clinicians triage cases requiring urgent investigation. The system allows secure transfer of messages, educational content and customisable question trees to support communication with patients and displays historic data and trend graphs to support data-driven clinical decision making.



User:
Clinicians



Platform:
PC software



Severity	Patient	NHS Number	Vital Signs
High	Watson, Dawn	987 512 3123	...
Medium	Bolton, William	111 111 1162	None
Low	Payne, Dylan	111 111 1111	None
Low	Adams, Alexander	111 111 1170	None
Low	Sheppard, Shannon	111 111 1375	None
Low	Atkinson, Benjamin	111 111 1138	None
Low	Robinson, Henry	012 345 6789	None
Low	Dike, Jude	900 000	None

MyCare

Tunstall extends the capabilities of MyMobile to carers, family and friends providing peace of mind and the ability for them to help in the management of long term health conditions. They can view current and historic readings and access appointment booking and concierge services.



User: Carers, friends and family



Platform: Online portal



Oxygen Saturation
92 %
10/31/2018 13:30
Target: N/A
Low: 92 %
High: %

MyReports

Operational management portal MyReports, offers configurable, customisable reports for audit and compliance, as well as providing data for clinical management and improving operational efficiency. Automated reporting reduces administration time and structured data extracts are compatible with internal business intelligence platforms for analytics and insights.



User: Clinical management



Platform: Online portal



Patient Video Conference Duration Report

MyServices

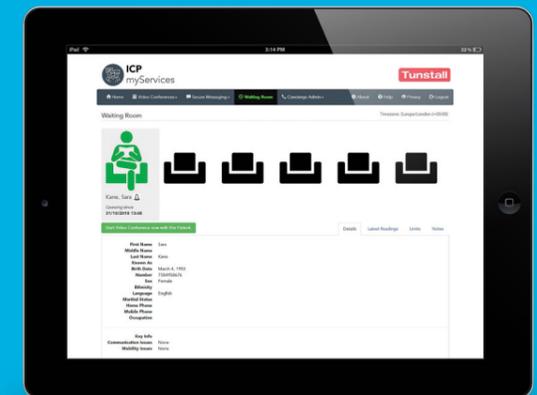
Providing a seamless bridge between MyMobile and ICP Triage Manager is the MyServices video conferencing app. Useful functionality includes the ability to create a video conferencing service which increases engagement and reduces appointment no shows.



User: Patient and clinicians



Platform: Online portal



Assistive Technology

Tunstall has a rich history of over 60 years developing alert and monitoring devices. We understand the importance of seamlessly integrating devices both into each customer's IT infrastructure and into a patient's daily routine. Tunstall integrates best-of-breed 3rd party assistive devices and platforms to capture data and aid the proactive management of long term health conditions.



Workflow Consulting

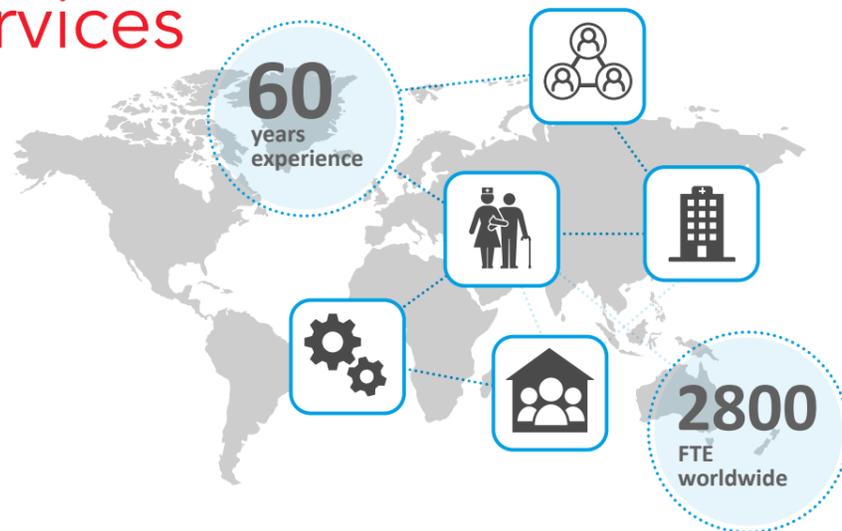
At Tunstall we offer a consultative approach to workflow and understand how technology can support integrated patient care. Our team of experienced nurses help provide practical advice on how to configure and implement connected health solutions.

Our team of clinical application specialists and consultative approach delivers:

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- Increased clinical productivity
- Improved adoption rates among users
- Improved patient outcomes
- Value for money

Managed Services

Building on local expertise, Tunstall offers a flexible set of managed services that can be tailored to individual provider needs.



Professional Services

We understand the importance of combining the clinical and IT perspectives to create a structured approach to delivery that enhances productivity, enables rapid deployment, reduces unplanned downtime and helps deliver success.



Consultation

Enhances staff and IT system productivity

- Workflow Consulting
- System Integration



Implementation

Enables rapid deployment of new workflows & process

- Project Management
- Software Implementation



Education

Helps drive adoption and improve productivity of staff

- Clinical & operational training
- Clinical champion education



Support

Helps reduce unplanned downtime and enhances usability throughout lifecycle

- Multi-level managed services and support



Enablement

Helps reduce uncertainty and long-term expenses

- Remote technical support
- In-country support services

Data Management and Analytics

Our patient-centric approach collects and connects data across health and social care from multiple devices and applications. By connecting health and behavioural data, providers are able to see greater context of the patient's condition and make better informed treatment decisions.



Health case studies

Complex Care Management: Renal Kidney Disease & Dialysis

Challenge:

- Home dialysis has proven to improve outcomes, quality of life and lower costs
- Traditionally uptake is low and drop-out rates high due to patient lack of confidence

Solution:

- ICP Triage Manager software in conjunction with video conferencing to improve education and give patients greater confidence in self-care
- Education delivered through MyMobile and 24/7 managed support service



Integrated home monitoring and video conferencing support for home dialysis



50% reduction in avoidable hospital admissions



106% increase in home dialysis uptake – hitting **33%** target



Increased compliance of protocols & longevity of patients on home service

Western Health, Australia

Complex Care Management Pathway – Frailty

Challenge:

- Patients in care homes represented over 13.5% of acute bed days, 9.1% of emergency admissions and 17.5% of GP home visits
- Increasing ageing population creates a stretch on health resources and creates need for more community-based care

Solution:

- Connected care monitoring devices managed with Tunstall PNC software
- Matron-led multi-disciplinary team working directly in care homes
- Tunstall workflow consulting service



33% decrease in emergency admissions



7000 acute bed days saved



Over **45%** decrease in GP call outs

NHS Calderdale Commissioning Group, UK

Chronic Disease Pathway – Diabetes

Challenge:

- Diabetes is the world's fastest growing chronic disease costing the US alone \$245b
- Progressive disease that can often lead to serious complications and multi-morbidities
- Requires a combination of testing, patient education and regular clinical consultations

Solution:

- Connected home monitoring devices with MyMobile self-management application
- Nurse-led service using ICP Triage Manager software for remote monitoring, education support and e-consultations



Primary care led programme including telemonitoring & nurse-led intervention



59% decrease in cost of care



16% reduction in hospital admissions



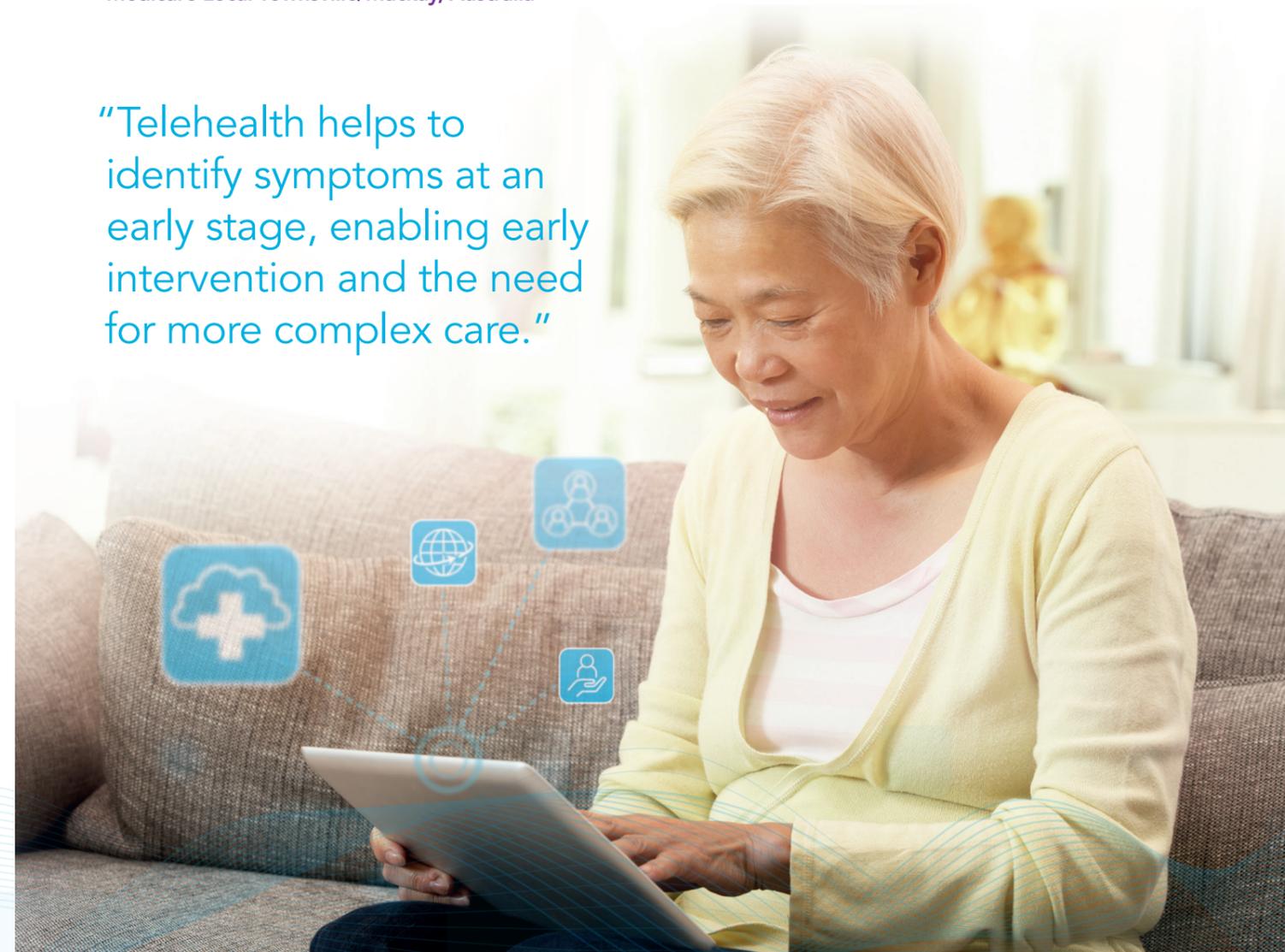
50% decrease in bed care days



Increase in patient satisfaction - 90% of GP's "very satisfied" with service

Medicare Local Townsville/Mackay, Australia

"Telehealth helps to identify symptoms at an early stage, enabling early intervention and the need for more complex care."



Connected Health Summary

Tunstall Connected Health leads the market in future-focussed, truly integrated digital healthcare solutions. Harnessing a peerless range of solutions from our proven product portfolio, operating on a unified digital platform and strengthened by our global, strategic insights.

We offer a unique health service model that can integrate care, health and social housing. In doing so we create greater efficiencies and a technologically advanced health service that can move into more preventative and predictive health care that can evolve to the needs of future generations.

Tunstall Connected Health – strategic and innovation-led health solutions.

For more information about how Tunstall can help you reduce hospital admissions, manage acute clinical care and realise cost savings, now and in the future, visit www.tunstall.com.

Tunstall