



TELEHEALTH & LONG TERM CONDITIONS MARCH 2014

Welcome to an additional supplement from the Technology Strategy Board (TSB) Knowledge Transfer Network (KTN) and the Telecare Learning and Improvement Network.

This telehealth supplement brings together some of the resources and links relating to the development of telehealth to date in the UK.

Typically telehealth has a limited definition in the UK – ie home remote monitoring for some major long term conditions (see definitions). In the UK, video consultations between clinicians over secure connections are often termed telemedicine and mobile apps (including SMS text) are often known as digital health or mhealth. In Europe, the term eHealth is popular. It can be confusing as terms are often used interchangeably.

In England, a newer, wider terminology of Technology Enabled Care Services (TECS) is now being used to embrace aspects of telehealth, digital health, mobile health and smartphone apps. This follows on from the 3 Million Lives initiative and is embedded in the NHS Mandate. In Scotland, the Scottish Centre for Telehealth and Telecare continues to support the national telehealth and telecare strategy. Northern Ireland continues to roll out its own programme with some further initiatives in Wales. Both Scotland and Wales have recently announced additional funding for telehealth.

Significant barriers still exist around the evidence of cost-effectiveness, clinician acceptance, patient engagement and motivation, medical device regulation, interoperability and how technology is linked to service transformation and medical records. Smartphone and tablet options are now reducing costs, however, simply adding technology to existing services and not making changes to how people are supported at home will most likely mean services cost more overall at a time when there is no new money.

Initial surveys of the draft Better Care Fund plans in England, indicate that around 60-65% mention telecare or telehealth as part of their future plans. More details will become available as 2014/15 progresses.

The aim of this supplement is to concentrate on the home remote monitoring aspect using hubs and increasingly/tablets and smartphones with linked medical devices for long term conditions such as diabetes, heart failure and COPD. The supplement has links to the Health Apps Library at NHS Choices but does not examine the wide range of 45,000+ apps available and their effectiveness (more information is available in the monthly newsletter). This supplement does not cover a complete range of long term conditions, telestroke services, mental health, telerehabilitation, use of Skype/FaceTime and other video connections to the home – there are hundreds of monthly updates across the sector in each monthly newsletter and well over 10,000 published journal articles across

telehealth and telemedicine to date. Some of the further developments will feature in upcoming supplements.

Dementia was covered in the January 2014 [supplement](#). The February 2014 newsletter had a [supplement](#) covering 2013 journal articles including telehealth/telemedicine/digital health. The recent NHS Expo (March 2014) which featured long term conditions is also covered in a [TelecareLIN supplement](#).

All links have been checked during March 2014 but will no doubt change over time. The format is alphabetical with some cross-referencing. There are currently a number of developments in this area and it is always difficult to capture and list them all - further initiatives will appear in the monthly newsletter as usual.

Newsletter supplement prepared by Mike Clark (@clarkmike) and brought to you by the Telecare LIN on behalf of the HealthTech KTN and Technology Strategy Board. Newsletters and supplements are archived at www.telecarelin.org.uk

Disclaimer: “We provide this newsletter supplement for information purposes only and neither the Technology Strategy Board nor the authors accept any liability whatsoever for inaccuracies, errors or omissions therein or for any consequences arising therefrom.”



A

[Academic Health Science Networks \(AHSNs\)](#)

Details about the 15 Academic Health Science Networks in England are available:

[List of Academic Health Science Networks](#)

[Map of AHSNs](#)

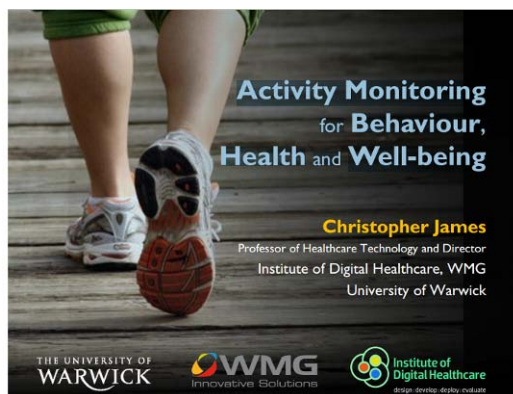
[Matrix of AHSN activities/projects](#)

[Access to local telehealth services for users and carers](#)

Access to telehealth remains limited in the UK. It is not yet a mainstream service in any format in any of the four home countries. Local Clinical Commissioning Groups and Health Boards will have details of initiatives. In Scotland there is a national database of projects held by the Scottish Centre for Telehealth and Telecare.

[Activity Monitoring](#)

There is growing interest in using activity monitoring for behaviour, health and well-being as well as frailty – eg University of Warwick/Institute of Digital Healthcare [presentation](#).

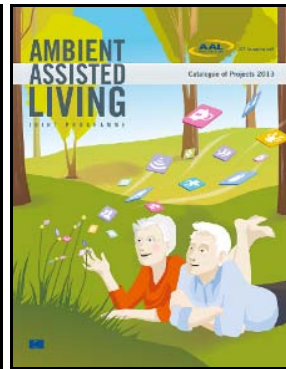
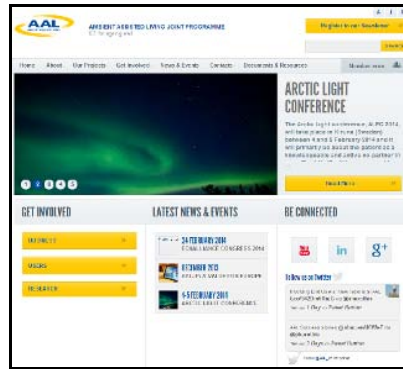


[All party Parliamentary Group on Telehealth](#)

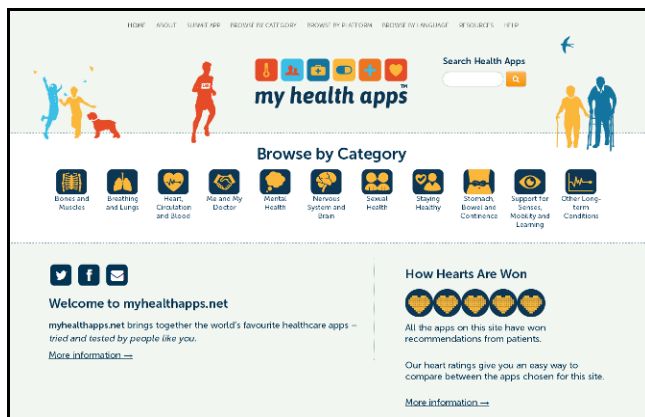
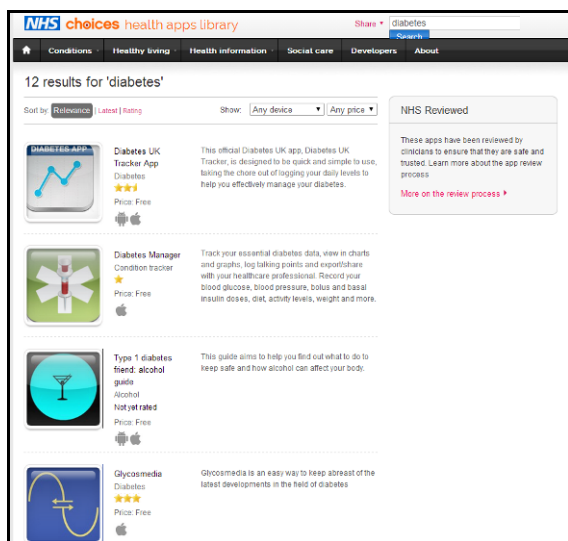
The aim of the [APPG](#) is to raise awareness in Parliament about the merits of telehealth and to encourage the further rollout of telehealth in the UK.

[Ambient Assisted Living \(AAL\) \(@AAL JP\)](#)

The Ambient Assisted Living (AAL) Programme covered 'ICT based solutions for Prevention and Management of Chronic Conditions of Elderly People' in Call One ([Catalogue](#)).



Apps



Interest continues in the wide range of health, fitness and wellbeing apps available. Evidence remains limited and there is some concern about the efficacy of many of them. Chris Wasden from PwC identifies some useful [principles](#) for developing mobile health apps.

Sites worth checking include:

- [NHS Choices Health Apps Library](#)
- [myhealth apps \(includes European Directory of Health apps\)](#)
- [Florence App](#)
- [iTunes Medical](#)
- [iTunes Health and Fitness](#)
- [iMedicalApps](#)
- [mobihealthnews](#)
- [Telehealth and Telecare Aware](#)

Look for reviews & evaluations of apps – make sure there are security features. There are continuing debates about hardware and software as medical devices – it is important to review current guidance from UK and international regulators (eg MHRA, FDA).

Assisted Living Innovation Platform (ALIP)



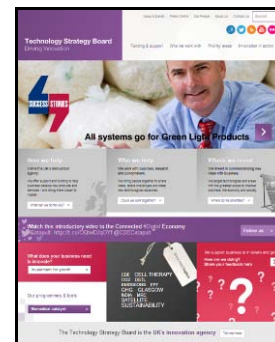
ALIP is delivering a wide ranging programme in the UK to enable the ageing population and those with long-term health conditions to live with greater independence. [2013 Showcase Report](#).

ALIP outputs: Pre-dallas

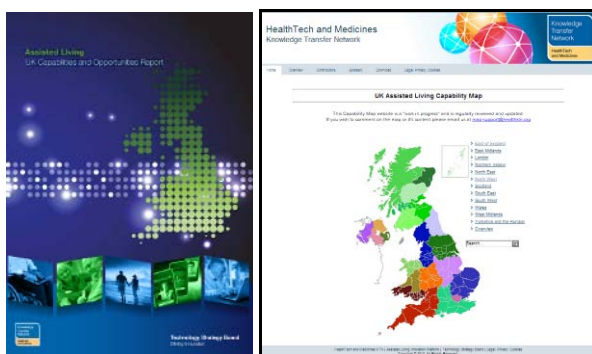
- Home Based Systems and User Centred Design (2008-11)
 - 9 Projects totalling £14.3m
 - Our investment: £6.3m (with NIHR, EPSRC and ESRC)
- Smart Care Distributed Environment (2009-2012)
 - 7 projects totalling £16.2m
 - Our investment: £6.3m (with NIHR and EPSRC)
- Economic & Business Models + Social & Behavioural Studies (2010-2014)
 - 8 projects totalling £12.3m
 - Our investment: £8.8m (with NIHR and ESRC)
- Independence Matters - with Design Council (2011)
 - 7 projects (£2m programme)
- European programme – Ambient Assisted Living (AAL)
 - 6 competitions (2008, 2009, 2010, 2011, 2012, 2013)
- Knowledge Transfer programme (2008 – 2013)
- Standards activity commenced early 2011

Technology Strategy Board
Driving Innovation

ALIP [Sliddeck](#) from November 2013 describing the programme and some of the projects. See also the separate entry on the dallas programme



ALIP is one of the [Technology Strategy Board's](#) Innovation Platforms



[Regional capabilities map](#) via HealthTech KTN

[Assisted Living - UK Capabilities and Opportunities Report](#) - guide for those in the public sector who are tasked with introducing assisted living services in their region and for organisations in the voluntary and private sectors who feel there is an opportunity to develop assisted living products and services.

See also [HealthTech and Medicines Knowledge Transfer Network](#)

Asthma

Asthma is caused by inflammation of the airways. These are the small tubes, called bronchi, which carry air in and out of the lungs. If you have asthma, the bronchi will be inflamed and more sensitive than normal. When you come into contact with something that irritates your lungs, known as a trigger (see below), your airways become narrow, the muscles around them tighten and there is an increase in the production of sticky mucus (phlegm). This leads to symptoms including:

- difficulty breathing
- wheezing and coughing
- a tight chest

In the UK, 5.4 million people are receiving treatment for asthma – that is one adult in 12 and one child in 11. Details from [NHS Choices](#) and [Asthma UK](#).



NICE Guidance on Asthma:

[Quality standard for asthma – QS25](#)

[Other NICE documents](#)

Telehealth and Asthma:

Cochrane Library - [Telehealthcare for asthma](#)

B

Better Care Fund

In 2015-2016, £3.8bn of existing health and care funds in England will be pooled across health and care services as agreed by 151 local health and wellbeing boards. Developments will include improved services for people with long term conditions and the use of a range of assistive technologies including telecare and telehealth. Health and social care services will need to be joined up via the NHS Number. More information is available via the [Telecare LIN newsletters](#).

British Geriatrics Society

[British Geriatrics Society Telehealth and Telecare - Best Practice Guide \(2010\)](#)

C

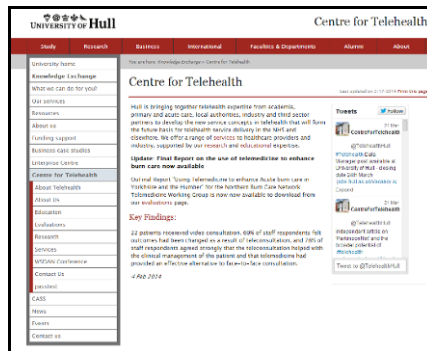
Centre for Connected Health and Social Care

The [Centre for Connected Health and Social Care](#) promotes improvements in patient care through the use of technology and fast-tracking of new products and innovation in the Health and Social Care system in Northern Ireland.

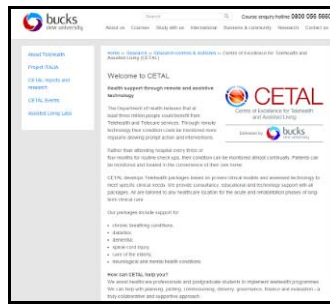


Centre for Telehealth Hull

The [Centre for Telehealth Hull](#) offer a range of services to healthcare providers and industry, supported by research and educational expertise.



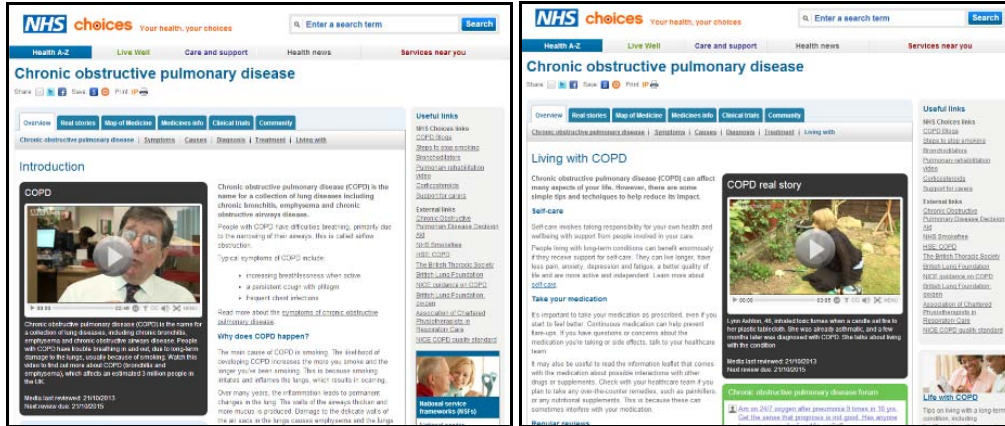
Centre of Excellence for Telehealth and Assisted Living (CETAL)



[CETAL](#) in Buckinghamshire develops Telehealth packages based on proven clinical models and assessed technology to meet specific clinical needs.

Chronic Obstructive Pulmonary Disease (COPD)

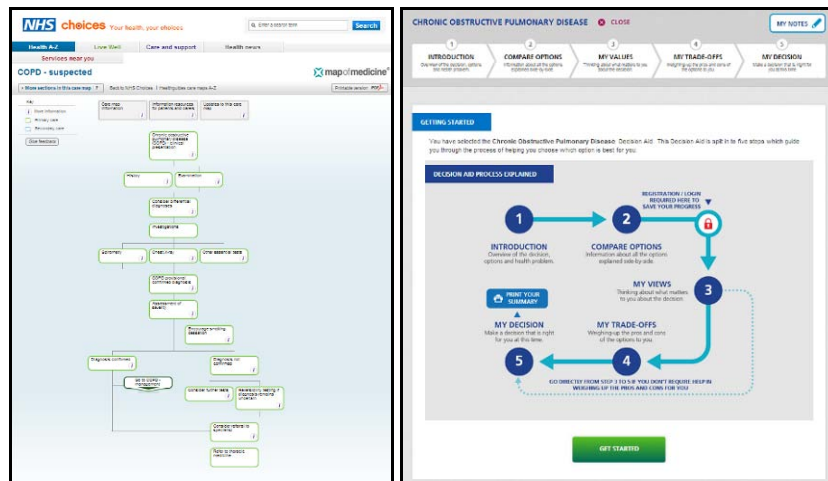
Chronic obstructive pulmonary disease (COPD) is the name for a collection of lung diseases including chronic bronchitis, emphysema and chronic obstructive airways disease. People with COPD have difficulties breathing, primarily due to the narrowing of their airways, this is called airflow obstruction.



Typical symptoms of COPD include:

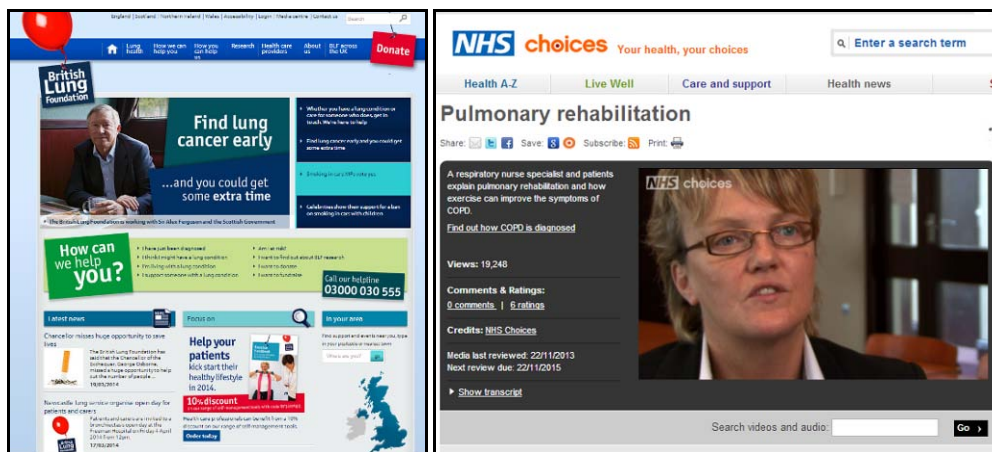
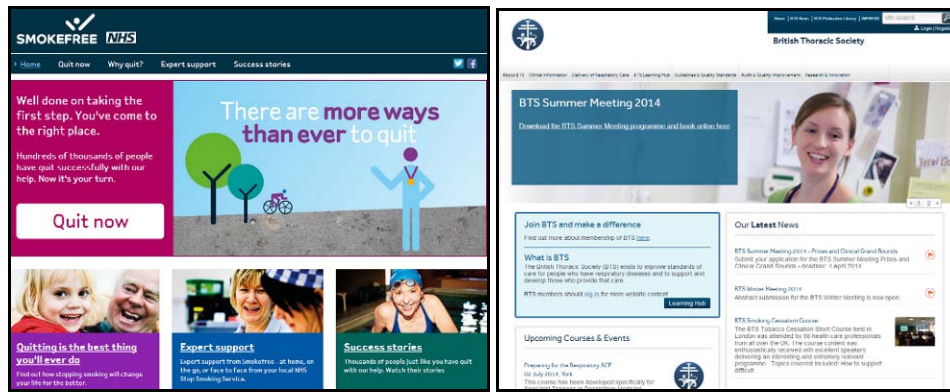
- increasing breathlessness when active
- a persistent cough with phlegm
- frequent chest infections

[Details](#) from NHS Choices cover symptoms, causes, diagnosis, treatment and living well. A [Map of Medicine](#) for suspected COPD is available as is a [decision aid](#).



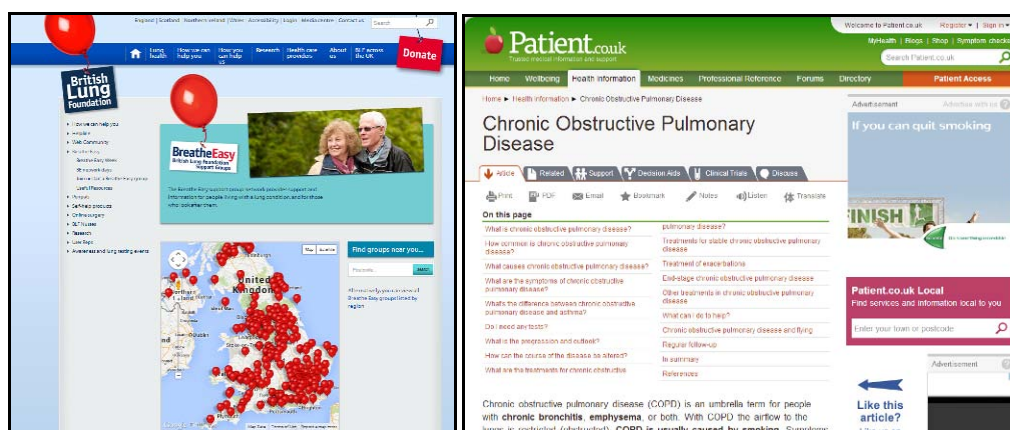
The core aim of the [COPD National Audit programme](#) is to drive improvements in the quality of care and services provided for COPD patients. The audit programme seeks to enable the comparison of performance and practice, highlight variations in patient care and outcomes, and seek to innovatively drive up standards of patient care.

The [NHS Smokefree](#) website provides options for quitting smoking. The [British Thoracic Society](#) (BTS) exists to improve standards of care for people who have respiratory diseases and to support and develop those who provide that care.

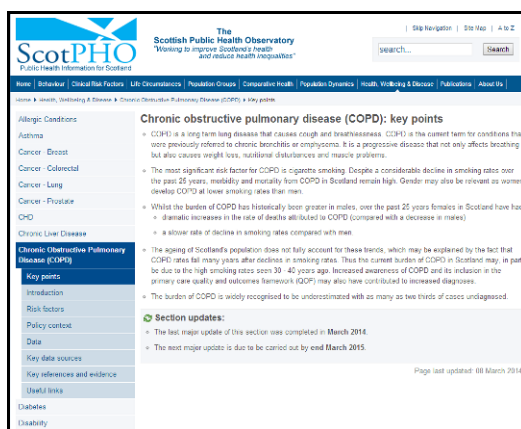


[British Lung Foundation](#) and (from NHS Choices) [Pulmonary Rehabilitation Video](#).

NICE Guidance is available on COPD – [CG101 COPD Pathway](#) [QS10 Quality Standard](#), [guide for commissioners](#), [baseline assessment tool](#), [Costing report](#), [Slideset](#).



[Breathe Easy Groups](#) and [www.patient.co.uk](#) websites



[SIGN Scotland: COMMUNITY MANAGEMENT OF LOWER RESPIRATORY TRACT INFECTION IN ADULTS SECTION 4: EXACERBATIONS OF COPD](#)

Some examples of recent literature reviews on COPD (see also Whole System Demonstrator):

- [Home telehealth for chronic obstructive pulmonary disease: a systematic review and meta-analysis](#)
- [Systematic Review of Telemedicine Services for Patients Affected by Chronic Obstructive Pulmonary Disease \(COPD\)](#)
- [Insufficient evidence of benefit: a systematic review of home telemonitoring for COPD Using preventive home monitoring to reduce hospital admission rates and reduce costs: a case study of telehealth among chronic obstructive pulmonary disease patients](#)
- [Using Telehealth technology to deliver pulmonary rehabilitation to patients with chronic obstructive pulmonary disease](#)
- [Empowering patients with COPD using tele-homecare technology Meta-analysis on COPD: Comment on 'Home telehealth for chronic obstructive pulmonary disease: a systematic review and meta-analysis](#)
- [Home Telemonitoring for Respiratory Conditions: A Systematic Review Piloting tele-monitoring in COPD: a mixed methods exploration of issues in design and implementation](#)
- [A Home Telemonitoring Program Reduced Exacerbation and Healthcare Utilization Rates in COPD Patients with Frequent Exacerbations](#)

[Cochrane Reviews](#)

[Cochrane Review – Telemedicine \(October 2010\)](#)

See also individual entries for recent reviews.

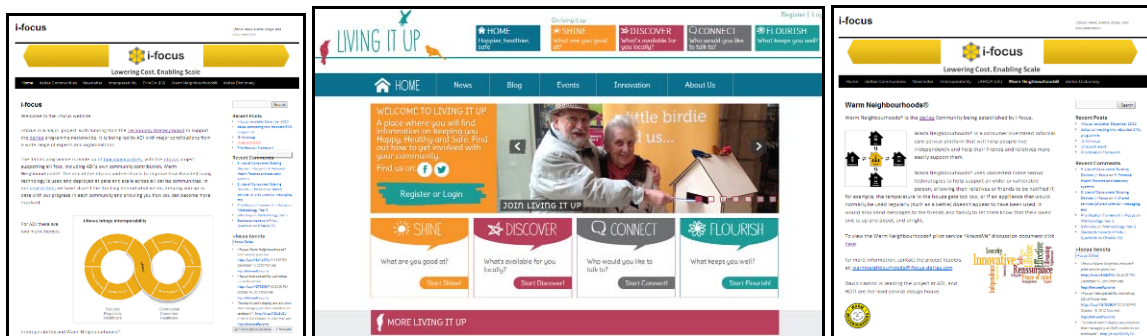
Connected Health Innovation Centre – Northern Ireland

[CHIC](#) targets research in areas such as eHealth, digital health, telehealth, telemonitoring, disease management, and home based care. Key focuses for the research are Vital Signs Sensing Development, Integrated Care, Assisted Living and Point of Care Diagnostics.

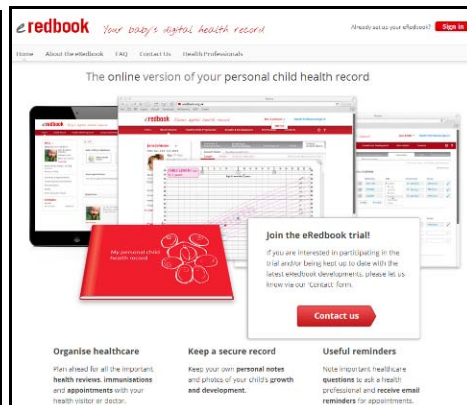


D [dallas \(@dallas_connect\)](#)

[dallas](#) is thinking beyond traditional health and social care to consider how new ideas and technology can be used to improve the way people live. It includes a number of programmes.



[i-focus \(@iFocusDallas\)](#), [Living it Up \(@Livingitup_Scot\)](#) and [Warm Neighbourhoods](#)



[MI Liverpool \(@Liverpool_mi\)](#) and [Year Zero/eRedbook \(@dallasYearZero\)](#)

Definitions

There is a wide range of definitions for telehealth – here are just a few examples:

[Telehealth – Centre for Telehealth, Hull](#)

[Telehealth – Telecare Services Association](#)

[Telehealth – Health Informatics Scotland](#)

[Telehealth and Telecare – Royal College of Nursing](#)

[Telemedicine – Cochrane Library](#)

[Telehealth – Queen’s Nursing Institute](#)

[Telehealth - Wikipedia](#)

[CSC - TeleServices for Better Health: Expanding the Horizon of Patient Engagement](#)

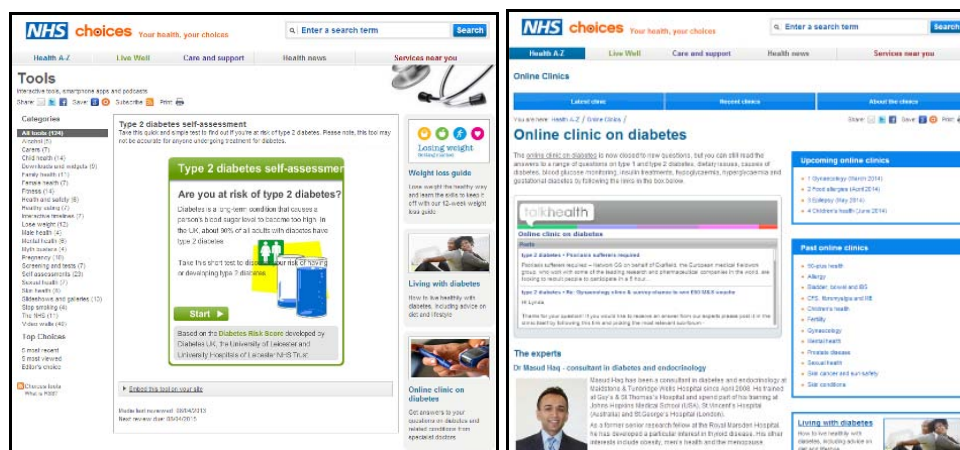
Telehealth – Whole System Demonstrator Programme – see separate entry for trial protocol with definitions

Diabetes

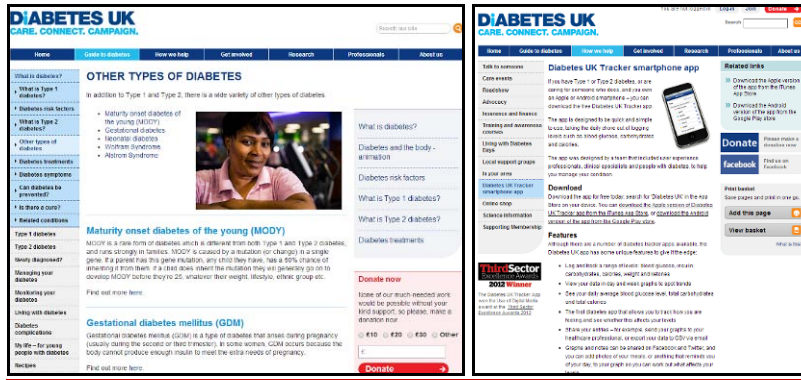
Diabetes is a lifelong condition that causes a person's blood sugar level to become too high. The two main types of diabetes are:

- [type 1 diabetes](#)
- [type 2 diabetes](#)
-

Gestational diabetes is a type of diabetes that affects women during pregnancy. There are other types. In the UK, diabetes affects approximately 2.9 million people. There are also thought to be around 850,000 people with undiagnosed diabetes. Details are available from NHS Choices on the Type 1 and Type 2 diabetes. [Details](#) and [diabetes facts](#) from NHS Choices web site.



NHS Choices has a Type 2 self-assessment [tool](#) and an [online clinic](#) on diabetes. More information is available from [Diabetes UK](#).



Diabetes UK also provides a wide range of information including [What is diabetes](#), [Guide](#), [Statistics](#), [Monitoring](#), [Caroline](#), [iPhone Tracker app](#), [risk score assessment tool](#), [research projects](#).

NICE Guidance for diabetes:

- [Type 1 diabetes: Diagnosis and management of type 1 diabetes in children, young people and adults – CG15](#)
- [Diabetes pathway](#)
- [Diabetes in pregnancy pathway](#)
- [Preventing Type 2 Diabetes pathway](#)
- [Diabetes in adults quality standard – QS6](#)
- [Diabetic ketoacidosis](#)
- [Diabetic foot problems: Inpatient management of diabetic foot problems](#)
- [Continuous subcutaneous insulin infusion for the treatment of diabetes mellitus - TA151](#)

Examples of recent reviews on diabetes:

- [Home telehealth for diabetes management: a systematic review and meta-analysis](#)
- [Telemedicine Application in the Care of Diabetes Patients: Systematic Review and Meta-Analysis](#)
- [The Contribution of Teleconsultation and Videoconferencing to Diabetes Care: A Systematic Literature Review](#)

Digital Agenda for Europe (@DigitalAgendaEU)



Check the [CORDIS](#) website for EU project information

The [Digital Agenda for Europe](#) website covers a wide range of resources including [health and ageing](#) and a list of projects.

Examples with a European Dimension include: [EUWISE – Self care for long term conditions in Europe](#)

Digital Health Institute

The aim of the [Digital Health Institute](#) (DHI) is to co-create sustainable economic growth through new products, services and systems developed together with businesses, academics, healthcare specialists and citizens. A further aim is to generate high value health and social care solutions to the benefit of the people of Scotland and wider.



E

European Innovation Partnership on Active and Healthy Ageing (@EIP AHA)

	<p>The EC has a European Innovation partnership on active and healthy ageing as part of the Europe 2020 programme.</p> <p>See also:</p> <ul style="list-style-type: none">• Active ageing and independent living• First year achievements of the action groups• Reference sites = How to Guide
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F

Facts and figures

Some of the best sources for facts and figures on long term conditions are:

- [DH –Long Term Conditions Compendium of Information](#)
- [Improving quality of life for people with long term conditions](#)
- [HSCIC Datasets](#)
- [ONS Health and Social Care](#)
- [Scottish Government Long Term Conditions](#)

[Health in Wales](#)

[Living with Long Term Conditions – Northern Ireland](#)

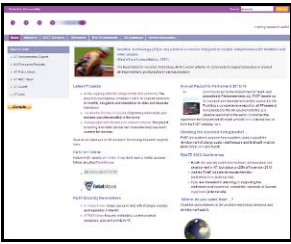
[Long term conditions and multi-morbidity – The King’s Fund](#)

[Commissioning for long term conditions – Nuffield Trust](#)

[Diabetes UK](#)

[Asthma UK](#)

Foundation for Assistive Technology (@FASTATUK)

	<p>Foundation for Assistive Technology covers telecare and telehealth, assisted living and wider sector activities</p>
	<p>See:</p> <ul style="list-style-type: none">• FAST parliamentary reports• FAST - research projects• FAST - events listing• FAST - policy news• FAST – R&D News

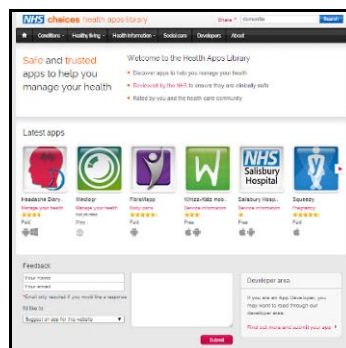
H

Health and Wellbeing Strategies

Each of 151 Health and Wellbeing Boards in England has prepared a Health and Wellbeing Strategy based on the Joint Strategic Needs Assessment (JSNA). Search on Google for details eg ‘Surrey Health and Wellbeing Board’ or ‘Surrey Joint Strategic Needs Assessment’. The documents will provide information on numbers of people with particular conditions and local services provided. In Scotland, Wales and Northern Ireland search for details against Health Boards.

Health apps library (@healthappslib)

The NHS has a [health apps library](#) with reviews. See also Apps.



Health Design & Technology Institute

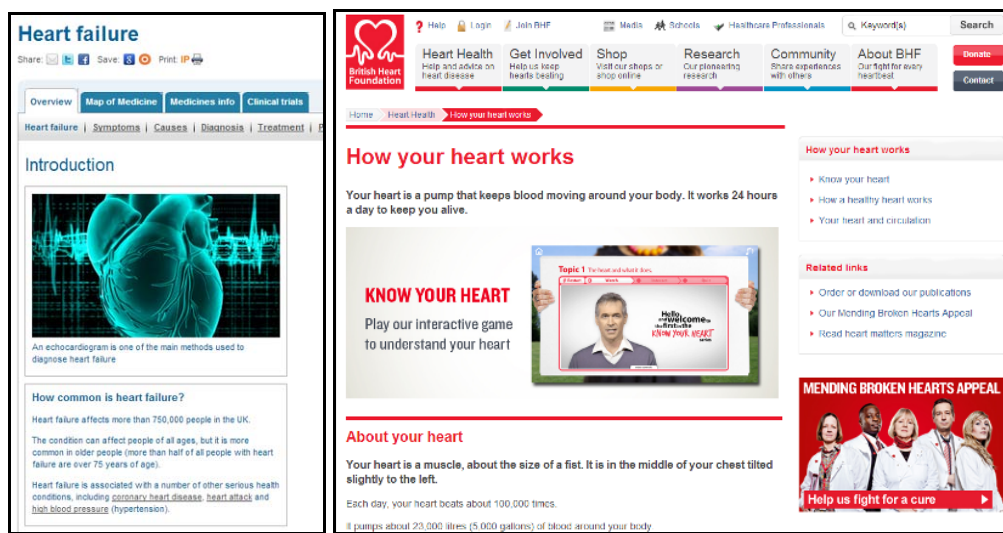
Coventry University's [Health Design & Technology Institute](#) (HDTI) supports the development of new and innovative community healthcare products. Focusing on the ageing population and people with disabilities and chronic health conditions, they provide design, prototyping and user-centred product evaluation services to entrepreneurial individuals and companies developing new technologies in this area.

HDTI's activities bring together businesses, healthcare practitioners, academics and end-users to focus on four key integrated areas:

- the design and validation of products and services required for improved healthcare in the community;
- research with practitioners and industry;
- training of community-based healthcare professionals, carers and self-managing patients;
- the delivery of new multidisciplinary courses in design and healthcare

HDTI [Research projects](#) include [TeleSCOPE](#)

Heart Failure



The screenshot shows the British Heart Foundation website. The main heading is "Heart failure". Below it, there are navigation tabs for "Overview", "Map of Medicine", "Medicines Info", and "Clinical trials". The "Introduction" section features a 3D illustration of a heart and text stating: "An echocardiogram is one of the main methods used to diagnose heart failure". A section titled "How common is heart failure?" provides statistics: "Heart failure affects more than 750,000 people in the UK. The condition can affect people of all ages, but it is more common in older people (more than half of all people with heart failure are over 75 years of age). Heart failure is associated with a number of other serious health conditions, including coronary heart disease, heart attack and high blood pressure (hypertension)." The "How your heart works" section explains: "Your heart is a pump that keeps blood moving around your body. It works 24 hours a day to keep you alive." It includes a video player for "KNOW YOUR HEART" and a "MENDING BROKEN HEARTS APPEAL" banner.

Heart failure affects more than 750,000 people in the UK. The condition can affect people of all ages, but it is more common in older people (more than half of all people with heart failure are over 75 years of age). Heart failure is associated with a number of other serious health conditions, including coronary heart disease, heart attack and high blood pressure (hypertension). NHS Choices has the [details](#).

The [British Heart Foundation](#) provides a wide range of information and offers a number of services eg [online community](#).

NICE Guidance on Heart Failure:

[Chronic heart failure: Management of chronic heart failure in adults in primary and secondary care](#)
[Chronic Heart Failure Pathway](#)

[Chronic heart failure quality standard – QS9](#)

[Cardiac resynchronisation therapy for the treatment of heart failure- TA120](#)

[Insertion and use of implantable pulmonary artery pressure monitors in chronic heart failure- IPG463](#)

Examples of recent reviews on heart failure:

[Impact of telehealth on patient self-management of heart failure: a review of literature](#)

[Telehealth for heart failure: exploring the mechanism of effect—a systematic review of self-care behaviour](#)

[Home telemonitoring for congestive heart failure: a systematic review and meta-analysis](#)

[A systematic review of telemonitoring technologies in heart failure](#)

[Telemonitoring or structured telephone support programmes for patients with chronic heart failure: systematic review and meta-analysis](#)

[Telehealth interventions for the secondary prevention of coronary heart disease: a systematic review](#)

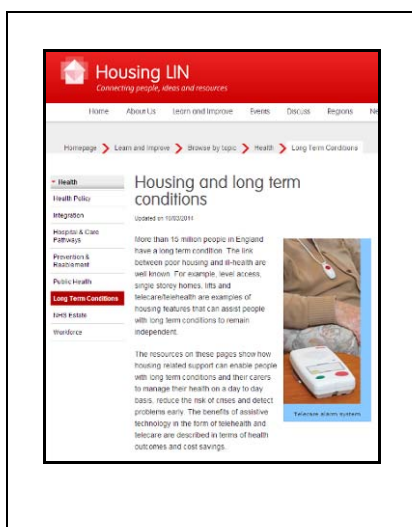
[Cost Comparison Between Telemonitoring and Usual Care of Heart Failure: A Systematic Review](#)

Horizon 2020 (EU H2020)

Calls are commencing for bids for funding under the wide ranging EU Horizon 2020 [programme](#).



Housing LIN



Resources from Housing LIN:

[Housing and long term conditions](#)

[Commissioning](#)

[Provision –](#)

[Extra care and supported housing](#)

[Specialist care and support services](#)

[Assistive technology](#)

[Design and Built Environment](#)

[Housing LIN](#) - the leading network for connecting people and promoting innovative new ideas that enhance the housing choices of older people. Our extensive learning resources pay attention to improving the delivery of housing and related care and support services.

Implementing transnational telemedicine solutions (ITTS)

ITTS is implementing transnational telemedicine solutions, at scale, across the Northern Periphery region.

ITTS is achieving this by:

- Improving accessibility, situating services in local communities or in patients' homes
- Normalising the use of technology into everyday practice
- Fostering transnational knowledge exchange



Integration and integrated care

All home counties in the UK are committed to more integrated health and social care. This could have benefits for people with long term conditions, their carers and families. It is likely that assistive technology, equipment and adaptations will be used to support hospital discharges and provide more preventative approaches. England has announced 14 [pioneer](#) sites as well as reinvesting £3.8bn of health & care funding in 2015/16 in [Better Care Fund plans](#). Northern Ireland already has [health and social care boards](#), Wales has been [consulting](#) on more integrated care and Scotland has more integrated health services with [legislative plans](#) to introduce joint health and care programmes (also [Joint Improvement Team](#)). To support integration in England, a website ([iCASE](#)) has been set up to share progress.



J

Journal articles

Several specialist journals cover long term conditions as well as assistive technology, telehealth and telecare. The [TelecareLIN newsletter](#) brings together leading articles each month. With over 10,000 published articles on telehealth and telemedicine, journal search facilities are available at Pub Med and Google Scholar. Examples of searches include:

Pub Med:

<http://www.ncbi.nlm.nih.gov/pubmed/?term=COPD>

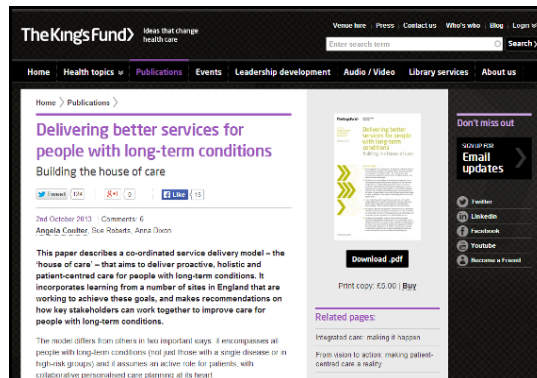
Google Scholar:

<http://scholar.google.co.uk/scholar?hl=en&q=diabetes+telehealth>

K

The King's Fund

The [King's Fund](#) provides a wide range of resources on long term conditions, the 'House of Care' as well as telehealth and also runs an annual international Congress on [digital health and care](#). See also latest reading list on [long term conditions](#).



N

National Institute for Health and Care Excellence

NICE guidance and standards are listed under long term conditions. It is possible to [search](#) the NICE database for telehealth information.

NICE is currently working on [Social care of older people with multiple long-term conditions](#)

National Policies

England

The Department of Health in England published '[Improving quality of life for people with long term conditions \(March 2013\)](#)'. They indicated that 15 million people are affected in England and that this figure is set to increase over the next 10 years, particularly those people with 3 or more conditions at once. Care of people with long term conditions accounts for 70% of the money spent on health and social care in England. However, major changes were made to the NHS in England in April 2013 and the Department notes that 'As long term conditions are the responsibility of NHS England, we will no longer produce a national strategy'. The [NHS Mandate](#) between the government and NHS England now sets out the ambitions for the health service including the management of long term conditions.

An NHS England objective is to achieve a significant increase in the use of technology to help people manage their health and care. In particular, the Government expects that by March 2015:

- everyone who wishes will be able to get online access to their own health records held by their GP. NHS England should promote the implementation of electronic records in all health and care settings and should work with relevant organisations to set national information standards to support integration;
- clear plans will be in place to enable secure linking of these electronic health and care records wherever they are held, so there is as complete a record as possible of the care someone receives;
- clear plans will be in place for those records to be able to follow individuals, with their consent, to any part of the NHS or social care system;
- everyone will be able to book GP appointments and order repeat prescriptions online;
- everyone will be able to have secure electronic communication with their GP practice, with the option of e-consultations becoming much more widely available;
- significant progress will be made towards three million people with long-term conditions being able to benefit from telehealth and telecare by 2017; supporting them to manage and monitor their condition at home, and reducing the need for avoidable visits to their GP practice and hospital. The Mandate also sets out that NHS England is uniquely placed to coordinate a major drive for better integration of care across different services, to enable local implementation at scale and with pace from April 2013 – this has now become the £3.8bn Better Care Fund.

At NHS England, long term conditions are covered under [Domain 2](#). The web site covers a wide range of areas for action and case studies (eg [Stoke on Trent Telehealth](#)) and the [House of Care](#) model.

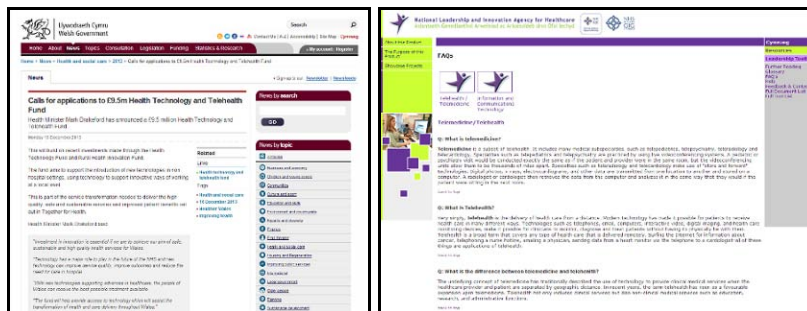
The screenshot shows two pages from the NHS England website. The left page is titled 'Domain 2: Enhancing quality of life for people with long-term conditions'. It features a 'Key issue' section stating that 15.4 million people in England have a long-term condition, and the number is expected to increase to 20 million by 2020. It also lists 'Areas of Action' such as 'Supporting people to manage their condition' and 'Improving the experience of people with long-term conditions'. The right page is titled 'House of Care model' and features a diagram with four pillars: 'Engaged informed individuals & carers', 'Personal control, coordinated care', 'Health & care professionals committed to partnership working', and 'Commensurate'. The diagram is set within a house-like structure with 'Organisational & clinical processes' at the top and 'Commensurate' at the base.

Scotland

Long Term Conditions is [covered](#) by the Scottish Government. The Scottish Centre for Telehealth and Telecare provides oversight of their telehealth programme (see separate entry). There is a national telehealth and telecare [delivery plan](#) and Audit Scotland has recently published a [review](#) of telehealth. On 5 March 2014, Scotland's Health Secretary Alex Neil [announced](#) £10m additional funding for NHS boards to support the expansion of home health monitoring solutions in a debate entitled 'Update on Delivering the 2020 Vision in NHS Scotland'.

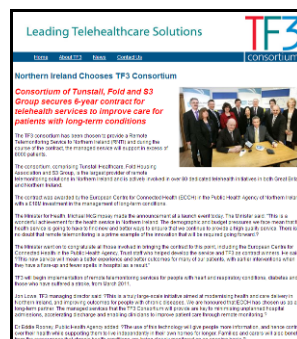


Wales



NHS Wales has information on [long term conditions](#) and recently announced a [£9.5m telehealth fund](#).

Northern Ireland



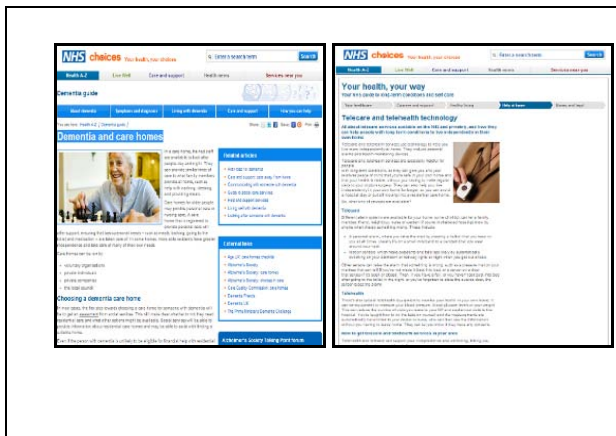
Northern Ireland has an extensive [Telehealthcare programme](#) in place for people with long term conditions supported by the [Centre for Connected Health and Social Care](#).

NHS Change Day



[NHS Change Day](#) for 2014 was 3 March – an opportunity for people to make pledges to improve health, care and related services for people with long term conditions. A total of over 500,000 pledges had been received by the end of March 2014.

NHS Choices



[NHS Choices](#) has extensive information on long term conditions together with health and care services in England – see sections on diabetes, COPD, heart failure etc.

In addition there are sections on:
[Equipment and alarms for carers](#)
[Telecare and telehealth technology](#)

NHS Expo

The [Health and Care Innovation Expo 2014](#) was held on 3 and 4 March 2014 in Manchester and included extensive coverage on long term conditions and the development of integrated health and care services. The TelecareLIN has produced an additional supplement in March 2014 covering the Expo.



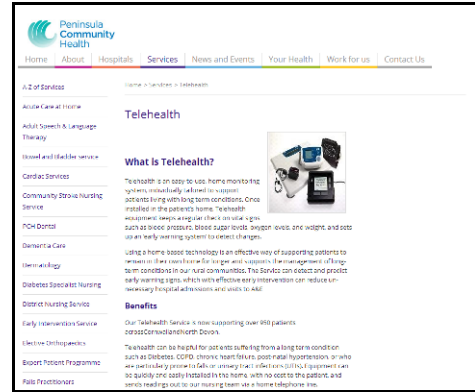
P

Projects, products, programmes and initiatives on telehealth and long term conditions

This section includes a small selection of interesting projects, products/services, programmes and initiatives from around the UK.



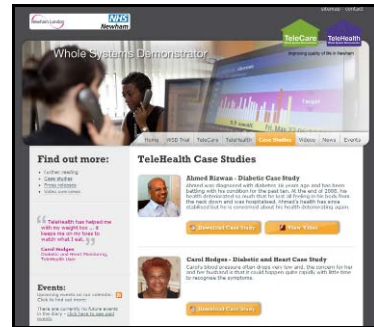
[SEQOL – Bringing care home \(video\)](#)



[Peninsula Community Health \(Cornwall\)](#)



[Docobo solutions and case studies](#)



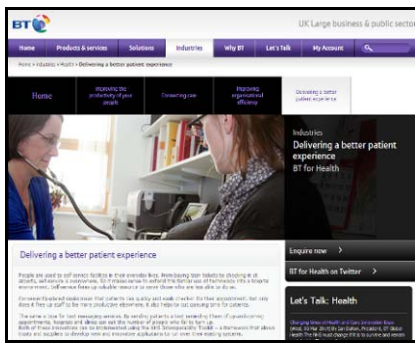
[Telehealth case studies - Newham](#)



[Florence Telehealth App](#)



[Tunstall Healthcare information on telehealth](#)



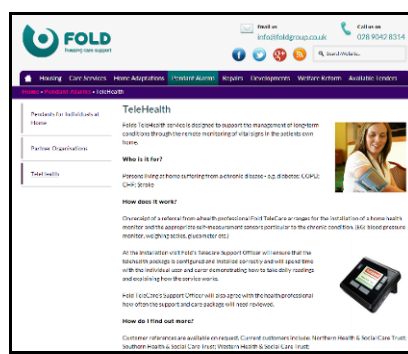
[BT for health](#)



[UK Telehealthcare](#)



[Kent Telehealth](#)



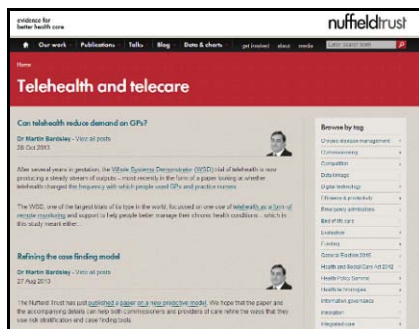
[Fold Telehealth](#)



[Telehealth Forum](#)



[The King's Fund Telecare and Telehealth](#)



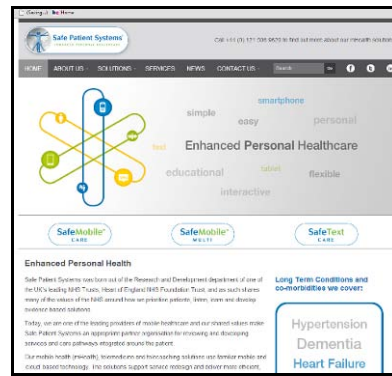
[Nuffield Trust Telehealth and Telecare](#)



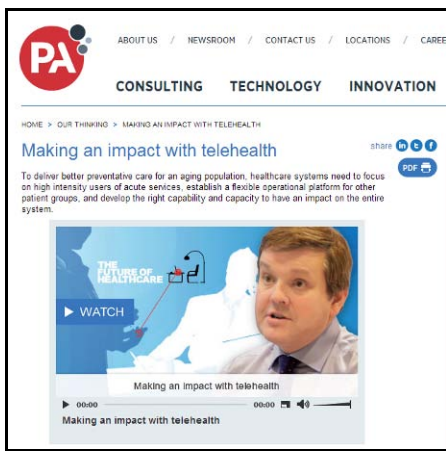
[Appello telehealth](#)



[Medvivo Telehealth](#)



[Safe patient systems](#)



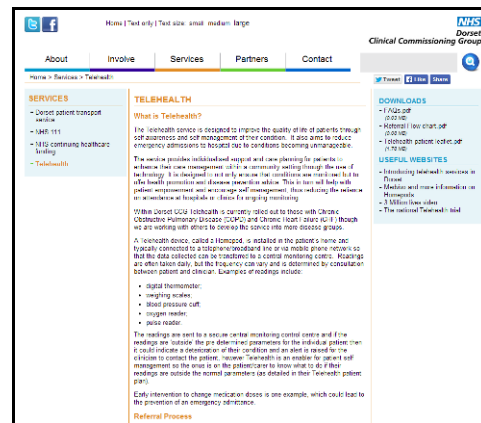
[Making an impact with telehealth](#)



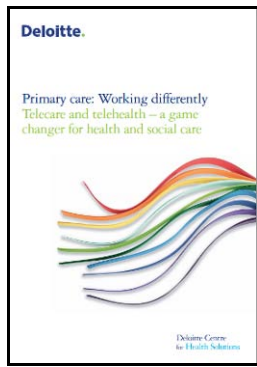
[HSJ telehealth supplement \(2012\)](#)



[Bosch Telehealth](#)



[Dorset CCG telehealth](#)



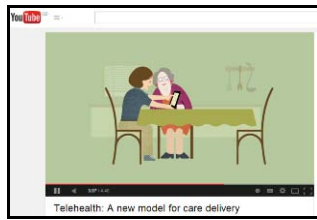
[Telecare and Telehealth – a game changer for health and social care](#)



[NHS Choices – telecare and telehealth technology](#)



[Philips Telehealth](#)



[Telehealth video](#)



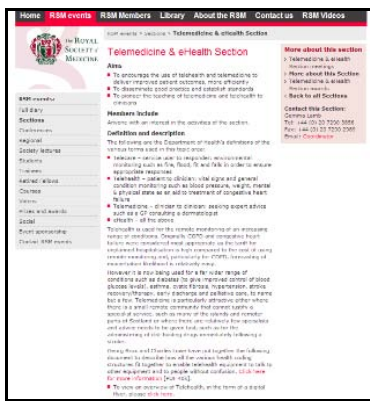
[Welbeing Telehealth](#)



[Airedale Digital Healthcare Centre](#)



[Yorkshire and Humber Telehealth Toolkit](#)



[RSM – Telemedicine and eHealth Section](#)



[Pulse Today - Telehealth](#)



[Advancing Care Coordination and Telehealth Deployment](#)



[Making Connections Report \(2020Health\)](#)
[Inside commissioning report on telehealth - Requires registration](#)

More reading:

- [A systematic review of the benefits of home care for frail elderly people and those with long-term conditions](#)
- [Home telehealth for chronic disease management: A systematic review and an analysis of economic evaluations](#)
- [Care Coordination/Home Telehealth: The Systematic Implementation of Health Informatics, Home Telehealth, and Disease Management to Support the Care of Veteran Patients with Chronic Conditions](#)
- [Telehealthcare for long term conditions](#)
- [NHS could be 'overwhelmed' by people with long-term medical conditions](#)
- [Health Committee on MANAGEMENT OF LONG-TERM CONDITIONS](#)

Useful web sites:

- [TelecareLIN](#) – also daily via @clarkmike & [front page](#)
- [TelecareAware](#)
- [mobihealthnews](#)



[Remote Care PLC – Barlow et al](#)

Purchasing frameworks

There are a number of procurement frameworks available for telehealth including:

- [Crown Commercial Service - Assistive Technologies - Telecare, Telehealth and Telecoaching](#)
- [ESPO Social Care](#) (includes range of assistive technologies)
- [Excel - Scotland](#)
- [Fusion 21](#)
- [Northern Housing Consortium](#)
- [South East Consortium](#)
-

Q

Quality Improvement Productivity and Prevention (QIPP)

The QIPP challenge is not only to transform the way organisations deliver care to those people with long term conditions and contribute to the current financial imperative of £20 billion savings, but also to set the NHS itself in a better position to remain viable for the future. See [Commissioning for long term conditions](#).

R

Royal College of GPs

The 2022 GP: A Vision for General Practice in the future NHS [outlines](#) the RCGP's aspiration for the future of general practice and patient care – along with what will be needed to deliver it.


Royal College of Nursing

The [Royal College of Nursing](#) has a section on telehealth and telecare so does the [Queen's Nursing Institute](#).

The image shows two side-by-side screenshots of websites. The left screenshot is from the Royal College of Nursing website, displaying a page titled "Telehealth and telecare". It features a navigation menu on the left with categories like "Library and heritage services", "Learning and education", "Publications", "NHS forums", "Nursing communities", "NHS patient community health care solutions (HCS)", "Nursing practice issues", "Clinical governance", "Care standards", "CPD online learning", "Dementia", "Dignity", "Disparity", "eHealth", "eAssessment", "E-learning/CPD records", "Innovation and training", "NHS resources", "Telehealth and telecare", "Setting up a programme", "HGA", "e-Healthcare", "Infection prevention and control", "Stroke care guideline", "NICE consultation activity", "Nutrition and hydration", and "Other people". The main content area includes a search bar, a "Home" link, and a "Telehealth and telecare" section with a sub-header "eHealth technology in practice". The text discusses the use of information and communication technology in social contexts and provides definitions for telehealth and telecare. The right screenshot is from the Queen's Nursing Institute website, showing a page titled "Telehealth and Telecare". It features a navigation menu on the left with categories like "Home", "About The QNI", "News and events", "Support us", "Campaigns", "For patients", "For nurses", and "Shop". The main content area includes a search bar, a "Home" link, and a "Telehealth and Telecare" section with a sub-header "In this section:". The text discusses the QNI's publication of a major new report, "Smart New World", and provides links to download a copy and view the press release. A photograph of an elderly woman is also visible.

S

Scottish Centre for Telehealth and Telecare (@SCTT NHS 24)



Also [SCTT database for health & care technologies](#)

The [Scottish Centre for Telehealth and Telecare](#) (SCTT) was established to support and guide the development of telehealth and telecare throughout Scotland.

The Centre's role is to provide support and advice to all key stakeholders and help evaluate the potential benefits of new technologies, with the aim of making Scotland a recognised global leader in telehealth and telecare. Specifically the Centre was tasked with -

- Disseminating best practice
- Providing practical support, both clinical and technical
- Co-ordinating the evaluation of projects
- Evaluating the impact of telehealth telecare on service redesign
- Developing inter-operable standards and protocols

Sheffield Health Services Research

With an ageing population, and a rising number of people with long-term conditions, more people will in future require such support to enable them to live with independence and dignity in their own homes and communities. Research and innovation is required to develop new user-friendly technologies and technology-supported services and to build an evidence base for their use. This is the mission of the [Rehabilitation and Assistive Technologies Research Group](#).

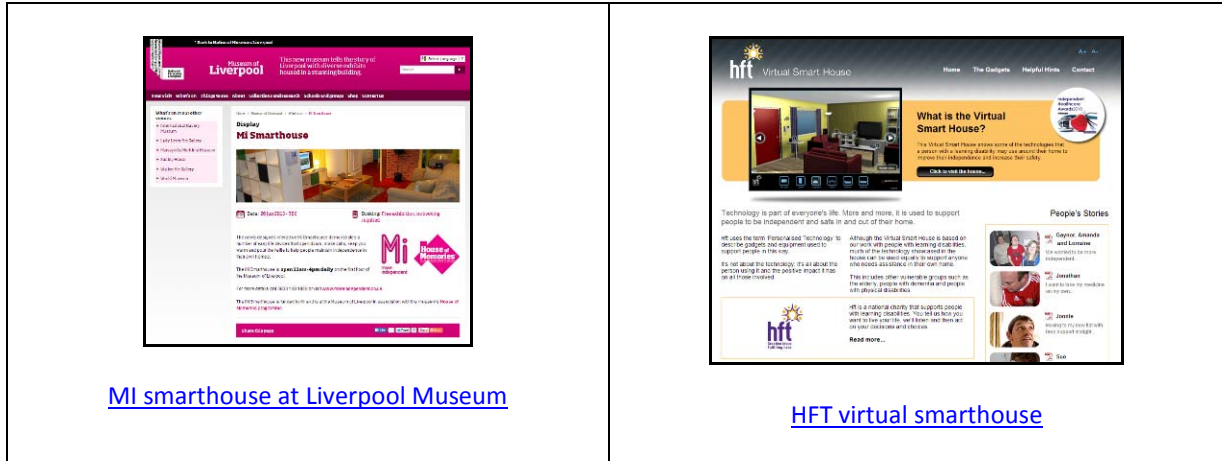


Current research projects include:

- Overcoming the Barriers to Implementing Assistive Living Technologies (BALT), Technology Strategy Board Assisted Living Innovation Platform, £1.8M (2011-14)
- Using Active Life in Dementia (VALD), National Institute for Health Research, £2.2M (2011-2015)
- LifeStyle Matters: Randomised controlled trial, NIHR Lifelong Health and Wellbeing, £1.13M (2011-14)

Smarthouses

There is continuing interest in the concept of smarthouses with more sensor-based devices, wearable technologies and the [‘Internet of Things’](#). Some local telecare services have demonstration areas and/or smart flats where different technologies can be demonstrated.

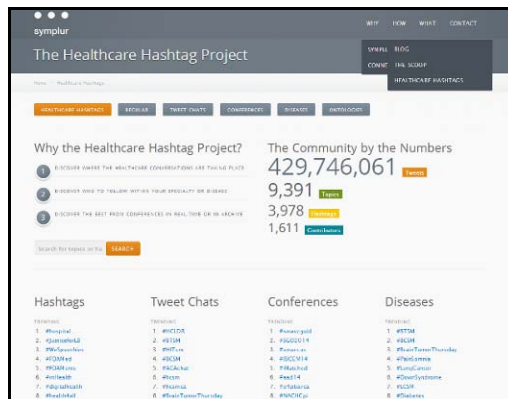


[MI smarthouse at Liverpool Museum](#)

[HFT virtual smarthouse](#)

Social Media

For information on social media, see the recent [dementia supplement](#). Search terms and hashtags include ‘telehealth’, ‘digital health’, ‘digital technology’ ‘eHealth’ as well as individual long term conditions. You may need to have an account on some social media sites. Of particular interest is the [Symplur Hashtag Project](#) where nearly 4000 Twitter hashtags are registered and monitored.



T

Technology Enabled Care Services

Since taking over the 3millionlives programme last year, NHS England has been working with stakeholders from health, social care, local authorities, third sector and industry partners to collectively identify the barriers to uptake of telehealth, telecare, telemedicine, telecoaching and self-care apps. The new Technology Enabled Care Services Programme is a national initiative which aims to improve the lives of people with long term conditions through the use of these technologies

and harness their potential to significantly improve health outcomes, empower patients to self-manage their conditions, and provide care that is convenient, accessible and cost-effective.

Working collaboratively with a broad range of stakeholders, NHS England has now produced a wealth of insights and some initial recommendations around what needs to change to create the right environment for technology enabled care services to become mainstream in health and social care settings. The recommendations focus on improving commissioning, procurement, metrics and measurement and information governance, and will be set out in the Technology Enabled Care Services Improvement Plan 2014-17, due to be published in late Spring 2014.

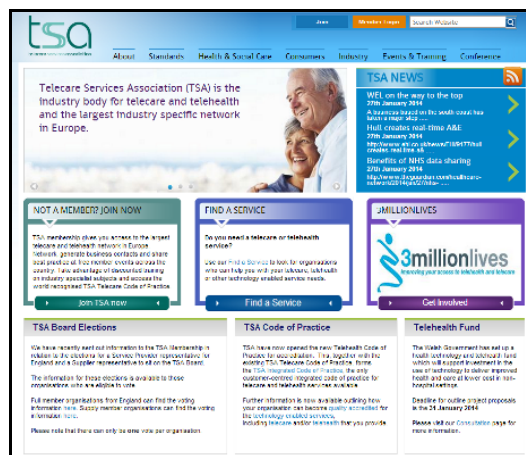
[TelecareLIN \(@clarkmike\)](#)

The Telecare Learning and Improvement Network has provided monthly newsletters since October 2005 covering telecare, telehealth, digital health, mHealth as well as UK health and social care.



[Telecare Services Association \(@teleservassoc\)](#)

[Telecare Services Association](#) (TSA) is the industry body for telecare and telehealth and the largest industry specific network in Europe. A number of conference presentations are useful and can be accessed [online](#).



Telehealth Codes of practice

Codes of practice are available for telehealth services including:

- [Telecare and Telehealth Integrated COP](#)
 - [Telehealth Services Code of Practice for Europe](#)
-

Three Million Lives (@3MillLives)

See the entry on Technology Enabled Care Services.

Whole System Demonstrator References

Key publications from the Whole System Demonstrator Programme include:

- [A comprehensive evaluation of the impact of telemonitoring in patients with long-term conditions and social care needs: protocol for the whole systems demonstrator cluster randomised trial](#)
- [Whole System Demonstrator Headline Findings – DH, Dec 2011](#)
- [Effect of telehealth on use of secondary care and mortality: findings from the Whole System Demonstrator cluster randomised trial](#)
- [Exploring barriers to participation and adoption of telehealth and telecare within the Whole System Demonstrator trial: a qualitative study](#)
- [An organisational analysis of the implementation of telecare and telehealth: the whole systems demonstrator](#)
- [Effect of telehealth on quality of life and psychological outcomes over 12 months \(Whole Systems Demonstrator telehealth questionnaire study\): nested study of patient reported outcomes in a pragmatic, cluster randomised controlled trial](#)
- [Cost effectiveness of telehealth for patients with long term conditions \(Whole Systems Demonstrator telehealth questionnaire study\): nested economic evaluation in a pragmatic, cluster randomised controlled trial](#)
- [Stimulating whole system redesign: Lessons from an organizational analysis of the Whole System Demonstrator programme](#)
- [Impact of telehealth on general practice contacts: findings from the whole systems demonstrator cluster randomised trial](#)

See also:

[Whole System Demonstrator trial: policy, politics, and publication ethics](#)

[Does telehealth reduce hospital costs? Six points to ponder – Jennifer Dixon, Nuffield Trust](#)

Newsletter supplement prepared by Mike Clark (@clarkmike) and brought to you by the Telecare LIN on behalf of the HealthTech KTN and Technology Strategy Board. Newsletters and supplements are archived at www.telecarelin.org.uk

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