

Health and social care support, using Assistive Technology



MEGALY
ABNORMAL DETECTED

XRAY:
BROKEN BONE

LAB FINDINGS:

WBC: 7.5G/L HB: 16.7G/DL
MCV 92 PLT: 201 G/L CRP: 0.1 MG/L
NA: 136MMOL/L K: 4.0MMOL/L CA: 2.54
GLYCEMIA RANDOM: 1.6G/L A AST: 28UI/L, ALT: 12
CPK 300 UI/L, TROPONIN 0.00 CK-MB 40
CREATININE: 102 UMOL/L

T: 37C
PULSE: 99/M



Centre of Excellence for Telehealth
and Assisted Living

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Welcome to CETAL

The Centre of Excellence for Telehealth and Assisted Living (CETAL) was founded in 2012, to promote the modernisation of health and social care services through the use of technology to support individuals with long term conditions, so that they can live safely in their own home.

This brochure describes the range of work that we do with commissioners, District and County Councils, technology companies, charities, academic institutions and service users and their relatives. You will find a separate sheet describing how we can support you to develop and provide an efficient, quality service:

Our work includes:

- Research and Evaluation Services
- Education and Training for Telehealth
- Enterprise Telehealth Sandpit Summits
- An Introduction to the CETAL Living Lab
- Demonstration Facilities for Technology Providers.

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An Introduction to the CETAL Living Lab

The CETAL Living Lab is based at University College Aylesbury Vale, It comprises a fully furnished flat equipped with the latest telehealth technology along with modern teaching facilities.

A virtual tour of the facility can be seen on our website: cetal.co.uk

What is the CETAL Living Lab used for?

As a test bed for new products and services in telehealth and telemedicine where real-time care can be delivered while the methodologies, products and services are put into practice.

Secondly, as a training facility for health and social care staff who will be working with these products and services on a daily basis. Also for members of the general public who act as carers or who wish to use telehealth and telecare technologies to help them maintain their independence.

Thirdly, the Living Lab is used to showcase new technologies to support innovation and creativity within the industry and the increasing range of products and services constantly being developed to go to market.

The Living Lab provides a unique insight into the use of telehealth and telecare technology in the home. We can demonstrate how these technologies work and their benefits. We offer demo sessions free of charge where we open the Living Lab to small groups who wish to see the facilities and see these technologies in action.

For commercial technology providers, the Living Lab can provide not only a showcase, but also an evaluation facility for your products, helping you to develop and validate your ideas.

Demonstration Facilities for Technology Providers

The CETAL Living Lab in Aylesbury provides an ideal opportunity for technology providers to demonstrate their products in a real-life environment. Our fully-equipped flat housed in a brand new, state of the art facility allows technology providers to demonstrate their products to potential customers and other interested stakeholders to show how their products can help to improve health and social care for their clients or themselves.

As well as being a state of the art showroom for products, the Living Lab is also used for training purposes thereby increasing the exposure of potential customers to new technologies and services. Technology providers can also use the Living Lab for their own demonstrations and seminars and contracts can be tailored to suit the needs of your organisation.

Who is this facility for?

- Users in their role as citizens and the community as a whole, who will be:
 - Empowered to influence the development of services and products which serve real needs and to jointly contribute to savings and improved processes through active participation in the R&D and innovation lifecycle.
- SMEs, including micro-entrepreneurs as providers to:
 - Develop, validate and integrate new ideas and rapidly scale-up their local services and products to other markets.
- Larger companies by:
 - Making the innovation process more effective by partnering with other companies as well as end-users, who are routed in active user experiences, increasing 'right the first time'.
- Researchers, the economy and society by:
 - Stimulating business-citizen government partnerships as a flexible service and for technology innovation ecosystems, integrating technological and social innovation through a 'beta culture'; increasing returns on investment in ICT and R&D.

Education and Training for Telehealth

Our Approach to Education and Training

We provide education and training in the exploitation and use of telehealth and telecare. Whilst technology is an important feature of providing telehealth and telecare, the real impact is through the redesign of patient pathways and the introduction of new models of care. The health and social care workers of the future will need to manage the design and implementation of new ways of working to promote the delivery of care more easily and in a timely manner.

Our programmes are designed to equip participants with a solid grounding in the technologies with the ability to see how these can be embedded through new patient pathways to deliver improved outcomes and cost-effectiveness.

Telehealth and Telecare Awareness for Care Providers

This one day programme provides an introduction to the benefits, challenges and operation of telehealth and telecare services. The participant will increase their knowledge and understanding of the integration of commercially available information and communication technologies into health and social care. Consideration of the design, procurement, installation and maintenance of systems for a range of service users will be explored.

Topics covered include:

- Introduction to telehealth
- Getting started with telehealth
- Telehealth in practice
- Technical requirements and options
- Privacy, security and medico-legal issues

Who is this programme for?

Health, social care professionals, health technology developers, commissioners for health and social care; and everyone who is involved or interested in telehealth and telecare.

Mode of delivery – Workshop or on-line

CPD hours available – 7

Bespoke Service

We also offer a bespoke service and can design programs exactly to your requirements.

Telehealth and Telecare for Health and Social Care Professionals

This five day program provides health and social care professionals with a systematic understanding of the concept and development of telehealth and telecare within their practice. It equips participants with the skills and understanding to evaluate the use of new telehealth and telecare technologies and be able to embed them in newly designed processes, including an understanding of all of the benefits and implications.

Topics covered include:

Topic 1 - Understanding the concept of telehealth and telecare and its role in health and social care.

Topic 2 - Review of the legal and ethical implications of using telehealth technology in health and social care.

Topic 3 - Practical examples of applying telehealth to support patients with long term conditions.

Topic 4 - Evaluation of the telehealth care services that support patients with long term conditions.

Topic 5 - Managing change to ensure the effective introduction of telehealth in health and social services.

Who is this programme for?

Health and social care professionals at all levels with an interest in developing telehealth and telecare within their organisation, health technology developers and commissioners for health and social care.

Mode of delivery – Workshop

CPD hours available and 15 academic credits

Enterprise Telehealth Sandpit Summits

Many creative telehealth and telecare applications have been developed, but they have not gained traction with health and social care providers. This is for many reasons, but often it is because clinicians do not understand or support telehealth and the commissioner purchasing framework makes it difficult for smaller companies to gain a foothold with their innovations.

As part of their Regional Network, CETAL are uniquely placed to help technology providers, clinicians, commissioners and service users work together to produce applications that are supported by all stakeholders. This has already been achieved through Project ITALIA, where sandpits were held as part of our Regional Network.

The Sandpit Workgroups:

- Create collaborative 'living lab' environments to test and develop telehealth solutions.
- Work with a specific challenge set by clinicians or industry requirements.
- Match solution providers with the challenge.
- Establish the right legal framework.
- Benchmark the current situation and available solutions.
- Explore innovative technology solutions.
- Develop state of the art solutions and product concepts.

Research and Evaluation Services

CETAL provides a wide range of research and evaluation services for health and social care providers, universities and commercial organisations. Using our expertise, we can work with you to design and deliver your unique research or evaluation project.

Some examples of the types of work we have done for clients are:

A Formal Evaluation Study of the Use of Telehealth to Deliver Remote Vital Signs Monitoring

Client - Thames Valley HIEC Knowledge Team and Buckinghamshire County Council

Overview

The aim of this project was to:

- Establish the effectiveness of vital signs monitoring from a patient's perspective, delivered using a telehealth approach. Does the technology deliver improved patient outcomes and if so, how?
- Explore the attitude and satisfaction experienced by participants, end users and professionals from remote vital signs monitoring, including enabling an improved clinician interaction with their client.
- Establish whether the use of the technology delivers a resource saving:
 - o in terms of Return on Investment.
 - o in terms of staff productivity and the overall service provided to patients.
 - o and in terms of a reduced cost to patients.

Outcome

There is the potential for significant savings from the use of telehealth monitoring systems. Staff recognised that the direct benefits include the improvement of health related quality of life and that the system provided a regular monitoring system which can serve as an early warning system if the patient's condition deteriorates.

Assistive Technology and Prevention: Evaluation of Learning Disability Telecare Project in Buckinghamshire

Client - Buckinghamshire County Council

The aim of this project was to:

- Explore the usability of technology to help young individuals with learning disabilities and outline the benefits and the barriers for its use with this group of clients.

Outcome

The findings of the project indicated that there is a positive role for the use of Assistive Technology to support clients with learning difficulties.