Newsletter December 2010

Welcome to the MATCH newsletter for December 2010. During the year, the membership of MATCH has grown to include new universities, companies, care organisations and government bodies. We will introduce some of the new members later in this letter.

Existing MATCH researchers have also had a successful year, with exciting work from projects such as Multi-Memo Home and Telesynth. Read on to find out more about these projects.

In this Issue ...

We meet the dot.rural project from Aberdeen, hear from a new Scottish home care technology provider and catch up with MATCH members' new work.

MATCH Web Portal in Operation

Many of the MATCH members have been using the new MATCH portal to disseminate information about their projects or their work. If you have not yet made an entry in the members wiki or if you'd like to see what other members are doing, you can use the portal at this address:

http://portal.match-project.org.uk:8080/web/match

You can also use the portal to announce events that you are planning or ask the community for advice on any aspect of care technology.

Report from WHI and MATCH Conference on Assisted Living



In September 2010, MATCH and the Wellness and Health Innovation centre ran an event on assisted living at the University of the West of Scotland. Companies in attendance were introduced to some of the MATCH technology and a number of new potential collaborations were born.

The keynote speech was delivered by Harry Wang of Parks Associates. Harry gave an interesting insight into his view of the market for Care Technology.

MATCH ran an afternoon workshop that brought researchers, companies and funding bodies together to encourage funded collaboration between industry and academia.

MATCH are grateful to Katie and Janette at WHI for all their work in organising the event.

New Members 2010

MATCH has welcomed a number of new members during 2010 and on this page we meet two of them.



"dot.rural" is funded by the RCUK Digital Economy Programme and is based at the University of Aberdeen. It is one of three Digital Economy Research Hubs in the UK, the others headquartered in Nottingham and Newcastle. dot.rural is led by various subject specialists and computer scientists and will employ up to 70 staff.

It focuses on 4 research themes in the rural digital economy: healthcare: accessibility and mobilities; enterprise and culture: and natural resource conservation. The healthcare theme will address emergency care; chronic disease management; ageing and technology and wellbeing and early detection. dot.rural is engaging with public sector providers and private companies in the healthcare and technology fields.

More detail on dot.rural and opportunities for collaboration is available at:

www.dotrural.ac.uk

General information on the RCUK programme is accessible at:

www.rcukdigitaleconomy.org.uk



Dutch company Omniqare now have a UK office selling their IQare products: MATCH member, Omniqare UK.

IQare provides home automation, telecare, telehealth, digital entertainment and telecoms through an all-in-one touch screen computer.

This online platform is designed to release people from the stress of having to be computer literate allowing them to access online information, products and services.

Communication is a key element of the standard system, which has video conferencing, video mail, and an online phone pad. There are also text and text to speech messaging, online language translation tools and audio support.

In addition to being able to access essential care and support services, the system can be integrated with commercial services from both local community services (e.g. food, special interest groups, hairdressing and transport) and existing online service providers (Tesco, Age Concern, etc.).

See www.omniqare.co.uk for more details

Project Update

User-Centered Design of Reminder Technologies for the Home www.multimemohome.com

MultiMemoHome is a research project aiming to develop user-friendly, accessible and effective reminder systems in order to improve home care. We are using usercentered design methods to investigate the things people forget and the methods currently used to remember things around the home, as well as people's current attitudes and expectations of telehealthcare technologies.

We're also investigating the different technology and techniques required to deliver useful and effective reminders to people of various ages, backgrounds and abilities. Most importantly, we're trying to create guidelines and methods that will allow designers to build better technology, and end users and carers to configure and personalize the technology to be as effective and as acceptable as possible.

For more details you can visit the website or email Marilyn McGee-Lennon – <u>mcgeemr@dcs.gla.ac.uk</u>. We believe the key to this is dynamic multimodal interaction: personalisable communication through sound, vision, smell and touch. Multimodal interaction allows us to create computer systems that are more accessible, especially to people with sensory impairments. It also supports devices and services that can change over time depending on our needs, location, and preferences. The MMH project brings together two worldclass teams to combine work on speech and multimodal interaction, supported by experienced clinicians from the only audiology training programme in Scotland.

MultiMemoHome

The

Project

Visit our website to find details of the research we have done already with older people to design reminder systems for the home. You can also read about what experiments and studies we have conducted to understand better how these reminders should be presented to make them as accessible and as acceptable to as many people as possible.





Project Update

The TeleSynth Project

TeleSynth is a one-year project funded by the Chief Scientist Office running from September 1, 2010 until August 30, 2011. It is led by Dr Maria Wolters, University of Edinburgh, in collaboration with Christine DePlacido. Senior audiology Lecturer in at Queen Margaret University, and Dr Brian McKinstry, Reader in Primary Care, University of Edinburgh.

The aim of this project is to determine how well older people can understand messages that have been generated by a computer voice under adverse conditions. We look at two types of adverse conditions, high levels of background noise and bad telephone lines. Both can affect all home care interventions that are delivered over the telephone, be it screening, monitoring, or reminder delivery, and both are to a certain extent outwith the user's control.

In the study, we focus on a particular type of message, medication reminders, because previous work has shown that these reminders are one of the most difficult messages to understand. If medication reminders can be remembered well, then other types of short messages should also be recalled without problems. We are currently collecting data; first results should be available in spring 2011.

It's Homer, but not Simpson

Project members Claire Maternaghan and Ken Turner have been extending the MATCH work to support a wide range of capabilities in the home. The new system called Homer supports many kinds of services in the home, from controlling heating and lighting to dealing with medication alerts and gas warnings.

At the heart of the system is the ability to control how the home should react using rules. Many home systems need specialised expertise to change how they behave. Instead, the idea is to let users define the rules for themselves. This lets users define exactly how they wish to be supported. The following simple examples give an idea of what is possible with rules:

When cold weather is forecast, turn the heating on an hour earlier in the morning

When I get home, turn on soft lighting and play my favourite music

When Gran forgets to take her medicine, let me know by text message

To make home care even easier to define, Claire has created an attractive program for the iPad tablet computer. This userfriendly interface lets users define rules in ways that are meaningful for them. A program for the iPhone also allows users to check the status of the home remotely.