



DREAMING Newsletter DK

eIDeRly-friEndly Alarm handling and MonitorING

August 2010 – No. 1

The DREAM world

Welcome to DREAMING.

DREAMING is an EU project, which has been running on the Danish island Langeland for a little over two years now. Two years where we in the DREAM team – yes, that is what we call ourselves! – have been working together to get off the ground a project with big dreams for the future.

These dreams have been prompted by what one might be tempted to call a present nightmare!

In Denmark, as in the rest of the EU, the number of elderly citizens continues to increase and many of these will suffer from chronic diseases. At the same time, the labour force is decreasing in size. According to the trade union FOA, the elderly care sector will be short of 67,000 workers by 2019! In other words, it is highly necessary for someone in Denmark to have dreams for the future.

The project may become very important for the elderly citizens in the future, who will hopefully be able to stay in their own home longer, avoid hospitalisations, and be released from hospital sooner because of the technology.

We have already come far. Welcome to our first newsletter.

Casper Dahl Marcussen, Project Leader DREAMING

Introduction to DREAMING

DREAMING is a pilot project testing welfare technology aimed at increasing safety and improving health for elderly citizens suffering from diabetes, heart failure, or COPD.

The pilot takes place in six European countries: Denmark, Germany, Sweden, Estonia, Italy, and Spain. In Denmark, Langeland Municipality acts as pilot site.

The welfare technologies comprise a range of technological devices, e.g. blood pressure meters, motion sensors, intelligent scales, etc. During the test period, which runs from June 2010 to June 2012, the technological devices are tested on approx 20 citizens while a group of the same size acts as a control group. The citizens take their own measurements, e.g. blood pressure or blood sugar, and the nurses can look

them up in a portal. This gives the nurses more time to care for the elderly citizens and by keeping an eye on the measurements in the portal, the nurses can make sure that the citizens are all right.

If the measurements differ greatly from the norm, which has been individually determined for each citizen, the nurses receive an alarm via SMS or email.

The project opens up for the use of many different technologies, but not all have been applied at the Danish pilot site. The box on the right shows the devices installed in homes on Langeland.

By use of video conferencing, the citizens can obtain contact with the doctor, nurses, and relatives, even if they are far away. This can contribute to relieving the feeling of isolation that many chronically ill elderly people experience.

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Blood pressure meter

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Oxygen saturation meter

Heart rate monitor

Scales

Peak flow meter

Motion sensor

Fire alarm

Thermometer

Video conference
on personal TV



Current state of play

During the last two years, where the DREAMING project has been running, the Danish team has encountered both obstacles and successes.

From the beginning of the project, it became clear that the implementation of the technology and especially obtaining internet access for all citizens would become a big challenge. This meant many trips between Odense and Langeland, and soon it became evident that a local colleague who knows the island and has the necessary technological proficiencies would ease and speed up the process. This is how Ole Jacobsen came into the picture.

Ole lives on Langeland and has a long career as a farmer behind him. He has retired early, but is still very active. He has played a big role in the deployment of the welfare technology and all citizens now have internet access and equipment installed in their homes.

The visiting nurses on Langeland have been very open towards the project even though it has entailed big changes in their working procedures. As they have gotten to know the technology, they have taken

an interest in its fields of application. They now see possibilities for using the technology in connection with other, and younger, citizens in order to better handle their diseases. This opens up the possibility for further implementation of the technology in the longer run and in more areas.

The citizens have also received the project with open arms. A keen advocate of the technology is Rasmus "Postman" Rasmussen who says: "I have no trouble using it, even though I'm not a fan of all the new technology", and continues, "I won't complain about someone keeping an eye on me".

By taking the daily measurements on their own, citizens like Rasmus have gained greater control of the development of their health and can rest assured that someone keeps an eye on their measurements. This way, the nurses can take action if the measurements differ too much from the norm and in many cases they can catch something before it gets too serious.

In addition, many citizens can save time-consuming trips to the doctor by having consultations via video conference.

DREAMING in the media

The media has shown great interest in the DREAMING project concerning the many new opportunities in applying welfare technology in the care for chronically ill elderly citizens. Below you will find links to articles and a video about DREAMING.

Ugeavisen Øboen

"Helbredet overvåges via internettet" (22. Jun. 2010)

<http://www.e-pages.dk/ugeavisenoebioen/10/> (p. 17) (Danish)

ePractice.eu

"DREAMING - eIDeRly-friEndly Alarm handling and MonitorING" (27. May 2010)

<http://www.epractice.eu/en/cases/dreaming> (English)

TV2

"Sygepleje på afstand" / "Nurse services from a distance" (video from the news 17. Apr. 2009)

[Dreaming – TV-nyhederne 2009](#) (English subtitles)

Fyns Amts Avis

"Langeland er vært for EU-møde om it-projekt" (9. Oct. 2008)

<http://www.fyens.dk/article/1531169:Langeland--Langeland-er-vaert-for-EU-moede-om-it-projekt> (Danish)

"Nu slipper Marie for at tage færge til lægen" (18. Sep. 2009)

<http://www.fyens.dk/article/1323015:Svendborg--Nu-slipper-Marie-for-at-tage-faerge-til-laegen> (Danish)

Share your knowledge!

We encourage our readers to contribute to the DREAMING Newsletter.

All ideas and contributions are welcome as well as any comments or suggestions you may have.

Contributions in both Danish and English are accepted. Please send to mac@medcom.dk



Upcoming events

AAL Forum 2010

In September, the next annual international conference under the Ambient Assisted Living Joint Programme (AAL JP) will be held in Odense, Denmark. The AAL JP is a European programme with the purpose of improving quality of life for elderly citizens through the development of age appropriate information and communication technologies. Participants from all of Europe as well as from the rest of the world will attend the conference, which will take place from 14 to 17 September in Odense Congress Centre.

Read more and register for the conference at the below link:

<http://www.aalforum.eu/>

Register for the DREAMING workshop by following this link:

<http://www.dreaming-project.org/workshopsEvents.html>

International advisory group meeting

In connection with AAL Forum, the International Advisory Group Meeting will be held on Langeland in Denmark. The meeting will take place on 31 August and include a demonstration of the DREAMING services, a visit with one of the citizens from the project, as well as many interesting presentations.

Interesting articles

The future in telemedicine

"Home telehealth - Current state and future trends" af S. Koch, *International Journal of Medical Informatics* 75 (2006), 565-576.

This article is based on the review of 578 articles and shows trends and future research areas in telemedicine. In addition, the article provides definitions of different terms from the same field.

Barriers for tele monitoring

"Automated weight monitoring in chronic heart failure: the excluded majority" af G. Johnston og G. Weatherburn, *Journal of Telemedicine and Telecare* 16 (2010), 190-192.

This article is rather new and reports from interviews of nurses and patients who participated in a research project with the purpose of home monitoring patients with chronic heart failure. The article describes multiple barriers in the implementation and use of tele monitoring of this particular group of patients as well as the pros and cons related to this method.



"Welfare technology: a business opportunity worth billions"

Langeland Municipality & the Region of Southern Denmark

Langeland Municipality and Region of Southern Denmark are the Danish partners in DREAMING and Langeland also acts as the Danish pilot site. Both the municipality and the region hope that DREAMING will provide a better utilisation of the resources for welfare and elderly care, improve working conditions for employees in the public welfare sector, and increase the elderly citizen's degree of self management, dignity, and quality of life.

PreventionCentre (ForebyggelsesCentret) Langeland

The PreventionCentre on Langeland attends to health promoting and preventive efforts on the island. The centre is engaged in development and project work, as well as health promotion and prevention directly targeted at the elderly citizens. The PreventionCentre has an important role in the deployment of the DREAMING project on Langeland.

Meet the Danish DREAM team



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