

GOOD EHEALTH DISSEMINATION EXPERIENCE & LESSONS LEARNED FROM TWO GOOD EHEALTH CASES: THROMBOSIS DIGITAL LOGBOOK & TELECARDIOLOGY

I. Moldenaers¹, B. Lejeune¹, T. Jansen¹, R. Hammerschmidt²

¹Deloitte Consulting Belgium, imoldenaers@deloitte.com,

blejeune@deloitte.com, thojansen@deloitte.com

Berkenlaan 8C, B-1831 Diegem, Belgium

² empirica GmbH Germany, reinhard.hammerschmidt@empirica.com

Oxfordstr. 2, D-53111 Bonn, Germany

Abstract

The Good eHealth project is a three-year study (2006-2008) commissioned by the EU DG INSFO to share and promote examples of good practices in eHealth which have not yet been widely publicized. Two interesting examples of this project will be discussed:

1- Thrombosis Digital Logbook: In the Netherlands, an innovative and unique system of home monitoring equipment and a web medical record for patients and medical professionals has been created. At the moment over 50% of all Dutch patients that measure their own International Normalized Ratio (INR) use the Thrombosis Digital Logbook. This solution more than doubled the number of patients nurses were able to treat.

2- Telecardiology in Lombardy, Italy: This project is about the realization and further expansion of a successful telecardiology network for GP's launched in a mountain region in Lombardy. Currently there are three different types of telecardiology services resulting in benefits in access to, and quality of health care as well as economic benefits. The project has an estimated economic return of 250%.

Good eHealth project

Today, a wide variety of innovative ICT applications have been successfully implemented. They constitute a source of valuable experience and examples of good practices.

The Good eHealth project is coordinated by Deloitte Belgium in partnership with empirica. The main objectives of the project are to:

- Identify good practices and their associated benefits;
- Develop and implement proven approaches to wider dissemination and transfer of day-to-day experiences;
- Stimulate and foster accelerated up-take of eHealth by addressing the common challenges of eHealth and lessons learnt.

In this session attendees will get an insight in two cases, both characterized by a successful step by step development. The presentation will give an up to date overview of the projects in terms of objectives, main milestones, challenges faced, success- and failure factors, wider impact as well as the intentions for further development and implementation in the future.

See also for more information: www.good-ehealth.org/

Thrombosis Digital Logbook

The Thrombosis Digital Logbook in the Netherlands is a system of home monitoring equipment and a web medical record for patients and medical professionals. The Digital Logbook contains a medical record and functions for the thrombosis service to perform the medical supervision of the patients. This entails entering new blood values and the calculation under protocol of a new dosing scheme. It also contains the possibility to immediately make adjustments and communicate these to the patients.

Patients can perform blood analysis at home, but the Thrombosis services still bear medical responsibility. Patients have direct access to a secure part of their own medical record through the Internet. Reimbursement for the use of home monitor equipment by health insurance companies is possible since 2002.

The project shows us how to support self management, increase patient compliance and make evidence based treatments accessible for everyone in need of it. Some key indicators of the Thrombosis Digital Logbook are given below.

Objectives

The main (general) objective is to contribute to the social tendency towards more self management of disease. Another objective of the project is to make evidence based treatments accessible for everyone in need of it by applying innovative systems, techniques, and processes.

Outcomes

- Patients and care provider are very satisfied about the service and patients become more empowered through self management.
- Over 50% market share in the thrombosis market in the Netherlands
- Number of patients nurses were able to treat, increased by 100%.
- Acceptance of the ASP web based model by the health care industry

Success factors

- Cost effectiveness through less administrative work and effective communication (anywhere, anyplace, anytime)
- Independence and freedom of the patient
- Standardization by using HL7

Failure factors

Due to limited training capacity and a negative point of view from the health suppliers towards this new method of health management, fewer patients are trained than expected.

See also for more information: www.portavita.nl

Telecardiology in Lombardy, Italy

This telecardiology project began in 1998 with the Boario Home Care Project, Lombardy. At that time, the project aimed to install, evaluate, then establish a telecardiology network for general practitioners in a mountain region in Lombardy. Currently there are three different types of telecardiology services:

1. Rapid second opinions for GPs: the service links general practitioners to cardiologists to provide access to specialist advice, as needed. Telecardiology provides electrocardiogram information faster than waiting for conventional appointments with doctors for the equivalent service. This quicker availability helps reduce the time patients have to wait for a second appointment to be given their electrocardiogram results and enables immediate start of the appropriate treatment.

2. Home telenursing for chronic patients: telecardiology is used by patients in their homes to collect data about the performance of their heart. Data is then transmitted to medical and nursing staff for review and response.

3. Call centre services for hospitals: terminals have been set up in University and Public Hospitals, functionally linked with the service centre of HTN, and configured to share the application program interface of the central station with on-site and on-line licences. The service centre is active 24h/ day and provides educational, technological and organisational support.

The project shows us the benefits from a telemedicine network connecting chronic patients, general practitioners and organizations providing health-care. Some key indicators of the Italian Telecardiology project are given below.

Objectives

The general objective was to realize better cardiology services to patients, while simultaneously improving the allocation of healthcare resources by applying new models of disease management and new technologies.

Outcomes

- The telecardiology initiative shows an economic return (net benefits to cost ratio) over 15 years of 230%.
- The estimated net benefits for the period have a total present value of EUR 99 million. About 31% of the direct benefits from telecardiology are for citizens; about 69% are for healthcare provider organizations.

Success factors

The success is partly realized due to the fact that the design of the service follows the needs of physicians and patients. These patient needs emerged from clinical trials. The clinical trials provided robust and peer-reviewed clinical evidence about telecardiology.

Failure factors

Dependence on temporary external resources is a failure factor. In 2004, some research programs involving general practitioners stopped and the number of general practitioners using telecardiology decreased by around 55%. With the authorities' decision in 2005 to reimburse the service across the region, numbers began increasing again.

See also for more information: www.e-htn.it/home.htm