

## Volume 11, Issue 1 / 2009 - E-Health

### E-Health Investment

---

#### High Potential Opportunity and Managerial Challenge

The increase in demand for health services tends more and more often to outstrip the increase in supply. Ageing populations, increasing incidence of chronic diseases, and improvements in medical knowledge and technological equipment are the main demand drivers across the EU. The financial and real resources available for meeting this increase in demand are limited. As a result of this worsening mismatch, the generic investment challenge is to improve the performance and capacity of the supply side in order to meet some of the growth in demand. The European eHealth IMPACT (2006, [www.ehealth-impact.eu](http://www.ehealth-impact.eu)) and EHR IMPACT studies (2008 [www.ehrimpact.eu](http://www.ehrimpact.eu)) showed that effective

e-health solutions can substantially contribute to improvements in quality, access and efficiency of healthcare, thus increasing the capacity of the supply side.

#### How to Invest in E-Health?

The recently completed Financing e-Health Study (2008, [www.financing-ehealth.eu](http://www.financing-ehealth.eu)) provided a generic guide for potential e-health investors to support them in the decision making process. The guide, addressing decision makers and managers, sheds light on, and draws the connection to, the overall decision taking and change management processes that are part of e-health investment.

The main lesson regarding the models to adopt is to integrate the e-health investment decisions into the healthcare strategy of the organisation. E-health can deliver, but it has to become part of the general resource mix considered in addressing healthcare needs. Then, e-health investments are considered alongside more conventional investments and the ones with the best value for money can be selected. The financing model for the investment should only be considered after the economic analysis is being performed. The approach is illustrated in the figure below. Too often, investments are driven by affordability considerations and not by a comparison between investment and the economic value of its impact.

#### The Process of Economic and Financing Decisions

Common difficulties in e-health investments reflect the differences between e-health and conventional ICT investment. Ehealth focuses on changes in the way healthcare is delivered, which is a demanding endeavour. In ehealth investment, ICT serves only as an enabler, not as an end. In this context, the main obstacles to success include:

unrealistic timescales;

underestimated risks;

inherent procurement difficulties, and,

a common misperception of the nature of most valuable benefits from e-health.

#### Timescales for E-Health

Project management for some ehealth projects focuses mainly on deploying and managing the resources during the design, development and implementation stages, and possibly the initial stages of operation. This time - scale can be too short for sustain able e-health investment. It may fit an ICT project, but seldom provides the time required for the activities needed to realise net benefits: typically, about four years on average and at least eight years for EHRs. The appropriate timescales extend well beyond the business and financial planning of most healthcare provider organisations and can present financing challenges for e-health.

Instead, the e-health investment lifecycle should be set by the time needed to realise the required net benefit, the ultimate objective. This will enable the management and productive utilisation of all the reallocated resources, as part of change lifecycle.

#### Risks

Like all investments, as complexity and scale increase, so do the scope, probabilities and costs of risk. Plans for e health investment seldom evaluate the potential of risk realistically. The result is no recognition of risks as costs, no mitigation and no respective financial provision. This in

turn leads to understated costs and overstated benefits, which is not a good foundation for e-health investment.

For example, engagement with users and other stakeholders is a high risk activity. Where it is not successful, the effect can inhibit e-health activities for many years. Where it is successful, e-health investors tend to apologise for the extended timescales, understating the significant reduction in risk by pursuing effective collaboration and engagement, especially with healthcare professionals.

## Procurement

Another concern is that there is still a mismatch between supply and demand for e-health systems and tools. Experts consulted in the Financing eHealth Study reported of repeated occasions in which ICT suppliers were not in the position to supply the solutions needed for benefit realisation, leaving investors with the task to develop rather than procure. At the same time, requirements are not always set effectively by procurers, making the lives of ICT vendors more difficult.

## The Value of Non- Financial Benefits From E-Health

The challenge is to ensure that the total investment matches an appropriate total economic benefit. It is important to treat ehealth investment in the same way as other new investments in healthcare, such as new drugs and surgical techniques. It should not be a means of saving money and improving overall cash flow, but an investment in better healthcare.

Large proportions of economic benefits from e-health are from quality, including patient safety, and time improvements. E-health is usually a net investment, with a negative financial return, so financial benefits must be realistic in their value and their timing. Sustainable e-health investment requires that all decision takers and financial stakeholders are clear about the distinction between economic benefits and financial savings.

The task is to identify, define and describe all the benefits needed from better information for each strategic initiative. There are several examples, such as inform patients better, improve patient safety, improve timeliness, streamline healthcare, improve clinical effectiveness by sharing patient information with other healthcare professionals that form the multi disciplinary team providing patient care, and modernise healthcare: all quality goals. Some citizens, such as those in remote locations, may need improved access to hospital and other specialist health services. Improving efficiency by saving time and cutting waste may be a priority.

## The Impact of E-Health on Hospital Management

The critical requirement for leaders, executives and e-health stakeholders is to be able to deal with ehealth investment as an integrated part of all healthcare investment. Finance executives and managers have a more specific role. First, they need to understand the value and impact of e-health, so they can extend and develop financial planning to deal with e-health investment time scales. Second, they need to extend their financial management skills to be able to develop ways to invest in better value.

This expands the principle of organisational change from healthcare professionals who use the ehealth investment directly, to the whole organisation. It is just as uncomfortable for executives as it is for healthcare professionals. As healthcare professionals use new information to improve quality, access and efficiency, executives are confronted with new clinical, working, and information exchange practices: they have a different organisation to run.

## Conclusion

E-health is slowly becoming a must have in modern healthcare. Expectations and resource constraints call for a high potential response, and e-health seems to be part of it. This seems to be common wisdom, but begs the question why e-health investments are not always successful in proving their potential. The answer is to some extent conveyed in this article, which is based on extensive research for the European Commission in the Financing eHealth Study. More needs to be invested in acquiring appropriate knowledge and experience with ehealth in order to master the managerial challenges associated with realising its potential.

## Authors:

**Alexander Dobrev,**

**Karl A. Stroetmann,**

*Empirica, Germany*

*Tom Jones, TanJent, UK*

Email: [Alexander.Dobrev@empirica.com](mailto:Alexander.Dobrev@empirica.com)

Published on : Mon, 23 Feb 2009

© For personal and private use only. Reproduction must be permitted by the copyright holder. Email to [copyright@mindbyte.eu](mailto:copyright@mindbyte.eu).