
Volume 4 / Issue 5 / 2009 - EU News

The Socio-Economic Impact of Interoperable Electronic Health Record (EHR) and

EPrescribing Systems in Europe and Beyond

Commissioned by DG INFSO and Media, unit ICT for Health the EHR IMPACT study (EHRI) investigates the socio-economic impact of interoperable Electronic Health Record (EHR) and ePrescribing systems in Europe and beyond.

The study comprises of detailed qualitative analyses of 11 good practice cases in Europe, USA and Israel. Nine of these cases also went through quantitative evaluation of their socioeconomic impacts. The aim is to support ongoing initiatives and implementations and to improve awareness of the benefits, socio-economic impacts and lessons learned from successful implementations.

An inductive, empirical approach was taken with two applied perspectives: The socio-economic and a narrower, financial one within the socio-economic therefore providing a rigorous evaluation of the long term impacts of interoperable EHR and ePrescribing systems. Case studies include systems from Scotland, Switzerland, Bulgaria, Spain, Sweden, Czech Republic, France, Italy, Israel and the USA.

Evaluation consists of a two-point analysis:

1. Developing an understanding of the healthcare and organisational setting in which the systems operate, identifying the path of development, ICT functionality, usability, users and stakeholders.
2. Identifying relevant impacts over time from an initial hypothesis. (This step develops the qualitative analysis into a quantitative evaluation by assigning monetary values.)

Cost Benefit Analysis (CBA)

CBA turns theory into a pragmatic evaluation tool. It is often used to analyse the impact of investments and can include all stakeholders and can extend over a long period of time. CBA also allows narrower financial components within the costs and benefits to be identified and analysed separately.

The roll-out of EHR systems requires a consistent methodology and close cooperation with teams onsite to ensure models are fit for purpose. This includes telephone and email exchange, site visits and face to face interviews. Close cooperation is needed to reflect specific settings.

Worth the Investment?

For all cases, eventually the socio-economic gains will outweigh the costs although this is often after a considerable amount of time. The report describes EHRs and ePrescribing as sustainable wins, not quick wins; positive socio-economic gains are produced only after four to nine years and six to eleven years are needed to produce a cumulative net benefit. These factors are very important when considering investing in such systems; a long time scale is essential.

The study shows that benefits from the implementation of these systems come under very broad, diverse categories but are very individual and specific to particular contexts.

The analysis of financial impacts of the system highlights the importance of managerial input. Managers' skills and expertise in facilitating organisational change and resource redeployment is a key factor in producing financial returns. The report states that healthcare provider organisations bear most of the costs and are the main beneficiaries but citizens and healthcare providers are more likely to reach a net benefit more quickly.

Interoperability

Interoperability is the key benefit of such systems: Information is available anywhere, at anytime. Closed systems would not reap as many gains. EHR systems are the backbone of health information systems and support other systems such as ePrescribing, eBooking, management systems etc.

Continuous, constructive engagement is a prerequisite for positive performance outcomes. This engagement should come from both the management and professionals, moving from consultation to dealing with propositions, concerns and requirements.

Policy

Policy should establish the right climate and incentives for health organisations to make the required investments. Political commitment to the main healthcare goals such as quality improvement, increasing efficiency and also to removing organisational and regulatory barriers. Policy makers should also ensure that investors, project teams and stakeholders are given adequate time to achieve net socio-economic returns.

Investment and Support

Consistent, continuous investment in people as well as technology is essential in achieving proposed strategic goals. Financial support should also be sustainable as timeframes are often lengthy.

Made to Measure

The report highlights that there is no correct style or strategy. EHR and ePrescribing systems should be “made to measure” depending on local/regional settings and requirements. Obviously roles and priorities differ between healthcare systems and systems should be designed to meet these particular needs. What are transferable are the experiences and success stories from others who have implemented such systems. A lot can be learned from the principles, tools and technology.

The overall goal is better healthcare, not financial gain. The implementation of these systems is a clinical venture in order to facilitate change in clinical and working practices; improving the delivery of health services and performance. The socio-economic benefits of the systems can reach as much as 200% returns on initial investment.

There are two main findings from the EHR IMPACT study. The first is the need for constant engagement and dialogue between users and ICT experts. Although time consuming, this dialogue (before any investments are made) is essential to ensure the right decisions are made. The second point is the benefits of interoperability: Access regardless of time or place and the ability to re-use information for multiple purposes makes life easier for users and increases gains and justifies the costs of investment.

The results of the EHR IMPACT study show a positive outlook for the future of EHR and ePrescribing in Europe. Its strategic recommendations are meant to encourage and support future initiatives of this kind.

For more information, please visit: www.ehr-impact.eu

Published on : Tue, 22 Sep 2009