

## OP97 Digital Home Services: Overcoming Critical Barriers In Early Decision Making

### AUTHORS:

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### INTRODUCTION:

There is a lack of adoption and diffusion of health innovations needed to drive the implementation of important breakthroughs in value-based health care. To stimulate organizational changes, decision-makers need to see potential benefit at an early stage. The aim of the present study was to assess the potential effects of a conceptualized intention to provide digital home-based care and compare it to the current provision of such care. The new intervention aims to strengthen the municipality's care services by offering a digital communication platform to recipients of home-based health services and their dependents. The platform is designed to be implemented nationally and is in line with home service needs identified in several white papers.

### METHODS:

An interdisciplinary team united to determine and quantify potential effects of the project. Effects of the digitalized service were distinguished in priced quantitative, unpriced quantitative and qualitative effects. A ten-year present value calculation with a calculation rate of four percent was used for the estimates. A risk analysis was also carried out.

### RESULTS:

The present value calculation resulted in estimated savings equal to EUR 25.8 million, with present value investments costs of EUR 5.5 million over ten years. This resulted in net present value per invested euro in the public sector equal to EUR 3.2. Overall assessment of uncertainty related to the intervention's socio-economic profitability was deemed average. Based on data quantified estimates from the conceptual phase, the project succeeded in the decision-making and funding needed to proceed into the next developmental phase of the project.

### CONCLUSIONS:

The present approach to early assessment may provide much desired decision support in an early innovation phase when data are still missing. Our experience is that early stakeholder involvement and the early assessment

and quantification of value gains are of utmost importance to overcome the critical barriers to organization health innovations.

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## OP99 Sustaining Mobile Health Interventions In Vietnam: The Challenges

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### INTRODUCTION:

Mobile health (mHealth) is increasingly being seen as a promising solution to the multiple health system challenges that Vietnam faces, including inadequate health service provision. Nevertheless, there is limited published information describing the sustainability of such mHealth solutions in the Vietnamese context. This study reviewed the available projects and interventions to evaluate factors challenging sustainability of mHealth initiatives in Vietnam.

### METHODS:

A multimodal scoping study was designed to collect data from various sources: published literature, government reports, unpublished literature, conference presentations, online documents, and key informant interviews. Relevant mHealth initiatives were identified and selected through electronic searches and informal discussions with key stakeholders. Collected data was charted and classified by thematic analysis. Challenges to the sustainability of mHealth initiatives were discussed in the context of the strengths, weaknesses, opportunities, and threats (SWOT).

### RESULTS:

Twenty mHealth initiatives with relevant information and available data were collected, covering the period from 2010 to 2017. Fifteen (75 percent) were primarily funded by external donors, one (5 percent) was government supported, and four (20 percent) were self-funded projects. Five (25 percent) were on-going, and fifteen (75 percent) were completed at the time of data collection. Four (20 percent) out of the completed initiatives were continuing to use materials, infrastructure, and technology to engage end-users.

**CONCLUSIONS:**

The high percentage of external funding, complicated governmental bureaucracy and lack of government commitment, electronic medical record standardization, and legislation relating to mHealth are amongst the largest challenges to mHealth sustainability in Vietnam. In addition, findings demonstrate it is crucial for project managers of mHealth initiatives to build strong relationships with the Vietnam government and advocate for their mHealth initiatives in order to promote sustainability.

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## OP100 Implementing Electronic Health Record In A Children’s Hospital

**AUTHORS:**

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**INTRODUCTION:**

The adoption of electronic health records (EHR), which contain large volumes of aggregated longitudinal clinical data, guarantees substantial benefits, including better care, improved safety and decreased clinical risks; however, it is also associated with significant costs and large technical and organizational impacts. For these reasons, it is important to conduct a comprehensive evaluation of health care delivery outcomes. The purpose of the study is to gather evidence on the safety and overall effectiveness of EHR implementation at Bambino Gesù Children’s Hospital.

**METHODS:**

A decision-oriented health technology assessment (HTA) method was applied to assess the technology on clinical, technical, organizational, economic, legal, ethical and safety domains. It is a new implementation of the EUnetHTA CoreModel integrated with the Analytic Hierarchy Process. The evaluation structure was a hierarchical decision tree filled with indicators of a technology’s performance, where each indicator was weighted based on its relative impact on decision making. Finally, the alternatives’ ranking was defined. A subgroup of these indicators has been included in a checklist for the evaluation of six EHR implementation projects.

This checklist was used as a tool by each involved professional during demo sessions.

**RESULTS:**

The assessment took into consideration all the recommendations about the benefits and disadvantages of EHR. In particular, EHR seems to offer many benefits in terms of safety and clinical effectiveness, such as improved continuity, quality of care and accessibility of the data. Its implementation resulted in important organizational outcomes such as EHR configuration, learning curve and training; usability was the main technical characteristics of the technology taken into account. Finally, legal aspects on privacy and data security assumed a key role.

**CONCLUSIONS:**

A detailed technology evaluation of EHR has permitted the hospital’s decision-makers to knowingly assess its introduction in the hospital.

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## OP101 Hospital-Based Health Technology Assessment At UW Medicine

**AUTHORS:**

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**INTRODUCTION:**

New medical technologies are an important part of delivering innovative healthcare, however, expanding use of medical technology is a major contributor to rising costs. The increase in medical spending is related to new technologies being rapidly developed, marketed and adopted; and often being incorporated into health systems with little evidence. They also come with higher prices when compared to existing technologies.

**METHODS:**

We describe how University of Washington (UW) Medicine has designed, and developed a new hospital-based health technology assessment (HB-HTA) program, Smart Innovation. Smart Innovation will replace a fragmented and complex set of purchasing and coverage-decision processes. The program will