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.

OP100 Implementing Electronic Health Record In A Children's Hospital

AUTHORS:

Martina Andellini (martina.andellini@opbg.net), Roxana di Mauro, Francesco Faggiano, Pietro Derrico, Lorella Scorteccia, Matteo Ritrovato

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.

OP101 Hospital-Based Health Technology Assessment At UW Medicine

AUTHORS:

Erik Landaas (erikl@uw.edu), Allison Devlin, Erik Walerius, Sandra Buckingham, David Flum, Carlos Pellegrini, Francine Yoshioka, Jackie Thiebe, Sean Sullivan

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

https://doi.org/10.1017/S0266462318001320 Published online by Cambridge University Press

streamline the decision-making process for new medical technologies and balance quick turnaround with rigorous evidence standards. The program is also being developed in collaboration with UW Medicine's Value Analysis team, an evidence-based purchasing team and MedApproved, a new centralized software program for medical purchasing at UW Medicine.

RESULTS:

Smart Innovation has been reviewing technologies during its first year and has received encouraging results. For example, by adopting a new liver ablation technology, UW Medicine has estimated improved patient outcomes by reducing the number of procedures and adverse events; as well as saving approximately USD 8,000 per patient. Additionally, The Smart Innovation program has achieved projected cost avoidance from deciding not to adopt uncertain or investigational technologies. For example, by not adopting a new bladder cancer screen, our models indicate UW Medicine will avoid spending USD 1.5 million per year.

CONCLUSIONS:

Smart Innovation is proving to be an effective program for reviewing and making critical healthcare policy decisions that is showing significant fiscal and patient improvements for UW Medicine. As the program continues to grow and become embedded into UW Medicine, its impacts will become even more valuable and system-wide.

OP102 Multiple Criteria Decision Analysis In The Field Of Hospital-Based Health Technology Assessment

AUTHORS:

Andrey Avdeyev (avdeyev.andrey@yahoo.com), Adlet Tabarov, Amir Akhetov, Nasrulla Shanazarov, Aigul Kaptagayeva, David Hailey

INTRODUCTION:

One of the main tools for Hospital-Based Health Technology Assessment (HB HTA) is the preparation of a mini-health technology assessment (HTA) report. Despite the high value of the results of mini-HTA reports for hospital decision-makers, the classical mini-HTA report does not allow a direct comparison of several health technologies among themselves.

METHODS:

Based on the analysis of international experience of using the principles of multiple-criteria decision analysis (MCDA) in the field of HB HTA, we created and approved our own managerial decision-making model which includes five standardized multiple criteria. The value (weight) of each criterion was defined as the arithmetic mean obtained as a result of interviewing hospital decision-makers and an HTA expert group.

RESULTS:

Five standardized multiple criteria were included in the structure of our mini-HTA report. These criteria presented the main results of assessment of the viability of implementing new health technologies (HTs) in hospital practice and contain the following: i) Novelty/innovation; ii) Comparative clinical effectiveness and safety; iii) Relevance (demand); iv) Economic effectiveness; and, v) Payback period. We conducted the modeling of various options of HTA results by using multiple criteria, which allowed us to determine the threshold values of the evaluated HTs corresponding to their priority for implementation: i) High priority - HTs are recommended for implementation; ii) Medium priority - HTs can be recommended only if there are sufficient financial resources in hospital; and, iii) Low priority - HTs may be recommended only if there are strong reasons for their need.

CONCLUSIONS:

Integration of the principles of MCDA in the structure of mini-HTA reports gives the opportunity to i) make comparative assessments of implementing new health technologies based on standardized criteria; ii) determine the priority for implementation of newly evaluated health technologies; iii) avoid the influence of subjective factors on the managerial decision-making in hospitals.

OP104 Moving Forward Hospital-Based Health Technology Assessment: Public Procurement Of Innovation

AUTHORS:

Gabriela Restovic (restovic@clinic.cat), Joan Sagarra, Laura Sampietro-Colom, Marta Sitges

https://doi.org/10.1017/S0266462318001320 Published online by Cambridge University Press