

Methods. A set of simulations using hypothetical scenarios were developed with uncertainty set at ± 20 percent. The simulations investigated the impact of number of cost components, balance between components, and correlation between them. A cost-utility model from an assessment of robot-assisted radical prostatectomy was analyzed; procedure cost was divided into 32 individual cost components or treated as a total cost.

Results. Based on five equal cost components, uncertainty reduces from ± 20 percent for correlated variables to ± 9 percent for uncorrelated variables. With increasing numbers of uncorrelated cost components, the uncertainty in the total cost decreases markedly. The uncertainty around total robot-assisted surgery procedure equipment costs was ± 19.7 percent when components were correlated and ± 9.4 percent when uncorrelated. The impact on uncertainty in the incremental cost effectiveness ratio (ICER) was negligible but the ranking of parameters in the univariate sensitivity analysis changed.

Conclusions. Analyzing uncertainty by aggregated or disaggregated costs can have implications for presenting uncertainty in costs to decision makers. Applying uncertainty to aggregated costs essentially implies that variation in the cost of individual components is perfectly correlated. By disaggregating cost components they are being treated as uncorrelated, which can substantially reduce uncertainty in the total cost. In this case study we found that although the reduction in uncertainty could be clearly seen in the cost parameter, it had a negligible impact on uncertainty in the ICER.

OP38 Implementing Social Innovations: From Evidence-Based To Theory-Driven

Ingrid Zechmeister-Koss (ingrid.zechmeister@hta.lbg.ac.at), Melinda Goodyear, Jean Paul and Annette Bauer

Introduction. For the last decades, health technology assessment has been strongly promoted in order to provide evidence-based rather than eminence-based healthcare. However, when it comes to implementing interventions that are based on processes and behavior rather than products, importing evidence-based interventions is likely to fail because it ignores the strong influence of contextual factors. In a recently started research project, an alternative approach is tested.

Methods. The project aims at improving identification and support of children who have parents with a mental illness in an Austrian region (Tyrol). A theory- and stakeholder-driven approach has been designed in order to co-develop, implement and evaluate practice approaches for improving the situation for children. The former addresses the questions whether, how and why suggested practices may work and the later brings together evidence and practice to develop interventions that are feasible and take the regional context and service settings into account.

Results. Based on evidence from various sources (literature, international and local stakeholder interviews), theories that describe the key mechanisms of action to influence outcomes for children have been developed. A regional and interdisciplinary group of practitioners and people with lived experience has been established to facilitate the development of the theory of change and practice approaches for the region and local service settings.

The final practice model is then monitored in the respective organizations with implementation support from the research team.

Conclusions. Theory-driven and co-designed-based approaches are a feasible alternative to 'off-the-shelf' evidence-based practices for supporting decision makers in implementing complex interventions. However, they require a broad variety of skills within the research team as well as willingness to accept uncertainties of the final outcomes produced, which can also be of risk to funders. The ongoing project will demonstrate whether the developed practices will be implemented successfully and result in benefits for the affected children.

OP39 Adapting HTA To Suit Emerging Needs - An Australian Experience

Mary Warner (mary.warner@health.gov.au)

Introduction. Australia has a well-developed HTA system for approving, funding and disinvesting in medical services, but how does it cope when it assesses new or existing services when health system frameworks, policy and legislation do not keep pace? This presentation will present a number of case studies where HTA methods have adapted to suit emerging health needs of the Australian community.

Methods. Australia's HTA system has been adapted over recent years to allow it to perform HTA on novel services that do not fit into its standard HTA pathway to public funding. There has also been an increasing number of assessments where HTA has been unusually sponsored by the funder to assess priority health care needs.

Results. More Medicare funding for addiction and sexual health consultation services are an example of a novel HTA which led to more public funding for these services. Limited evidence for these services was available and there was difficulty in demonstrating that increased public funding would lead to better outcomes for patients. A range of techniques, such as examining real world data and stakeholder views were partnered with HTA to assess these services. Currently, HTA is being utilised to assess a novel medical treatment known as the anti-CD19 chimeric antigen receptor T cell (CAR-T) therapeutic process. This is a complex, non-standard HTA which encompasses aspects of the Australian hospital funding system, Medicare and the Pharmaceutical Benefits Scheme and requires an adapted HTA process to assess evidence across a range of funder systems.

Conclusions. Australia's well established HTA system has adapted to become more agile to suit emerging health care needs for a range of interest groups, the government, sponsors and consumers. Consultation with stakeholders and the community have assisted in developing and refining these new processes.

OP40 Criminal Justice Costs And Benefits Of Mental Health Interventions

Luca Janssen (luca.janssen@maastrichtuniversity.nl), Irina Pokhilenko, Ruben Drost, Aggie Paulus and Silvia Evers