OP179 Quantitative Evidence Synthesis Methods For Assessing The Effectiveness Of Treatment Sequences For Clinical And Economic Decision-Making: Methodology Review

Ruth Lewis (r.lewis@bangor.ac.uk), Dyfrig Hughes, Alex Sutton and Clare Wilkinson

Introduction. The sequential use of alternative treatments for chronic conditions represents a complex, dynamic intervention pathway; previous treatment and patient characteristics affect both choice and effectiveness of subsequent treatments. Evidence synthesis methods that produce the least biased estimates of treatment-sequencing effects are required to inform reliable clinical and policy decision-making. A comprehensive review was conducted to establish what existing methods are available, outline the assumptions they make, and identify their shortcomings.

Methods. The review encompassed both meta-analytic techniques and decision-analytic modelling, any disease condition, and any type of treatment sequence, but not diagnostic tests, screening, or treatment monitoring. It focused on the estimation of clinical effectiveness and did not consider the impact of treatment sequencing on the estimation of costs or utility values.

Results. The review included ninety-one studies. Treatment-sequencing is usually dealt with at the decision-modelling stage and is rarely addressed using evidence synthesis methodology for clinical effectiveness. Most meta-analyses are of discrete treatments, sometimes stratified by line of therapy. Prospective sequencing trials are scarce. In their absence, there is no single best way to evaluate treatment sequences, rather there is a range of approaches, each of which has advantages and disadvantages and is influenced by the evidence available and the decision problem. Due to the scarcity of data on sequential treatments, modelling studies generally apply simplifying assumptions to data on discrete treatments. A taxonomy for all possible assumptions was developed, providing a unique resource to aid the critique of decision-analytic models.

Conclusions. The evolution of network meta-analysis in HTA demonstrates that clinical and policy decision-making should account for the multiple treatments available for many chronic conditions. However, treatment-sequencing has yet to be accounted for within clinical evaluations. Economic modelling is often based on the simplifying assumption of treatment independence. This can lead to misrepresentation of the true level of uncertainty, potential bias in estimating the effectiveness and cost effectiveness of treatments and, eventually, the wrong decision.

OP181 Adapting Evidence To Produce A Health Technology Assessment Of Mammography Screening: An Example From The West Bank

Lieke Fleur Heupink (liekefleur.heupink@fhi.no), Mervett Isbeih, Sharif Qaddomi, Elizabeth Peacocke, Ingvil Sæterdal, Rand Salman and Lumbwe Chola

Introduction. Health technology assessment (HTA) can play a key role in evidence-based decision-making. However, HTA requires resources that might be lacking in low-income settings. To test the feasibility of adapting existing evidence as part of the HTA process, this project evaluated the effectiveness and economic impact of breast cancer screening programs for women over 40 years in the West Bank, where mammography screening is provided for free in governmental clinics.

Methods. We conducted a search for systematic reviews, HTAs and guidelines in electronic databases. We included the most recent global systematic review and meta-analysis that fulfilled our inclusion criteria. The European Network for Health Technology Assessment (EUnetHTA) adaptation toolkit was used to guide adaptation and undertake a budget impact analysis of the economic impact of mammography screening. We build capacity by working as a team of HTA experts and first-time HTA researchers. The results were disseminated to raise awareness for HTA.

Results. The European Commission Guidelines on Breast Cancer Screening were identified as most recent global systematic review with meta-analyses, out of 2,365 references. The adapted evidence may inform policies on screening in the West Bank. Our experience is that adaption requires extensive skills and resources, including finding, assessing, and adapting relevant evidence. The EUnetHTA toolkit is useful, but also adds to the workload. Furthermore, local stakeholder engagement is important in topic selection, to access information, and to contextualize global evidence to the local setting.

Conclusions. This study is currently ongoing, but preliminary findings show that producing an HTA by adapting existing evidence in resource-limited settings is feasible. There is a need for nuanced guidance on transferability of evidence from other settings. Future studies should investigate innovative methods to optimize the adaption process. Capacity building in adaptation is important to ensure the production of quality HTA products. Inclusion of local team members and stakeholders is important for future development of HTA in the region.

OP188 Post-Launch Evidence Generation Studies For Medical Devices In Spain: Integrating Real World Evidence Into Decision-Making

Inaki Imaz-Iglesia (imaz@isciii.es), Pedro Serrano, Eugenia Orejas, Anai Moreno, Janet Puñal-Ruibóo, Matilde Palma, Amado Rivero, M. Luisa Vicente-Sáiz, Eva Reviriego, Enrique Alcalde, Himar González, Iñaki Gutiérrez-Ibarluzea, Jesús González-Enríquez, José Asua, Asunción Gutiérrez and Lorea Galnares

Introduction. A national act (Order SSI/1356/2015) regulating Post-Launch Evidence Generation (PLEG) studies was set in Spain in 2015. These PLEG studies are to inform decisions about technologies already included in the Benefit Portfolio of the Spanish National Health System (SNHS) in order to confirm/exclude/modify their terms of use. Once a PLEG is

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