



PROCUREMENT PERSPECTIVES ON ASSESSING THE VALUE OF MEDICAL DEVICES

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Note: All content and opinions expressed are exclusive to the panelists and do not necessarily reflect panelists organizations or ISPOR.



QUESTION 1: WHAT DO YOU THINK IS THE MOST IMPORTANT PIECE OF INFORMATION USED IN MEDICAL DEVICE PROCUREMENT DECISIONS?

Introduction

- Assessing the value of medical devices is a key element in making adoption and coverage decisions for medical devices.
- Several value assessment frameworks (VAFs) have been published to provide measures to evaluate medical interventions
- Current recommended measures of values assessment are not consistently used.
- ISPOR Special Task Force (STF) established in 2016 to provide guidance on value assessment frameworks *
- ISPOR SFT Recommended the use of the cost per quality-adjusted life year (QALY) for payer coverage and reimbursement decisions.
- Use of QALYs varies from country to country

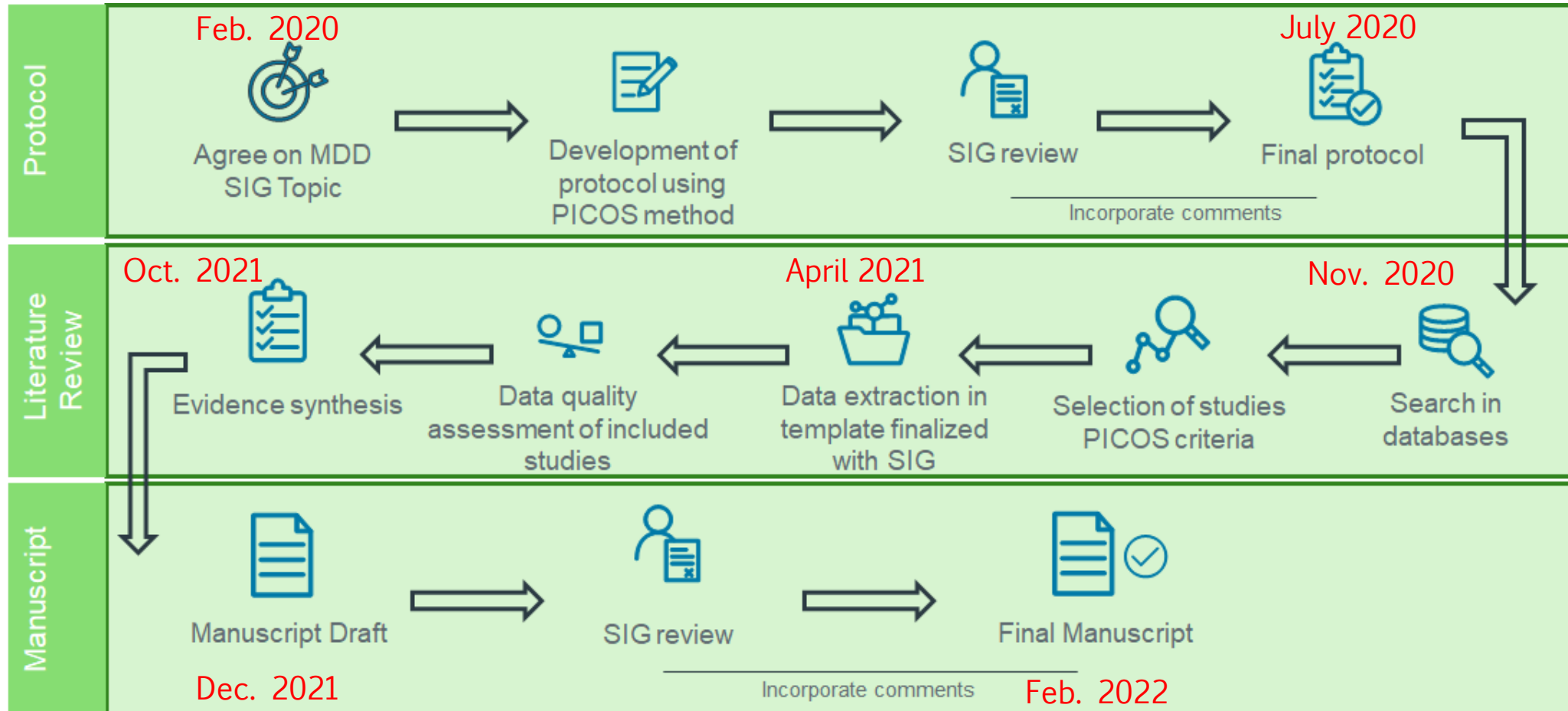
Rationale and Objective

- Hospital purchasing departments, value assessment committees, and group purchasing organizations consider different criteria when making purchase decisions
- As a result, patients and even some clinicians are not making the decision as to what device will be used
- The aim of this project is to identify what specific criteria stakeholders use to assess the value of medical devices.
- Goal: to inform evidence generation strategies for medical device companies and researchers to capture the most relevant data



METHODOLOGY

Process flow



Criteria for considering the studies

Exclusion criteria:

- Not about medical devices
- Articles prior to 2000

Types of Studies Included

- HTA
- Cross sectional
- Observational
- Prospective
- Quasi controlled
- Randomized
- Experimental

Search Strategy

- Keywords
- MeSH Terms

Electronic Searches


- PubMed
- Embase

Inclusion Criteria

- Medical device(s)
- Health technology assessment
- Procurement / purchase



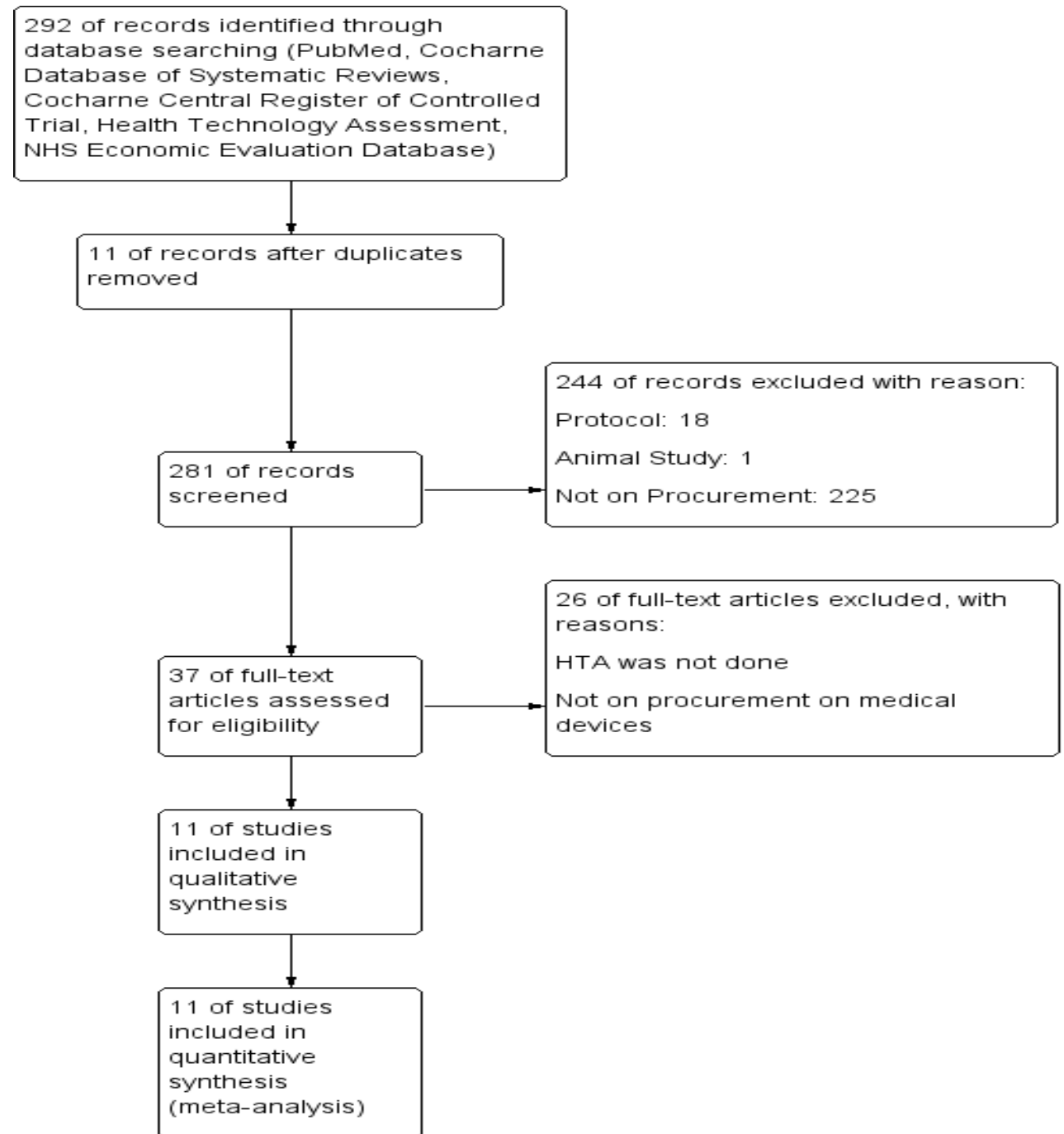
RESULTS



**QUESTION 2: HOW MANY STUDIES
(ABSTRACTS) DO YOU THINK WERE
IDENTIFIED BY THE SEARCHES?**

PRISMA Flowchart

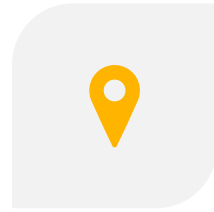
- The study reporting followed the Preferred Reporting Items in Systematic Reviews and Meta-Analysis (PRISMA) Guidelines



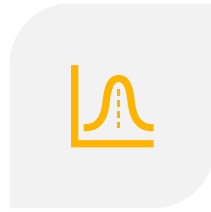
Data Extraction



CATEGORISATION OF
STUDIES



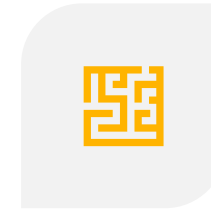
GEOGRAPHIC LEVEL



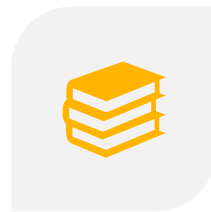
PRODUCT TYPE



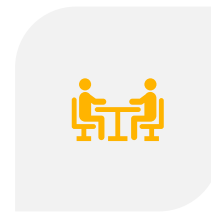
ANY CONCLUSIONS
PRESENTED ABOUT
LINK BETWEEN HTA
AND PROCUREMENT



META-ANALYTIC
METHODS (IF
APPLICABLE)



EVIDENCE TYPES
EVALUATED



STAKEHOLDERS

From 11 studies data were extracted broadly for the above categories.



EXAMPLE STUDIES

Summary results : Landaas et al 2020

- Landaas et al (2020) describe the establishment of a value analysis (hospital HTA) team within a broader sourcing team to work across four hospitals and other health centers and covering all non-pharmaceutical products.



Summary results : Callea et al 2017

- Studied the combined influence of HTA and different procurement models upon the selection and price of medical devices in Italy.
- National survey of Italian hospitals (44 hospitals across 15 regions) covering two main criteria:
 - HTA governance (regional; hospital-based; double-level; no HTA)
 - Presence of centralized procurement (yes or no)
- Four therapeutic areas characterized by rapid innovation (interventional cardiology, interventional neurology, neurosurgery, and orthopedics).
- Hospitals provided information on:
 - Quantities of devices purchased
 - Total device expenditures
 - Implementation of HTA
 - Information about the use of HTA in procurement decisions.
- Main conclusions:
 - Hospitals undertaking their own HTA activities acted as cost-containment units (with a potential to hinder access to innovative technologies)
 - Those using a regional HTA model were more likely to purchase the most expensive devices (due to a higher likelihood of positive regional HTA recommendations for such products).
 - Centralized procurement did not influence the selection of devices but led to prices which were around 10% lower than in areas without centralized procurement.
 - Hospitals following a regional HTA program were found to pay lower prices than those using an internal HTA approach, regardless of procurement level.



Summary results : Newman et al 2009

- Clinical and health-economic analyses of a four-arm RCT comparing three separate minimally invasive glucose monitoring devices with conventional monitoring in patients with insulin-treated diabetes.
- Part of the UK health technology assessment program, whose remit is to perform research to inform bodies such as NICE
- The RCT collected clinical outcomes, patient-reported outcomes, self-reported psychological data, and a trial-based health-economic analysis (from a UK payer perspective) was performed to incorporate these elements and understand the cost-effectiveness profile of the different glucose monitoring devices.
- The overall conclusions were that the evidence did not support widespread use of continuous glucose monitors, due to insufficient clinical evidence, inconclusive cost-effectiveness and concerns around patient acceptability.
- Research priorities were identified but widespread use of the devices was not recommended. This would not preclude the devices from being used, but without a formal recommendation they would not be reimbursed



Summary results : Poder et al 2018

- Hospital-based HTA to evaluate biplane angiography for vascular neurointervention
- UETMIS of the CIUSSS de l'Estrie-CHUS, Quebec Canada.
- 257 references; 9 selected; very low level of confidence
- SLEEPERS Methodology – Social, Legal, Ethical, Environmental, Political, Entrepreneurial/Research - (Marin et al.)
- Non-clinical Factors:
 - Support and reinforce procedural volume
 - Improve operators confidence
 - Funding mechanisms through provincial grants to defray costs
- Committee recommended to procure technology, in spite of the low level of evidence 'given these contextual advantages'
- Procurement with evidence development
 - Ongoing Registry
- Analysis of context complemented the rigor of HTA
- Higher-dimensional considerations beyond those typically considered by HTA.





**QUESTION 3: WHAT IS THE BIGGEST REASON
PROCUREMENT BODIES DON'T PUBLISH?**

Call To Action

- Create incentives to publish among procurement bodies
- Improve connectivity and communication between:
 - Methods Experts
 - Evidence and Health Technology Assessment Community
 - Procurement Bodies
- Advance evaluation and assessment methods among procurement bodies

Next Steps

- Prepare manuscript for submission to Value in Health (early 2022)
- Evaluating follow-on work to explore the topic in more detail, given the small number of studies identified (e.g., survey of device procurement staff)
- Gather feedback from SIG on how to take this forward

Discussion Topics & Questions

- Does this confirm what you would expect from the literature?
- Why is there not more evidence on this topic?
- What further steps could be taken to better understand device procurement?
- Should more detailed HTA with social, ethical and regional issues be encouraged?
- What role can ISPOR play in making device procurement more transparent?

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Thank You!