Integrating Qualitative Research Into Health Technology Assessment in Canada

The CADTH Experience

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Disclosure

- CADTH receives funding from Canada's federal, provincial, and territorial governments, with the exception of Quebec.
- CADTH collects fees for three of its programs:
  - CADTH Common Drug Reviews
  - CADTH pan-Canadian Oncology Drug Review
  - CADTH Scientific Advice

CADTH

is an independent, not-for-profit organization responsible for providing Canada's health care decision-makers with objective evidence about the optimal use of drugs and medical devices.

Our Programs and Services

HEALTH TECHNOLOGY MANAGEMENT PROGRAM

- Health Technology Assessment Service
- Optimal Use Service

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CADTH Health Technology Expert Review Panel

- An advisory body to CADTH

  Develop guidance and/or recommendations on non-drug health technologies to inform a range of stakeholders within the Canadian health care system

- Use a multi-criteria deliberative framework

HTERP Deliberative Framework

Framework Domain	Information/Elements	
Background/Context	• Audience; issue and policy question(s)	
Clinical Need	• Background on health condition • Size of affected population	
	• Availability of alternatives	
Clinical Benefit	• Clinical effectiveness • Impact on clinical management	
Harms	• Safety	
Patient Preferences	• Acceptability of health technology by patient • Non-health benefits	
Economic Impact	• Cost-effectiveness • Infrastructure support costs • Budget impact	
Implementation	• Ease of integration into existing workflow • Training/competency • Ease of repair/maintenance	
Legal	• Legal impacts	
Ethics	• Consistent with ethical values	
Environmental Impact	• Environmental impact of health technology (e.g., nuclear waste material)	

Health Technology Assessment

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HTERP Deliberative Framework		
Framework Domain	**Information/Elements**	
Background/Context	• Audience; issue and policy question(s)	**PROJECT SCOPING**
Clinical Need	• Background on health condition • Size of affected population	**PROJECT SCOPING**
	• Availability of alternatives	**PROJECT SCOPING**
Clinical Benefit	• Clinical effectiveness • Impact on clinical management	**CLINICAL SYSTEMATIC REVIEW**
Harms	• Safety	**CLINICAL SYSTEMATIC REVIEW**
Patient Preferences	• Acceptability of health technology by patient • Non-health benefits	**?**
Economic Impact	• Cost-effectiveness • Infrastructure support costs • Budget impact	**ECONOMIC EVALUATION, MODELLING, BUDGET IMPACT ANALYSIS**
Implementation	• Ease of integration into existing workflow • Training/competency • Ease of repair/maintenance	**?**
Legal	• Legal impacts	**?**
Ethics	• Consistent with ethical values	**?**
Environmental Impact	• Environmental impact of health technology (e.g., nuclear waste material)	**?**

Our Approach

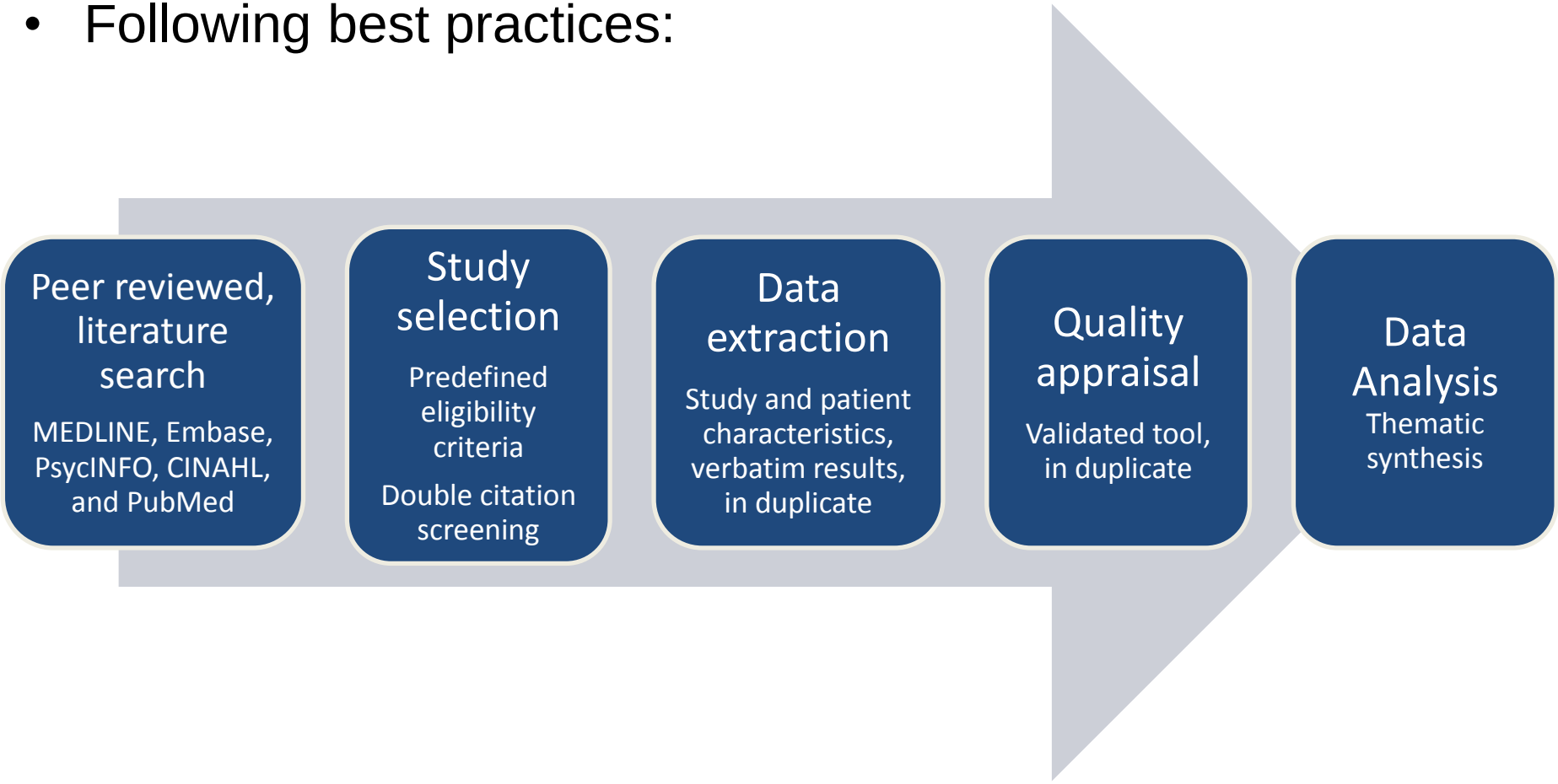
- Systematic review of literature related to patient and caregiver perspectives and experiences

- Research questions address perspectives and experiences of those impacted by policy recommendations
  - Broad, letting issues of importance emerge through review

- Protocol developed in parallel with other HTA sections
  - External peer review

Systematic Review Methods

- Following best practices:



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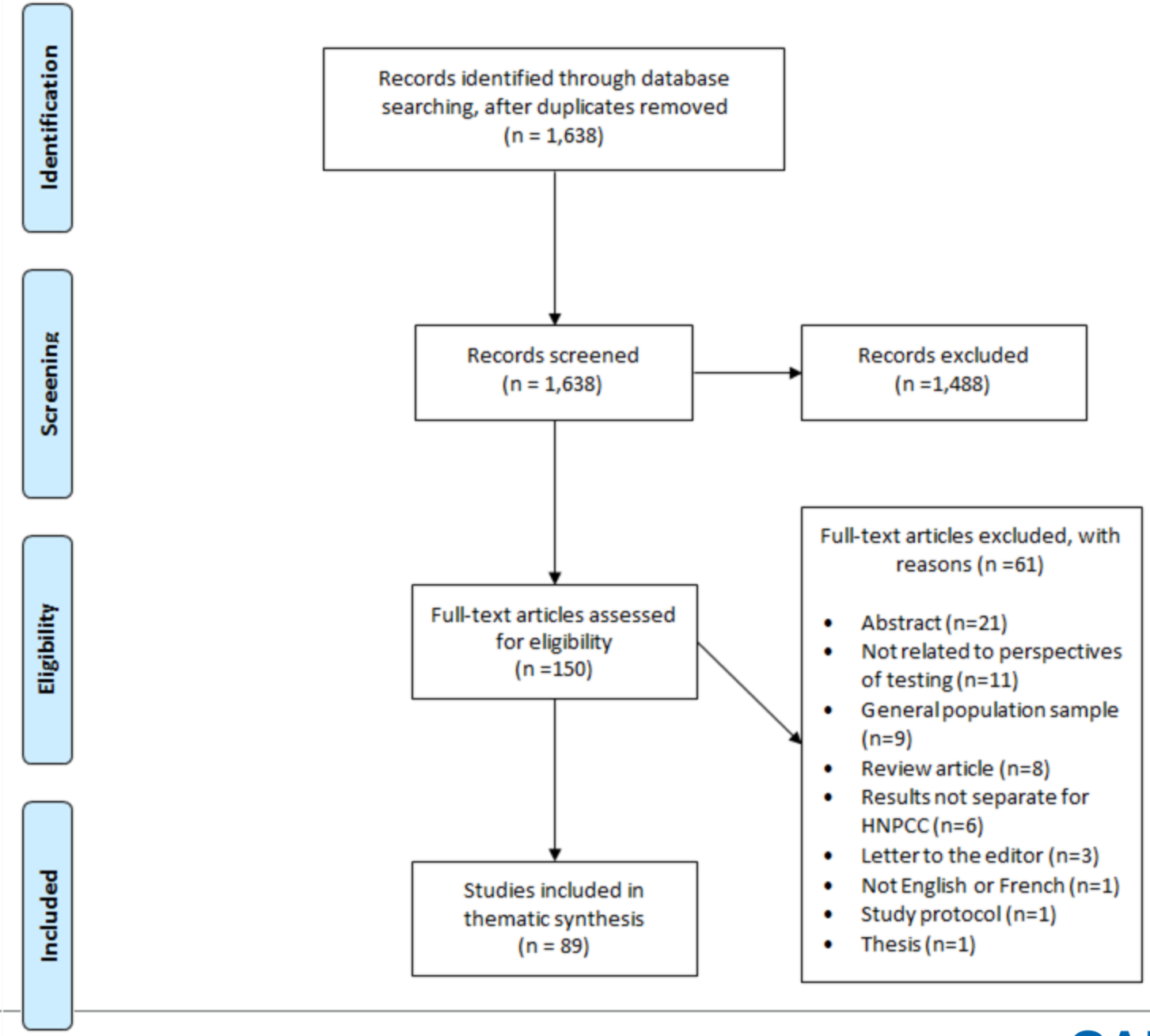
Reporting and Deliberation

- Separate chapter defined within HTA report
- Presentation to CADTH Health Technology Expert Review Panel (HTERP) by CADTH researchers
- Inform deliberation and recommendations

Example: Mismatch Repair Deficiency (dMMR) Testing for Patients with Colorectal Cancer

What are the perspectives of colorectal cancer patients, their family members, and caregivers regarding the value and impact of dMMR testing on their health, health care, and lives?


Identification
Screening
Eligibility
Included
Records identified through database searching, after duplicates removed (n = 1,638)
Records screened (n = 1,638)
Records excluded (n =1,488)
Full-text articles assessed for eligibility (n =150)
Full-text articles excluded, with reasons (n =61)
Abstract (n=21)
Not related to perspectives of testing (n=11)
General population sample (n=9)
Review article (n=8)
Results not separate for HNPCC (n=6)
Letter to the editor (n=3)
Not English or French (n=1)
Study protocol (n=1)
Thesis (n=1)
Studies included in thematic synthesis (n = 89)

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Emergent Data Categories, Descriptive Themes, and Analytic Themes			
Descriptive Themes	**Categories**	**Analytic Themes**	
Making a decision to learn mutation status	Decision-making process		Deciding to learn about one's mutation status is an individualized process with implications for the individual and their family
	Reasons for, and factors related to, learning mutation status		
	Reasons for not, and factors related to not, learning mutation status		
	Perceptions of genetic testing		
	Knowledge of genetic testing		
	Uptake of testing		
	Willingness to pay		
Learning mutation status	Expectations regarding testing		
Behaviours, feelings, and experiences after learning mutation status	Confidence in test results		
	Satisfaction with decision to learn mutation status		
	Impact of knowing mutation status	Living with knowledge of one's mutation status has individual and family implications	
	Disclosure and discussion of mutation status		

What Did the Synthesis Add?

Rationale to support recommendations

- Patients and their families value knowledge of dMMR status to manage future risk and implement screening
- Universal testing could improve equity by reaching those who do not actively seek testing

Implementation considerations

- Potential for behaviour change
- Need for education: patients, families, providers
- Genetic counselling capacity

Lessons Learned

CADTH and HTERP eecognize Value

- Methodological rigor
- Unique evidence to inform deliberations and recommendations

Need to balance practicality and idealism

- Ideal methods versus what is feasible

Requires specialized skills and resources

- CADTH staff
- CADTH HTERP

Requires champions

- Buy-in at all levels
- Shift from clinical and economic focus

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Summary and Moving Forward

- CADTH is now including a systematic review of patient preferences and experiences into assessments of medical devices, procedures, and programs
  - Stakeholder demand
  - Best practices
  - Inform assessments and deliberations
- Ongoing methods development, training, process refinement
- Most important outcome: we are doing it

CADTH HTERP

More information available at:

https://www.cadth.ca/collaboration-and-outreach/advisory-bodies/health-technology-expert-review-panel

CADTH HTERP Deliberative framework available at:

https://www.cadth.ca/sites/default/files/pdf/hterp/HTERP_DFW_e.pdf


Our evidence
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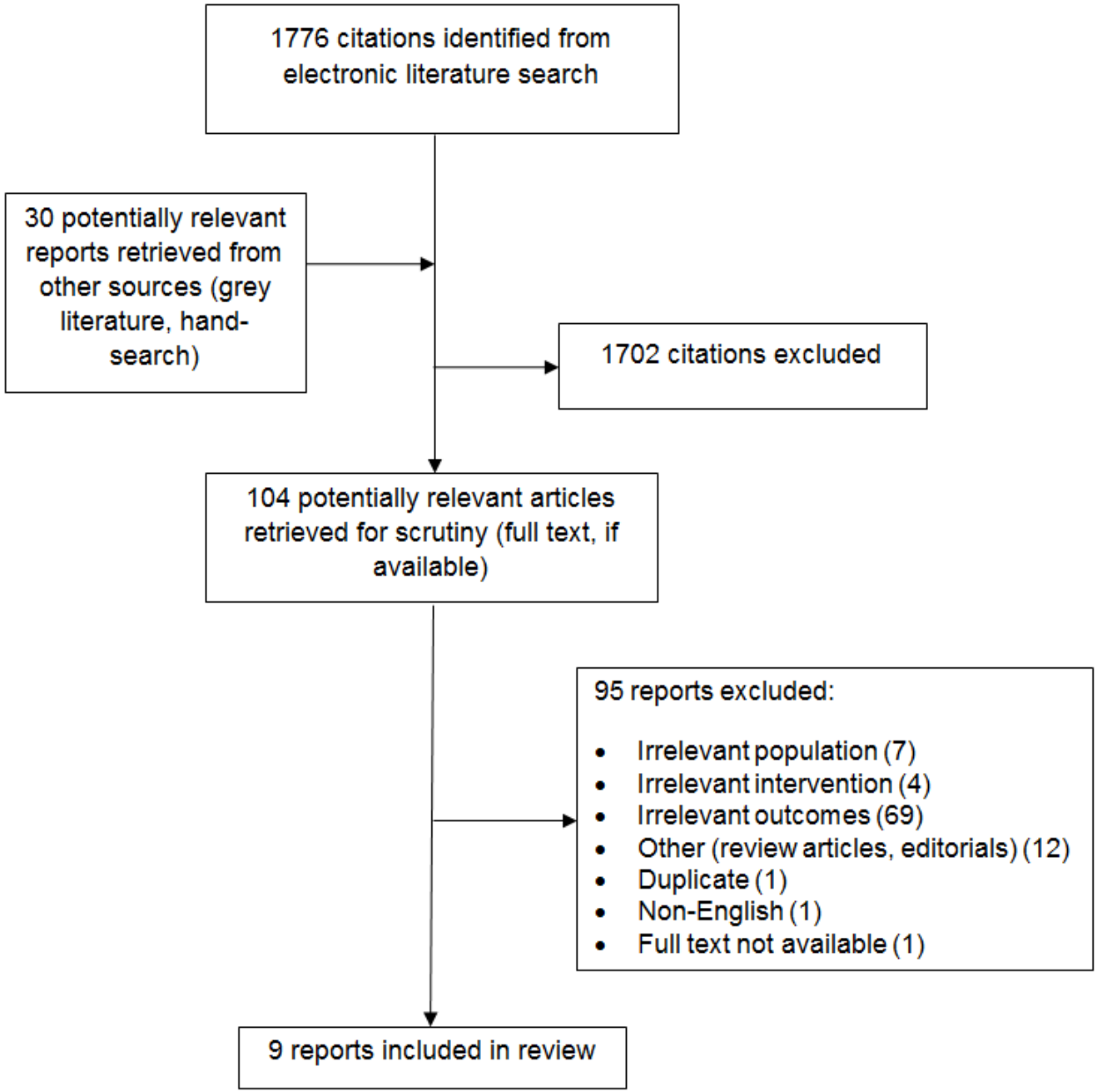
CADTH Evidence Driven.

ACMTS Preuves à l'appui.

E.g. 2: Monitoring for atrial fibrillation (AF) in discharged stroke and transient ischemic attack (TIA) patients

What are the perspectives and experiences of patients who have had a stroke and/or TIA, and caregivers, regarding the value and impact of outpatient cardiac monitoring devices for AF monitoring on their health, health care, and quality of life?


1776 citations identified from electronic literature search
30 potentially relevant reports retrieved from other sources (grey literature, hand-search)
1702 citations excluded
104 potentially relevant articles retrieved for scrutiny (full text, if available)
95 reports excluded:
Irrelevant population (7)
Irrelevant intervention (4)
Irrelevant outcomes (69)
Other (review articles, editorials) (12)
Duplicate (1)
Non-English (1)
Full text not available (1)
9 reports included in review

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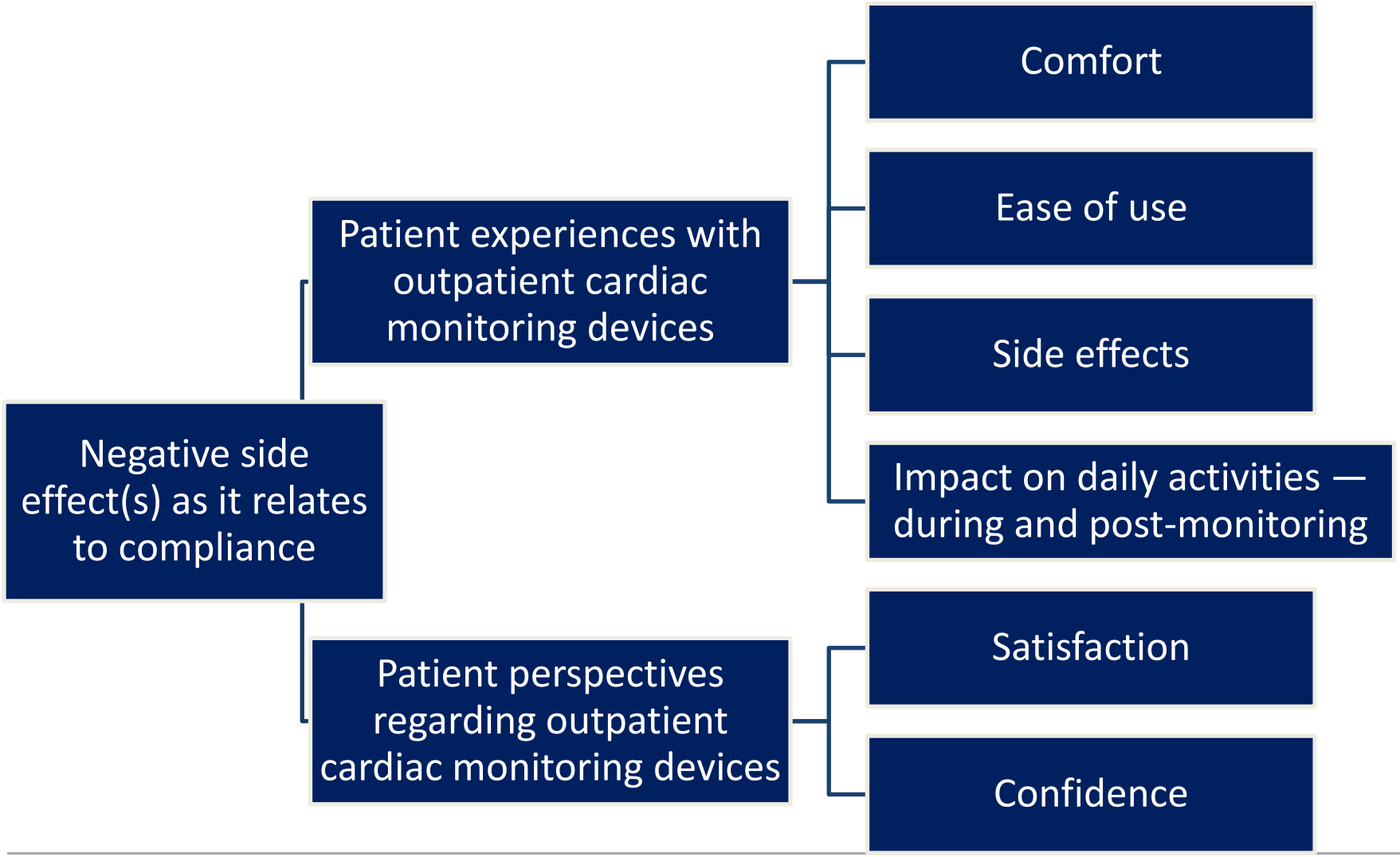
Results – Themes and Categories



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What Did the Synthesis Add?

Not a lot of data BUT

- Raised the issues and made them part of deliberation
- Prompted clinical insight, based on experiences with patients

Context

- How experience could change, depending on results, during versus post-monitoring

Implementation

- Recommended length of monitoring