Targeting Low Value Care: Moving into Action
The Role of Health Technology Reassessment

Fiona Clement, PhD
Associate Professor, Department of Community Health Sciences
Director, HTA Unit, University of Calgary

Lesley Soril, MSc
PhD Candidate (Health Services Research)
Department of Community Health Sciences, University of Calgary
What is low value care?

- Health services and procedures that may be overused or misused and provide little to no clinical benefit for certain patient groups.

(Elshaug et al., 2013)
Spectrum of value

Low Value
Overused/misused & unnecessary, NOT clinical- and/or cost-effective

High Value
Underused & highly beneficial, clinical- and cost-effective
Why is this a problem?

Harmful to patients

High-quality, evidence-based care

Scarce healthcare dollars

Headroom for innovation & high value care
How big is the problem?

Unnecessary care in Canada

- Wastes health system resources
- Increases wait times for patients
- Can lead to patient harm

Canadians have 1 million+ potentially unnecessary medical tests and treatments each year.

Up to 30% of patients indicated in the 8 selected Choosing Wisely Canada recommendations had tests, treatments and procedures that are potentially unnecessary.

There is room to reduce unnecessary care.
Substantial variation exists among regions and facilities in terms of the number of unnecessary tests and procedures performed — this points to an opportunity to improve.

cihi.ca
© 2017 Canadian Institute for Health Information
How are we addressing the problem?
National & international activities

**HTA+**
- Employs traditional, evidence-based HTA (i.e., review of clinical, economic, social, ethical evidence) to provide recommendations

**KT/Implementation**
- Implementation of various behaviour change techniques
- Change (de-adoption) at physician-level

**List-Making**
- Lists of overused ineffective or harmful treatments
- Informed by clinical experts

**Priority-setting**
- Priority setting within a programme budget
- Can apply multi-criteria decision analysis & marginal analysis
National & international activities

- Health Technology Reassessment (HTR)
- De-adoption Agenda in Critical Care
- Choosing Wisely Canada
- Priority setting within a programme budget
  Can apply multi-criteria decision analysis & marginal analysis
Systematic review of HTR Literature (Leggett et al., 2012)

Environmental scan of HTR experience (Leggett et al., 2012)

Workshop with international experts (McKean et al., 2014)

Propose conceptual HTR model (Soril et al., 2017)

Qualitative work to implement into complex system (Sevick 2017)

Start-up phase
Health Technology Reassessment (HTR)

- Structured, evidence-based assessment of the medical, economic, social and ethical impacts of a health technology (e.g., drug, device, test, procedure, etc.) currently used in the healthcare system, to inform its optimal use in comparison to its alternatives

(Noseworthy & Clement, 2012)
Conceptual model for HTR
(Soril et al., 2017)
Emergent tensions

Strategic Thinking
Practice-based Research
Have's
Incenting

Time
Effectiveness
Resources
Money

Immediate Success
Academic-based Research
Have Not's
Maximizing Value

(Sevick et al., 2017)
Major barriers for HTR

1. Engagement across multiple levels of the healthcare system
2. Difficulty identifying and prioritizing low value care
3. Little guidance and/or methods for implementation

(Sevick et al., 2017; Elshaug et al., 2007; Daniels et al., 2013; Rooshenas et al., 2015; Schlesinger and Grob, 2017)
#1 - A Data-Driven Prioritization Process

- Data-driven
- Routine & replicable
- Stakeholder collaboration
- Actionable
- High return on investment
- In-hospital admissions (DAD)
- Physician claims
- Laboratory data
5-step process

Compile Recommendations

Review + Coding

Frequencies + Costs

Rank + Prioritize

Review + Dissemination

(Soril et al., under review BMS HSR)
Pilot testing in British Columbia

(Soril et al., *under review* BMS HSR)
#2 - Pilot Implementation Study

- Proof-of-concept
- Evidence-informed
- Tailored intervention to promote change
Case study: blood transfusions in the ICU

- High-quality evidence support restrictive transfusion strategies for most non-bleeding adult patients in the ICU
  - Transfusion at a hemoglobin level below 70 g/L

- Blood products are scarce and expensive health technologies
  - ~$64M per year in Alberta
Pilot study in Edmonton ICU

- Clinical and administrative data
- Qualitative data from stakeholders

Engage Site Stakeholders

Determine Local Facilitators/Barriers

Set Clear, Measureable Targets

Monitor & Evaluate

Tailor Intervention(s)

• Lead & co-designed with stakeholders

• Education
• Audit & feedback
#3 - Practical Guide to Optimal Use

• GOAL: empower health system decision-makers to initiate HTR initiatives

• Developed visual guide driven by key questions: why, how, what and who?
What is the value of the technology? 
- High Value
- Low Value
- No Effect
- Harmful
- Uncertain Benefit/Harm

What is the current utilization gap? 
- Underuse
- Overuse
- Mis-use
- Unknown Use

What are the available tools & resources? 
- Data
- Human Resources
- Dedicated Funding
- Leadership
- Knowledge Generation

What are the levers for change? 
- Champions
- Guidelines
- Education
- Reminders
- Audit & Feedback
- Incentives
- Policy

What is the desired outcome(s)? 
- Increased Use
- No Change
- Decreased Use
- Exit of Technology
- New Evidence

Who are the Foundational Actors? Healthcare providers, Researchers, Health System Administrators, Policy-Makers, Patients and Public

(Soril et al., in press IJTAHC)
Final reflections