

Health Technology Assessment: A Comprehensive Framework for Evidence-Based Recommendations in Ontario

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Ontario Health Technology Assessment Committee - OHTAC

- Ministry of Health recognized need for a system to address uptake and diffusion of health technologies
- OHTAC developed in 2003

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- **Nondrug health technologies**
- **OHTAC receives a request for a review of a health technology from potential purchasers, mostly hospitals or from the Ministry**

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- Only health technologies approved by Health Canada are taken into consideration – funding; not funding; field evaluation
- 16 programs, treatments
- 81% uptake; 6% contrary

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- OHTAC believed that to consider economic, social, and ethical aspects within the recommendation process more fully, revision of the pre-existing decision process was required

Ontario Health Technology Assessment Committee - OHTAC

- **Decision Determinants Sub-Committee was convened in January 2007 to provide guidance to OHTAC**
- **Committee members: decision making experts, clinical epidemiologists, clinicians, health economists, policy makers, health services researchers**

Decision Determinants Subcommittee

- **Work guided by review of literature and discussions with key informants: evidence-based medicine, health economics, decision analysis, bioethics, health policy**

Decision Determinants Subcommittee

- **Literature**

What criteria used to make health technology recommendations?

What methods used to evaluate health technologies (i.e., weights, ranking, rating)?

What methodology used to synthesize criteria (i.e., process, rules, frameworks)?

Conceptual Foundations

- Subcommittee drew on several key ideas: evidence based medicine, cost-effectiveness, Accountability of Reasonableness, and a deliberative process

Conceptual Foundations

- Subcommittee believed that scientific or context-free evidence must play a role in decision making
- Also recognized
 - Context sensitive evidence (e.g., cost-effectiveness, social surveys)
 - Expert opinion
 - Colloquial evidence

Recommendations

- Transparency & consistency
- 4 explicit criteria
- Fair & deliberative process
- Right to challenge

OHTAC's Decision Process

Criterion 1

Overall Clinical Benefit

Effectiveness

Safety

Burden of Illness

Need

Criterion 2

Consistency with Social & Ethical values

Societal Values

Ethical Values

Criterion 3

Value for Money

Economic Evaluation

Criterion 4

Health Systems Feasibility

Economic Feasibility

Organizational Feasibility

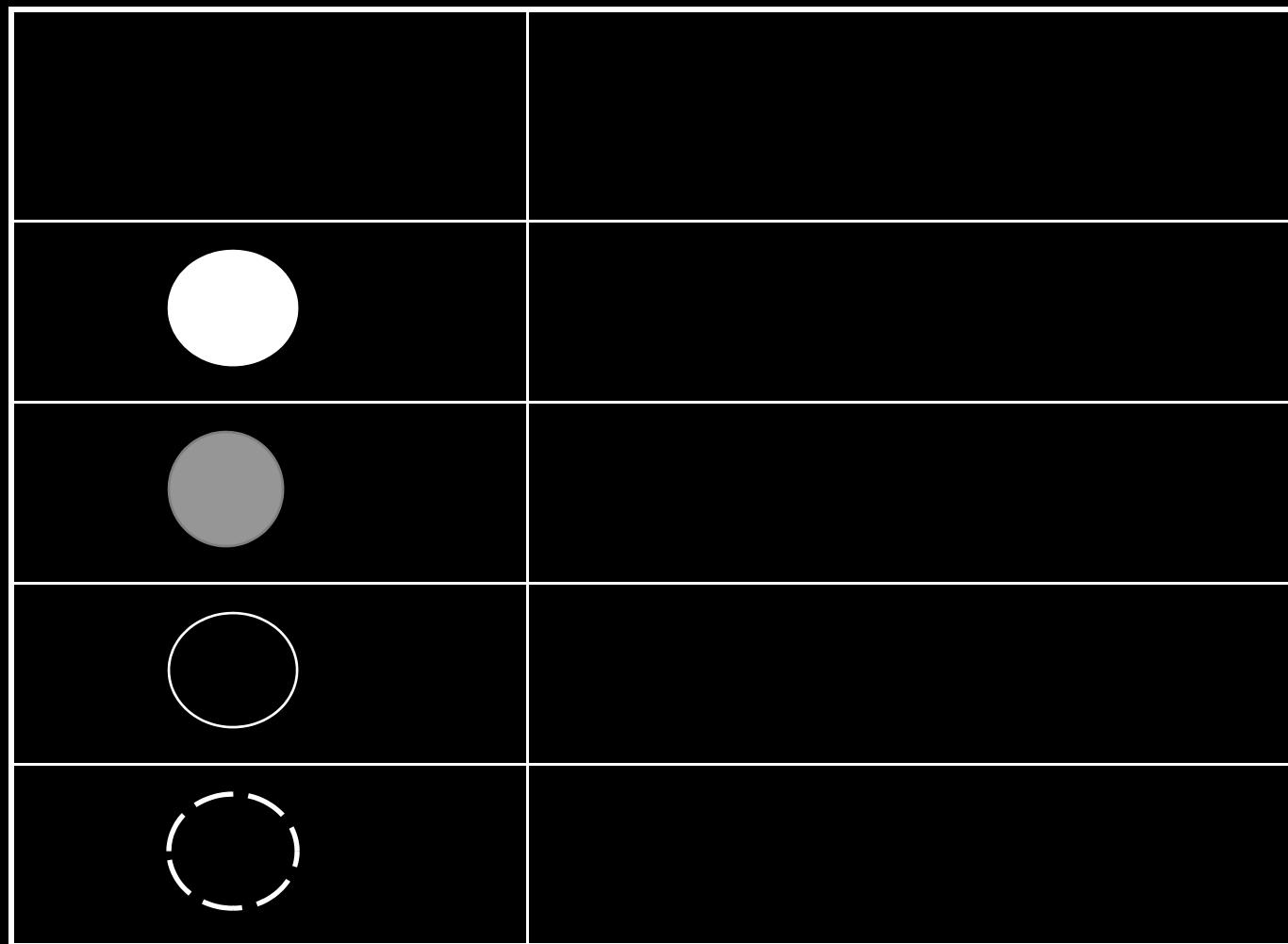


Evaluate the criteria through a deliberative process.

State recommendation and value judgments based on these criteria.

How to Put this all Together?

Evaluation of Criteria



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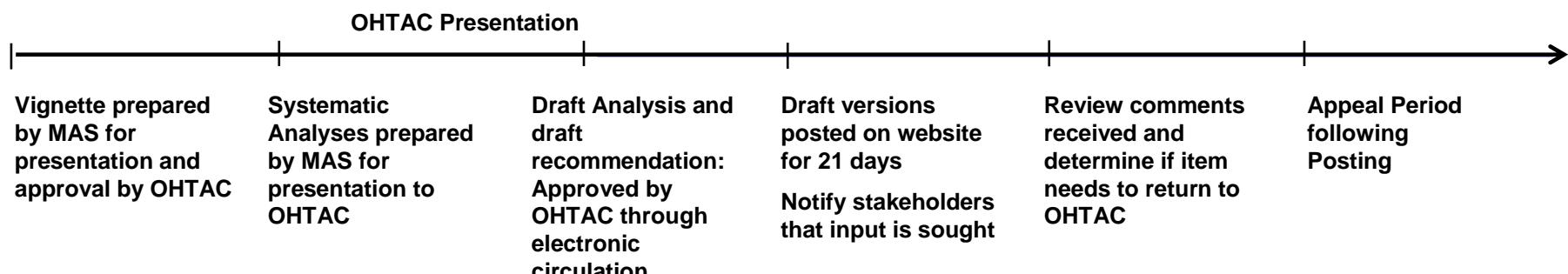
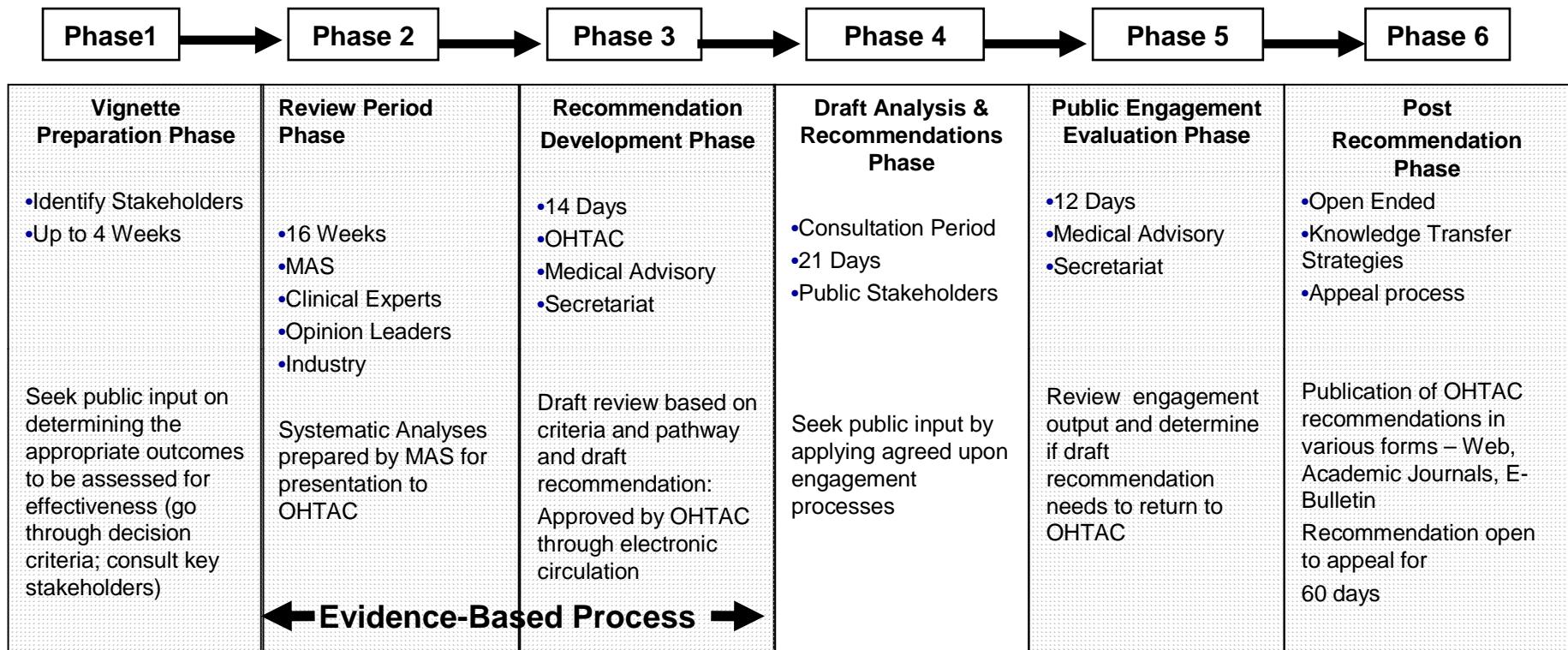
Evaluation of Criteria

Decision Criterion	Rating	Evidence	Type of Evidence/ *Quality	Evidence Assessment
Clinical Benefit		Effectiveness	RCTs/High	Significant decrease in mortality
		Safety	Case Reports/LOW	Acceptable safety profile
		Burden of Illness	MOHLTC database	High prevalence and incidence in ON
		Need	No alternate treatment as per experts	No effective alternate treatment

Conclusion

- **Development of an explicit framework for the recommendation of adoption of new health technologies**
- **Framework is currently being used by OHTAC – pilot testing**
 - **Feasibility**
 - **Acceptability**
 - **Perceived usefulness**

MAS – OHTAC Decision Determinants Overview



Definitions of Criteria

Criteria	Definition	*Evidence
Overall Clinical Benefit	A measure of the <u>net health benefit</u> of using the technology to diagnose or manage a healthcare condition (e.g., heart failure) or health care related issue (e.g., infection control)	<ul style="list-style-type: none">EffectivenessSafetyBurden of IllnessNeed
Consistency with Societal/Ethical Values	A balanced judgement made after considering information on societal/ethical values	<ul style="list-style-type: none">Societal ValuesEthical Values
Value for Money	A measure of the <u>net efficiency</u> of the technology compared to available alternatives (no cut-off threshold)	<ul style="list-style-type: none">ICER, Cost-Utility, Acceptability Curves, Cost-consequence
Health Systems Feasibility	A measure of the ease with which the technology can be adopted into the ON system	<ul style="list-style-type: none">Economic FeasibilityOrganizational Feasibility