



*Developing Criteria for Evaluating the
Introduction of Health Technology at
the Local Level*

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Local HTA Decision Support Program

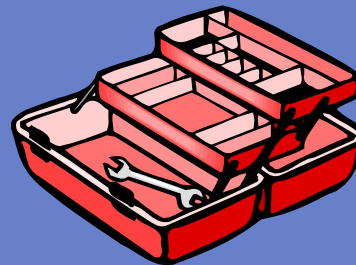


↔
New ideas & improvements



Department of Surgery
Local HTA Decision Support Tool Box

Department X
Local HTA Decision Support Tool Box



Revised Local HTA Decision-Support Program



OBJECTIVES

1. To create a List of Criteria & a Technology Evaluation tool that can be used for:
 - a) making recommendations about a technology
 - b) prioritizing competing technologies
2. To create a Decision Guideline Tool that uses the criteria to determine whether a technology should be recommended, and if so, under what conditions
3. To create a Technology Prioritization Tool by which the criteria can be used to prioritize competing technologies



METHODS

1. Recruited a consultative review panel
2. Compiled a list of published of criteria and summarized various prioritization methods
3. Consulted key Decision Makers from the review panel to do an initial revision fo criteria, and Obtained an example of a practical prioritization methodology from Dr. Craig Mitton
4. Used a Modified Delphi process to collect individual feedback on revised List of Criteria (Modified Delphi Step 1; survey)
5. Modified Delphi Step 2: Face to Face Retreat:
 - a) consensus for final Criteria List, & used the criteria:
 - b) to create a Technology Evaluation Tool
 - b) to develop a Decision Guideline Tool
 - c) to develop a sample Prioritization Tool
6. Revised Local HTA Program to add the developed tools



RESULTS

CRITERIA FOR TECHNOLOGY ASSESSMENT

Domain	Criteria	Example Clarifying Questions
Health Gain	Efficacy	<ul style="list-style-type: none">• <i>Is there evidence for short-term or long-term health gain?</i>
	Population health	<ul style="list-style-type: none">• <i>Does it address a condition with significant incidence or burden of disease?</i>
	Standard of Care	<ul style="list-style-type: none">• <i>Will it establish a new Standard of Care?</i>

CRITERIA FOR TECHNOLOGY ASSESSMENT

(Continue)

Domain	Criteria	Example Clarifying Questions
Service Delivery	Safety	<ul style="list-style-type: none">• <i>Is it as safe as current practice for patients and health care providers?</i>
	Training	<ul style="list-style-type: none">• <i>Will it require health care provider training or credentialing?</i>
	Access	<ul style="list-style-type: none">• <i>Will it improve accessibility or services to under-served populations?</i>
	Service Coordination	<ul style="list-style-type: none">• <i>Will it impact other health services (increase load? Decrease load?)</i>
	Sustainability	<ul style="list-style-type: none">• <i>Will it be well utilized?</i>• <i>Will additional human resources be required?</i>

CRITERIA FOR TECHNOLOGY ASSESSMENT

(Continue)

Domain	Criteria	Example Clarifying Questions
Strategic Fit	Strategic Fit	<ul style="list-style-type: none">• <i>Is it aligned with internal (Division/Department) strategic goals?</i>
Innovation	Knowledge and Research	<ul style="list-style-type: none">• <i>Will it improve the generation, transfer, or application of new knowledge to patient care services?</i>
Financial	Cost (Budget Impact)	<ul style="list-style-type: none">• <i>Will it have direct, start-up, ongoing, or environmental costs?</i>
	Economic Analysis	<ul style="list-style-type: none">• <i>Is there evidence for cost-effectiveness?</i>



Technology Evaluation Tool

Overview of our method for evaluating technologies using the agreed-upon criteria:

- A. **QUALITY and COMPLETENESS** of the information provided (0 - 4 points)
- B. **CRITERIA WEIGHTING** (numerical weight 0-20 = 100)
- C. **SIGNIFICANCE and IMPACT** of the technology according the criteria (0 – 5 points)
- D. **Score** (sum of each criterion points x weight)

RECOMMENDATION (Decision Guideline Tool)

Local HTA Advisory Committee
Assessment and Recommendation to Department

Decision by Department Executive Committee

1. Not Approved

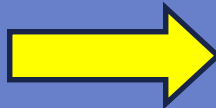
2. Approved

3. Conditional approval:

- a) Clinical Trial
- b) Audit
- c) Pending funding
- d) Pending training protocol

4. Request HTA

**Need Decision
Guideline Tool**



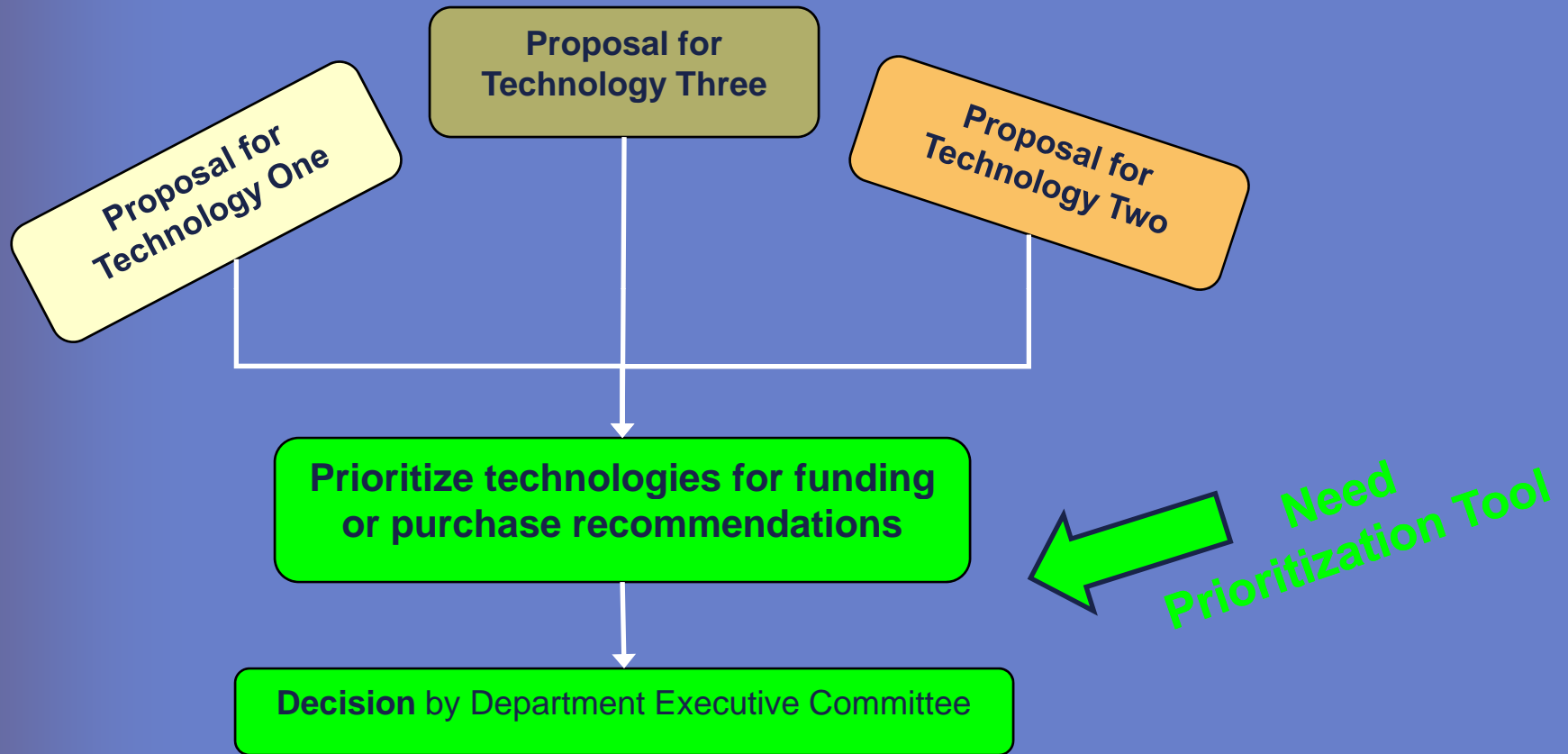
DECISION GUIDELINE TOOL - I

DECISION RECOMMENDATION	CRITERIA & RATIONALE
1. NOT APPROVED	<ul style="list-style-type: none">• Negative, poor, or no data on efficacy• Insufficient evidence of safety• Decreases or worsens service delivery
2. APPROVED	<ul style="list-style-type: none">• Efficacy and safety well established• Financial Impact is likely the same or better than current practice• Strategic fit is strong
3. REQUEST HTA	<ul style="list-style-type: none">• Efficacy or safety is controversial or insufficient• Cost-effectiveness is controversial or uncertain• May be innovative
4. CONDITIONAL	<ul style="list-style-type: none">• Various conditions may apply

DECISION GUIDELINE TOOL - II

4. CONDITIONAL RECOMMENDATION

DECISION RECOMMENDATION	CRITERIA & RATIONALE
4a. Clinical Trial	<ul style="list-style-type: none">• Efficacy has uncertain or controversial evidence• Safety or population health benefit is uncertain• May be innovative
4b. Audit	<ul style="list-style-type: none">• Efficacy has limited evidence• Good evidence for safety (risk is minimal)• Advantage over current practice needs to be established• Cost within budget
4c. Pending Funding	<ul style="list-style-type: none">• Technology is approved in principle but additional funding is required
4d. Pending Training Protocol	<ul style="list-style-type: none">• Detailed training protocol is required• Cost of training needs to be clarified





PRIORITIZATION TOOL

Step 1. Compliance Screen

- Check whether technology violates any laws, regulations, or contractual agreements

Step 2. Criteria Review

- Criteria used should be agreeable to all
- Should be independent and non-overlapping
- The newly developed [Criteria for Technology Assessment](#) can be used



PRIORITIZATION TOOL

Step 3. Criteria Weighting

- Some criteria deemed to be more important than others – given a numerical weighting
 - Allocate 100 points among the criteria listed
 - No more than 20 points to a single criterion

Step 4. Criteria Rating Scales

- To Score the SIGNIFICANCE and IMPACT of the technology according to the criteria list, a scale (e.g. 0-5) is developed for each criteria with clear definitions



PRIORITIZATION TOOL

Step 5. Technology Scoring

- Each technology is scored for each criterion. Overall score is the sum of each individual criterion score x weighting

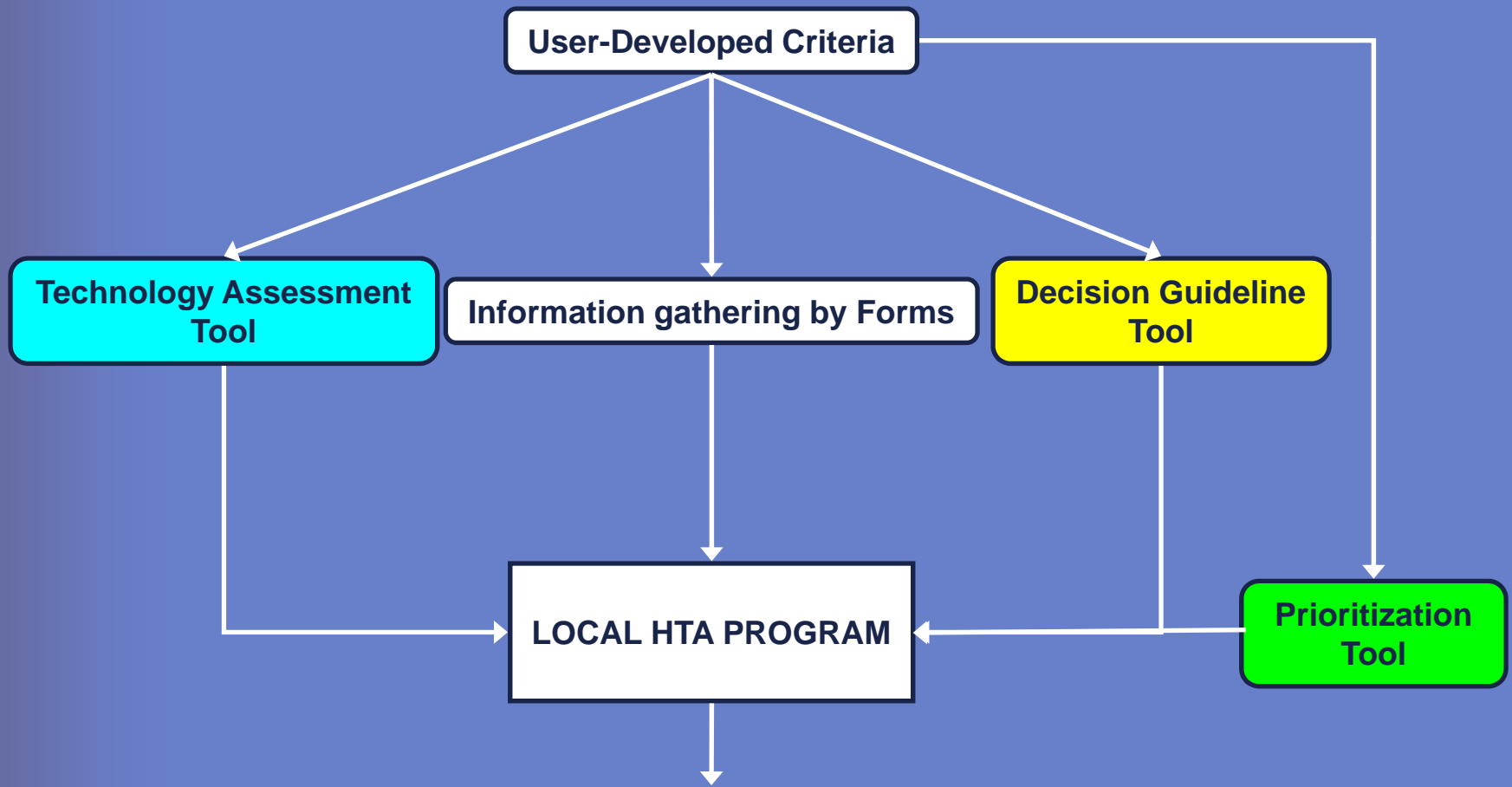
Step 6. Technology Ranking

- Overall score used to prioritize technologies or to calculate a cost-benefit ratio

Step 7. Additional Checks

- Additional checks for system readiness, system benefit, and probability of success

CONCLUSIONS



Consistent, Systematic, Transparent Decision-Making



Weaknesses

- **Decision-Making Process, compared to research summary (i.e., systematic reviews for clinical questions) leave much discretion in the hands of the decision-makers (Lomas 2005)**
- **This raises the issue of how to engender trust and credibility in the people making the recommendations and decisions, and in the process they use? (Lomas 2005)**
- **Patient interests (i.e. acceptability of technology) not well represented in the criteria list**
- **Will take time to evaluate the benefits of the program**



STRENGTHS

- **Using the agreed-upon criteria and tools to make decisions will improve the consistency and transparency of the decisions – generate trust**
- **General satisfaction with the tools developed from the criteria – ensure buy-in**
- **The tools give a framework for evaluating technologies**
- **Participation in using these tools develops critical skills**
- **The program and tools provide a consistent, systematic, and transparent guide for decision-making**



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