Implementing GRADE in a Canadian Health Authority

8th International Conference of EBHC Teachers & Developers ∎

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Location: Taormina, Sicily
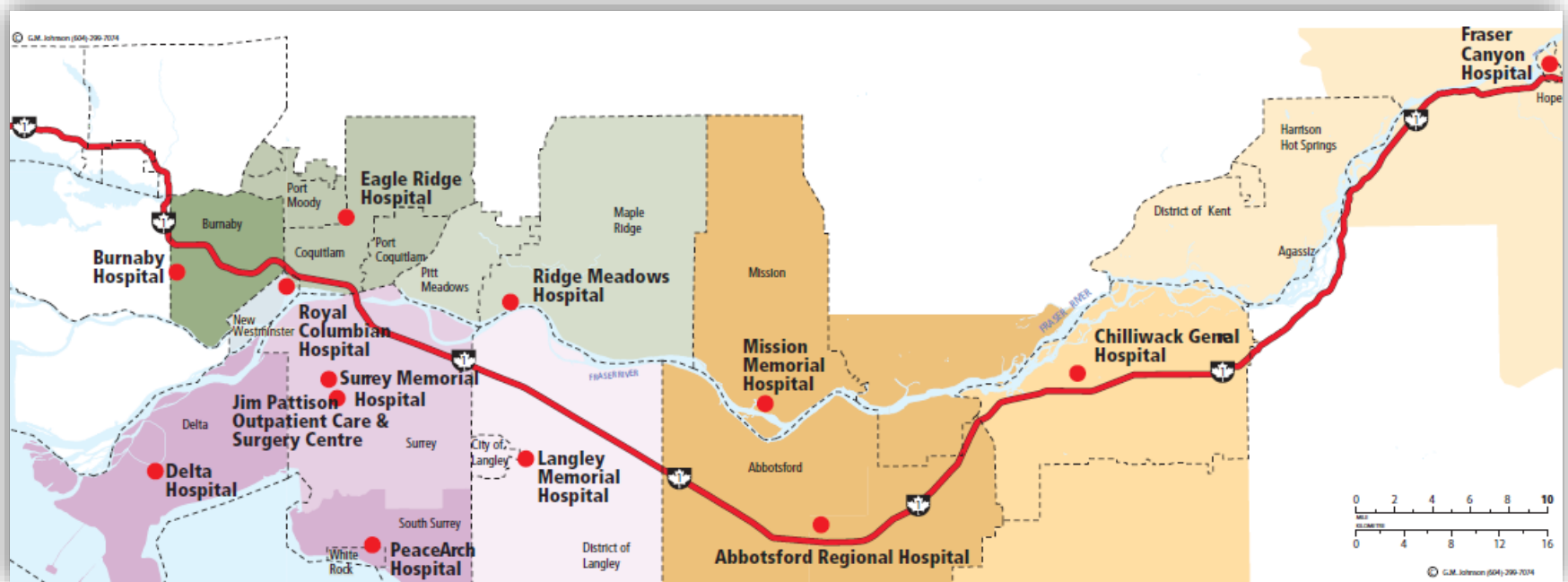
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Background: Who We Are

- Publicly funded
- 1.7 Million population
- 22,000 employees
- 2,500 physicians

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- 12 Hospitals
- 7,760 Residential Care beds
- Community Services: Public Health, Home Care, and Mental Health

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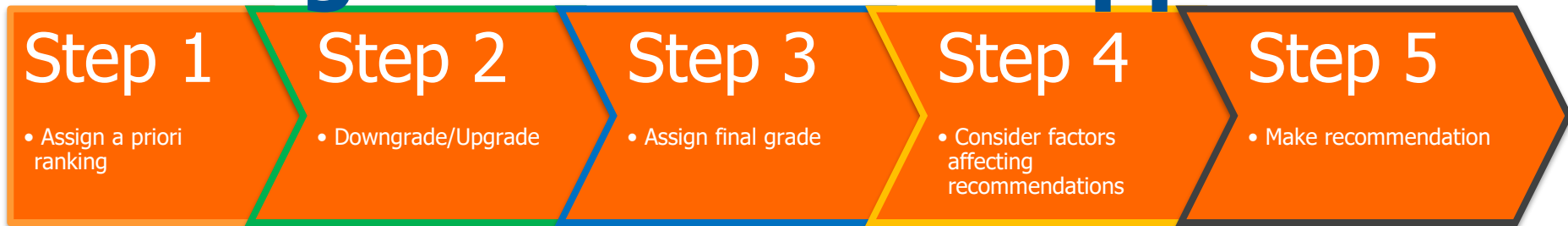FRASER HEALTH

Background: Choosing GRADE

Need

- Evidence-based research for Clinical Decision Support Tool (CDST) development
- Standardized & rigorous process to determine quality of evidence
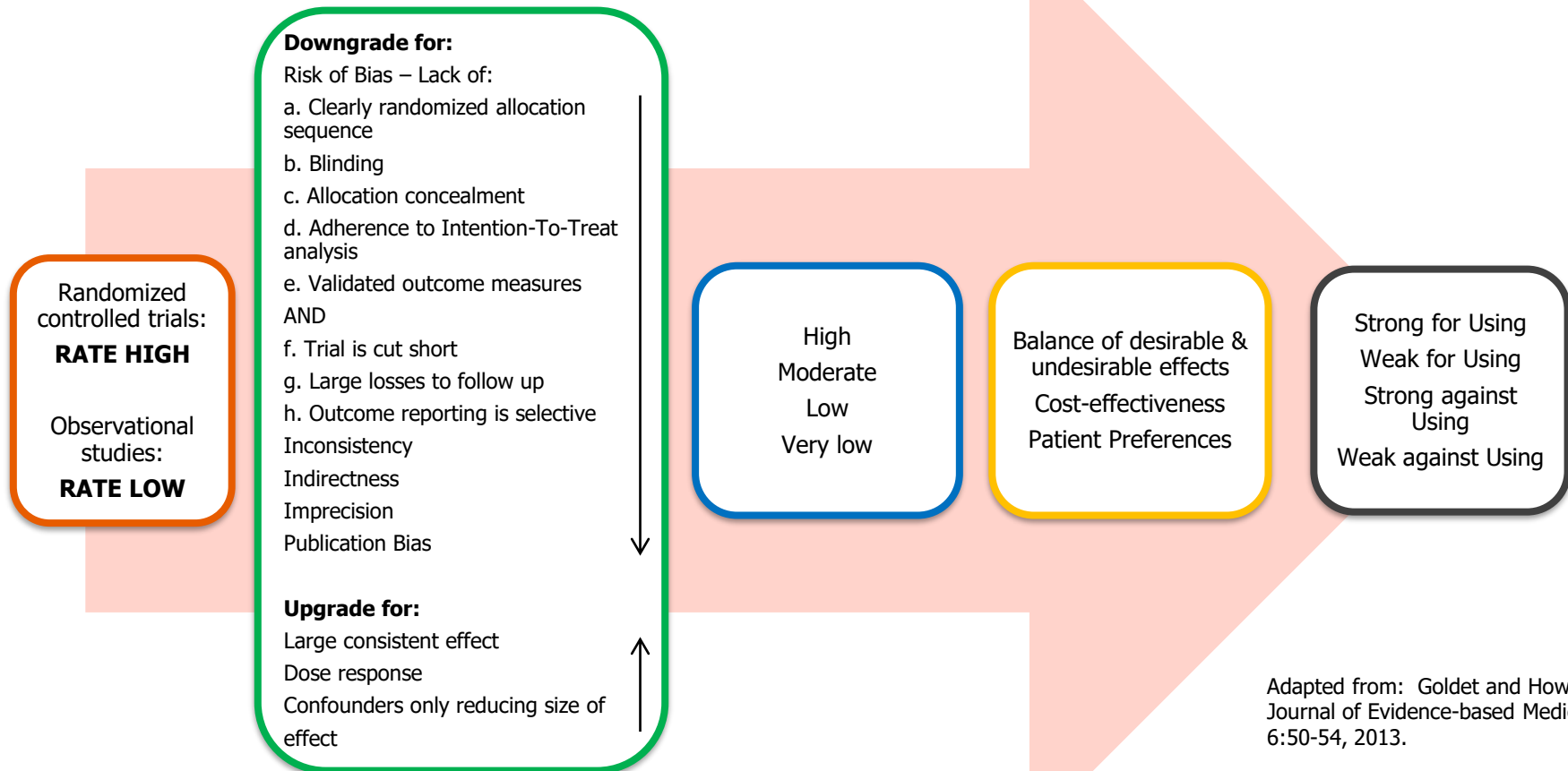
Choice

GRADE (The Grading of Recommendations Assessment, Development and Evaluation)
Canadian Agency for Drugs and Technology (CADTH) Quality Assessment Tools Project Report 2012

Background: GRADE Approach

Step 1	Step 2	Step 3	Step 4	Step 5
• Assign a priori ranking	• Downgrade/Upgrade	• Assign final grade	• Consider factors affecting recommendations	• Make recommendation

Repeat Steps 1 to 3 for each critical outcome of interest

Randomized controlled trials:
RATE HIGH

Observational studies:
RATE LOW

Downgrade for:

Risk of Bias – Lack of:

a. Clearly randomized allocation sequence

b. Blinding

c. Allocation concealment

d. Adherence to Intention-To-Treat analysis

e. Validated outcome measures AND

f. Trial is cut short

g. Large losses to follow up

h. Outcome reporting is selective

Inconsistency

Indirectness

Imprecision

Publication Bias

Upgrade for:

Large consistent effect

Dose response

Confounders only reducing size of effect

High
Moderate
Low
Very low

Balance of desirable & undesirable effects

Cost-effectiveness

Patient Preferences

Strong for Using

Weak for Using

Strong against Using

Weak against Using

Aims: Case Study Analysis

Identifying Need

1. Gaining Fraser Health Executive support

2. Piloting GRADE

Partnering with Fraser Health Library & CADTH

1. Fraser Health develops PICO questions and hands off to CADTH

2. CADTH conducts literature searches

Implementing GRADE

1. The CDST policy

2. The GRADE algorithm

3. Educating inter-professional work teams

Evaluating GRADE usage

1. The Survey

2. Results

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Methods

**Applying Policy Analysis Frameworks**

- **The 'Case for Change'**
  - Legitimacy, Feasibility, Support
- **Sustaining Change**
  - ADKAR for Change Management (Awareness, Desire, Knowledge, Ability & Reinforcement)

Conducting Formative Evaluation

- The Survey
- CDST development process
- Use of GRADE data collection tool
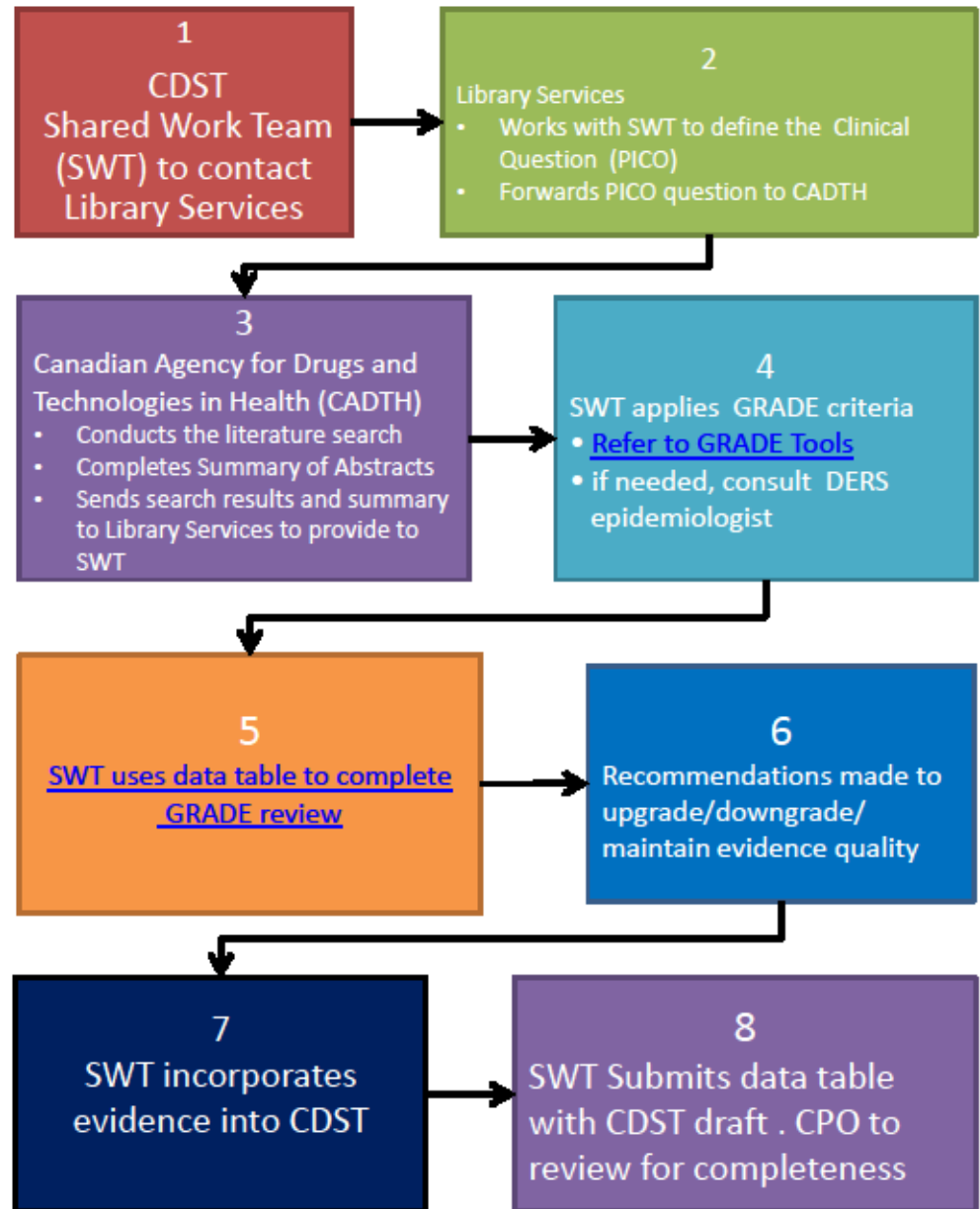
Results: The 'Case for Change'

Legitimacy
Lack of prescribed process; GRADE pilot
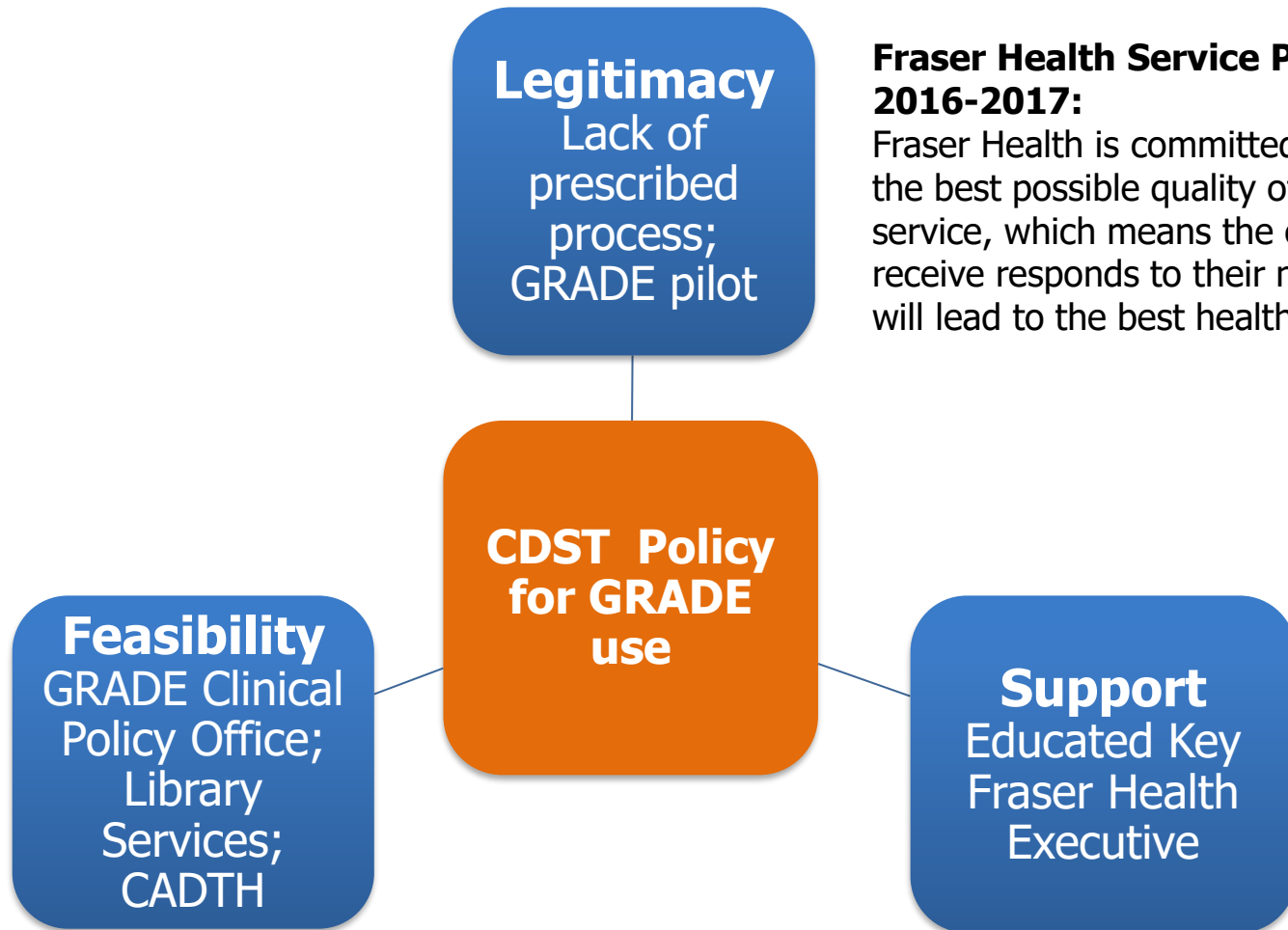
Fraser Health Service Plan 2016-2017:
Fraser Health is committed to providing the best possible quality of care and service, which means the care people receive responds to their needs and will lead to the best health outcomes.
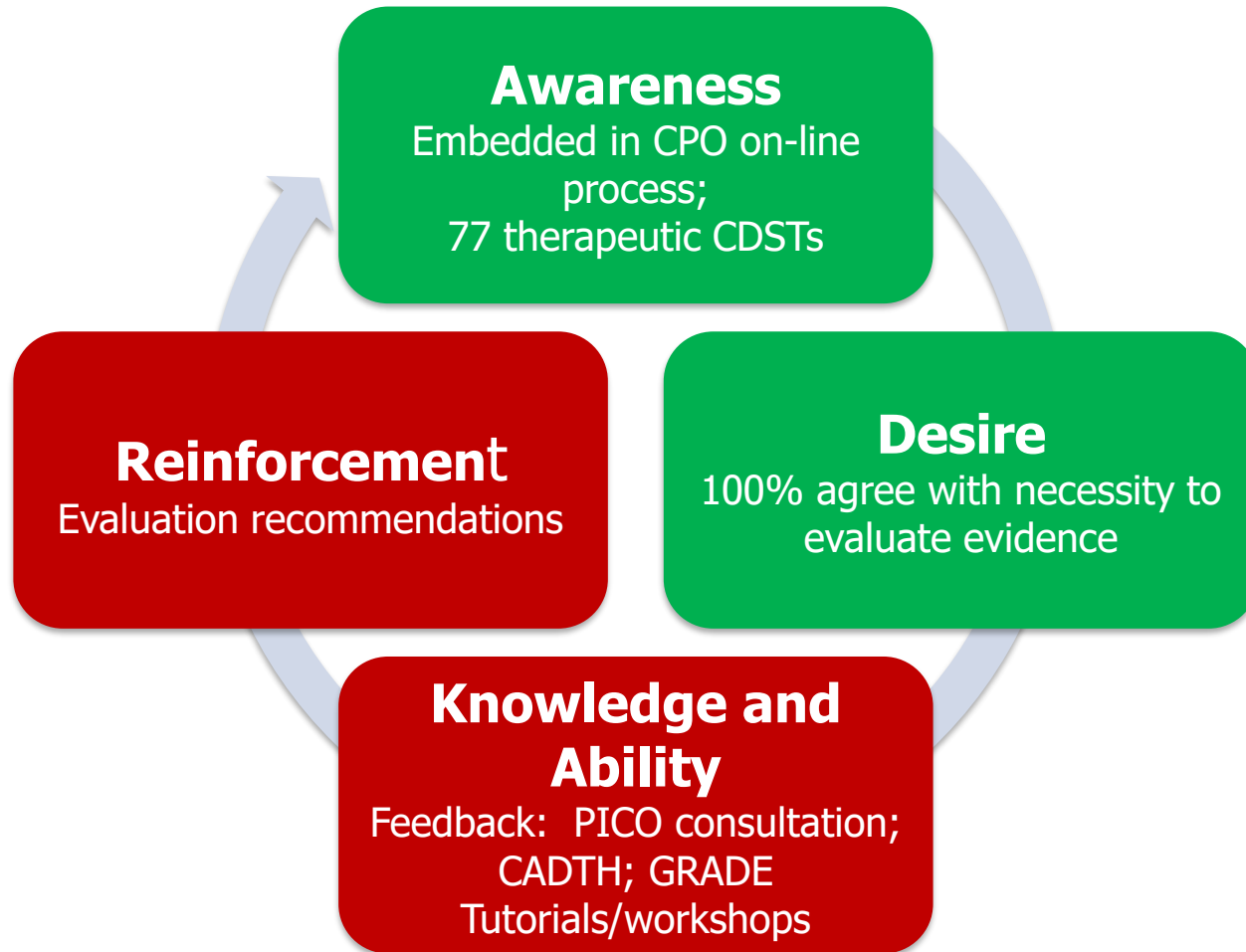
CDST Policy for GRADE use

Feasibility
GRADE Clinical Policy Office; Library Services; CADTH

Support
Educated Key Fraser Health Executive

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Results: Sustaining Change

GRADE ALGORITHM

1
CDST Shared Work Team (SWT) to contact Library Services

2
Library Services
- Works with SWT to define the Clinical Question (PICO)
- Forwards PICO question to CADTH

3
Canadian Agency for Drugs and Technologies in Health (CADTH)
- Conducts the literature search
- Completes Summary of Abstracts
- Sends search results and summary to Library Services to provide to SWT

4
SWT applies GRADE criteria
- Refer to GRADE Tools
- if needed, consult DERS epidemiologist

5
SWT uses data table to complete GRADE review

6
Recommendations made to upgrade/downgrade/ maintain evidence quality

7
SWT incorporates evidence into CDST

8
SWT Submits data table with CDST draft . CPO to review for completeness

Results: Sustaining Change

Awareness
Embedded in CPO on-line process;
77 therapeutic CDSTs

Desire
100% agree with necessity to evaluate evidence

Knowledge and Ability
Feedback: PICO consultation;
CADTH; GRADE
Tutorials/workshops

Reinforcement
Evaluation recommendations

Other Results
"Return on Investment"
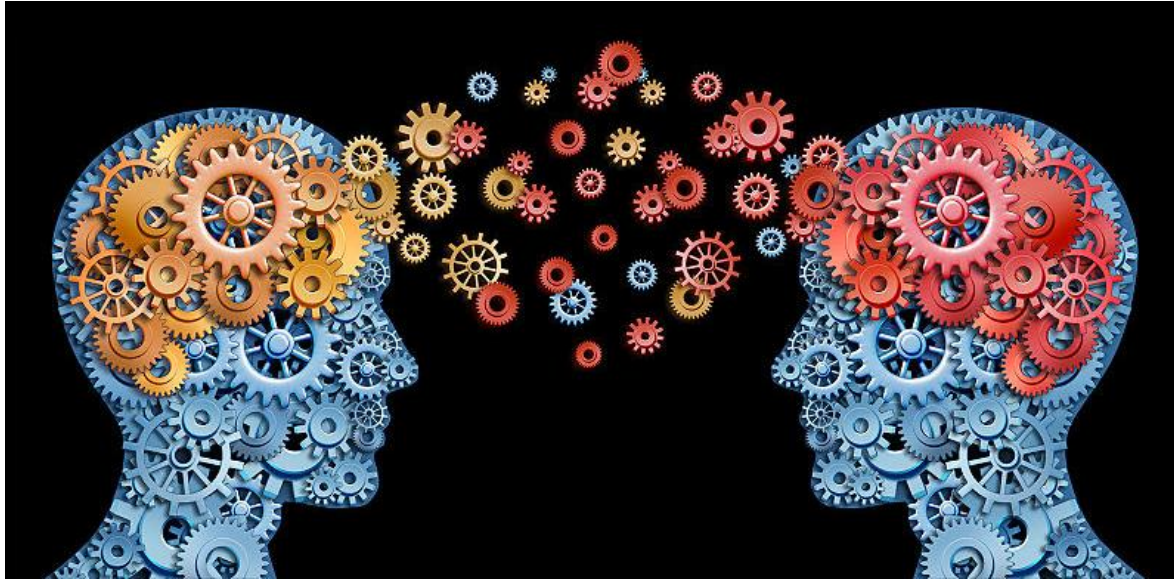
Benefits beyond Fraser Health:

All literature search results posted as open access on CADTH website

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Limits

- Evaluation design limited to survey because of time and resource restrictions
- # of evaluation survey respondents low; only 53% had applied GRADE
- Effect of respondent memory & organizational demands on survey respondents' replies

Bottom Line

Were professional behaviours changed?

- Increased appreciation of GRADE's value for RCTs/observational research
- Increased appreciation of need to use a systematic approach for evaluation of evidence rather than clinical judgement

What were the obstacles?

- Lack of clear communication re applicability
- Lack of time to learn GRADE
- Lack of staff with trained expertise to teach GRADE

What mitigation strategies?

- Revised Algorithm
- One to one tutorials
- Potential Fraser Health policy

Thank You!

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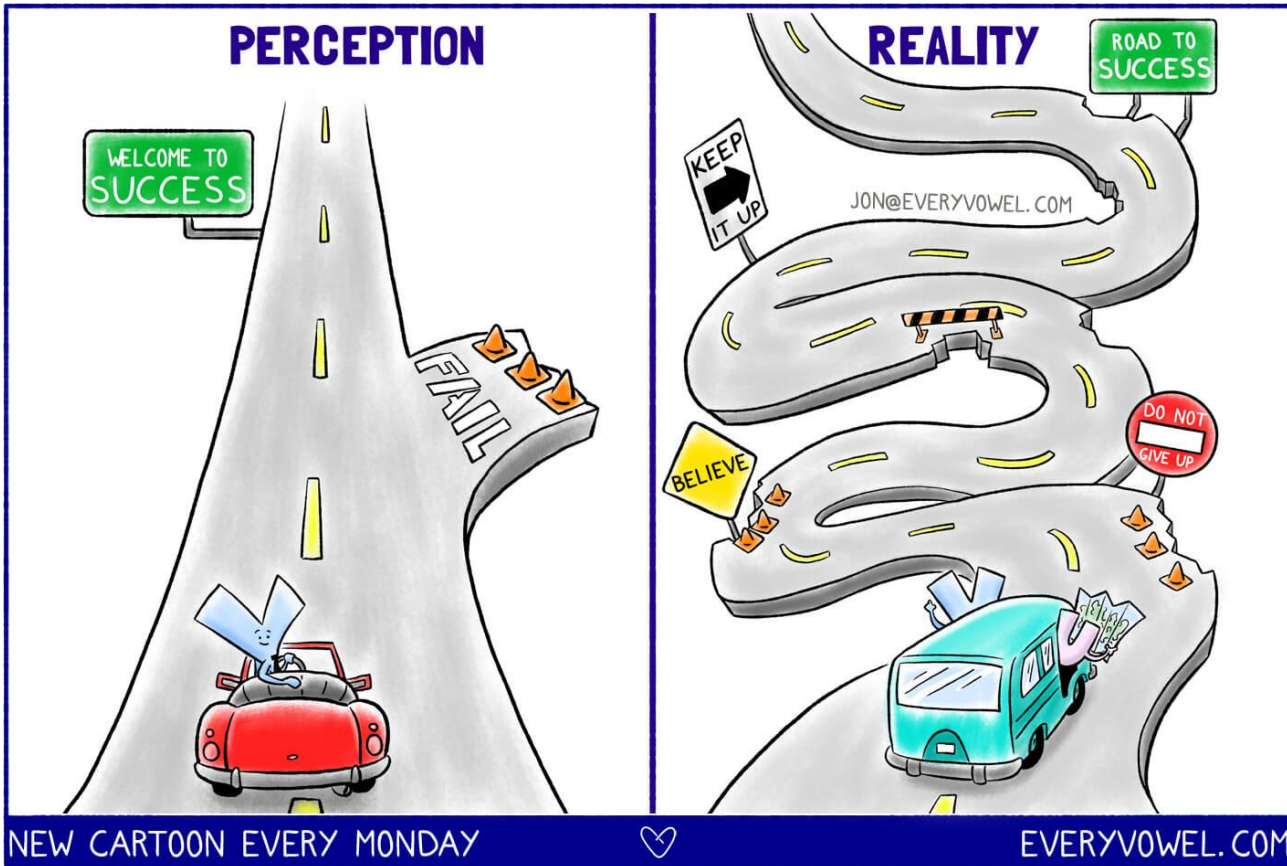
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