Using conjoint analysis to validate SAGE: A tool to measure research use in health policy/program development

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Outline

- Introduction
  - Benefits and importance of measuring research use in health policy making
  - Developing a measure and system to score research use
  - Aims and benefits of developing a valid scoring system
- Method
  - Using conjoint analysis to develop the scoring system
- Findings of the conjoint analysis
- Discussion
  - How to use the scoring system
  - Positive implications of this scoring system
  - Next steps

INTRODUCTION

Measurement of research use

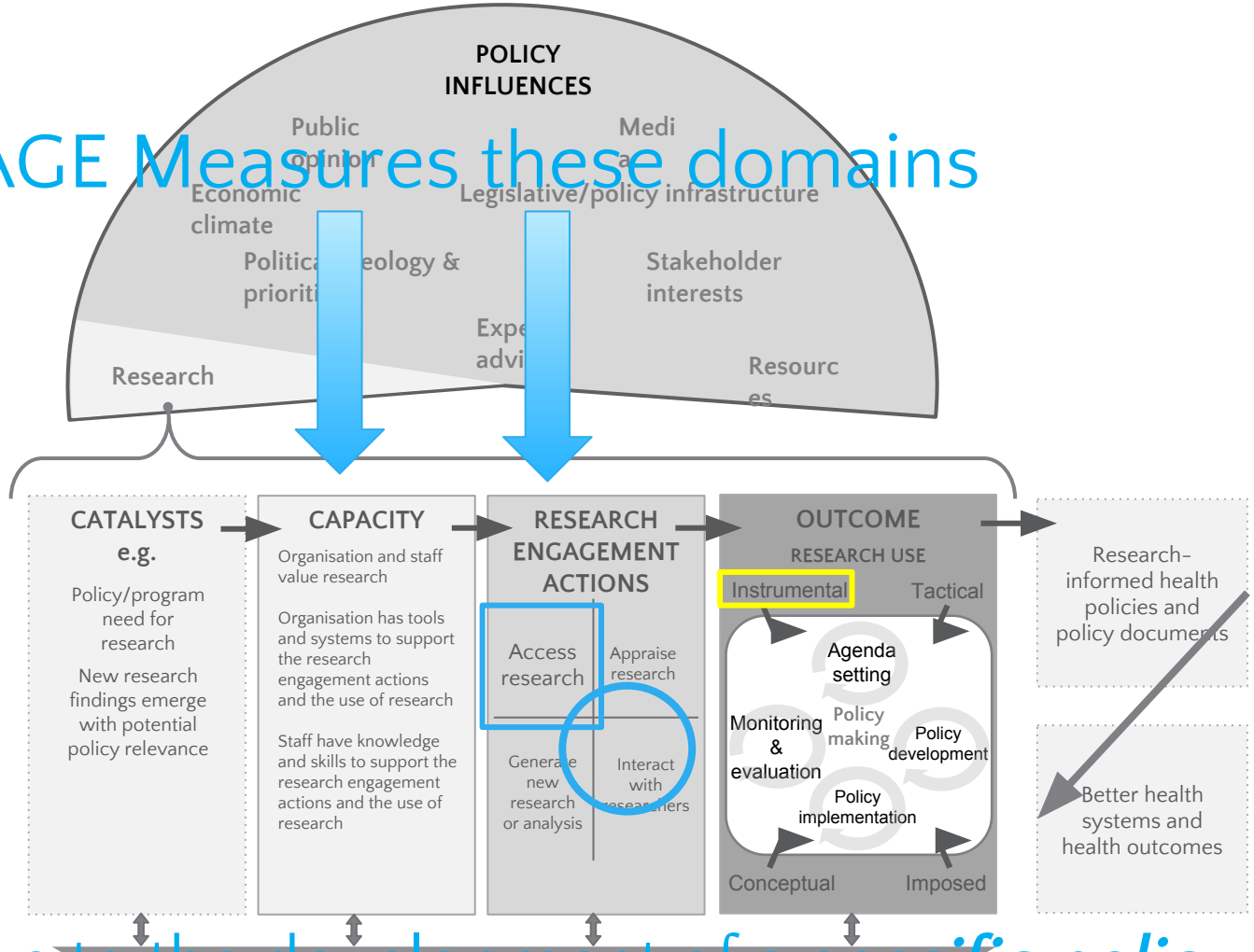
- Policymaking: complex process
- Calls for decision makers to incorporate *more* research into the development of health policies and programs
  - Reduce health spending ↓
  - Improve health systems ↑
  - Improve health ↑
- If we can measure research use -organisation can evaluate their progress towards this goal
- Current measures: few and have limitations

Development of a new measure: SAGE

- Staff Assessment of enGagement with Evidence from Research
- A comprehensive measure of research use
- Firmly grounded in the SPIRIT Action Framework

SPIRIT Action Framework

SAGE Measures these domains

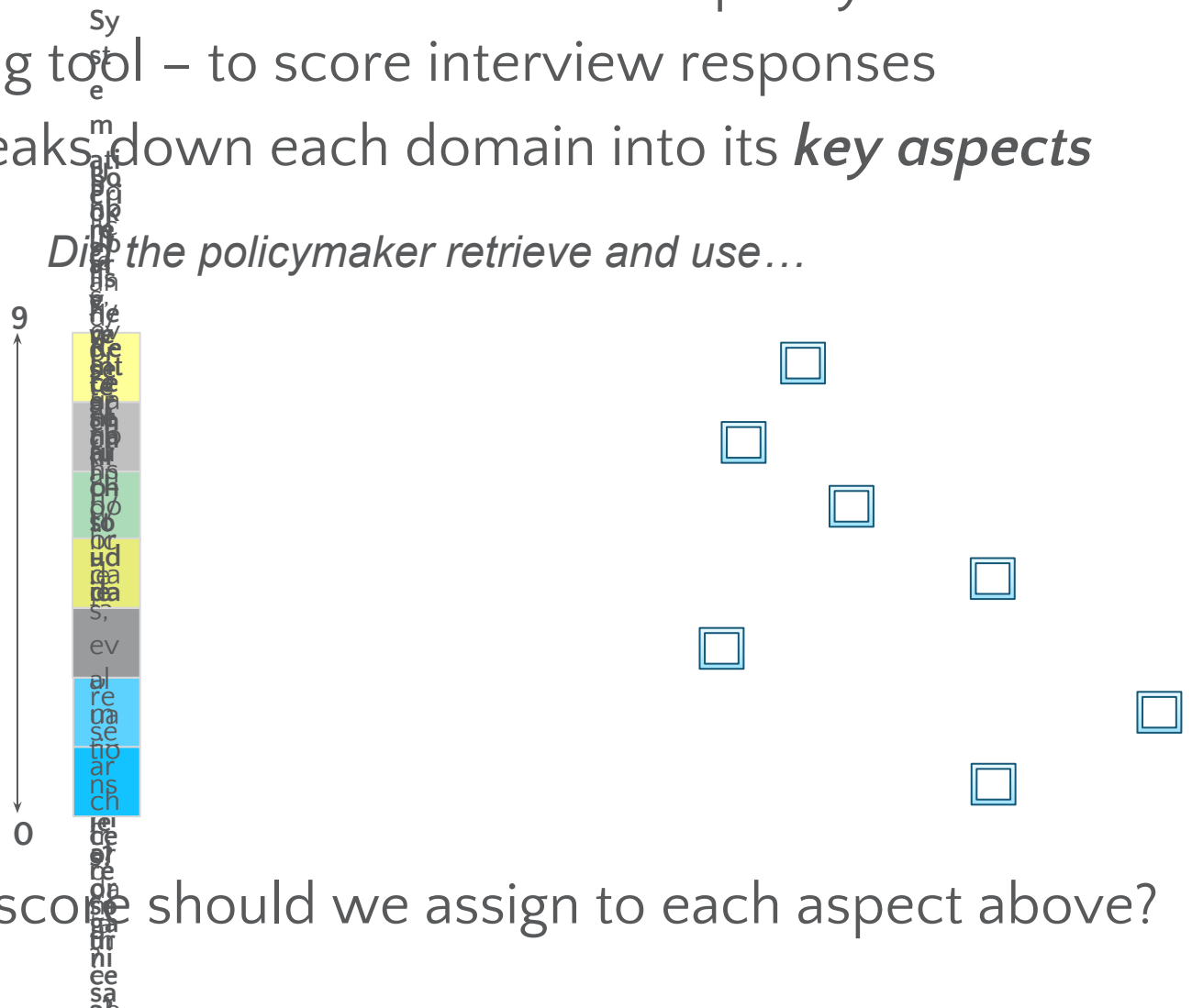


In relation to the development of a ***specific policy product*** or ***program***

Redman et al., 2014

SAGE – components

1. Comprehensive interview about a policy document
2. Scoring tool – to score interview responses
   - Breaks down each domain into its ***key aspects***



- What score should we assign to each aspect above?

Aims

- Use **conjoint analysis,** with an **Expert Sample,** to quantify the relative importance of aspects for each:
  - research engagement action
  - Type of research use
- This will:
  - Generate a valid scoring system for REAs/RU
  - Produce an informative scoring system to help agencies maximise their research capacity*

METHOD

Method

1. Recruit Experts sample (*N* = 54).

2. Complete a **Choice survey** – respondents exposed to combinations of key aspects called "profiles". There is a survey for each **research engagement action** and **type of research use**

3. Rate each profile – does it represent a limited, moderate, or extensive instance of *searching for research, appraising research etc.*

4. Conjoint Analysis - analyse the results of the survey. This will generate a **"utility value" and "importance value"** for each key aspect.

5. Utilities are the score assigned to each aspect in the SAGE scoring tool

Example profile: appraising quality

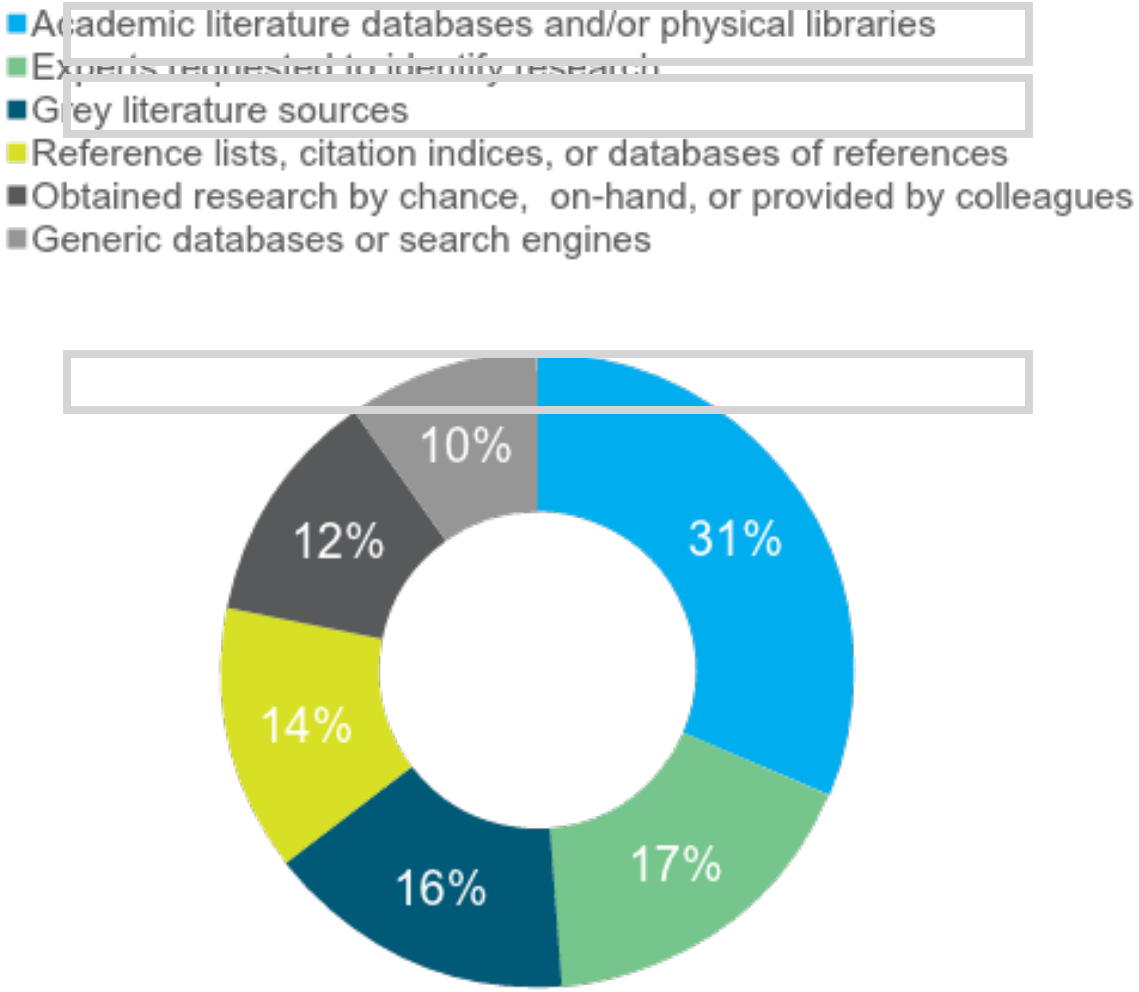
To evaluate the quality of research, the policymaker…
• Assessed whether the research design or conclusions were valid
• Checked whether the research cited, or was referenced in other high-quality research or policy documents
• Consulted experts to assess quality
• Assessed the level of evidence of the research
• Undertook these strategies as part of a pre-specified strategy

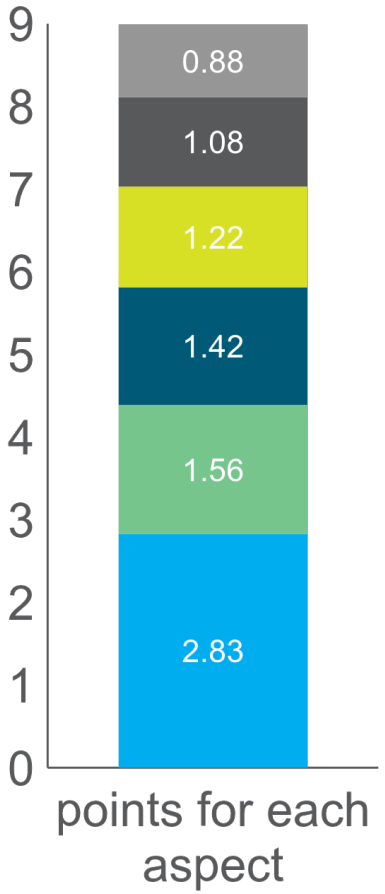
Using the 1-9 scale below, does this scenario **represent a *limited, moderate, or extensive* appraisal of research quality**.

1	2	3	*4*	5	6	7	8	9
Limited			Moderate			Extensive		

RESULTS

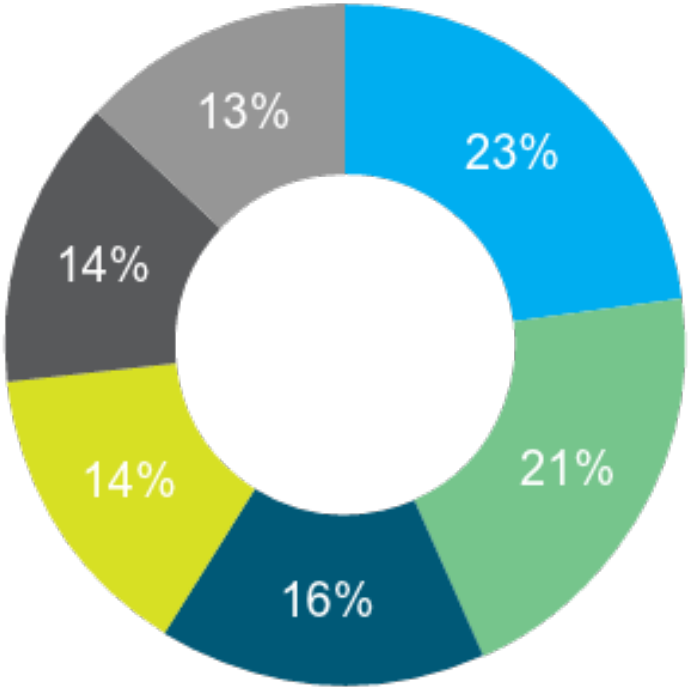
What is the best way to search for research?

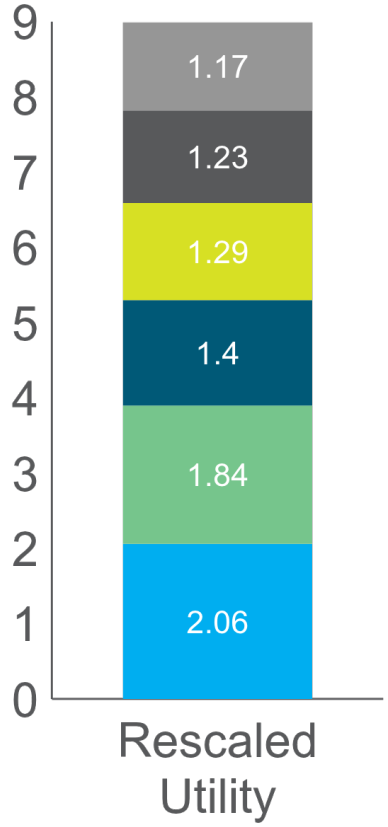




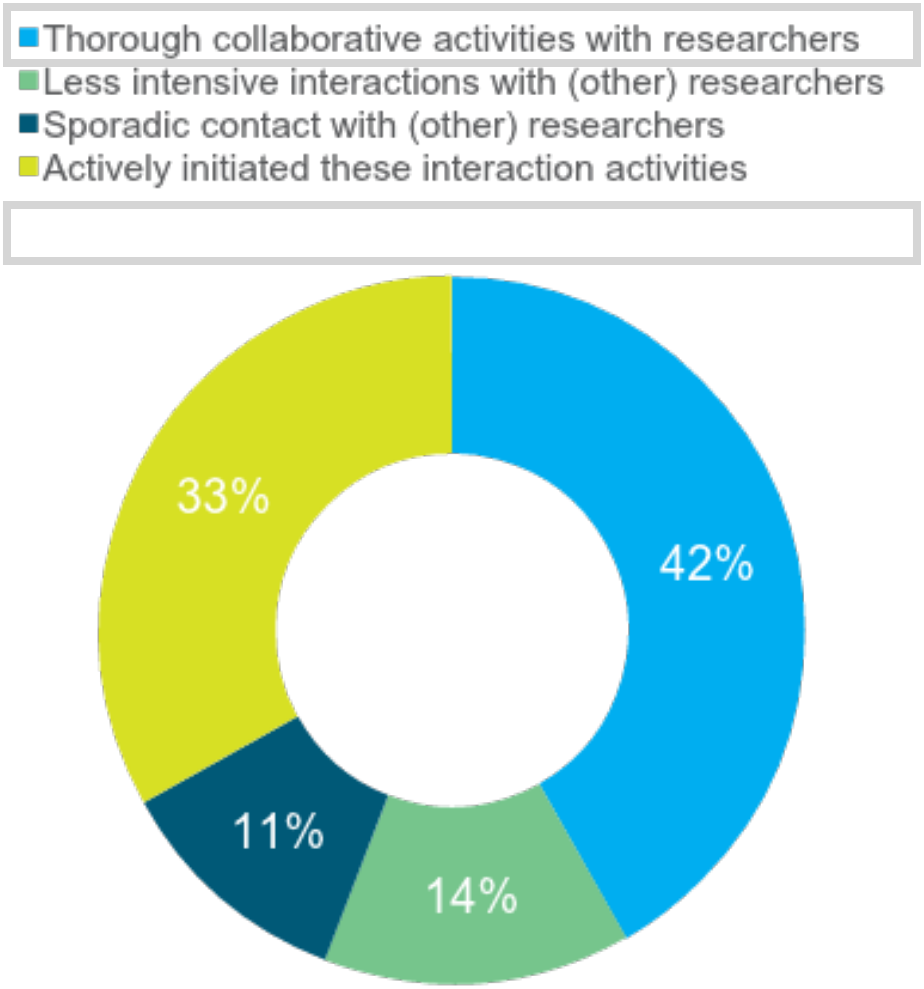
How should relevance be appraised?

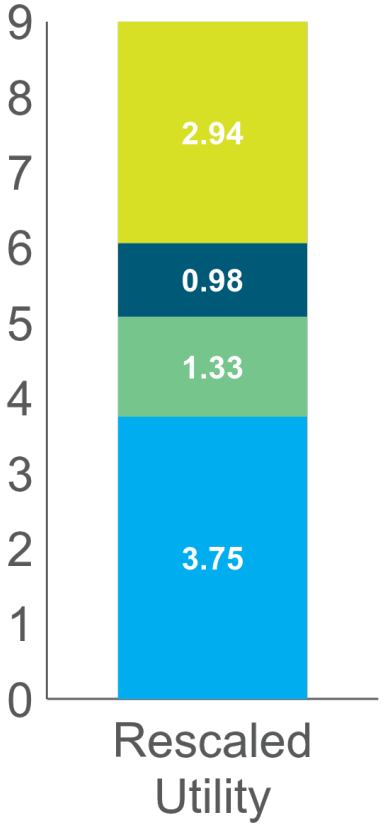
plicable to the policy context or policy issue
commendations were actionable and/or feasible
dertook these actions as part of a pre-specified strategy
nsulted experts to assess the relevance of research
nsistent with previous research on the issue
mpatible with his/her OR the organisation's values, knowledge, or experience





What are the best sort of interactions with researchers?





Acknowledging barriers

- Health decision makers, program developers face obstacles that make it difficult to use research
  - Some are more overwhelming than others
- Important to acknowledge these
- Examples of barriers:
  - Lack of access to research databases/journals
  - Self-perceived deficits in research skills
  - Lack of time (!!)
  - No relevant/practical research is available
- SAGE includes a checklist of key barriers as a means of accounting for these
  - Puts scores in context
  - Can inform organisations on what needs improvement

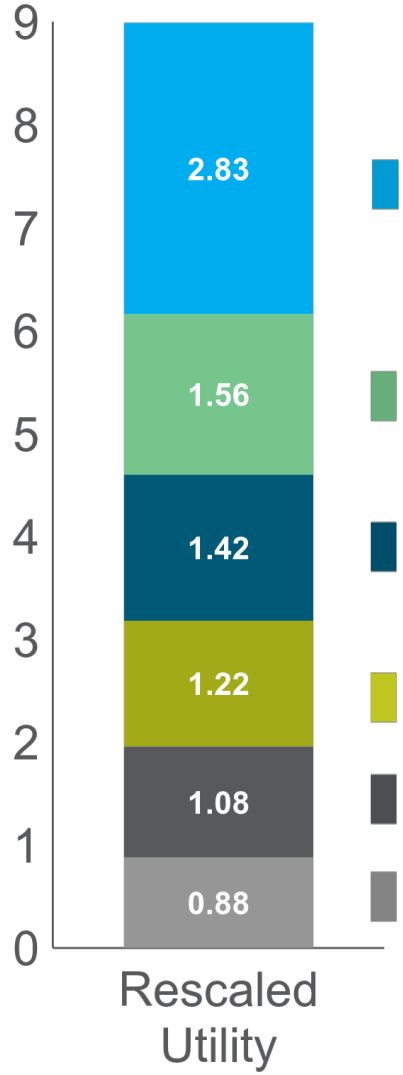
IMPLICATIONS

1. An **empirically derived** scoring system

- Quantified the relative importance of all key aspects
- Generated a score for each key aspect
- Produced an unbiased, context-sensitive, valid means of scoring research use

How does the scoring work?

Example: Searching for research



- Academic literature databases and/or physical libraries ☐
- Experts requested to identify research ☐
- Grey literature sources ☑
- Reference lists, citation indices, or databases of references ☐
- Obtained research by chance, on-hand, or provided by colleagues ☑
- Generic databases or search engines ☑

Total = 3.3 / 8

2. An **informative** scoring system

- Scoring tool can be used to increase organisations' research use capacity

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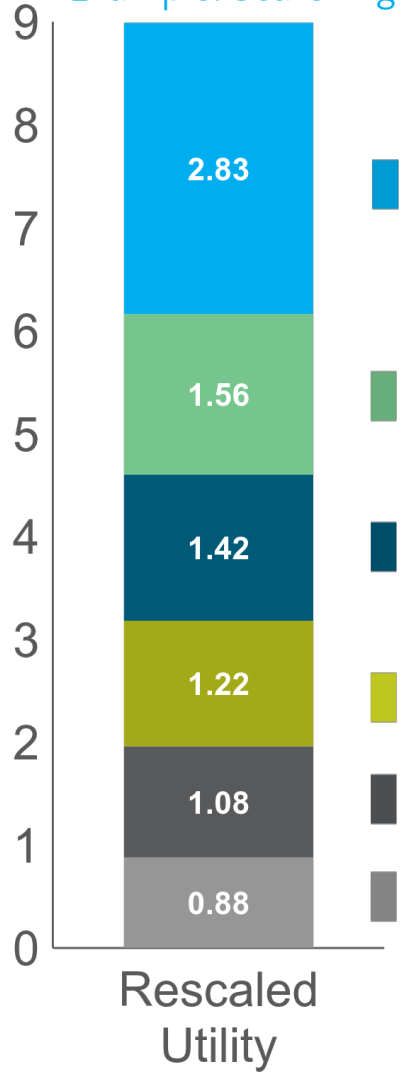
An informative scoring system

Example: Searching for research



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Next steps

- Evaluate the practical utility and face validity of the tool
- Evaluate the reliability and validity of the tool

To conclude – possible long-term benefits of SAGE

1. Policy agencies use SAGE to measure staff research engagement actions and use
2. Use scoring tool to score their research engagement actions and use
3. Use the scoring tool to determine what areas should be improved
4. Invests in programs to improve these capacities
5. Reassess staff with SAGE. Staff capacity to engage with and use research has improved
6. Improved health systems

⋮

8. Greater improvements in health

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Thank you