



THE UNIVERSITY OF
MELBOURNE

The use of rubrics in qualitative evaluation

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CEBRA, 28 July 2022



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cebra
Centre of Excellence for
Biosecurity Risk Analysis



Presentation outline

- Performance evaluation
- Health project
- Performance indicators
- Evaluative rubrics



Performance evaluation

Purpose	<ul style="list-style-type: none">• Is episodic and investigates particular dimensions of an intervention and observed results, usually in depth and by using multiple data sources• Supports more strategic decision making
Scope	<ul style="list-style-type: none">• Achievement of objectives, changes at outcome/impact levels. Underlying theory of change• Overall quality, merit and value of program, does the program fit stakeholder needs and policy environment• Reasons for achievement or non-achievement of performance areas; future benefits of the program• Lessons learned and recommendations for intervention improvement and/or resource allocation
Timing	<ul style="list-style-type: none">• Periodic, less timely and less regular than monitoring
Measures	<ul style="list-style-type: none">• Criteria and standards• Generally, applies a multiple methods approach based on a rigorous methodological design
Resourcing	<ul style="list-style-type: none">• Requires dedicated resources as part of overall program budget
Reporting	<ul style="list-style-type: none">• At agreed intervals, detailed evaluation report



Public Governance, Performance and Accountability Act 2013

38 Measuring and assessing performance of Commonwealth entities

- (1) The accountable authority of a Commonwealth entity must measure and assess the performance of the entity in achieving its purposes.
- (2) The measurement and assessment must comply with any requirements prescribed by the rules.

39 Annual performance statements for Commonwealth entities

- (1) The accountable authority of a Commonwealth entity must:
 - (a) prepare annual performance statements for the entity as soon as practicable after the end of each reporting period for the entity; and
 - (b) include a copy of the annual performance statements in the entity's annual report that is tabled in the Parliament.

“Longer term evaluations or information that might be relevant over a three or four-year period is harder to find” (JCPAA, 2015).



Public Governance, Performance and Accountability Act 2013

No. 123, 2013

Compilation No. 4

Compilation date: 23 August 2017
Includes amendments up to: Act No. 92, 2017
Registered: 28 August 2017

Prepared by the Office of Parliamentary Counsel, Canberra



Health project

- How healthy is the biosecurity system?
- Multi-year project
- Evaluation framework for national biosecurity system
- Literature reviews

Evaluating the health of Australia's biosecurity system

CEBRA 170714

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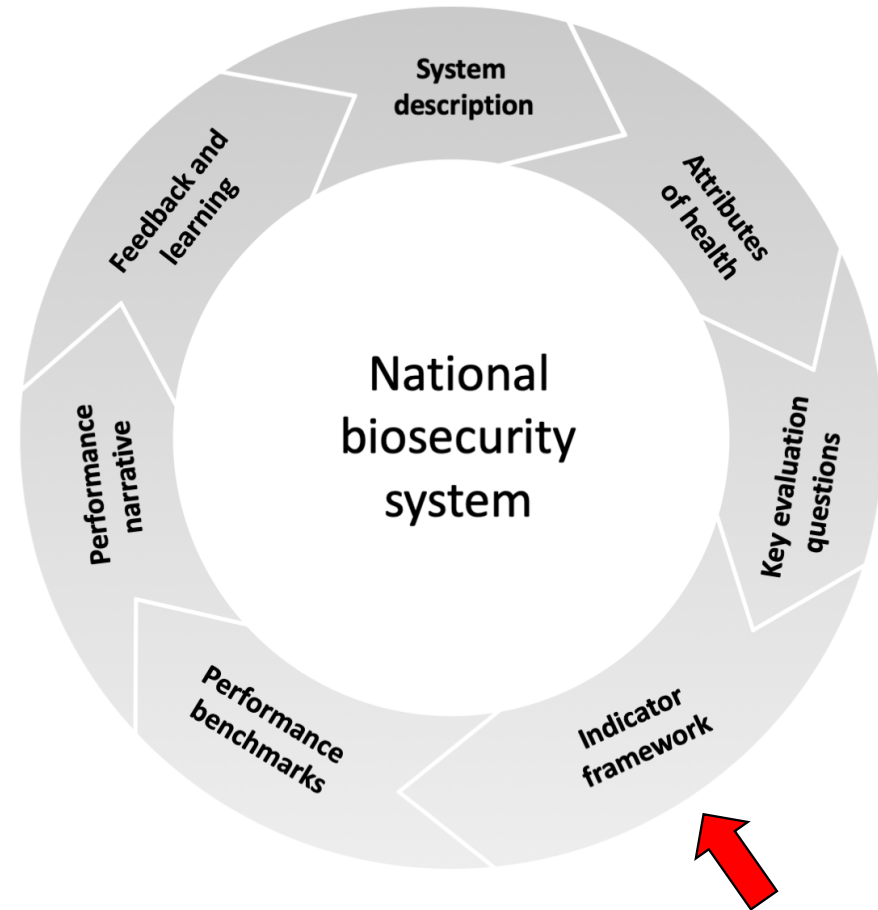
June 2020





Evaluation approach

- 7-step approach
- Project focused on steps 1-4
- Today: Indicator framework

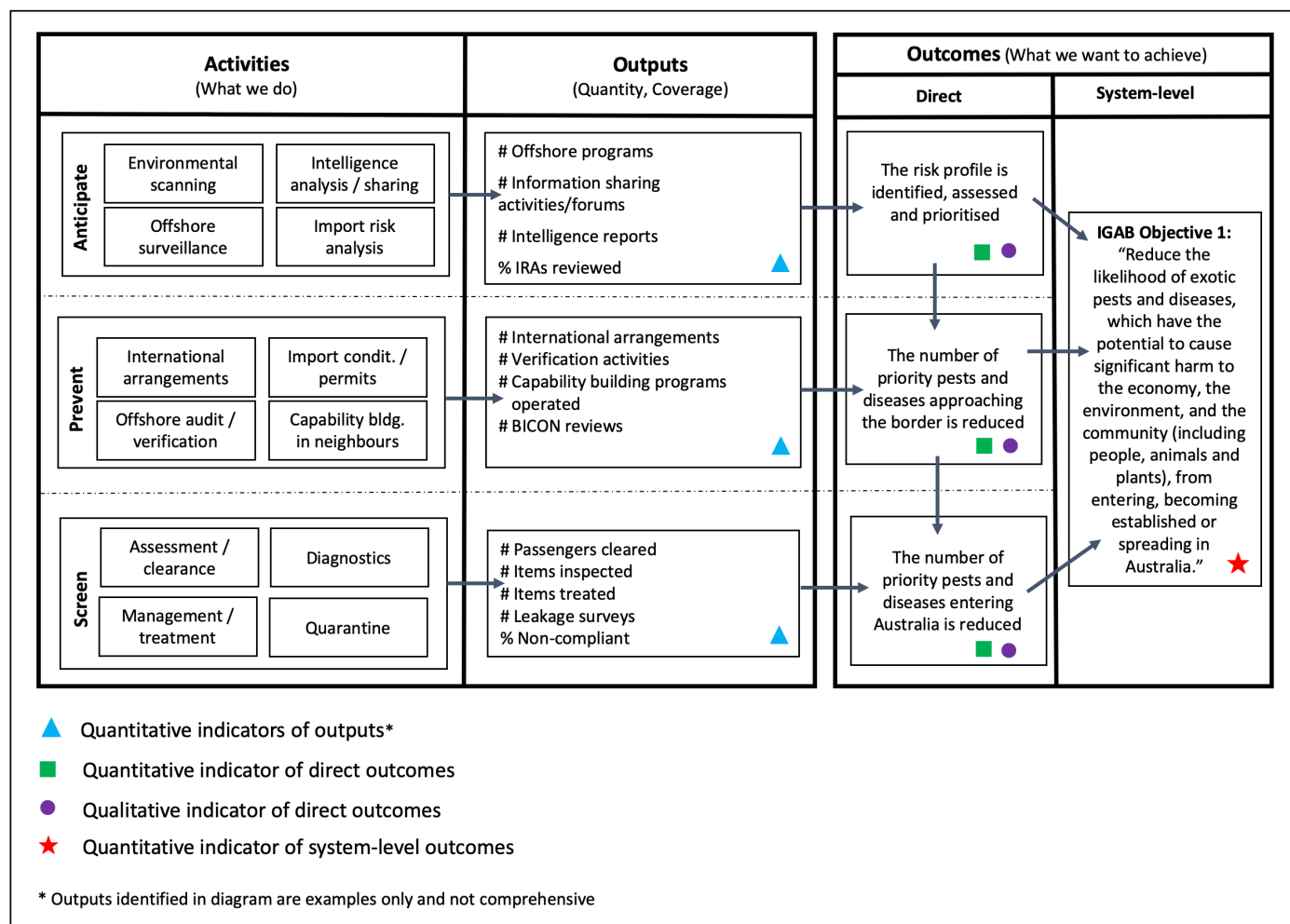




Performance indicators

- Can signify the level of success of management interventions
- Integral part of performance evaluation
- Selection or development should be guided by system description
- Different data sources available
- Can use quantitative and qualitative data

Indicator framework: pre-border and border





Qualitative data in evaluation

Strengths

- When quantitative data collection and analysis are not possible
- Effective in understanding *processes* that have led to an outcome
- Identify previously unknown issues

Limitations

- Difficult to generalise to other settings
- Subjective interpretation
- Often no random selection of participants


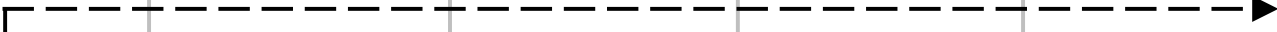


Introducing evaluative rubrics

- Form of constructed measure
- Captures qualitative judgments in consistent manner
- Originated in the education and health sector
- Can also be used in program evaluation
- Flexible tool



Elements of an evaluation-focused rubric

Evaluative Criteria <i>Elements that are the key contributors to performance, the dimensions of quality</i>	Performance Standards 				
	Standard 1	Standard 2	Standard 3	Standard 4	Standard 5
Criterion 1					
Criterion 2	<div>Descriptors <i>Text that defines the expected performance for each standard and criterion</i></div>				
Criterion 3					
Criterion 4					
Criterion 5					



Example rubric: Effectiveness of anticipate activities

	Performance standards*			
	Advanced	Good	Developing	Inadequate
Evaluative criteria				
Environmental scanning	Environmental scanning is used systematically and rigorously across all risk areas – animal, plant, aquatic – and is based on best practice techniques.	Environmental scanning is used systematically across most risk areas – animal, plant, aquatic – but there is less effective coverage in at least one area. Techniques employed are best practice.	Environmental scanning is used across at least one risk area and may use best practice techniques.	Environmental scanning is undertaken on an ad hoc basis, does not cover all risk areas, and does not use contemporary, best practice techniques
Offshore surveillance coverage, including sentinel herds and traps	There is excellent coverage of priority pests and diseases in offshore surveillance and sentinel activities that provides a very high level of confidence that off-shore risks are identified.	There is good coverage of priority pests and diseases in offshore surveillance and sentinel activities. Confidence that off-shore risks are identified is high.	There is incomplete coverage of priority pests and diseases in offshore surveillance and sentinel activities. Confidence that off-shore risks are identified is limited.	There is insufficient coverage of priority pests and diseases in off-shore surveillance and sentinel activities to provide confidence that offshore risks are identified.

*Column 'Insufficient evidence' not shown: Evidence is unavailable or of insufficient quality to determine performance



Example rubric: Effectiveness of detect activities

	Performance standards*			
	Advanced	Good	Developing	Inadequate
Evaluative criteria				
Diagnostic laboratory capacity	The diagnostic laboratory system is maintained and resourced to a very high level with sufficient surge capacity to cope with virtually all emergency situations.	The diagnostic laboratory system is maintained and resourced to a high level with sufficient surge capacity to cope with most emergency situations.	The diagnostic laboratory system is adequately maintained and resourced and has the capacity to respond to some emergency situations although surge capacity is limited.	The diagnostic laboratory system is not well maintained and resourced and there are significant gaps in its capacity to respond to emergency situations.
Livestock traceability	Livestock traceability systems virtually always meet the National Livestock Traceability Performance Standards.	Livestock traceability systems usually meet the National Livestock Traceability Performance Standards.	Livestock traceability systems sometimes meet the National Livestock Traceability Performance Standards.	Livestock traceability systems generally do not meet the National Livestock Traceability Performance Standards.

*Column 'Insufficient evidence' not shown: Evidence is unavailable or of insufficient quality to determine performance



Rubric synthesis

	Assessors							
Criteria	A1	A2	A3	A4	A5	A6	A7	A8
C1	4	3	4	4	3	4	3	4
C2	1	4	2	4	2	2	2	1
C3	3	3	3	4	4	3	2	2
C4	2	1	3	2	2	1	3	2
C5	4	4	4	3	4	3	3	4
C6	2	2	2	3	1	3	2	2



Advanced = 4
Good = 3
Developing = 2
Inadequate = 1

1. As proportion
2. Transform
3. Mean, CI
4. Back-transform
5. (Weightings)



Criteria	Mean
C1	0.97
C2	0.71
C3	0.88
C4	0.46
C5	0.97
C6	0.54



Rubric synthesis (cont.)

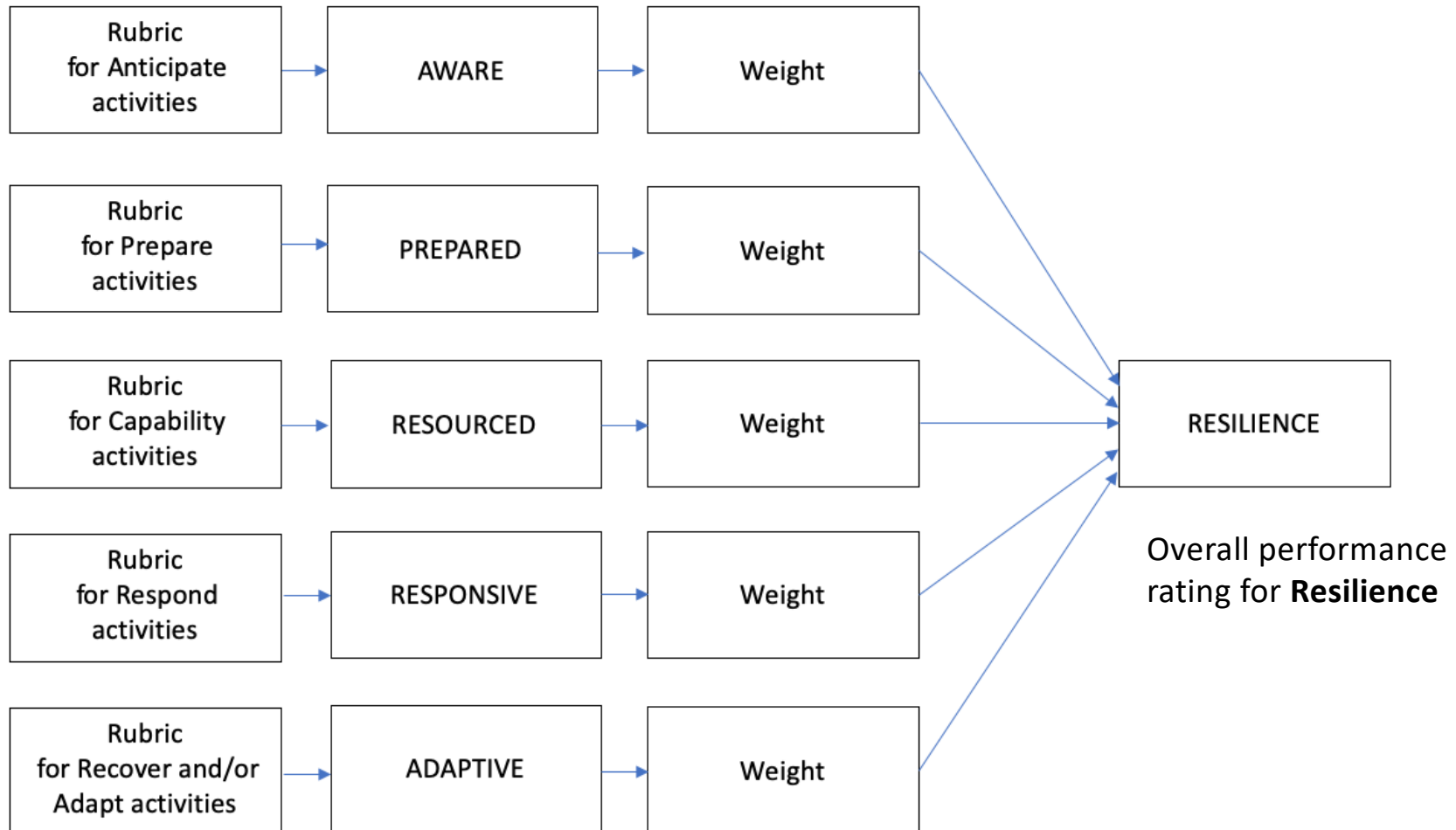
Grading system

Overall performance rating	Mean
Advanced	>0.8
Good	0.65 – 0.8
Developing	0.5 -0.65
Inadequate	<0.5

Criteria	Mean
C1	0.97
C2	0.71
C3	0.88
C4	0.46
C5	0.97
C6	0.54
Mean	0.76

Overall performance rating of 'Good'

Rubric synthesis (cont.)





Thank you

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Picture: freestocks.org