

PRESENTATION TO:
AUSTRALASIAN EVALUATION SOCIETY CONFERENCE

4 SEPTEMBER 2017

EVALUATION-BASED ADVICE WITH UNCERTAIN EVIDENCE



PRESENTERS:
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LOCATION:
CANBERRA

IMPACT EVALUATION: THEORY OF CHANGE



Existing policy/program

Policy/program is evaluated

Evidence of impact is generated

Advice based on evidence of impact

Policy/program is:
– Continued/improved
– Discontinued

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Hierarchy of evidence

1. Systematic reviews (meta analyses) of multiple randomised control trials (RCTs)
2. High quality RCTs
3. Systematic reviews (meta analyses) of natural experiments and before-after studies
4. Natural experiments (quasi experiments)
5. Before-after (pre-post) studies





Source: Leigh (2009)

IMPACT EVALUATION: HIERARCHY OF EVIDENCE



Hierarchy of evidence

Frequency of evidence (stylised)

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2. High quality RCTs 
3. Systematic reviews (meta analyses) of natural experiments and before-after studies 
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Hierarchy of evidence

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2. High quality RCTs



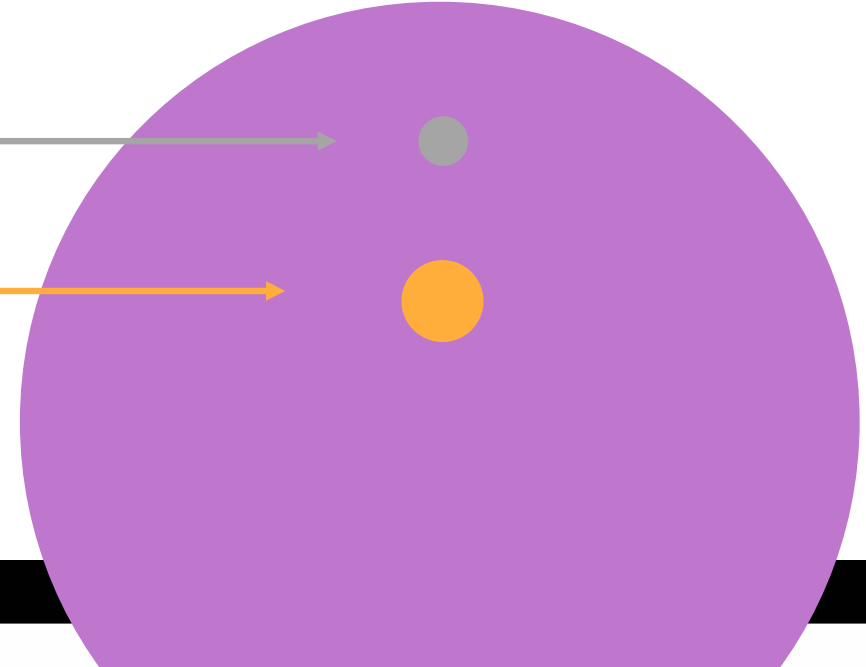
3. Systematic reviews (meta analyses) of natural experiments and before-after studies



4. Natural experiments (quasi experiments)



5. Before-after (pre-post) studies



Source: Leigh (2009)

OUR FINDINGS ARE BASED ON A WIDE RANGE OF EXPERIENCE



Evaluation of the New Colombo Plan
Scholarship and mobility programs



Australian Government
Attorney-General's Department

Review of the NPA on Legal Assistance Services
Justice services

The Higher Education Participation and
Partnerships Program (HEPPP)
Higher education



Evaluation of the NPA on Skills Reform
Vocational education



The Adult Migrant English Program (AMEP) and
Skills for Education and Employment (SEE) Program
Vocational education and skills



Northern Territory Indigenous Education Strategy (IES)
Early childhood and school education

OUR HEPPP EVALUATION — RECENT CASE STUDY



Document analysis

- Program documentation
- University Participation annual reports (223), and grant-based NPP reports (100)
- University evaluations of HEPPP-funded projects – over 500 evaluation documents from 32 universities
- International higher education equity literature

Data analysis

- HEIMS, and Apps and Offers
- University-provided data on individual student involvement in HEPPP, and on Partnerships partners (schools, RTOs etc) – 28 universities
- HEPPP project inventory (developed from annual reports) – more than 3,000 HEPPP projects
- HEPPP and higher education finance data

Consultations

- University interviews – 124 interviews across the 38 universities; 9 site visits
- Student interviews – 30 interviews across numerous project types and universities
- University staff survey – 359 responses (across 25 universities)
- Student survey – 3,544 responses (across 23 universities)
- Written submission processes – 136 submissions received (79 schools, 22 universities, 11 higher education peak bodies, 24 other)

OUR HEPPP EVALUATION — RECENT CASE STUDY

Document analysis

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Nature

- Complex meta-evaluation
- Multiple sources of evidence
- Varied levels of evaluation of individual initiatives

Findings

- Strong qualitative indication of effectiveness
- Weak qualitative evidence of impact

Supplementary actions

- Additional (targeted) data collected
- Drew on econometric analysis of retention and success rates
- Further highlighted weaknesses in in situ evaluation

Recommendations

- Evidence inconclusive, but ...
- Sufficient to recommend continuation ...
- Contingent on strengthened attempts to develop adequate evidence

Outcome

- Recommendation(s) accepted
- Evaluation embedded as part of future funding

Report

- https://docs.education.gov.au/system/files/doc/other/final_heppp_evaluation_report_2017.03.16_0.pdf

Data

- HEIM
- Unive
- HEPP
- HEPP

Consu

- Univers
- Student
- Universi
- Student
- Written s

OVERVIEW OF STRATEGIES



1. Triangulate the before-after evidence

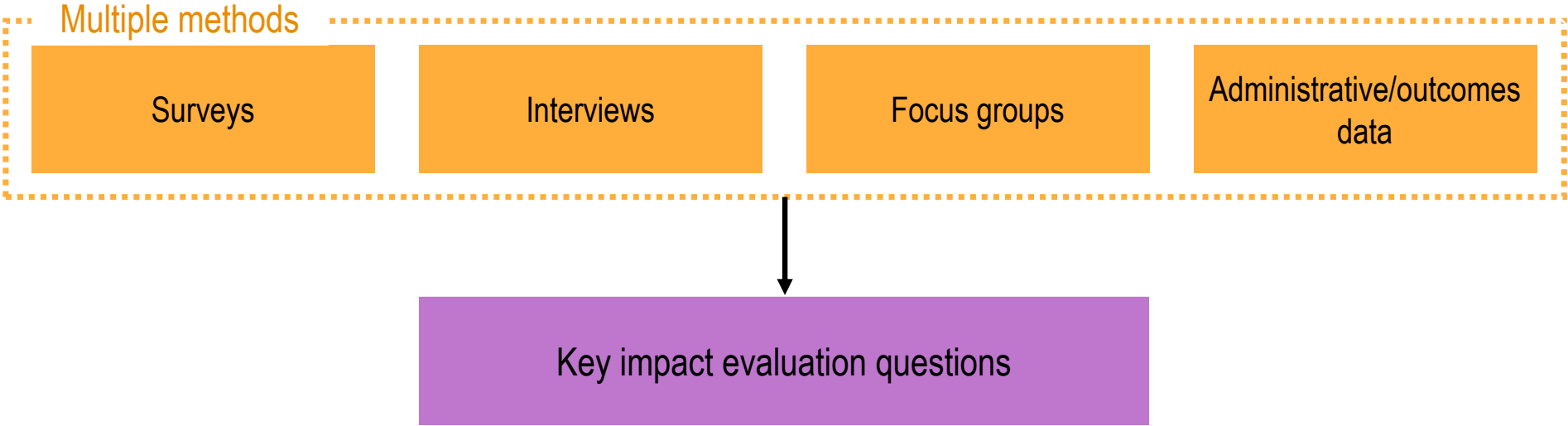
2. Corroborate with external evidence

3. Theorise (and if possible triangulate the theories)

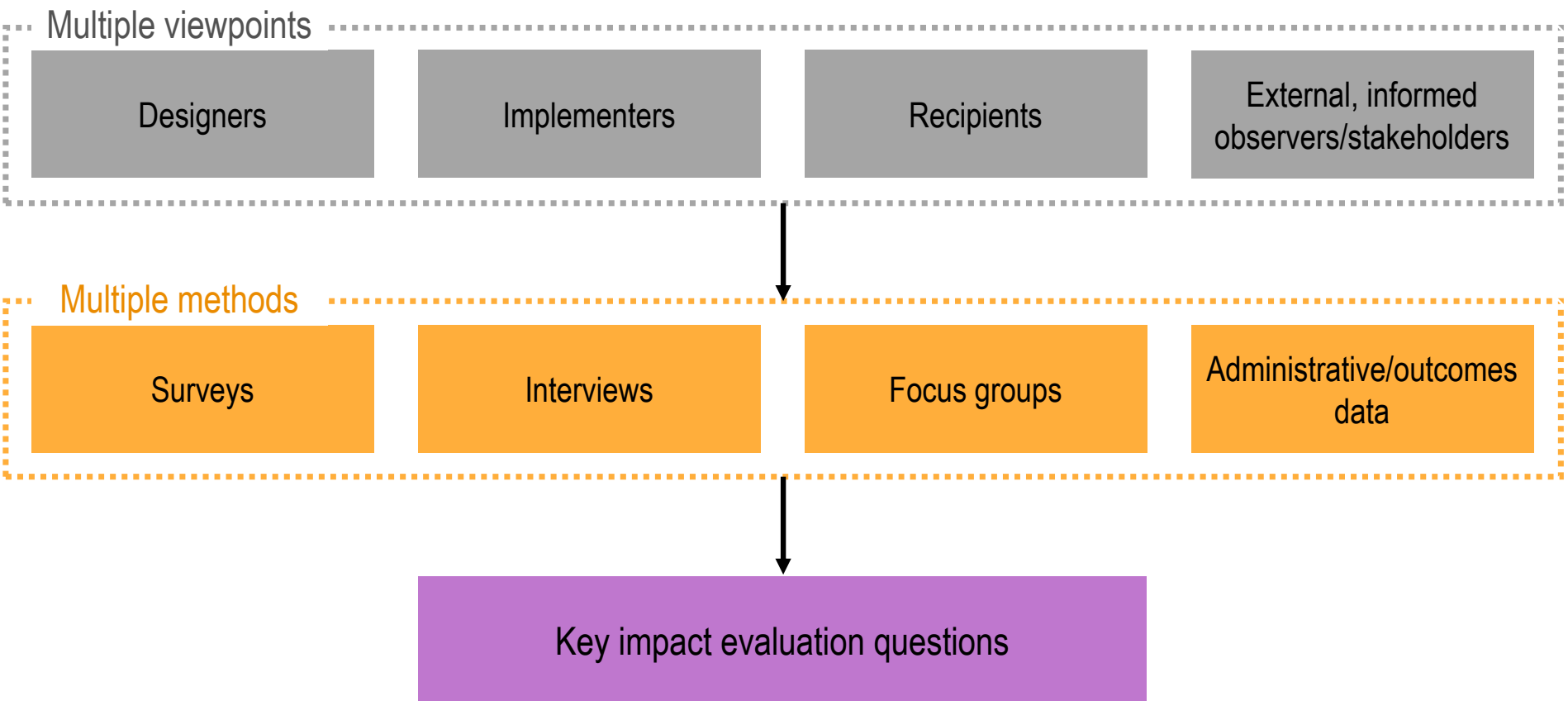
4. Consider the impact of any advice/change itself, and the environment in which it is made

Coda (some additional thoughts)

1. TRIANGULATE THE BEFORE-AFTER EVIDENCE



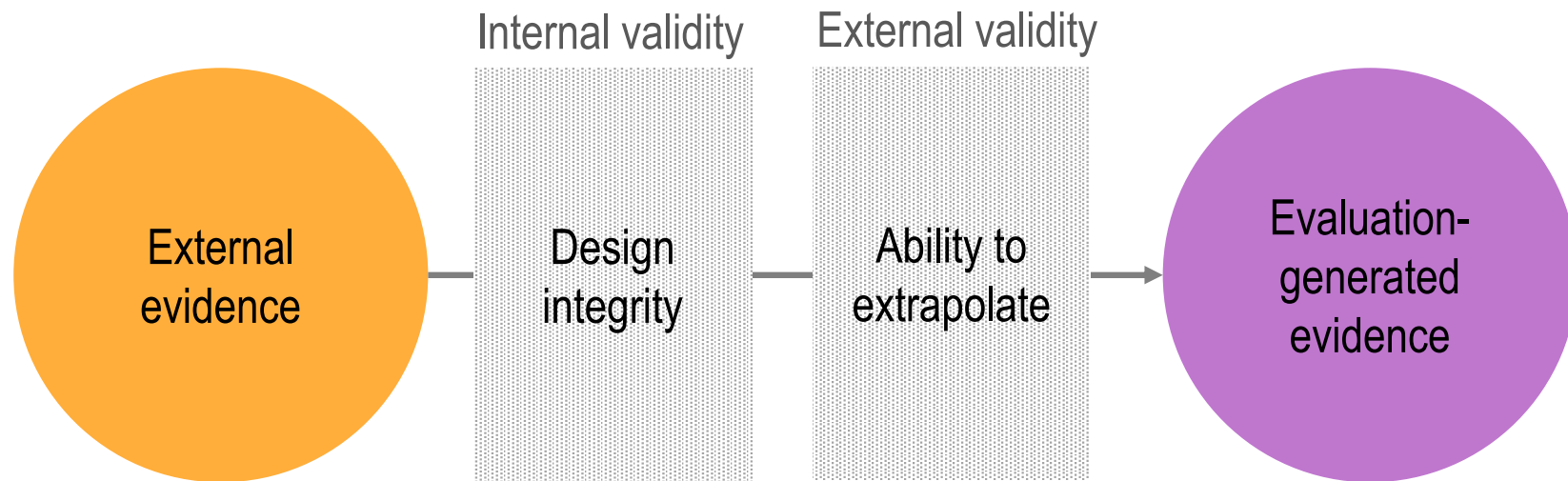
1. TRIANGULATE THE BEFORE-AFTER EVIDENCE



2. CORROBORATE WITH EXTERNAL EVIDENCE



2. CORROBORATE WITH EXTERNAL EVIDENCE



3. THEORISE

Theories can give some guide to likely outcomes.
And can be subjected to scrutiny and debate

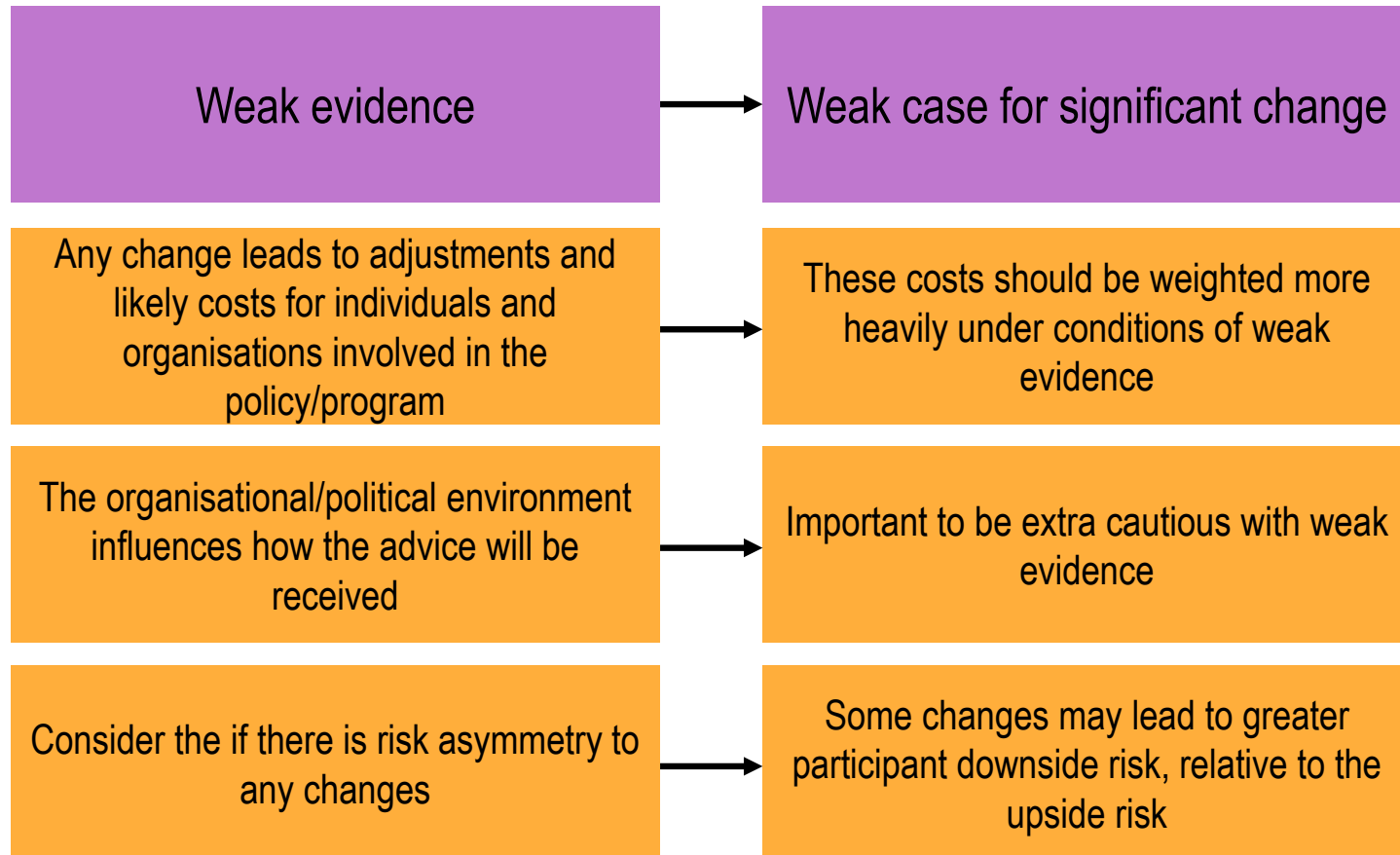
Theories can include:

- how systems work
- how individuals/firms/organisations react

Key questions:

- What are the preferences and incentives of agents?
 - Are agents likely to act 'rationally'?
 - Are there cognitive biases at play?

4. CONSIDER THE IMPACT OF ANY ADVICE/CHANGE ITSELF, AND THE ENVIRONMENT IN WHICH IT IS MADE



CODA (SOME ADDITIONAL THOUGHTS)

Accurately set evaluation commissioners' and stakeholders' expectations

Should understand the rigour of evidence that will be produced

There may be scope trade-offs

Trade-off between breadth of evidence and rigour of evidence

Consider behaviour biases that may impact the advice

- Confirmation bias
- Attribution asymmetry
- Cognitive inertia
- Recency / primacy effect / anchoring

Push in the direction of better evidence collection

- Policy/program designed with evaluation data collection imbedded
- Move evaluation evidence up the hierarchy

OUR CONTACT DETAILS



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