The International School
on Research Impact Assessment

Analysis: Understanding what works

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Organised by: Agència de Qualitat i Avaluació Sanitàries de Catalunya
AGENCY FOR HEALTH QUALITY AND ASSESSMENT OF CATALONIA
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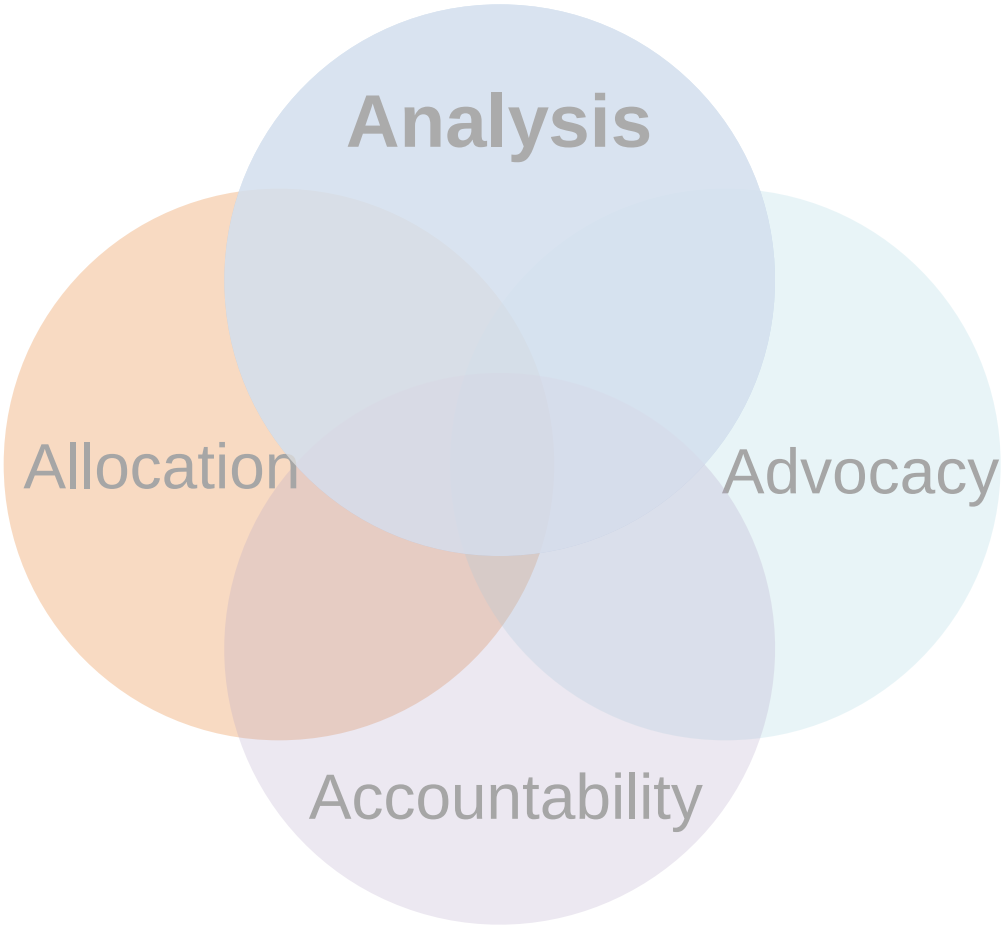
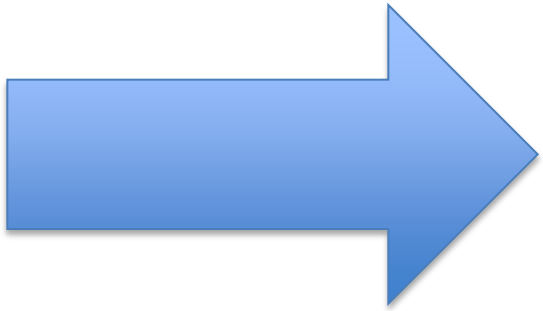
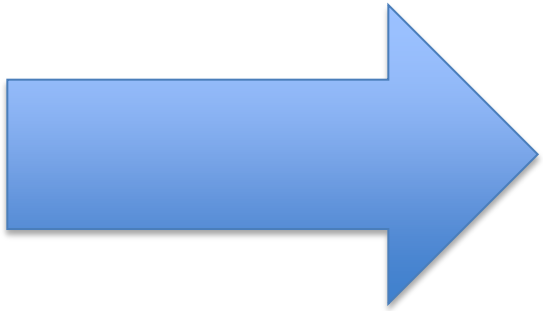
RAND EUROPE
Alberta Innovates Health Solutions


Analysis
Allocation
Advocacy
Accountability

Analysis…

- How is research translated to produce impacts?
- Are there things we can do to maximise those impacts?

Research  **Impact**

Research  **Impact**

What research characteristics are associated with impact?

What kinds and levels of impacts does research produce?

Project Retrosight

- Case study approach based on research grants

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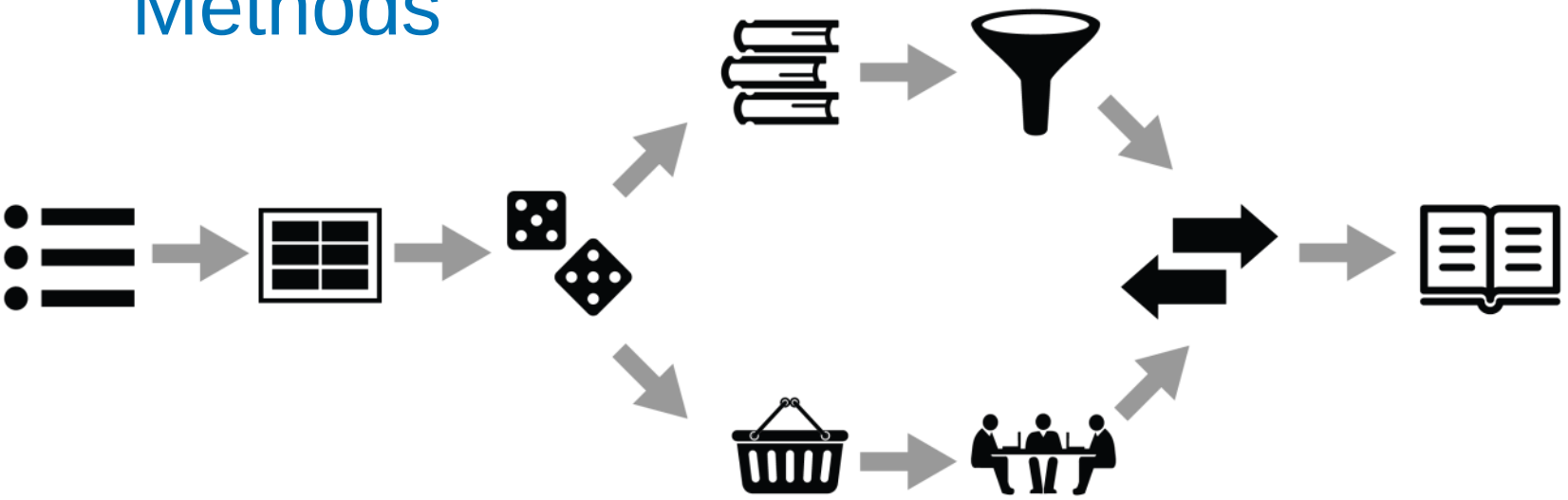
Project Retrosight

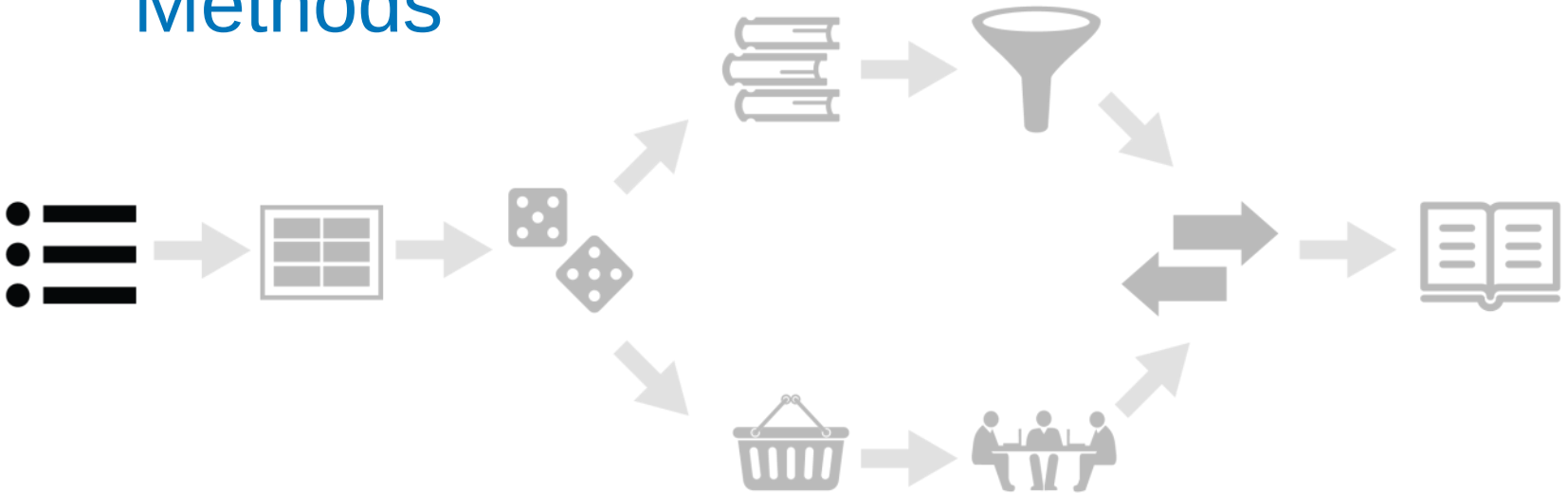
- Case study approach based on research grants
- Used a tried and tested structure
- International – UK, Canada, Australia
- Focused on cardiovascular and stroke research

	AUS	CAN	UK
Mortality	38%	30%	35%
Morbidity	18%	5%	13%
Annual cost to national economy	$10.5 billion	$15.0 billion	$53.3 billion
Annual research spending	$120.9 million	$66.6 million	$191.5 million

Methods



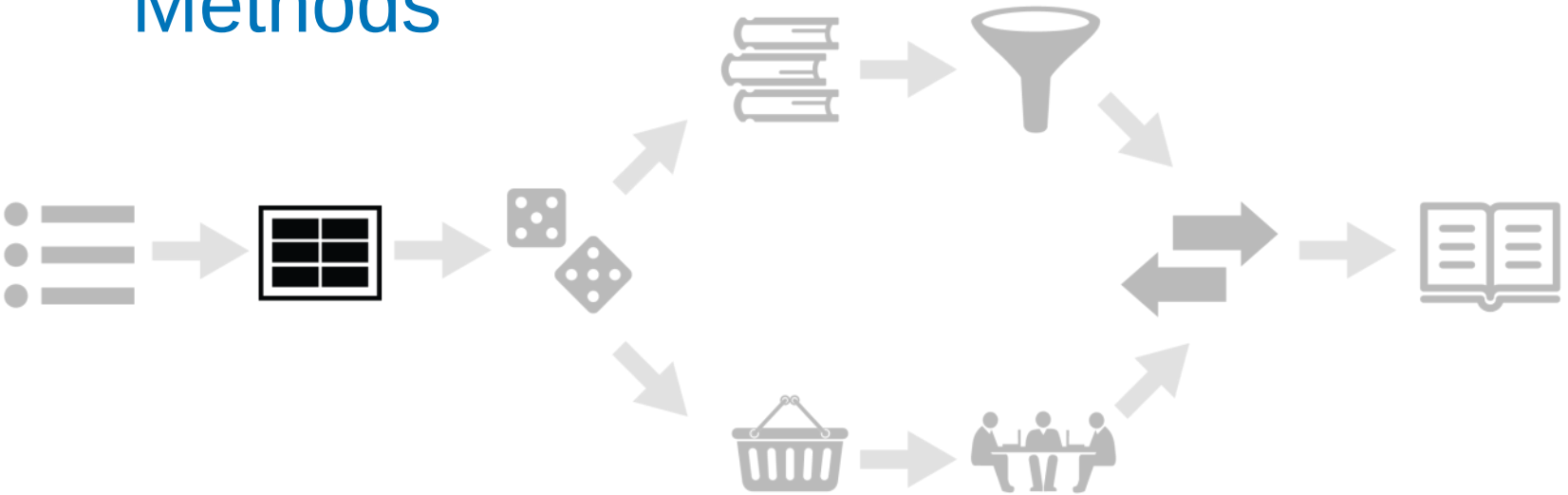
Methods



List of grants

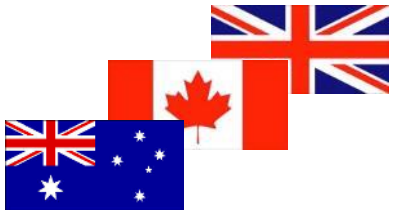
Research grants awarded for cardiovascular and stroke research

Methods

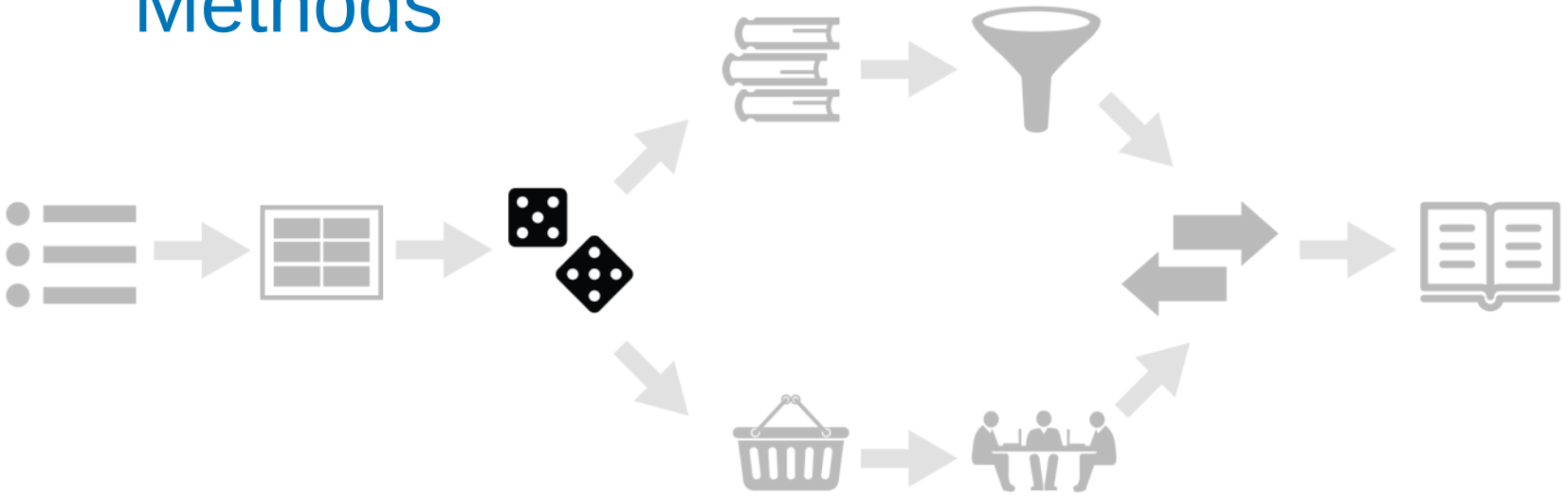


Assign to cells in a selection matrix

	High estimated impact	Low estimated impact
Basic		
Clinical		



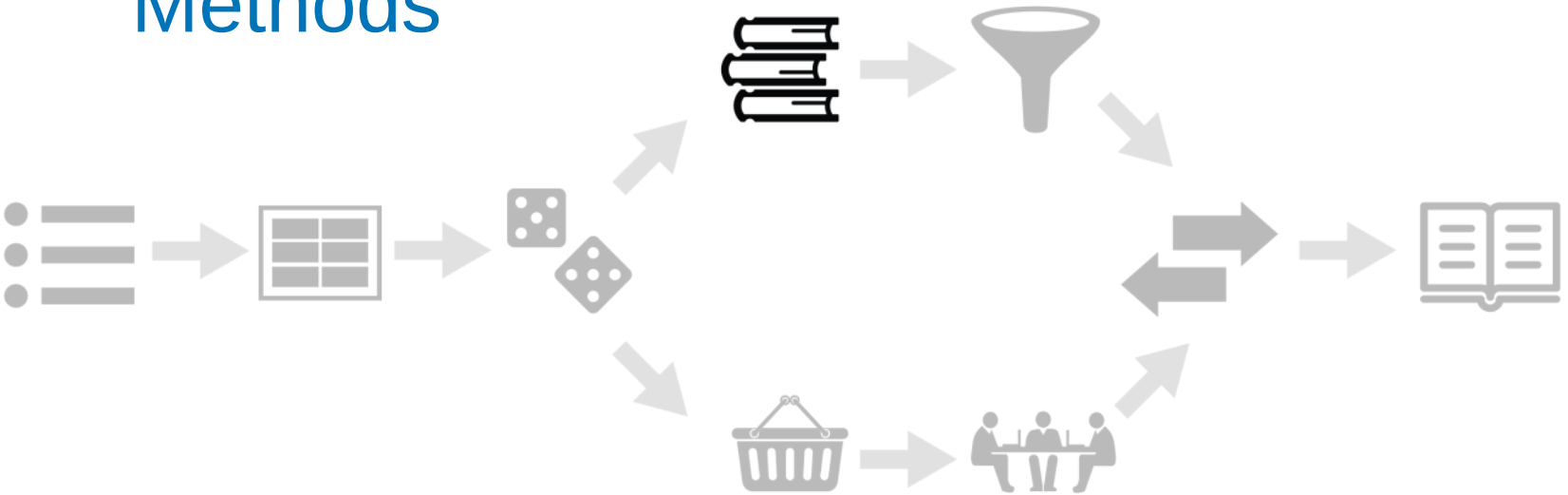
Methods



Randomly select

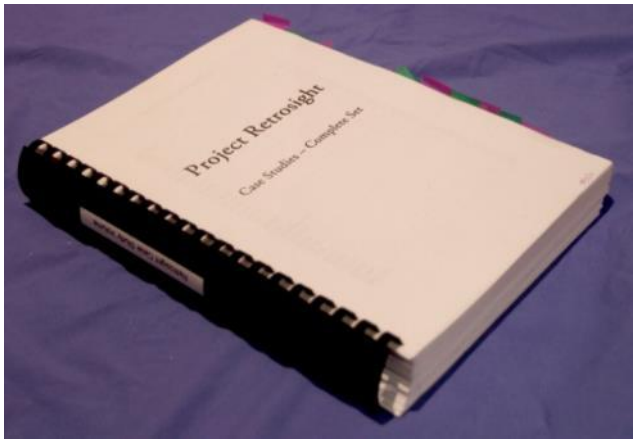
We were left with a random selection of 29 grants, representing each category and country

Methods



Compile stories

We read case studies, did bibliometrics, read archives and interviewed researchers



Methods

Multidimensional catalogue of impacts

- Knowledge production
- Research targeting & capacity building
- Informing policy & product development
- Health & health sector benefit
- Broader economic benefit

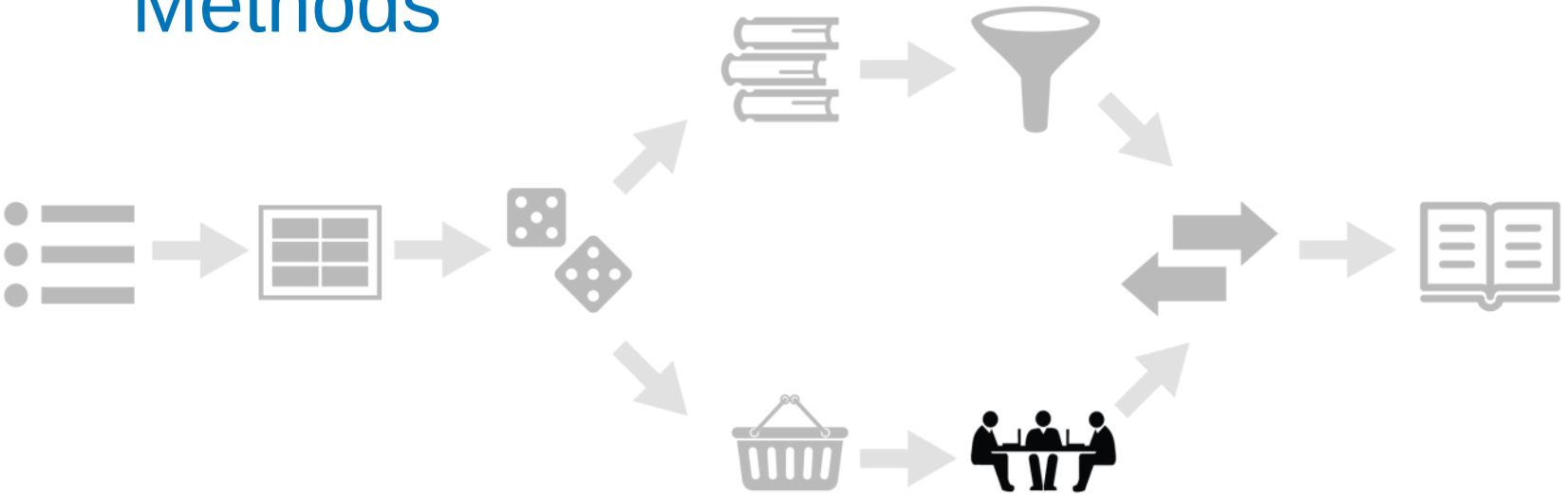
Methods

Extract characteristics

Story

Collaboration	Yes
Strategic thinking	No
Negative results	No
Clinical motivation	Yes

Methods



Use panel to score impacts

Lists of impacts →

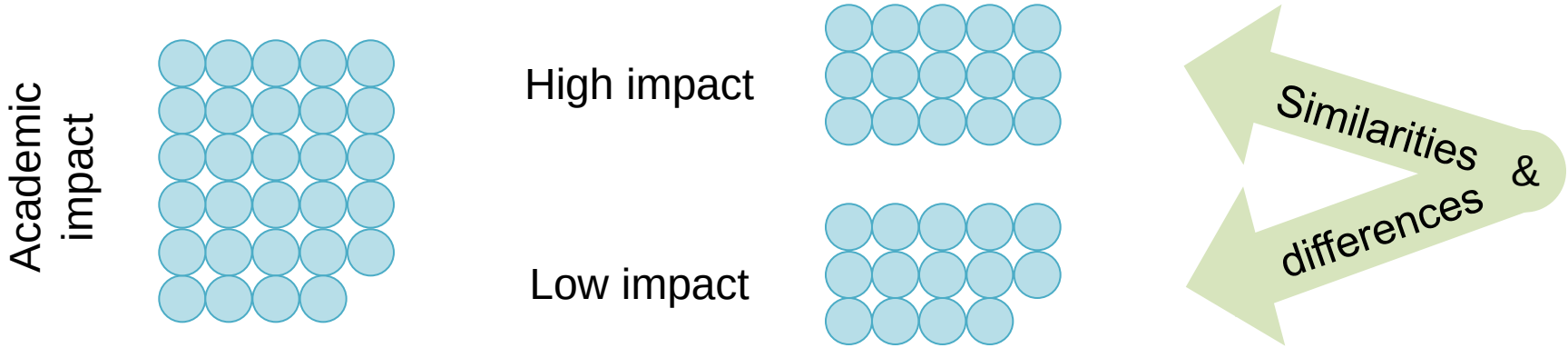
Impacts	Payback scores
KP	8
RTCB	4
IPPD	2
HHSB	3
BEB	1

Academic impact

Wider impact

Methods

Examine similarities and differences



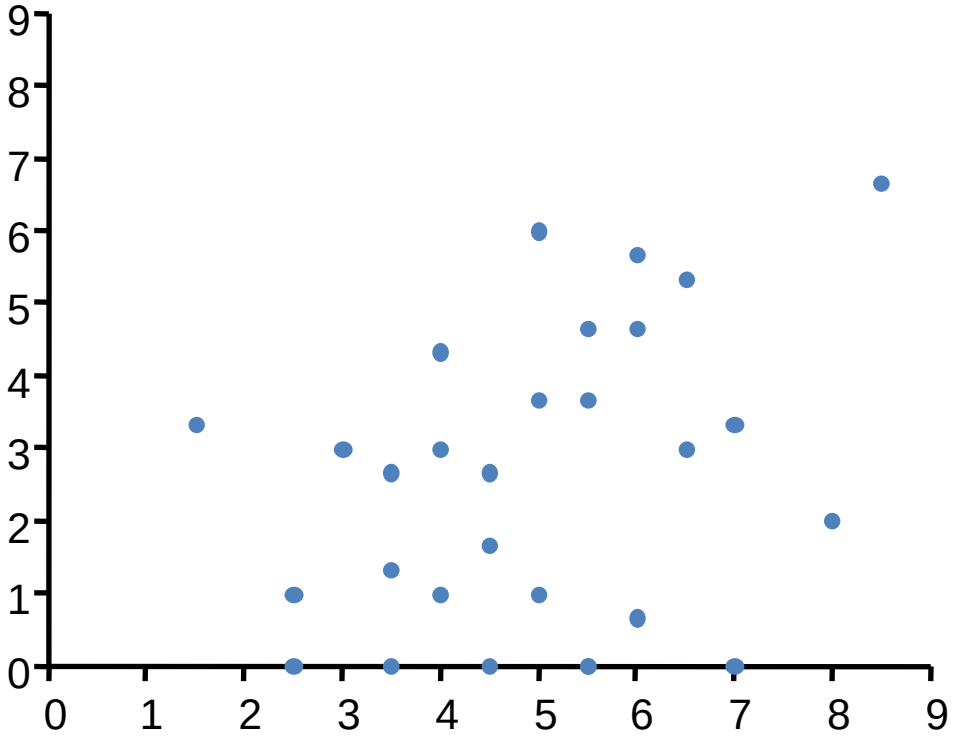
Methods

Return to case narratives and existing literature to investigate strength of association

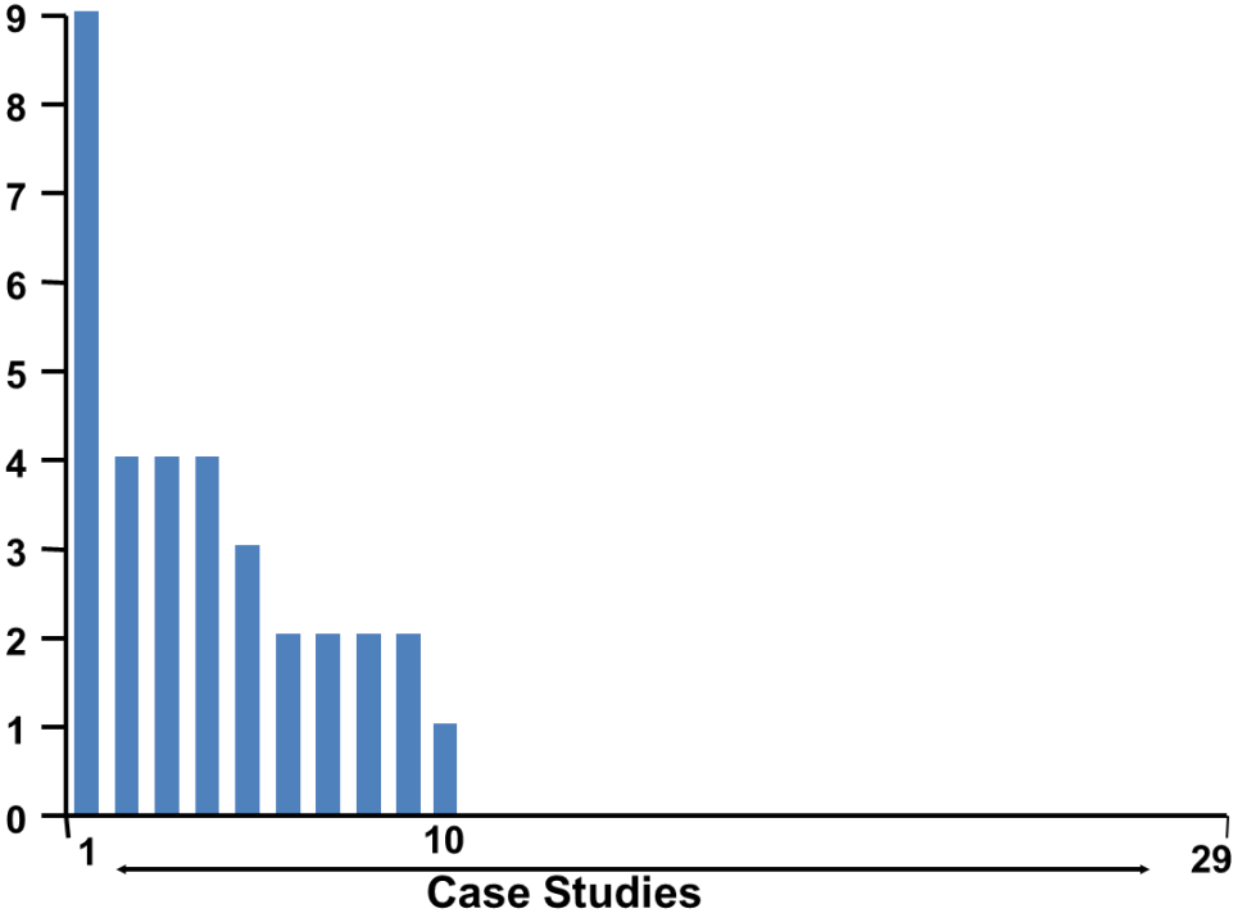
A wide range of impacts was produced

A wide range of impacts was produced

Wider impact did not correlate with knowledge production



Few projects produced economic impact



Motivation

Finding

Basic biomedical research with clear clinical motivation is associated with high academic and wider impacts

Recommendation

Encourage and support clinically motivated research

Research Questions

Further unpick the role of motivation in driving the impact of researchers and their work.

Is it possible to inspire researchers to pursue research focused on patient needs?

Collaboration

Finding

Research collaboration is associated with high academic and wider impact

Recommendation

Encourage and support research collaboration in both basic biomedical and clinical research

Research Question

What kind of collaboration is most effective?

Strategic thinking

Finding

Strategic thinking by clinical researchers is associated with high wider impact

Recommendation

When seeking wider impact, focus research funding on researchers who think strategically about translation

Research Question

Can researchers be taught to ‘think strategically’ about research translation?

Wider engagement

Findings

Engagement with practitioners and patients is associated with high academic and wider impact

Basic biomedical research collaboration with industry is associated with high academic and wider impacts

Recommendation

Encourage and support these kinds of engagement

Research Questions

At which point in the research process is engagement with patients most valuable?

Is collaboration with industry not also important in clinical research?

In summary…

Research → **Impact**

What research characteristics are associated with impact?

What kinds and levels of impacts does research produce?

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- We identified a wide range of impacts from cardiovascular and stroke research
- Wider impacts were not correlated with knowledge production
- The majority of economic impacts came from a small number of projects

What research characteristics are associated with impact?

- We can identify a range of factors that appeared to be associated with high impact, including:
  - Clinical motivation
  - Research collaboration
  - Thinking strategically about translation
  - Engagement with patients, practitioners and industry

Recommendations

- Research funders can expect a range of impacts from cardiovascular and stroke research
- They should not assume that knowledge production will predict wider impact, or expect the majority of projects to produce economic benefits
- Research funders should encourage and support:
  - Clinically motivated research
  - Research collaboration
  - Researchers who think strategically about research translation, when seeking wider impact
  - Engagement of all researchers with patients and practitioners
  - Engagement of basic biomedical researchers with industry

Questions and discussion