EVIDENCE AND INFLUENCE:
The Indigenous Burden of Disease Study as an input to policy and practice

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Acknowledgements

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- Chief investigators: Peter Hill, Cindy Shannon, Phillip Davies, Anthony Zwi
- We acknowledge the Traditional owners, past and present, of this land

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IBoD study findings: health risk factors

Table i: Indigenous health gap (DALYs) due to selected risk factors, expressed as a proportion of excess burden from each risk factor, 2003

	Total (%)						
Risk factor	**0–14**	**15–34**	**35–54**	**55+**	**Total**	**Health gap (DALYs)**	**% of total Indigenous burden**
Tobacco	6	0	47	47	100	9,816	10
High body mass	0	9	57	34	100	8,953	9
Physical inactivity	0	13	48	39	100	6,554	7
High blood cholesterol	0	10	64	26	100	3,994	4
Alcohol	2	45	40	13	100	3,820	4
High blood pressure	0	5	45	50	100	3,215	3
Low fruit and vegetable intake	0	10	52	37	100	2,873	3
Illicit drugs	4	63	28	5	100	2,150	2
Intimate partner violence	0	48	42	11	100	1,836	2
Child sexual abuse	0	67	28	5	100	869	1
Unsafe sex	4	40	43	12	100	926	1
11 risk factors combined[(a)]	**3**	**21**	**45**	**32**	**100**	**27,383**	**29**

(a) Joint effect of 11 risk factors in Indigenous analysis, and 14 in National Study (Begg et al. 2007) minus the burden from osteoporosis, occupation, and air pollution

Uptake of evidence to policy: the Indigenous Burden of Disease (IBoD) case study

- Aims:
  - Explore how meaning is constructed from the Indigenous BoD research evidence by different policy stakeholders: researchers, policy decision makers and the members of the communities affected by policy decisions;
  - Compare with prioritization through BoD to other approaches in priority setting;
  - Map out the implications for the use of different data, frameworks and approaches for priority determination and agenda setting;
  - Identify ways to enhance the use of research evidence in policy allowing researchers and community health advocates to better understand and engage with policy processes; and
  - Extend the current theoretical base of health policy analysis.

Panel

- Policy context and narrative leading to the Australian Indigenous Burden of Disease Study (2007) *by Jessica McGowan*
- The use of multiple evidence-bases to effect change: the experience of a regional Aboriginal community controlled health organisation *by Deepa Gajjar*
- Research, practice and policy: role of evidence and economics in developing policy *by Christopher Doran*

- [Standard Deviations: the (mis)use of Indigenous Life Expectancy Estimates *by Bryan Mukandi]*

Policy context and narrative leading to the Australian Indigenous Burden of Disease Study (2007)

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Objectives

- What were the contextual factors that led to the commissioning of the IBoD study?
- What were the expectations of different stakeholders in relation to the IBoD study?
- What is known about the commissioning of BoD research within population sub-groups, notably Indigenous populations?
- What can be learned from this case study about commissioned research within policy settings?

Methods

- Systematic literature review
- 37 key informant interviews with Indigenous and non-Indigenous researchers, policy-makers and statisticians
- Analysis in NVivo 10

Context in lead up to commissioning

- Indigenous disadvantage
- Lower life expectancy
- High mortality and morbidity
- Lack of an adequate evidence base

Establishment and set up of IBoD study

- Terms of reference
- Structures
- Timeline
- Identifiable parties with interest in such a study

Stakeholder expectations

1. Improving the evidence base
   - Lack of good data
   - Better data needed
   - Quantification
2. Contributing to setting priorities
3. Informing policy

1. Improving the evidence base

Lack of good data:

"What bedevils Aboriginal policy is the lack of data, constantly" (policy-maker)

Better data needed:

"…for a long time been a strong will on the part of governments of either political persuasion to improve Aboriginal and Torres Strait Islander health… And we knew that there was – the better the evidence base, the better armed we will be" (policy-maker)

Quantification:

"You've got policy makers saying, 'We're not interested in your technical ifs and buts, give us the number'" (researcher)

2. Contributing to setting priorities

"It's about establishing and confirming priorities" (researcher)

3. Informing policy

"(Treasury) saw it as, even then, potentially useful for policy" (policy-maker)

"I guess I hoped that it would be used as evidence in informing policies" (researcher)

Summary and conclusion

- Indigenous health challenges and issues
- Expectations around IBoD study
- Commissioned research in context
- Scope for differential interests coalescing around a study which may help address a range of challenges experienced by different stakeholders in advancing the Indigenous health policy agenda
- IBoD study unique
- Our next analysis is interpreting views of stakeholders as to the usefulness of the study and its influence on policy – different from this analysis, which focused on stakeholder expectations and the rationale for engaging with it

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The use of multiple evidence-bases to effect change: the experience of a regional Aboriginal community controlled health organisation

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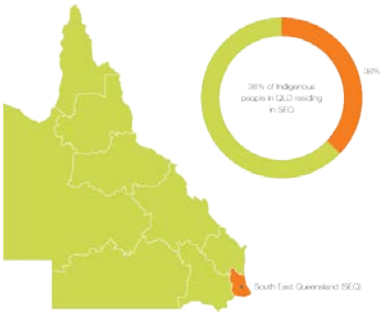
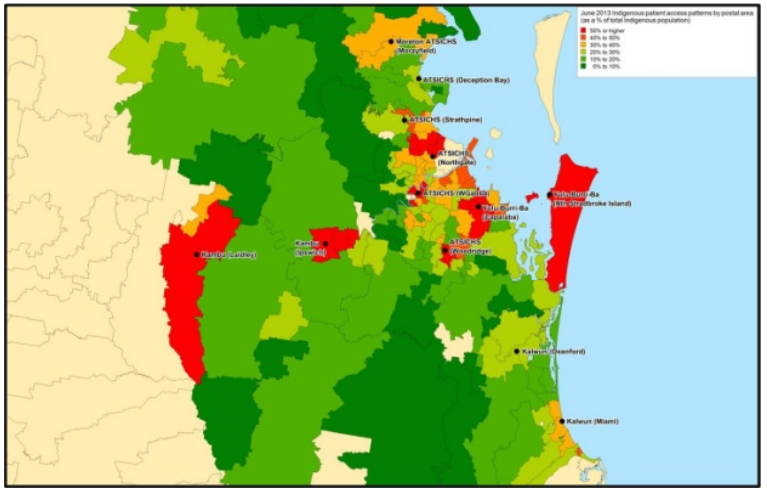
Background

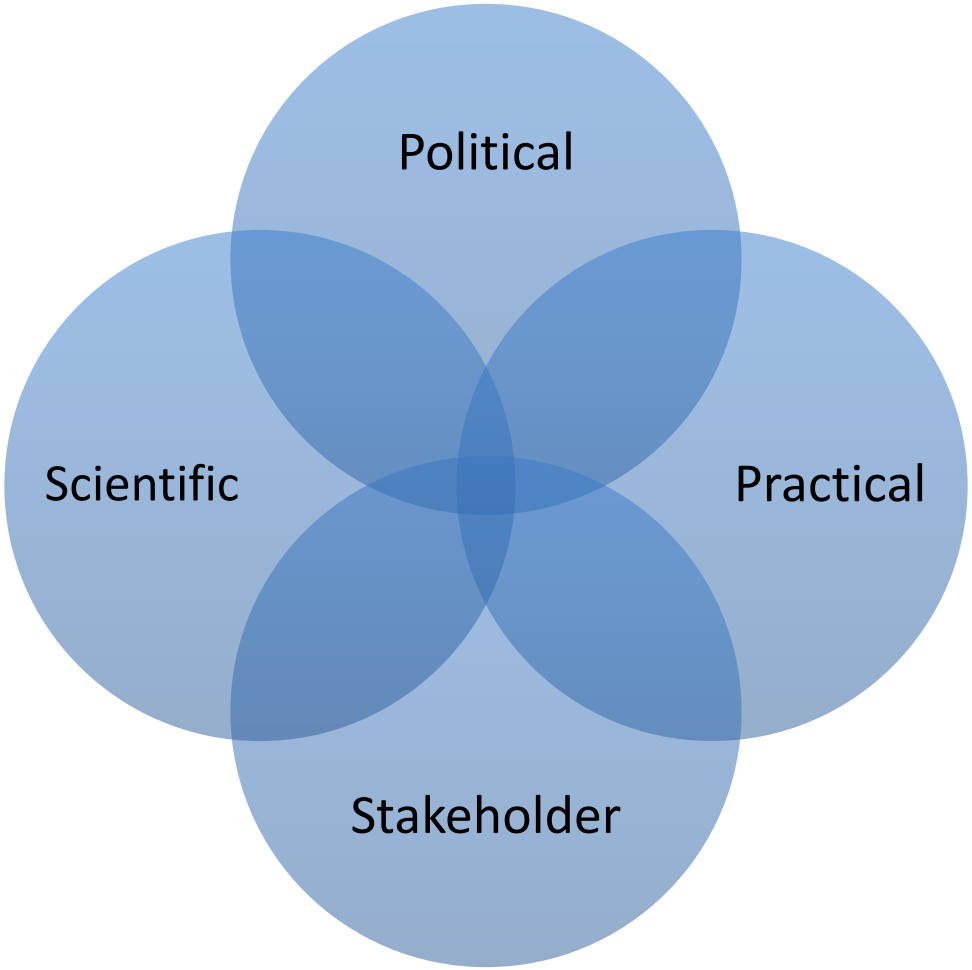
- Methods
  - Event-based analysis of management meeting
  - In-depth interviews
  - Literature
- Institute for Urban Indigenous Health (IUIH)
  - Partnership between four ACCHS
  - IUIH Model of Care





Source: Institute for Urban Indigenous Health

Four ‘lenses’ of evidence based policy



Political knowledge

- Politicians, parties, organised groups, media
- Agenda-setting, advocacy, accountability, negotiations
- IUIH is a political actor
  - Regionalisation
- Strategies:
  - "Positive pressure"
  - Demonstrate impact

"You do it by taking him [the Minister] out there, showing him what we've done and talk publicly then about good things happening in Aboriginal health. What can he do? Is he going to argue against you about good things happening?" (Senior manager, IUIH)

Scientific knowledge

- Systematic analysis of trends and conditions
- Population and clinical data
- CQI and monitoring of MBS profile
- Accountability

Source: Moreton ATSICHS 2013

"We call it our own organisational health check, which we put back out to the community, which gives an indication of, well what have we achieved in the last 12 months, or what outcomes have we delivered to the community?"
(Senior manager, ACCHO)

Client and stakeholder knowledge

- Perspectives of ordinary people
- Consultation and “expert knowledge”
- Formal and informal mechanisms:
  - Board meetings
  - Client feedback
  - Community days
  - Social media
  - Community

Practical knowledge

- Professional, technical and organisational
- Tested at greenfield sites and refined
- "Change management" and "challenging the status quo"

"It's very different to walk into a brand new, what we call greenfield site, where you're building something absolutely new, everyone comes with that frame of mind in terms of okay, this is something new, we're going to go with it … as opposed to walking into somewhere where they've been doing something the same for the last 20 odd years and then trying to change." (Senior manager, IUIH spearhead)

Summary and conclusion

- Multiple evidence bases to:
  - Develop a sustainable business model
  - Strengthen community control
  - Demonstrate the sector is a viable service provider
- Lessons for other service providers
- Caution given geographic concentration of organisations, due to diversity of cultural contexts

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Research, practice and policy: role of evidence and economics

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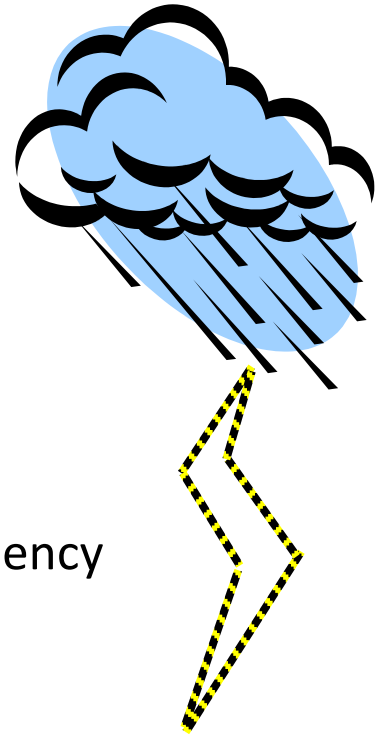
How do policy makers allocate resources?

Industry

Lobby groups

Burden of disease



Political interests

Existing commitments

Personal interests

Professional interests

Media

Available resources

Evidence of economic efficiency

Equity

Closing the gap - policy context

- The Indigenous Burden of Disease study (published 2007) has been an important input into the policy making process
  - Essentially provided the science / evidence around the health gap
  - Facilitated the development of strategies to tackle chronic disease
- The Close the gap initiative is broader than health
- National Indigenous Reform Agreement (NIRA) is the formal expression of the COAG's long term effort to Close the Gap between Indigenous and Non-Indigenous health, material standards of living and social opportunities
- The ATSI Health Performance Framework established to inform development of policies and monitor progress

Lets look at the evidence – disease burden

DALYs by disease group	ATSI		Non-ATSI		Rate ratio of disease ATSI v Non-ATSI
	Total DALYs	DALY rate per 1000	Total DALYs	DALY rate per 1000	
Communicable diseases	***11,794***	**24.8**	***123,094***	***6.7***	***3.7***
Non-communicable diseases	***71,798***	***151.0***	***2,324,625***	***68.0***	***2.2***
Malignant neoplasms	7,817	16.4	499,416	9.8	1.7
Diabetes	8,498	17.9	143,831	3.5	5.1
Mental and behavioural disorders	14,860	31.3	350,545	19.6	1.6
CVD	16,786	35.3	473,794	7.6	4.6
Respiratory diseases	8,587	18.1	186,737	7.1	2.5
Injuries	***12,384***	***26.1***	***185,050***	***8.6***	***3.0***
Total	**95,976**	**201.9**	**2,632,770**	**83.3**	**2.4**

DALY = disability adjusted life year

Lets look at the evidence – hospital expenditure

	Hospital expenditure per person					
	2006-07			2010-11		
Disease group	ATSI	Non-ATSI	Ratio	ATSI	Non-ATSI	Ratio
Communicable diseases	***$ 519***	***$ 179***	***2.9***	***$ 691***	***$ 299***	***2.3***
Noncommunicable diseases	***$ 1,242***	***$ 879***	***1.4***	***$ 1,801***	***$ 1,396***	***1.3***
Malignant neoplasms	$ 69	$ 119	0.6	$ 86	$ 175	0.5
Diabetes	$ 73	$ 22	3.4	$ 61	$ 18	3.3
Mental and behavioural disorders	$ 212	$ 85	2.5	$ 336	$ 126	2.7
CVD	$ 166	$ 160	1.0	$ 230	$ 262	0.9
Respiratory diseases	$ 77	$ 48	1.6	$ 124	$ 79	1.6
Injuries	***$ 245***	***$ 140***	***1.8***	***$ 348***	***$ 230***	***1.5***
Total	**$ 2,212**	**$ 1,372**	**1.6**	**$ 3,160**	**$ 2,219**	**1.4**

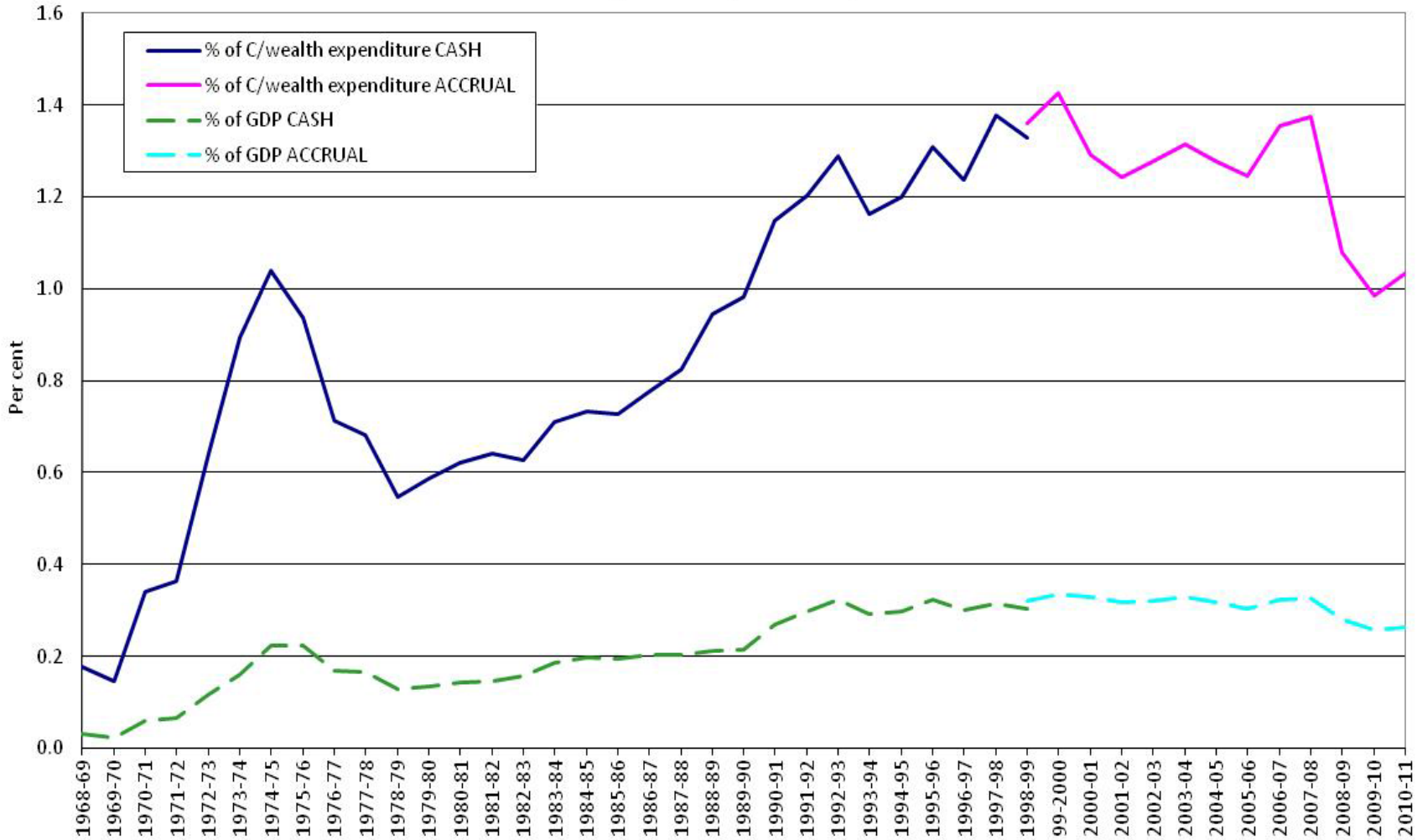
Hospital expenditure 41% of total Indigenous health expenditure
Is an indication of access to health-care services and health service use

Lets look at the evidence – changes over time

	Rate ratios ATSI v Non-ATSI			
Disease group	**Disease burden**	**Hospital expenditure**		
		2006-07	**2010-11**	**% change**
Communicable diseases	***3.7***	***2.9***	***2.3***	***-20%***
Noncommunicable diseases	***2.2***	***1.4***	***1.3***	***-9%***
Malignant neoplasms	1.7	0.6	0.5	-16%
Diabetes	5.1	3.4	3.3	-1%
Mental and behavioural disorders	1.6	2.5	2.7	8%
CVD	4.6	1.0	0.9	-15%
Respiratory diseases	2.5	1.6	1.6	-4%
Injuries	***3.0***	***1.8***	***1.5***	***-13%***
Total	**2.4**	**1.6**	**1.4**	**-12%**

Closing the gap - policy context

- In contrast to the finding that a more substantial investment is required to overcome ATSI disadvantage, total Commonwealth Indigenous expenditure as a proportion of gross domestic product (GDP) has been falling



Is the Government allocating resources efficiently?

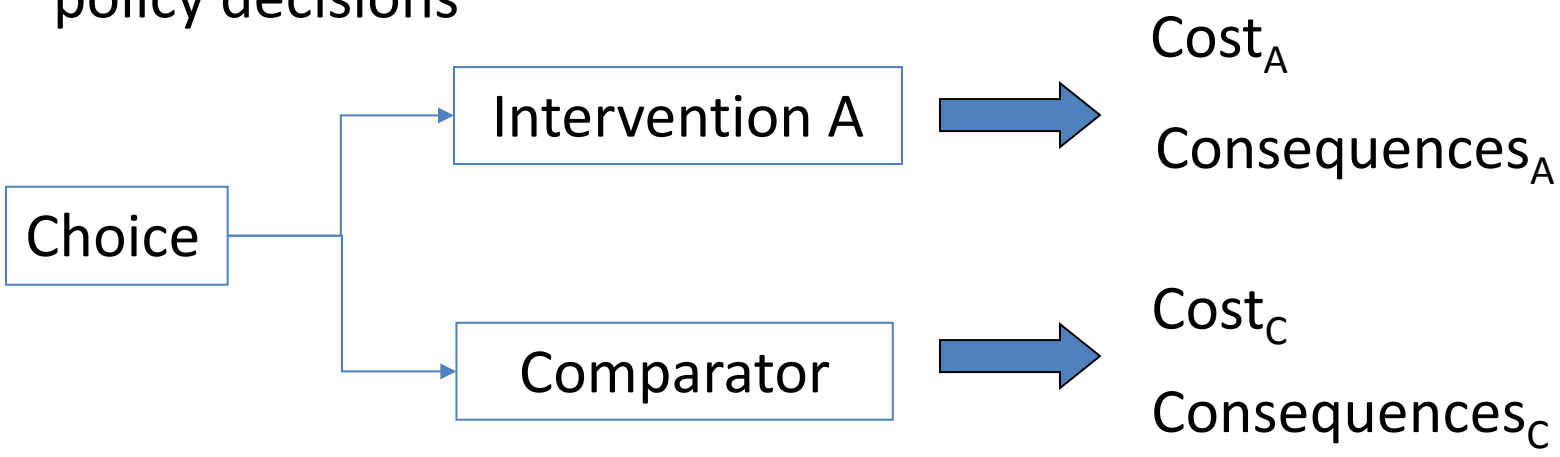
- Evidence suggests
  - ATSI spending would need to be increased to a level between 3 and 6 times the current national average per capita expenditure to achieve NIRA targets
  - However, Commonwealth Government funding has been declining and there is increased pressure on State Government funding

- The 4th Government Health Performance Framework report states
  - It is still too early for the data to demonstrate progress in achieving health targets
  - Data quality limitations hamper our ability to monitor Indigenous health and the performance of the health system

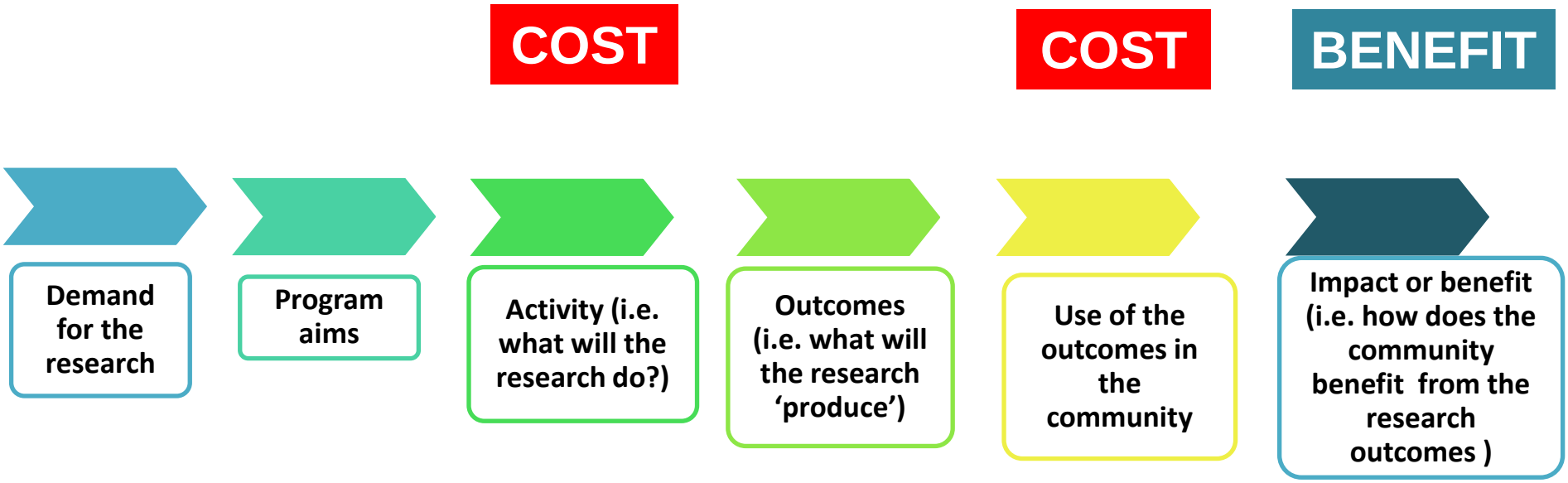
- Is the government (or ATSI people) getting value for money from this investment?

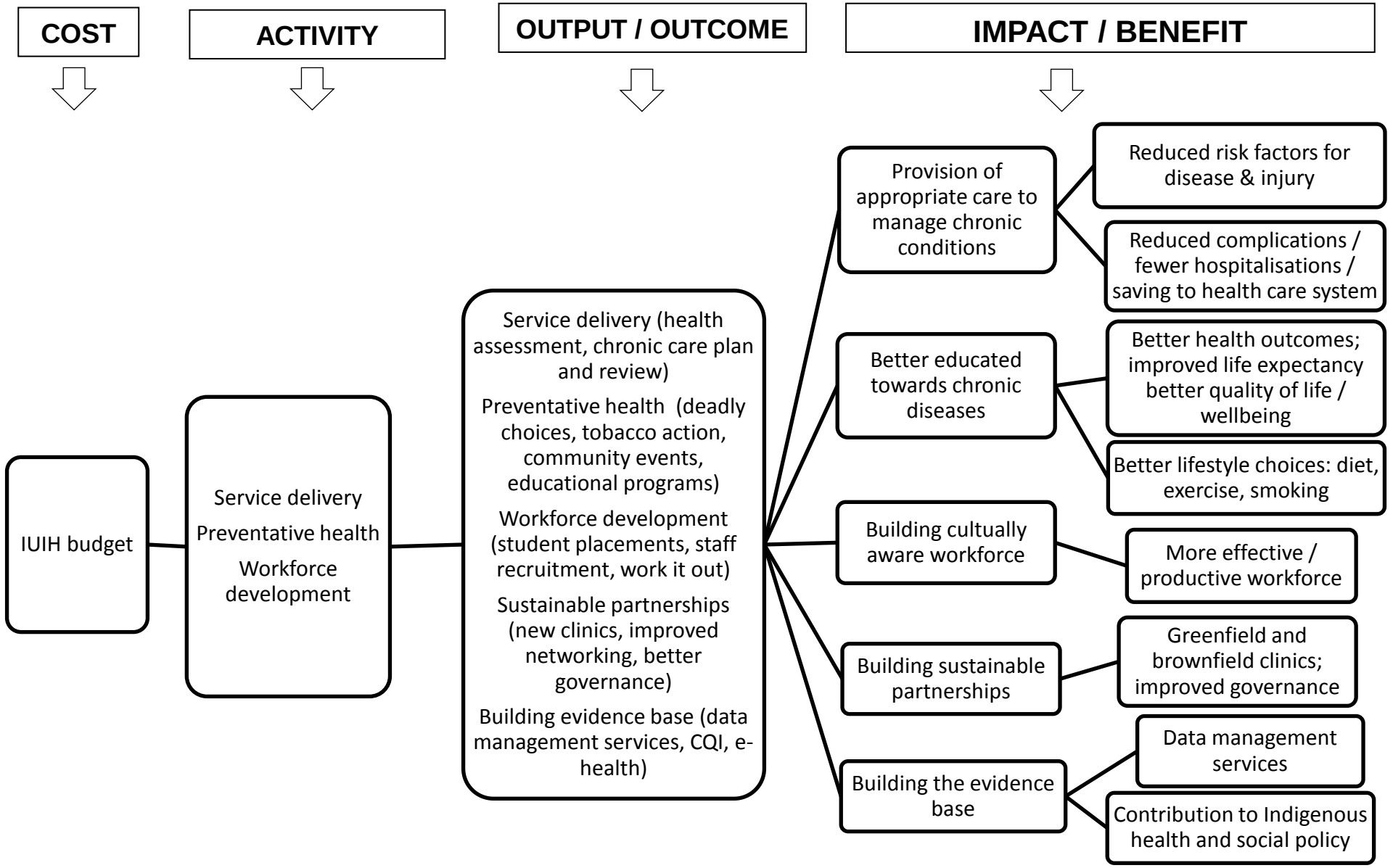
Using economics to identify value for money

- Economic evaluation provides a framework to identify value for money
- Economic evaluation is
  - The comparative analysis of alternative courses of action in terms of both their costs and consequences in order to assist policy decisions



Translational research pathway using tools of economic evaluation





What is the translational impact of Institute for Urban Indigenous Health?

Economics and decision making

- Scarcity of resources is forcing policy makers to consider the return on investment
- It is not what we spend but how we spend it that counts
- Economics is becoming increasingly important as an aid to policy making as results are expressed in a language they can understand
- To properly **evaluate** Close the Gap initiatives requires
  - Culturally appropriate data collection
  - Culturally appropriate indicators to capture full extent of IMPACT
  - Use existing and develop new frameworks
  - Funding, commitment and collaboration

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Comments, questions and discussion…