



Evaluating the Impact of Health Research The CAHS Model

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Outline

- **Introduce** Alberta Innovates – Health Solutions (AI-HS)
- **Drivers** of performance management and evaluation
- **Illustrate** using Canadian Academy of Health Sciences (CAHS) framework to evaluate “Return on Investment (ROI)”
- **Review** AI-HS performance management and evaluation framework
- **Question and Answers** throughout presentation

Organization's History

- *Established in 1980*
- Government endowment of ~ **\$1.3 billion (2009)**
- *Unprecedented research opportunities – AHFMR (now AI-HS):*
 - Contributed > **\$1 billion** to the scientific community
 - Supported > **9,000 researchers**
- International acclaim

Organization's Mandate

“is to support top **quality**, internationally **competitive health research**. Our research seeks to further our **understanding** of health and disease and to produce **results** that will make a difference to the **health, economy and societal well being** of Albertans and people around the world”

What is Program Evaluation?

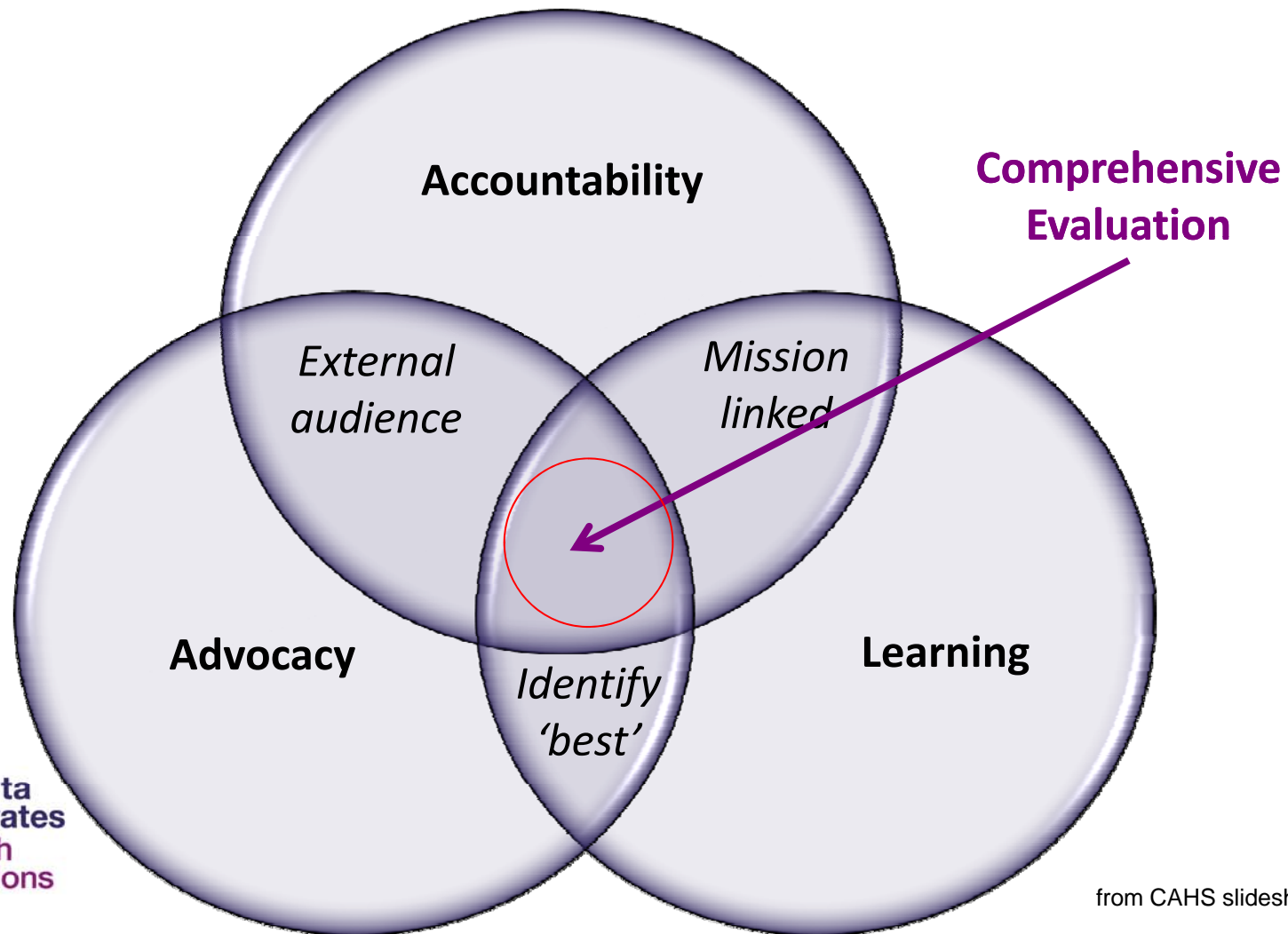
“Program evaluation:

Looking for indicators of success
Data collection, analysis, outcomes

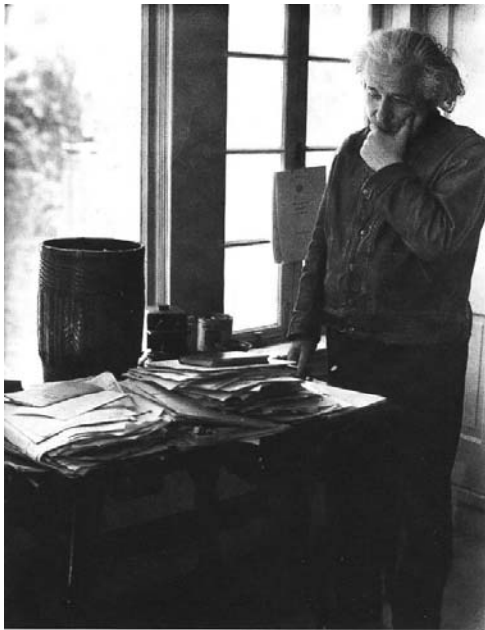
**make judgments; improve program effectiveness;
inform future programming decisions**

(Patton, 1997)

Different Evaluation Needs

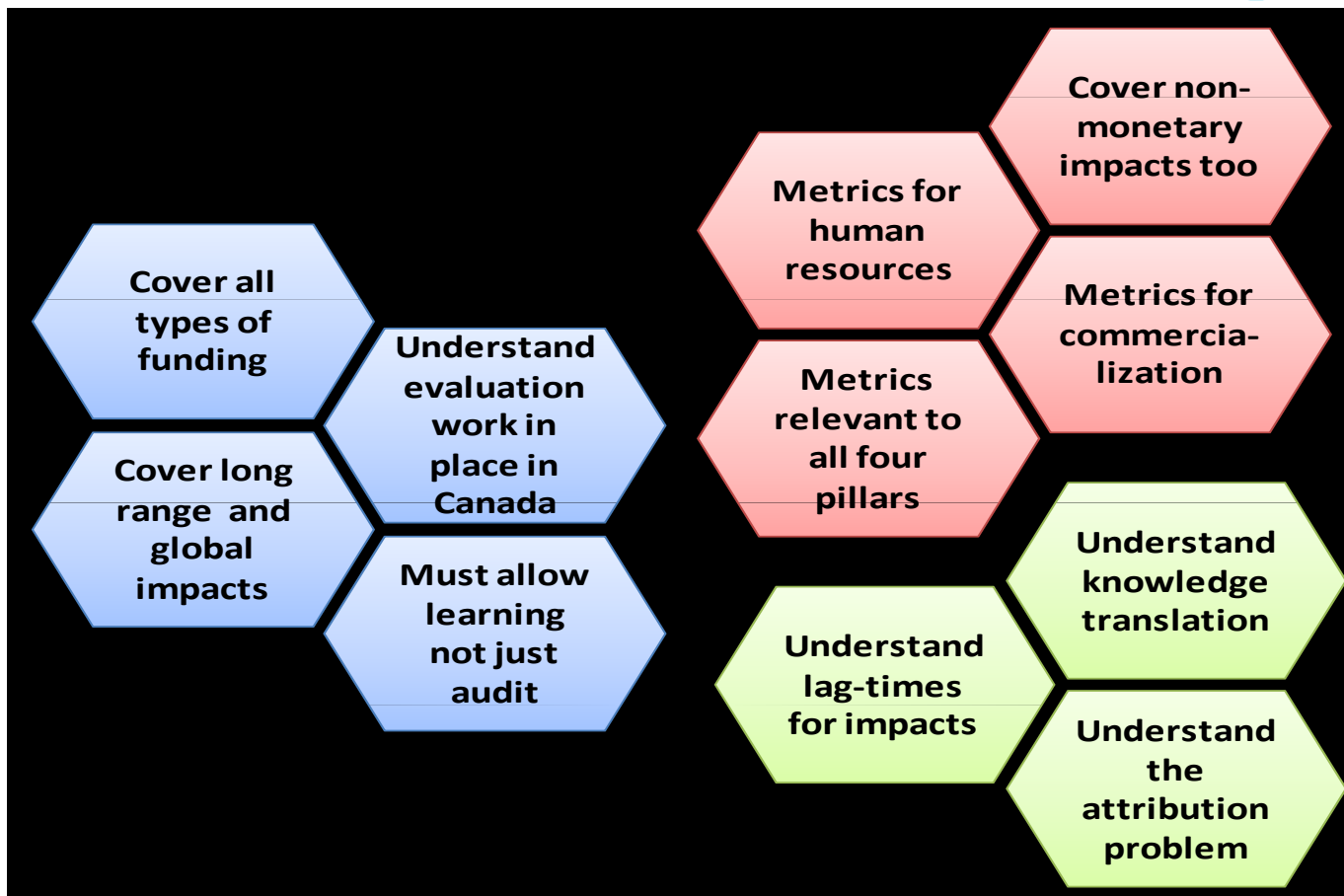


Measurement Challenges



“Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted”

CAHS Model – Multiple Stakeholder Needs



CAHS Framework Features

➤ **Five CAHS impact categories and sub-categories:**

1. Capacity Building – e.g. personnel – graduated research students in health related subjects
2. Advancing Knowledge e.g. quality – highly cited publications
3. Informing Decision-Making e.g. Health care – use of research in guidelines
4. Health Impacts e.g. health status, - quality adjusted mortality – Quality-adjusted life years
5. Broad Socio-Economic Impacts – commercialization – Licensing returns (\$)

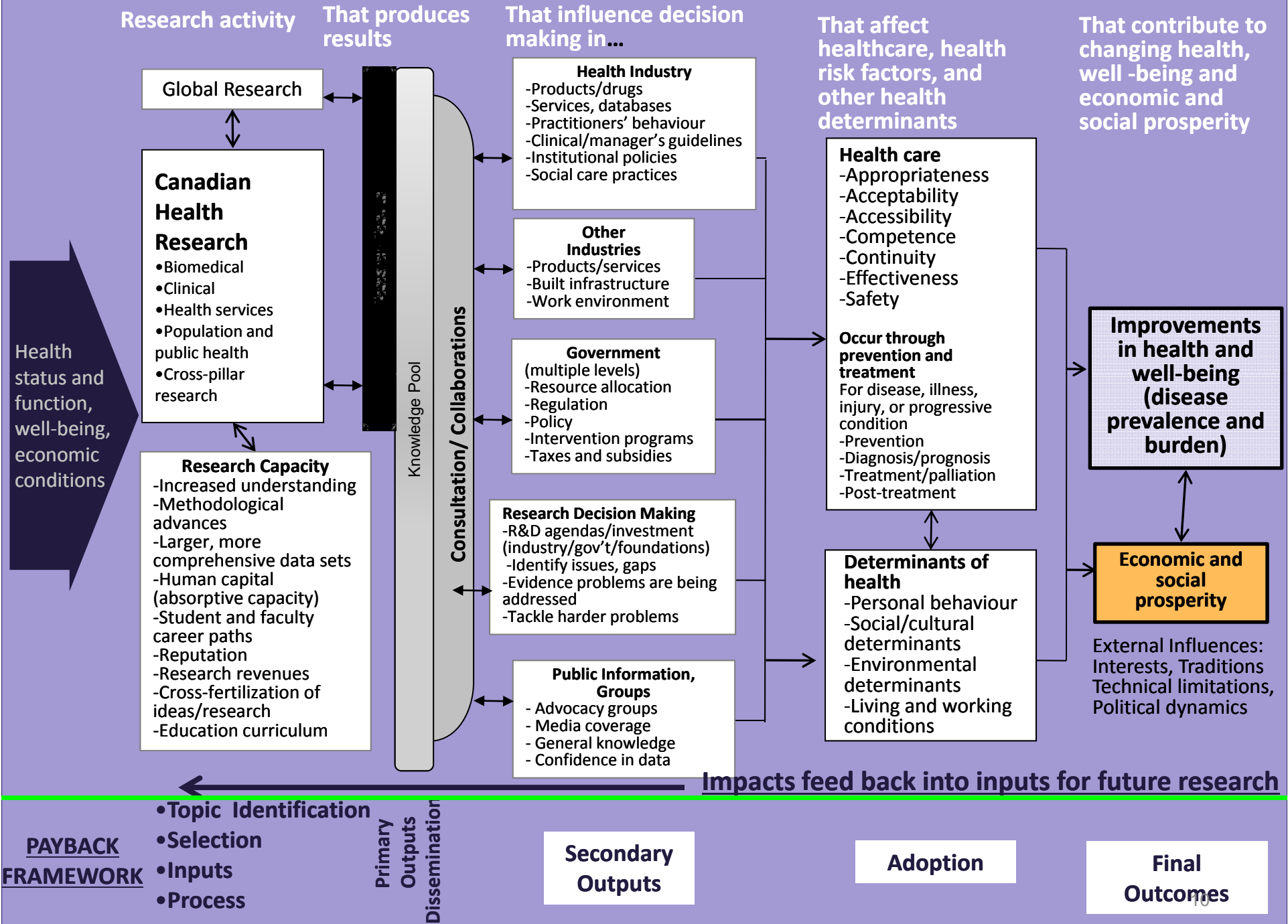
➤ Selection of 66 indicators across five categories, sub categories, level of application, pillars – using **FABRIC**, **Attractiveness** and **Feasibility** criteria for selection

➤ Results Logic – The framework outlines:

- How **research activity** informs decision making
- How **research impacts** feedback upstream
- Final outcomes



Initiation and Diffusion of Health Research Impacts



An Example - *Is our research getting commercialized and can we improve that?*

◆ Step 1

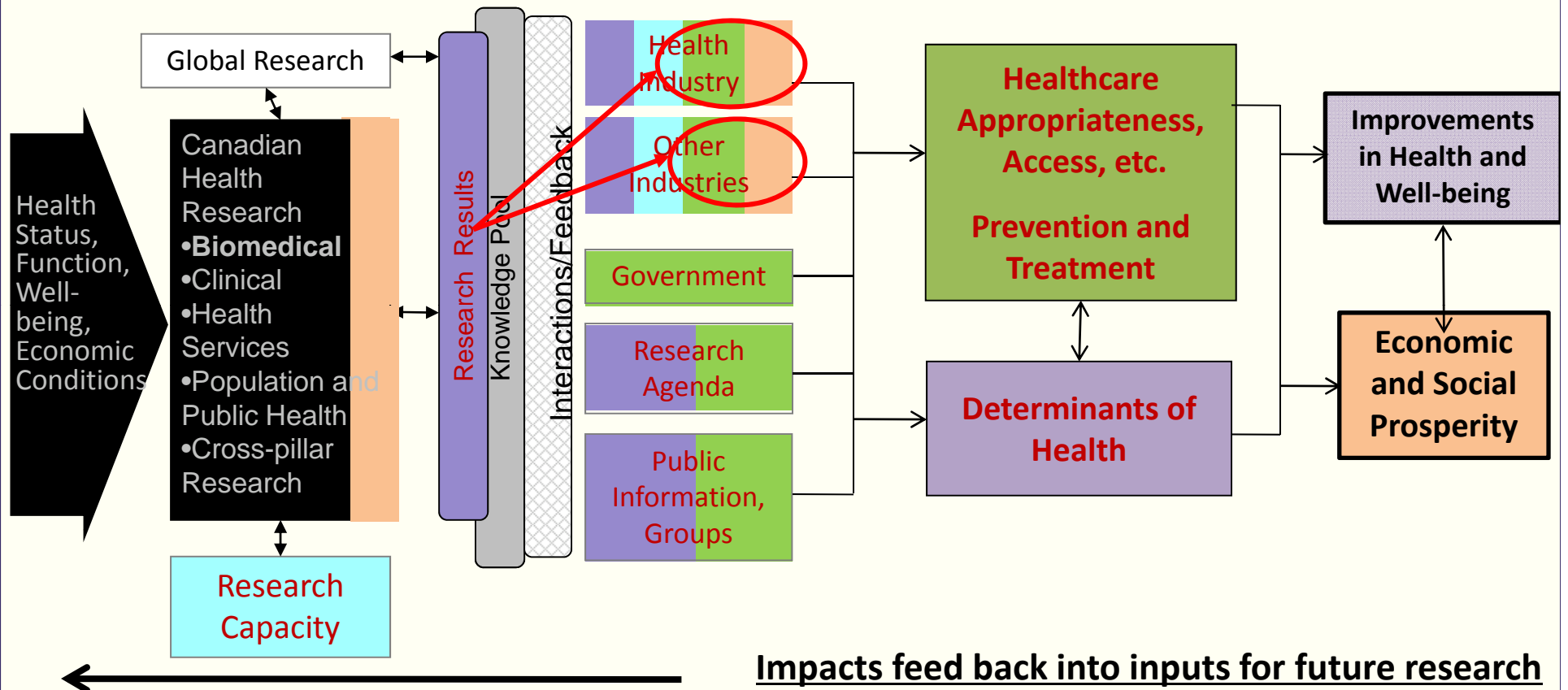
- Q: Are our researchers commercializing their research effectively right now?
- Q: What proportion of projects we fund lead to a commercialized product each year?

◆ Step 2

- Use the framework to determine where to look for impacts.

Example for Biomedical Research

Initiation and Diffusion of Health Research Impacts



- Advancing Knowledge
- Capacity Building

- Informing Decision Making
- Health Benefits

- Economic Benefits

An Example - *Is our research getting commercialized and can we improve that?*

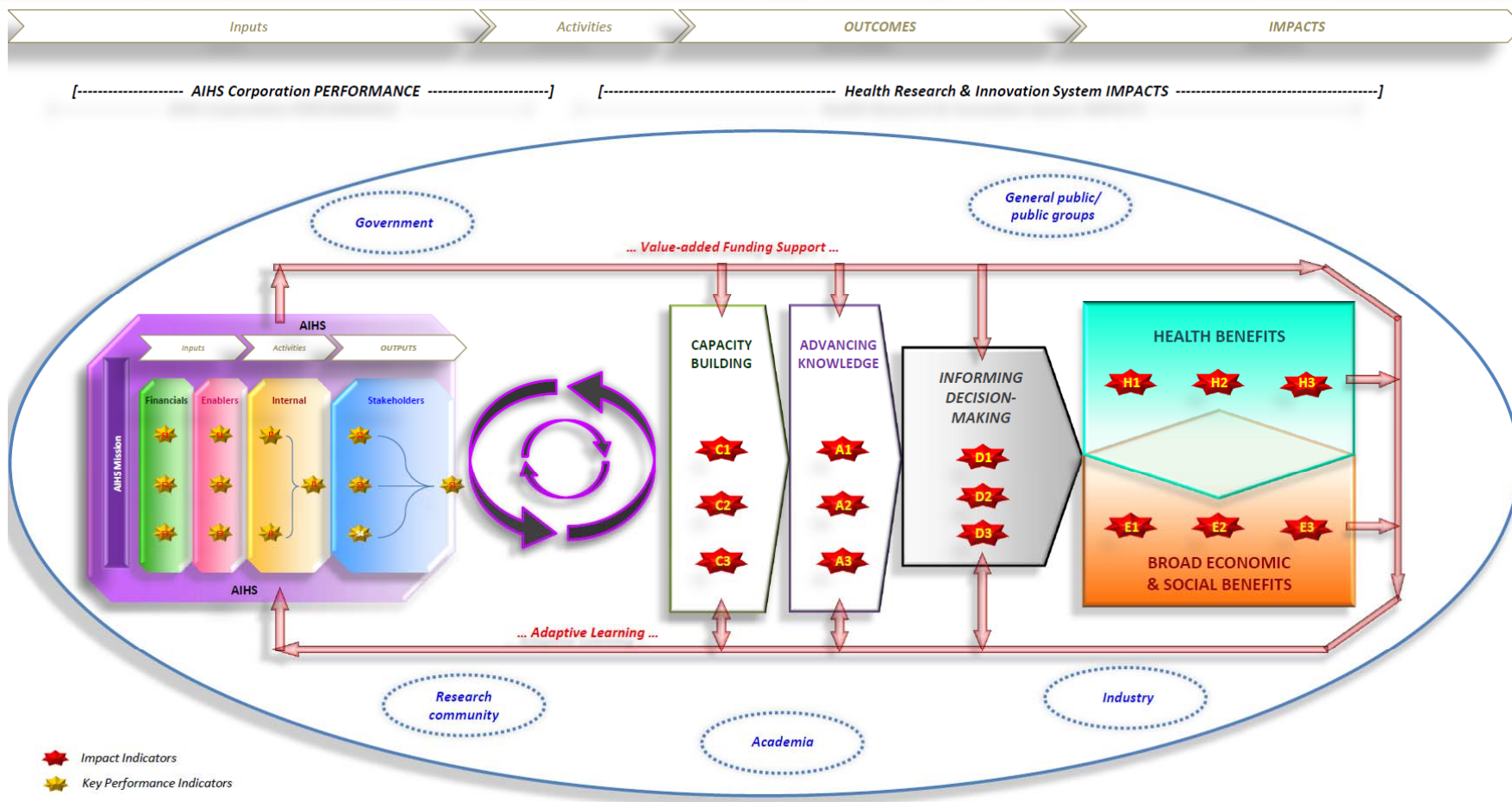
◆ Step 3

- Choose Sets of Indicators for each category of interest.
 - Informing decision making (health products industry vs other industries)
 - # patents licensed (per year)/ #projects funded (or per program)
 - # funded researchers consulted by industry (per year)/# projects
 - Economic Benefits
 - Licensing returns (\$)
 - Valuation of spin-out companies (\$)
 - Product sales revenues (\$)

◆ Step 4

- Review evaluation results to identify potential enablers and barriers to commercialization and improve the system

AIHS Framework – How AI-HS uses the model - *DRAFT*



Knowledge Transfer Implications

- Are we evaluating Knowledge Transfer (KT)?
- Will it help to evaluate KT?
- Contribution versus attribution?

Next Steps

- **Retrospective studies** - verification
- **Prospective studies** → tracking progress to impacts →
Follow up studies
- **Collaborate with other institutions** to test and evaluate the model in focused areas
 - Cross sector application
- Based on feedback and research findings continue to **modify model** – **practice based** and **evidence based**

References and Sources

Source Reports and Presentations

<http://www.cahs-acss.ca/e/assessments/completedprojects.php>

- **Assessment Report:** Making an impact – a preferred framework and indicators to measure returns on investment in health research
- **Assessment Summary:** Making an impact – a preferred framework and indicators to measure returns on investment in health research
- **Appendices:** Making an impact – a preferred framework and indicators to measure returns on investment in health research
- **Slide set about the report:** Making an impact – a preferred framework and indicators to measure returns on investment in health research

Thank You