



Impact of Science

14-15 June 2018, Ottawa

Palladian Room, 11.30-12.45

Internal evaluation policies

David Phipps (Chair)

Katharine Barker

Barend van der Meulen

Internal evaluation policies

David Phipps

*Executive Director Research and Innovation Services, York University,
and Network Director, Research Impact Canada*

Internal evaluation policies

Katharine Barker

*Senior Lecturer at Manchester Business School,
University of Manchester, United Kingdom*

Internal Evaluation Systems for Assessing the Impacts of University Research – the University of Manchester, UK

AESIS Impact of Science Conference
14-15 June 2018
Ottawa

Kate Barker
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Senior Lecturer
Manchester Institute of Innovation Research
Alliance Manchester Business School
University of Manchester

Presenter

- Academic within the Manchester Institute of Innovation Research, Alliance Manchester Business School
- Researches on science policy and evaluation
- Co-PI for the SIAMPI project funded by the EU – Social Impact Assessment Methods for research and funding instruments through the study of Productive Interactions between Science and Society
- Co-PI for the OSIRIS Institute – Oslo Institute for Research on the Impact of Science – Norwegian-British-Spanish international group – key focus of MIOIR is impact of research on policy – understanding the user side.
- Regular trainer on evaluation of research professional courses

Disclaimer and thanks

- Views in this presentation are those of the author and do not represent the official stance of the University of Manchester!

Thanks due to

- Prof Luke Georghiou (Deputy President and Deputy Vice Chancellor) and to
- Andrew Walsh (Director of Research and Business Engagement Support Services)

Aims of the Presentation

1. Context for assessing the impact of research in the UK
2. Pressures for developing internal evaluation systems
3. Responses of a typical “world class research intensive university” in the UK (Russell Group of 24)
4. Describe how the internal evaluation process mirror the national research evaluation system (REF)
5. Explain the internal governance of managing the impact of research
6. Describe other impact reporting including benchmarking and commissioning impact studies
7. The importance of self-promotion of impact for reputation and positioning

Context of Expectations of Universities

Public science spending must demonstrate return on investment
(Treasury)

Economic and social returns

- Risk of anecdote over “hard” evidence; economic evidence crucial
- Impact not reaching all sectors of the economy and society or at least not visible to them
- extends range of expectation to include clear role in innovation
- Reinforced by formation of **UKRI** (6 research councils plus innovation agency)
- increasing role of impact in REF (national evaluation of university research)
- Regional role and impact to the fore again North West devolution and industrial strategy
- Multiple missions, limited resources especially time

Profile of the University

Highly ranked in UK, European and world terms (Academic Ranking of World Universities)

Large university in UK terms – single campus

40,000 students (28,000 undergraduates)

Very strong commitment to social responsibility – goal 3

Researchers

3,600 PhD students

2,000 research staff

2,000 research and teaching academics

Research Income 2016-17

UK Research Councils - £109 million

Funding Council (HEFCE) – £69 million

UK Charities - £53 million

Overseas - £41 million

UK government depts, hospitals etc - £25 million

UK industry - £25 million

Structures in brief

Large organisational units, getting larger as schools and faculties are combined

Strong steering core of senior executive

Schools organised into 3 faculties

- Humanities

- Biology, medicine and health

- Science and engineering

Strategic Goals

“The University of Manchester will be a world leading university, recognised globally for the excellence of its research, outstanding learning and student experience, and its social, economic and cultural impact.”

Strategic plan, Manchester 2020

Goal 3 = social responsibility

Pressures on the University

- Compete for project-based research funding

- UK Research Councils
- Horizon 2020 of the EU, charities, etc

Impact agendas very strong here also

- Achieve highest possible ratings in the Research Excellence Framework

- steers the allocation of Funding Council money for research support (not projects)
- Impact cases are peer-reviewed and judged for their quality with funding consequences - since 2014

Pressures on the University 2

- Compete for HEIF (Higher Education Innovation Funding)
 - Funding council, broader types of activities funded including knowledge exchange and entrepreneurship

Competition with peer universities and with non-peers – reputational consequences of the REF are huge

Difficult to over-state the pressures to demonstrate impact of research and to score highly in REF impact

REF 2021 impact cases

REF peer reviews submissions in defined areas (eg business and management) (not overall university level submission), panels are convened

Impact case studies worth 25% of the submission and 15% of the assessment of research environment (increase in value since 2014)

Each submission needs at least 2 impact cases depending on how many staff

1 case study + 1 case per 15 full time staff (decreases after 105 full time staff)

Key definition – impact has to relate to underpinning research which is recognised internationally in terms of originality, significance and rigour, published between defined dates = 2*

Impact has to take place within a set time period

REF 2021 impact cases 2

- National level peer review of impacts has to be highly codified and specified to prevent legal actions and ensure fairness and transparency of process
- Definition of impact is broad – impacts on the economy, society and / or culture
- Assessment is on the “reach and significance” of the impacts
- Set template with word limits
- Presentation of the case (drafting), selection of corroborating evidence about research quality and of significance and reach of impact needs a lot of attention (support staff can help) as diverse and independent sources needed
- An administrative task and an art form!

Internal Evaluation – Mirroring REF

Governance

from the top level through the 3 faculties and the 17 schools through **Research Impact Group = key committee**

- Impact support teams (professional support staff) in schools and faculties
- Heads of research (academics) in schools and at faculty level, often with supporting academics with responsibility for impact

Activities

- review of REF 2014 to improve for 2021
- developing common understanding of how to write an excellent impact case – cross calibration
- training workshops for support staff and academics
- monitoring of potential cases for REF 2021 for selection of strongest and to ensure compliance and readiness for submission

Characterising REF internal evaluation

- Strong governance, sent from top downwards
- Strong element of performance monitoring and management
- Evaluation used for learning, improvement, managing impact to improve it eg supplying additional time and funding for activities to improve reach and significance, support to get other external funding
- Promotes links to university services eg library, IP company, Policy@Manchester, knowledge exchange officers
- Benefits beyond REF?
 - Impact culture?
 - Individual researcher incentives and rewards?
 - Presenting impact evidence generally

Other dimensions of internal evaluation

- Individual level – University statement of research expectations for researchers and academics with research in their role

Extract below:

Point 8 = Knowledge exchange and impact

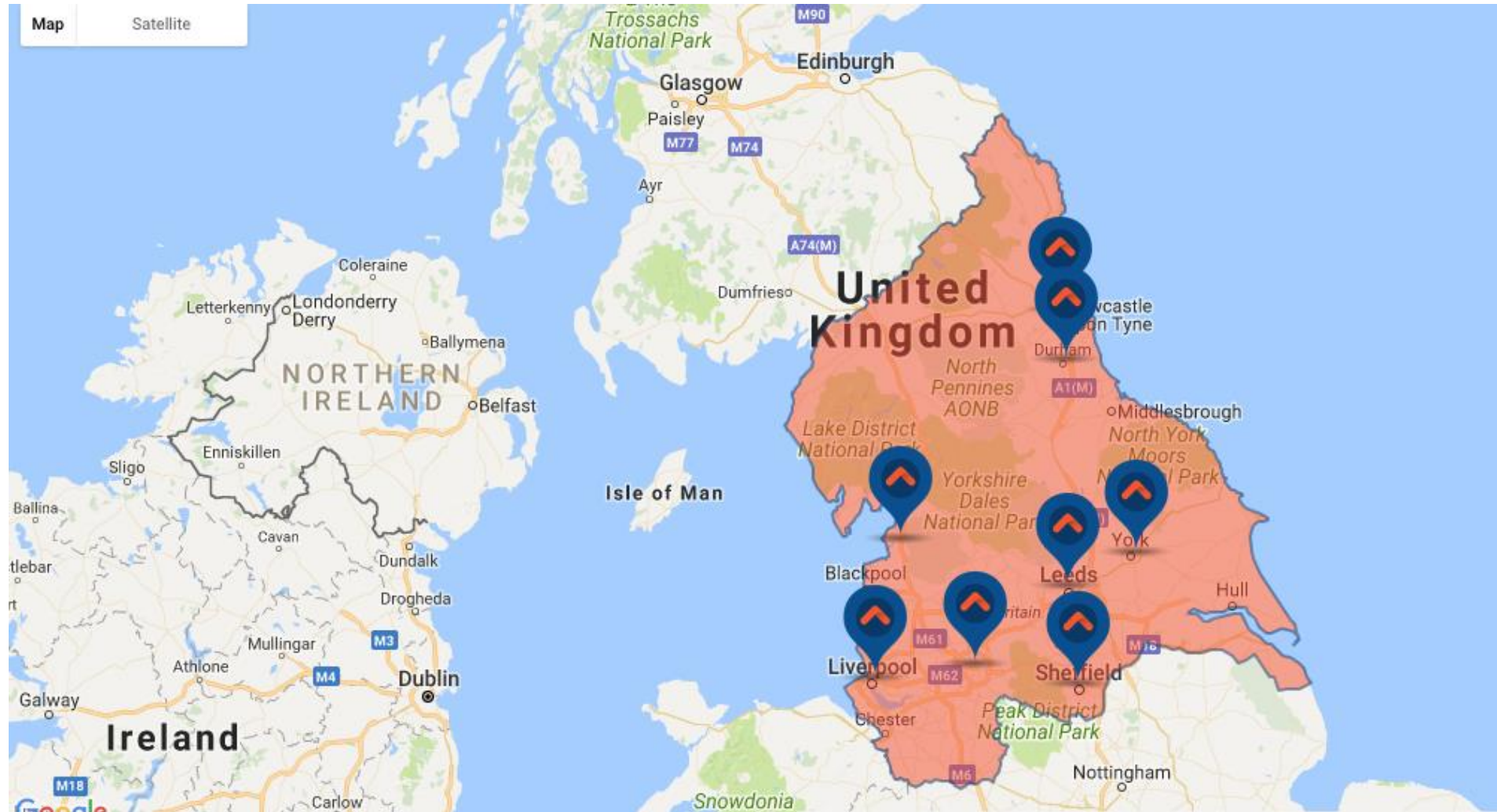
- *Ensure that opportunities for their research to achieve economic, social, cultural or other impacts beyond academia are realised through a combination of creative dissemination and engagement plans devised as part of research project planning and responsiveness to unforeseen opportunities as they arise.*

Benchmarking Knowledge Exchange

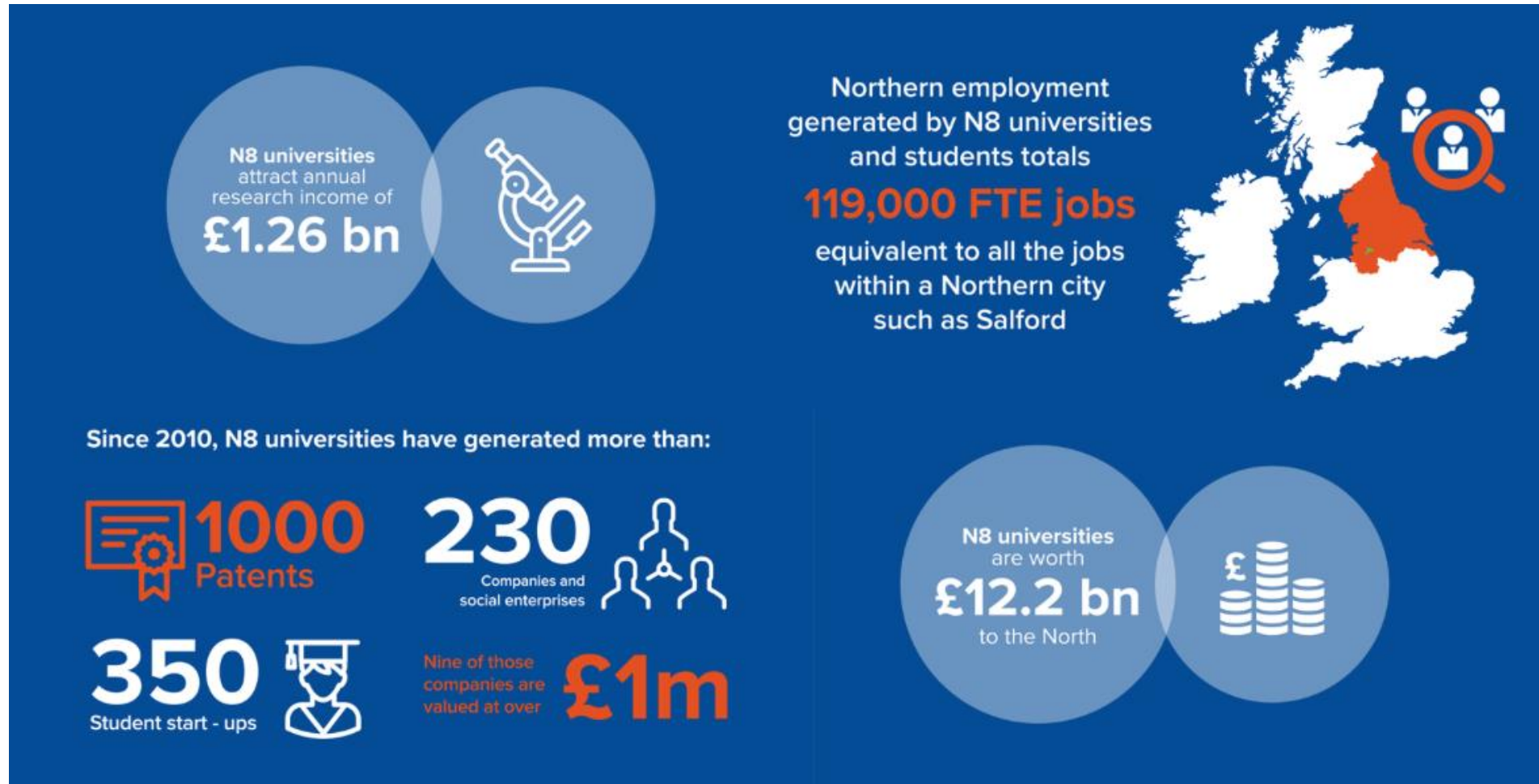
UoM credentials from HEFCE KE Benchmarking 2012-15 (formal reporting to funding council)

Collaborative Research	Contract Research	Facilities and Equipment	IP income	Formal spin offs	SME income	Large business income
£185,956k	£166,546k	£14,154k	£7,052k	27	£7,713k	£101,964k
2nd	5th	9th	7th	1st	21st	4th

N8 Research Partnership across the North



Economic Impact Study: The Power of 8



Conclusions on the Processes

- Necessary – stakes are too high not to play the games
- Support staff and structures quite significant investment
 - Been successful in REF impact cases for 2014, game will be harder 2021
- Support staff help with developing engagement and helping academics have impact (co-creation of impact)
- Constant need for convincing and up to date evidence of socio-economic impact for funding applications, regional and national contexts
- Social responsibility Goal is serious – impact must be shown
- Incentives for researchers? Variable in how translated to lower levels of the organisation eg importance for promotion cases, but support and opportunities are provided

Future Developments

- **Knowledge Exchange Framework** – in addition to the REF and the Teaching Excellence Framework, a third national assessment process is on the way to measure knowledge exchange processes
- Will be indicator based
- Aim is to improve and share best practice as well as to assess
- Will require precise collection of knowledge exchange related data by the university

Further information

- www.ref.ac.uk
- www.manchester.ac.uk
- www.n8research.org.uk
- www.russellgroup.ac.uk

Internal evaluation policies

Barend van der Meulen

*Head of Research, Rathenau
Institute, the Netherlands*

■ Mindfull impact

First thoughts on the
science of science impact

Barend van der Meulen



Science & Technology in the Parliament



1. Mind your language

What is “evidence” for scientists is not always evidence in policy making, and vice versa

2. Mind your step

Politics has it's own dynamics and politician have to represent society, not science

3. Mind the gap

Real societal impacts of S&T are long-term changes and cannot be linked to specific scientific investments

Contact

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The (evaluation) goldmine data waiting to be tapped...

AESIS Ottawa Conference 2018

Pierre Therrien

Pierre Therrien
Innovation Economic and Market Analysis
Innovation, Science and Economic Development Canada

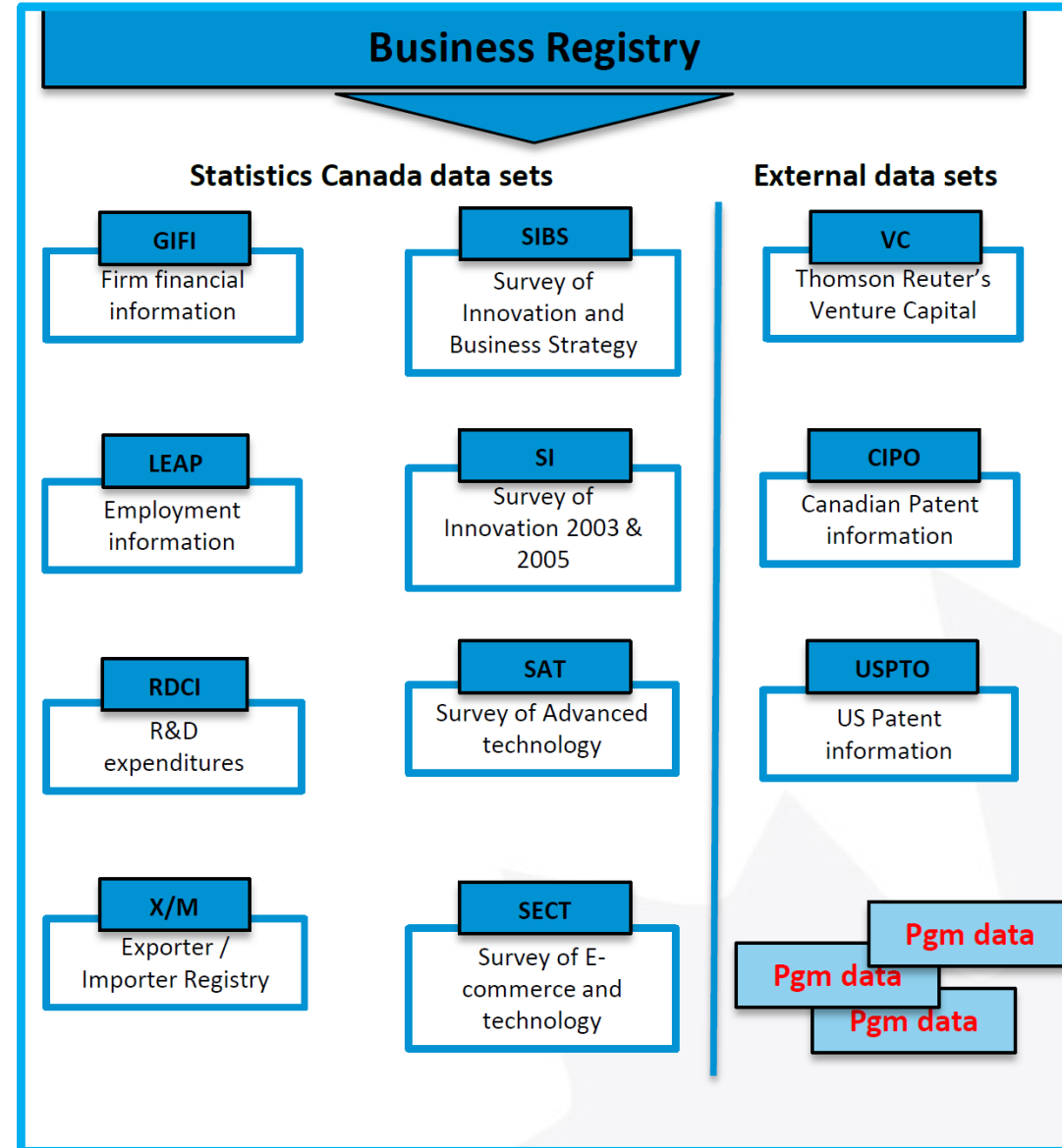
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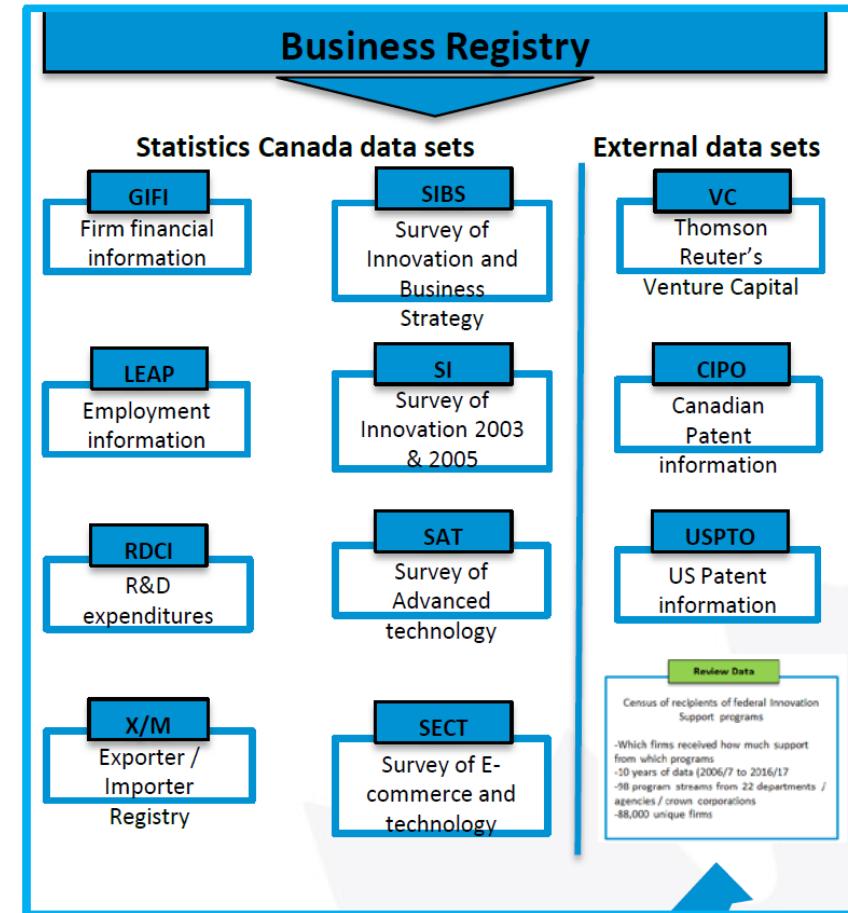
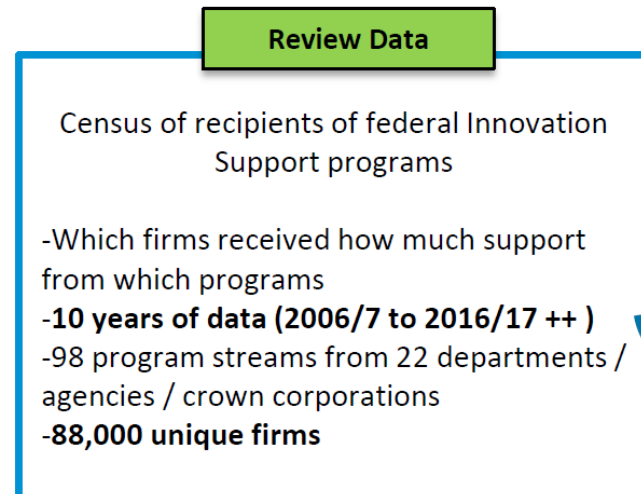
(New) tool for evaluating business/economic support program

- Need to put “New” in context
 - Econometric evaluation not new in most fields but still underused in economic/business support
- Building a counterfactual group– key is richness of economic/innovation-related data
 - In Canada -- (rich) data infrastructure does now exist (Ottawa-based)
- But still...
 - Assessments in “silo”
 - not use as often as it could/should be (re: 2016 OECD Blue Sky)
 - Complex system still hard to evaluate



Exciting news in Canada: a gold mine with the new federal support program database

- Firm-level data now complemented with GoC Innovation Program Review data (Review data)
- Game changing
 - From bottom-up to top-down approach (and long-term commitment)
 - From “silo” to system efficiency
 - Suite of program used
 - Spillovers in region
- Q?: is it enough to assess complex ecosystems (e.g., Superclusters)





Making an Impact:

A shared framework for measuring the impact of health services and policy research on decision-making

**AESIS Impact of Science Conference
Science of Science Impact Roundtable
June 15, 2018**

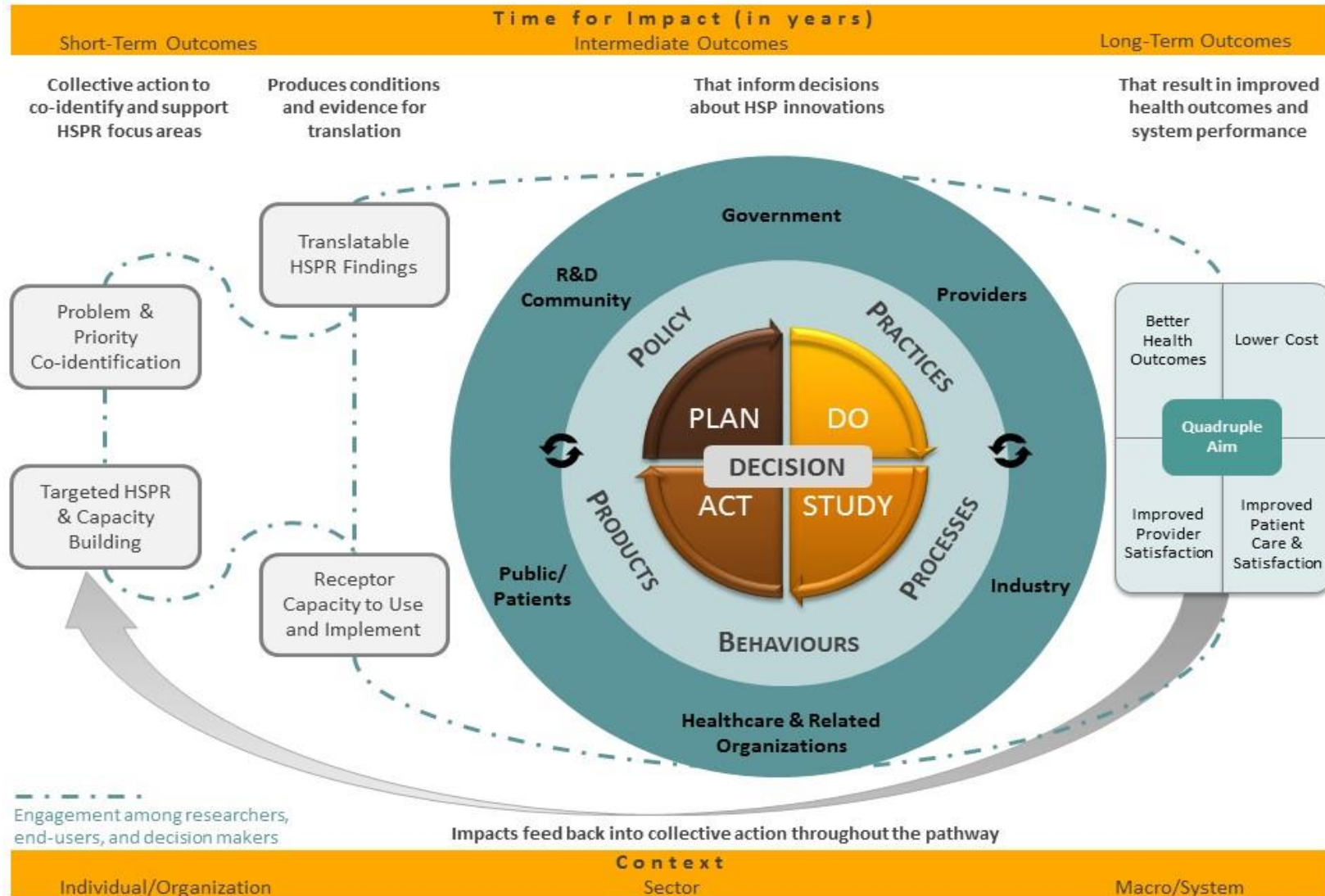
Meghan McMahon, Institute of Health Services and Policy Research – CIHR
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On behalf of the CHSPRA Impact Analysis Working Group

Pathways to Impact



Research Impact Pathways for Informing Decision Making in Health Services & Policy



12 Core Impact Indicators



Collective Action to Co-Identify and Support HSPR Focus Area

Short Term

- Important problems warranting HSPR attention are co-identified with decision makers [number and description of type of problems].
- Number and type of HSPR funding programs/ projects according to HSPR priority theme areas
- Trend in funding investments over time for HSPR [per cent (%) growth of HSPR funding over time, open and strategic, and by HSPR priority theme areas].

Produce Conditions and Evidence for Translation

Short Term

- Number of HSPR projects that include meaningful participation of patients or members of the public as appropriate.
- Number and per cent of policies that cite research evidence
- Number of HSPR researchers engaged in capacity development with end user audiences.

Inform Decisions about HSP Innovations

Medium Term

- Research evidence directly informed agenda setting, priority-setting, policy debates, briefings: e.g. invited policy papers and consultancies, information requests by decision-makers, invited meetings and interactions with decision-makers.
- Research directly underpinned policy decision (e.g. legislation, regulation, program, practice, behaviour, service delivery).
- Evidence of participation of researchers in process of making decisions (e.g. participation in policy networks, boards, advisory groups).

Inter-mediate by Target Sectors

Medium Term

- Number and per cent of policies with use of HSPR evidence in their development.
- Number and per cent of end users that reported HSPR evidence was useful.
- Number of public service and broader public sector organizations formally requiring use of research to inform HSP (over time).