

How can we measure the impact of primary health care research?

Libby Kalucy and Eleanor Jackson-Bowers
(Ellen McIntyre)

Australian Centre for Child Protection
University of South Australia
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Primary
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Why measure research impact?

Accountability and performance

- rate well in the Research Quality Framework (research group, institution)
- accountability to funding bodies who need to justify their 'Return on investment'
- Personal reputation and promotion

Just as important: as researchers we

- want to fix up some of the problems we see
- want to do work which makes a difference
- don't want our work to be ignored or duplicated



THE RQF in Australia

- Aims of RQF from Julie Bishop's speech June 2006
 - To lift research quality
 - Shift focus towards research which has an impact
 - Tool for greater diversity of universities. Likely to have universities specialising in different areas.
 - Linked conceptually to Research Transfer
- Research Transfer is "the process of engaging with business, government or the community to generate, acquire, apply and make accessible knowledge for quantifiable economic benefits for the community."



Preferred RQF Model Oct 2006

- Will assess research Quality AND Impact
- **Quality** is defined as: *recognition of the originality of research by peers and its impact on the development of the same or related discipline areas within the community of peers*
- **Impact** is defined as: *the recognition by qualified end users that methodologically sound and rigorous research has been successfully applied to achieve social, economic, environmental and/or cultural outcomes*



Ways of measuring *Quality* under the RQF

- **Citation data (bibliometrics)**
 - number of journal articles in high impact journals and citations to those articles
- **Discipline specific outputs**
 - most prestigious conferences, journals or exhibition venues
- **Grant income data.**



Confusion: journal impact or impact on users?

- Journal Impact Factor and bibliometrics- What are they?
- Number of articles published in journals with high JIF is a RQF *Quality* measure not a measure of *Impact*.



Public health & PHC research and Journal Impact

- Coverage of the ISI database is great for biomedical science. Not so great for public health or PHC.
 - Eg of the 13 most used PHC journals only 6 are indexed
- This type of quality indicator is misleading in PHC research.
 - Lack of indexation does not mean lack of readership or influence
- This is recognised by the RQF.
- Discipline Specific Outputs are an alternative ranking of research output.



Ways of measuring *Impact* under the RQF

The **impact** of the research, ie its social, economic, environmental and/or cultural outcomes, will be assessed through an **impact statement** which includes:

- an “evidence based statement of claims for the Group against **generic and panel specific impact criteria** including verifiable indicators in support of those claims”;
- up to four **case studies** that illustrate the Group’s claims of impact;
- and details of **end users** who can be contacted to verify claims of impact.



Over to you

- Can you give us any specific examples of the impact of child protection research on end users – practitioners, organisations, decision-makers?
- What were the pathways to impact in these examples?



What did we do and why?

- In 2005 we (PHC RIS) assumed RQF assessment would be based on publications
 - PHC research would be disadvantaged
- We wanted to find ways to enhance PHC research impact, but first needed to measure impact.
- So, we went to the literature.....
- Then we conducted a project



Focus on understanding and measuring research impact

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www.phcris.org.au/publications/focuson/index.php



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FOCUS on...

Towards better policy and practice in Primary Health Care.

B Beecham
I Kraljic
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UNDERSTANDING & MEASURING RESEARCH IMPACT

Main messages

- Research impact refers to the value and benefit associated with using the knowledge produced through research, and being involved in conducting research.
- Knowledge produced through research can be used in three main ways - instrumentally, conceptually and symbolically. Instrumental use influences direct changes in policy, practice and behaviour. Conceptual use influences changes in levels of knowledge, understanding and attitudes. Symbolic use is about persuasion, leading to action or inaction.
- The conceptual use of knowledge produced through research is more important to the day-to-day professional activity of professionals and managers in government agencies than symbolic use, which in turn are more important than instrumental use.
- Factors in the users' context are the main predictors of the uptake of research knowledge by government officials.
- Measuring research impact is a challenging endeavour because of its multi-dimensional, unpredictable, non-linear and contingent nature.
- Meaningful approaches to measuring research impact should relate to the main ways research is used and the range of forms in which research impact occurs. They should also acknowledge the contribution of activity occurring at different stages of the research cycle and in both the researcher and user settings.
- Effective measurement of research impact needs to incorporate assessment of conceptual and symbolic use of research knowledge as well as instrumental.
- Capacity for effectively measuring research impact is still developing; however experience so far provides some valuable learning for methodological, practical and policy activity.

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CONCENTRATING ATTENTION - MAXIMISING CLARITY AND DEFINITION

FOCUS on...

With the aim of informing primary health care policy and practice in Australia, the research committee comprises examples of key recent research findings identified by the authors. Feedback and suggestions for future issues in this FOCUS on... will be welcomed.

PHCRIS
Flinders University, Adelaide
Ph: +61 8 8226 3099
Email: phcris@flinders.edu.au
Web: www.phcris.org.au

Aims of first stage project in 2006

- identify how much or what types of impact can be assessed through various means at different stages of research completion;
- develop efficient methods for primary health care researchers (or other relevant organisations) to track and assess the impact of their projects.



Our project applied an existing framework for assessing impact

- The payback framework (Buxton and Hanney) Brunel University, UK
 - Categories of impact
 - Interface (Logic) model
- Interviews and document analysis
- Synthesis in payback grid

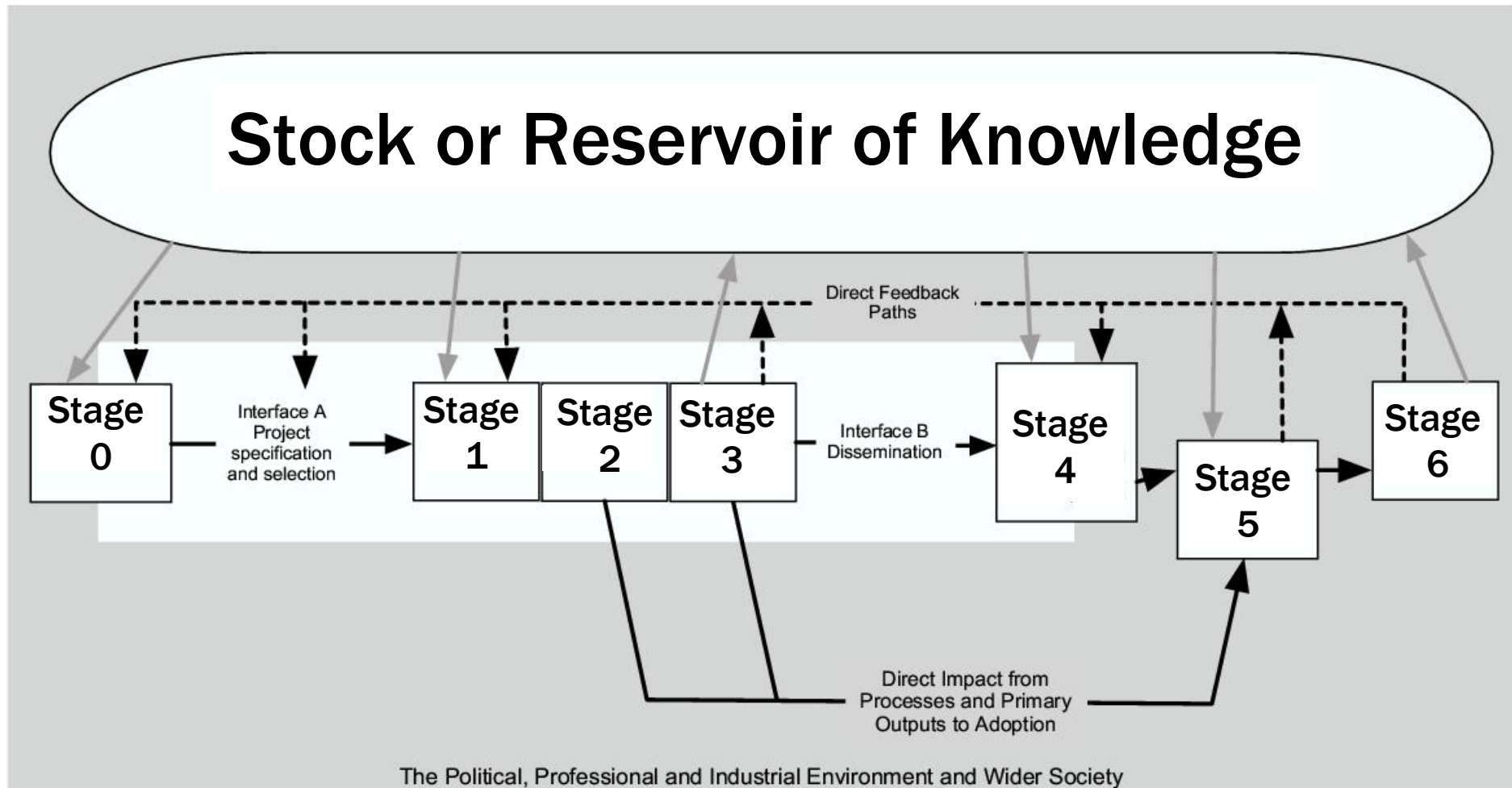


Categories of Impact in Payback framework

- Knowledge production
- Research targeting, capacity building and absorption
- Informing policy and product development
- Health and health sector benefits
- Broader economic benefits



Payback model (Hanney et al 2004)



Stage 6: Final outcomes

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Methods

- Ethics approval from Flinders Social and Behavioural research ethics committee
- Sample of Nationally funded research projects (ROAR)
 - Primary Health Care as defined by NHMRC and PHCRED
 - funded at least \$100 000
 - commenced after 1999 and completed by 2005
- Four research projects selected at random
- Semi-structured telephone interviews with chief investigators and users they nominated (n=13)
- Analysis of transcripts using NVivo 7



Results: four very different projects

- Trust in a primary care partnership
- Develop method to assess quality of procedural medical care in rural areas
- Randomised controlled trial of physical activity intervention in patients with specific condition in general practice
- Review of case notes of older people presenting for emergency care to identify possibilities for earlier alternative intervention.



Results

- The four projects had
 - most impact in knowledge production, research targeting, capacity building and informing policy development
 - Less or none in health and health sector benefits or broader economic benefits
- Payback framework is feasible to measure impact of PHC research
- Framework is useful structure for RQF case studies



Challenges in using the framework

- Locating people difficult in mobile PHC sector
- Few users were nominated and located
- Researchers' record keeping incomplete
- Some duplication between categories, interviews were long
- Additional impact categories needed



Limitations and questions

- Findings depended on what respondents knew about impact of their projects
- Findings skewed to impacts in settings known to interviewee
- What impact was from the research and what was from subsequent development? Eg trust project, ED project
- Broader issues
 - Should decisions be made on the basis of one study?
 - How much control does a researcher have over impact of their work?



What were the pathways to impact?

- Researchers had strong links with potential users (before, during and after the research)
- Alignment with policy priorities
- Planned dissemination beyond 'usual suspects'
- Personal dissemination and advocacy: champions
- Serendipity
- Findings may 'miss the boat' if not released until published, which can take a long time



Additions to framework

- Knowledge production
- Research targeting, capacity building and absorption
- Informing policy and product development
- Health and health sector benefits
- Broader economic benefits
- **Research transfer:**
 - Enhanced pathways and relationships for research transfer to policy makers, organisational decision makers, practitioners and consumers.
 - Improved university engagement with the community and the health care sector.



Sources of information about impact

Knowledge production	CI records and testimony, bibliometrics
Informing policy and product development	Key informants / survey of practitioners. Use in guidelines /organisational procedures.
Broader economic benefits	CI testimony, patents
Health sector benefits	Key informants, personal contact, survey of practitioners. Use in guidelines or organisational procedures. Research findings
Capacity building	CI testimony Subsequent grants
Enhanced networks and partnerships for research transfer	Key informants, CI testimony

CI = Chief Investigator



Researchers can track research impact by keeping:-

- records of conferences, presentations and meetings
- records of individual enquiries and requests for more information.
- copies of reports, media stories, newsletter articles, and other publications citing your research. Google is useful in finding citations to your work.
- contact with those who have used your research findings - their testimony will be needed to provide evidence of research use



Summary

- Can use this model to structure information gathering for RQF Impact assessment. It can:
 - Guide compilation of case studies
 - Provide panel specific impact criteria
- Second phase of this project in 2007 with larger sample



Questions

- Relevance to you?
- Ideas?
- Suggestions?

Contact PHC RIS on 8204 5399

phcris@flinders.edu.au

www.phcris.org.au



Final word

- Take heart: it is easier to have and track impact in our disciplines than in astronomy or working on subcellular particles
- We can be confident that we are positioned to rate well under the RQF
- Be aware of your pathways to impact – keep them open and direct.

