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

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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

December 2005

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)

Stock or Reservoir of Knowledge

Stage 0: Topic/issue identification
Stage 1: Inputs to research
Stage 2: Research processes
Stage 3: Primary outputs from research
Stage 4: Secondary outputs: policy making; product development
Stage 5: Adoption: by practitioners and public
Stage 6: Final outcomes

The Political, Professional and Industrial Environment and Wider Society

Stage 6: Final outcomes
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 PHCREDS
  - 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

<table>
<thead>
<tr>
<th>Knowledge production</th>
<th>CI records and testimony, bibliometrics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Informing policy and product development</strong></td>
<td>Key informants / survey of practitioners. Use in guidelines / organisational procedures.</td>
</tr>
<tr>
<td><strong>Broader economic benefits</strong></td>
<td>CI testimony, patents</td>
</tr>
<tr>
<td><strong>Health sector benefits</strong></td>
<td>Key informants, personal contact, survey of practitioners. Use in guidelines or organisational procedures. Research findings</td>
</tr>
<tr>
<td><strong>Capacity building</strong></td>
<td>CI testimony</td>
</tr>
<tr>
<td><strong>Enhanced networks and partnerships for research transfer</strong></td>
<td>Key informants, CI testimony</td>
</tr>
</tbody>
</table>

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
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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.