How can research influence policy?

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Australian and New Zealand Fall Prevention Society Seminar

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Role of research in healthcare and public health

Health research has high value to society.

- It can provide important information about:
 - disease trends and risk factors;
 - effectiveness of treatment or public health interventions;
 - patterns of care and service provision, and
 - health costs and efficiency.



Research investment

- Biomedical research has been estimated to consume almost a quarter of a trillion US dollars globally every year.
- About 85% of global health and medical research investment is wasted (\$200 billion annually)¹
- A consistent findings from clinical and health services research is the failure to translate research into practice and policy²





^{2.} Grimshaw et al 2012 Knowledge Translation of Research Findings. Implementation Science20127:50 https://doi.org/10.1186/1748-5908-7-50

Evidence – practice gap

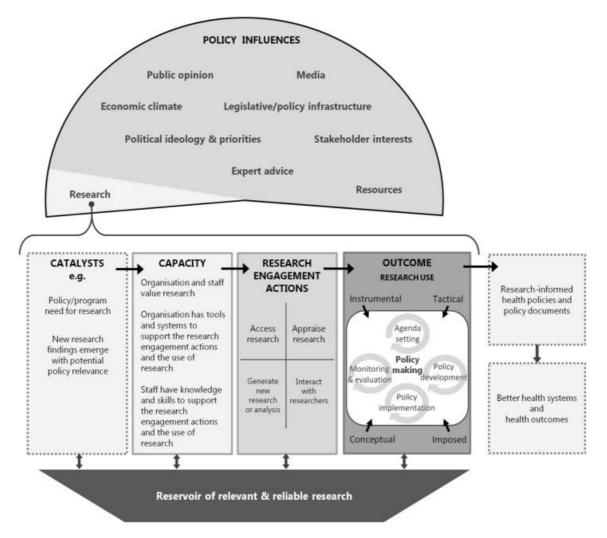
- Most research is not translated into practice. (Newson et al 2015)
- The process of translation when it occurs is often "slow and haphazard" (Morris et al, 2011, Milat et al 2013)
- On average it takes 17 years to move research into clinical practice (Morris et al, 2011)
- In prevention can take between 5-12 years to move research into practice (Milat et al 2013)

> Morris Z S, Wooding S, Grants J (2011). The answer is 17 years, what is the question: understanding time lags in translational research. J R Soc Med. 2011 Dec; 104(12): 510–520.doi: 10.1258/jrsm.2011.110180

Milat et al (2013). Policy and practice impacts of applied research: a case study analysis of the New South Wales Health Promotion Demonstration Research Grants Scheme 2000-2006. Health Res Policy Syst. 2013 Feb 2:11:5. doi: 10.1186/1478-4505-11-5

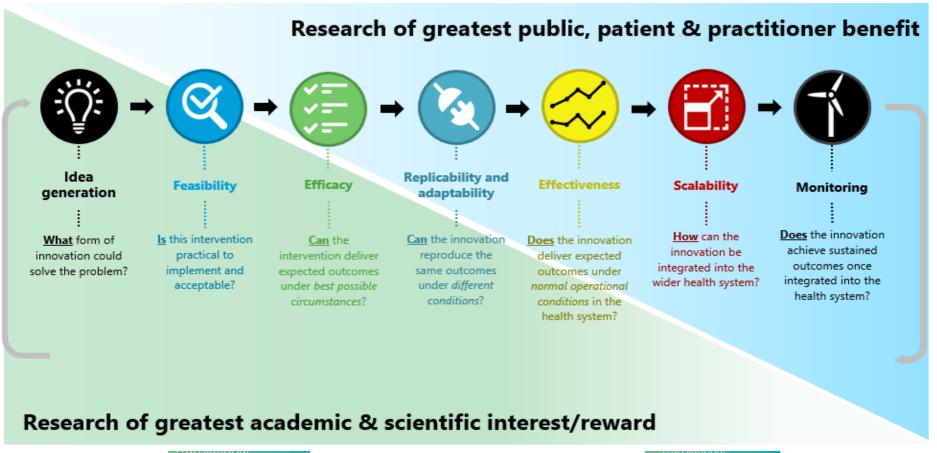
Newson, R., King, L., Rychetnik, L., Bauman, A., Redman, S, Milat, A., Schroeder, J., Cohen, G., Chapman, S. (2015). A mixed methods study of the factors that influence whether intervention research has policy and practice impacts: perceptions of Australian researchers. BMJ Open, 5(7), 1-13. http://dx.doi.org/10.1136/bmjopen-2015-008153

Increasing use of research in policy: SPIRIT Action Framework



Source: Redman S Turner T, Davies H, Williamson A, Haynes A, Brennan S, Milat A et al (2015). The SPIRIT Action Framework: A structured approach to selecting and testing strategies to increase the use of research in policy. Social Science & Medicine 136–137:147-155. https://doi.org/10.1016/j.socscimed.2015.05.009 Supporting Policy In health with Research: an Intervention Trial (SPIRIT)

Translational research framework





Research Framework:
Source Book

Importance of intervention research

Only 1 in 5 published studies are intervention research

3-8 % of intervention studies are 'effectiveness' or 'scalability'

RESEARCH ENTERPRISE

Indigenous health research: a critical review of outputs over time

Robert W Sanson-Fisher, Elizabeth M Campbell, Janice J Perkins, Steve V Blunden and Bob B Davis

We Are What We Do Research Outputs of Public Health

Rob W. Sanson-Fisher, PhD, Elizabeth M. Campbell, PhD Cynthia J. Millar, BSc

A description of public health research output and citation

Milet et al. BMC Public Health 2011, 11:934 http://www.bi.omedcen.tpd.cpm/1471-2458/11.934



CORRESPONDENCE

Open Acce

Public health research outputs from efficacy to dissemination: a bibliometric analysis

Andrew J Milat^{1,2*}, Adrian E Bauman², Sally Redman¹ and Nada Curac²

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Short Report

What is generated and what is used: a description of public health research output and citation

Luke Wolfenden^{1,2,3}, Andrew J. Milat^{4,5}, Christophe Lecathelinais³, Rob W. Sanson-Fisher^{1,2}, Mariko L. Carey^{1,2}, Jamie Bryant^{1,2}, Amy Waller^{1,2}, John Wiggers^{1,2,3}, Tara Clinton-McHarg^{1,2}, Sze Lin Yoong^{1,2,3}

Increasing research influence

- Set research priorities and research questions that take in account of the needs of end users³
- Conduct research in collaboration with end users³
- Establish 'implementation laboratories' that encourages the systematic uptake of research findings and other evidencebased practices into routine practice⁴



Available online at www.sciencedirect.com

Public Health

journal homepage: www.elsevier.com/puhe



Original Research

The correlation between National Health Service trusts' clinical trial activity and both mortality rates and care quality commission ratings: a retrospective cross-sectional study



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COMMENTARIES

Embedding researchers in health service organizations improves research translation and health service performance: the Australian Hunter New England Population Health example

Luke Wolfenden^{a,b,c,*}, Sze Lin Yoong^{a,b,c}, Christopher M. Williams^{a,b,c}, Jeremy Grimshaw^d, David N. Durrheim^{a,b,c}, Karen Gillham^{a,b,c}, John Wiggers^{a,b,c}

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^dOttawa Hospital Research Institute, Ottawa General Hospital, 501 Smyth Road, Ottawa, ON K1H 8L6, Canada Accepted 14 March 2017; Published online 21 March 2017

³ Chalmers I, Bracken MB, Djulbegovic D, Garattini S, Grant J, Gulmezoglu AM, Howells DW, Ioannidis JP, Oliver S. Research: increasing value, reducing waste: low to increase value and reduce waste when research priorities are set. *Lancet* 2014; 383: 156-165.

⁴ Ivers NM, Grimshaw JM. Reducing research waste with implementation laboratories. Lancet 2016; 388(10044); 547-8.

a Cumbria Partnership NHS Foundation Trust, Research & Development Department, Carlisle, CA1 3SX, UK

Research partnerships with end users

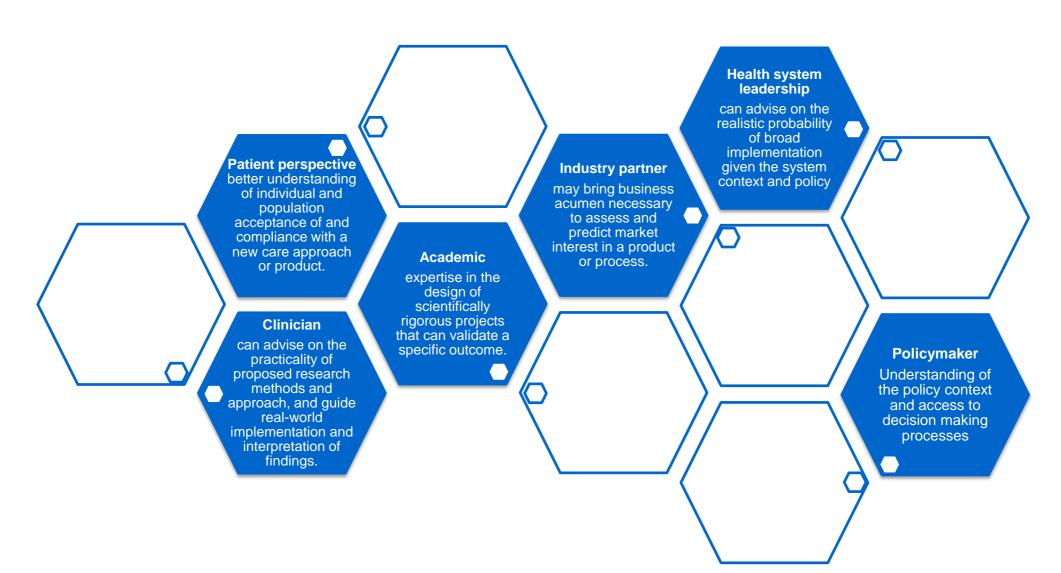
Benefits for researchers

- develop a better understanding of system and policy issues
- obtain clearer policy direction for future research
- gain access to a research 'laboratory' and funding
- gain support from the Health Organisations, including recognition of the value of their research
- provides an avenue for the translation of their research

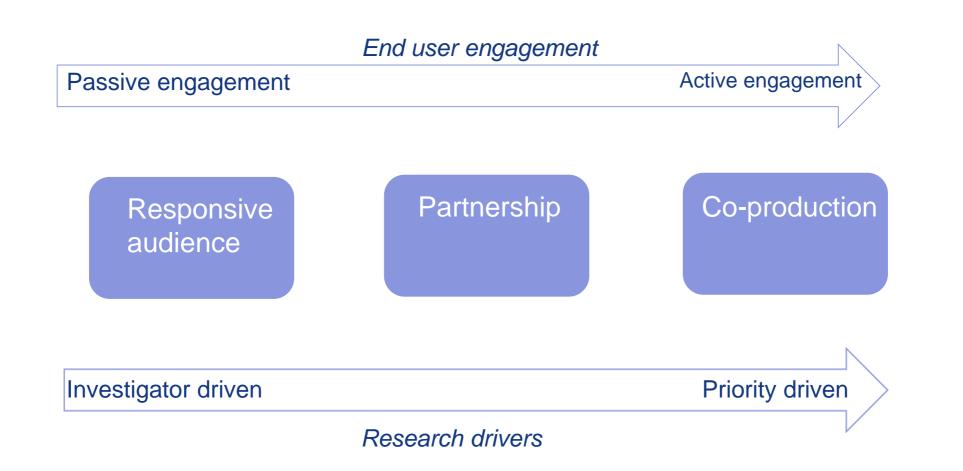
Benefits for policy makers/practitioners

- better alignment of research with health system and local priorities
- provides access to researcher knowledge
- broader range of evidence on which to base decisions
- provides contacts for ad hoc advice
- supports capability development

Different perspectives and strengths



Types of research partnership



Partnering with policy agencies



Home > Population Health Research > Guidelines for developing research grant partnerships

Guidelines for developing research grant partnerships

Joint research initiatives with the NSW Ministry of Health are most successful when all partners are involved early in the development of the research proposal and when partner contributions are clearly defined.

While there are a range of research partnerships, this page highlights issues for external partners to consider when entering into formal partnerships for research grants involving the NSW Ministry of Health.

Why is partnership important?

Population health research

Population Health Research Strategy

Population health guidance series

Prevention Research Suppor

Policy and program evaluation

grant partnerships

Capability building

Population health research assets

Guidelines for developing research

Health Promotion Demonstration

Research Grants Scheme 2000-2010

- . There is evidence that interaction between researchers, policy makers and practitioners is likely to increase the use of research.
- In particular, co-production of research where policy makers are involved in developing research questions, undertaking the
 research, interpreting the findings, and disseminating the results is likely to produce more policy-relevant and practice-relevant
 research, and have a greater impact on policy.

Types of research grant partnerships

- Funding structures involving co-sponsorship have the potential to promote partnerships between policy makers and researchers
 and to increase motivation for linkage and exchange more generally.
- · Grant schemes that require both researcher and practitioner involvement include

https://www.health.nsw.gov.au/research/Pages/research-grants-partnerships-guidelines.aspx

- Establish research partnerships at the inception of the project
- ✓ Be clear what you want from the policy agency (financial and/or in-kind contributions; access to program, administrative or survey data; epi or statistical expertise; policy expertise)
- ✓ Identify clear research questions:
 - clinically and policy relevant
 - aligned with system (local and/or state) priorities
 - be clear where on the translation continuum project sits
 - clearly defined outcomes
- ✓ Align capabilities and partner interests.
- Honest discussion about incentives and deal breakers
- Work towards relationships that generate trust and mutual respect

HOW DO WE INCREASE RESEARCH USE IN POLICY AND PRACTICE IN NSW HEALTH?

A long-term strategic approach in NSW

Generating the 'right' research evidence

- > Competitive funding schemes
- Funding priority research
- Generating rigorous 'evidence-from-the-field'
- > Focus on implementation science and scale-up

Translation and knowledge mobilisation

- > Bridging the gap between decision makers and researchers
- Developing and maintaining research assets
- Capability building
- Accountability





Investment in research pipeline, partnerships and capability building

Research assets

- Centre for Health Record Linkage (CHeReL)
- HealthStats NSW
- Secure Analytics for Population Health Research and Intelligence (SAPHaRI)
- NSW Health Statewide biobank

Priority research centres

- Physical Activity, Nutrition and Obesity Research Group (PANORG)
- BBV and STI Research, Intervention and Strategic Evaluation Program (BRISE)*

Competitive funding schemes

- Translational Research Grants Scheme (TRGS)
- Early-Mid Career Fellowships
- Prevention Research Support Program (PRSP)
- Alcohol and Other Drugs (AOD) Early Intervention Innovation Grants

Collaborative research

- NHMRC Partnership Centre: The Australia Prevention Partnership Centre
- NHMRC Partnership Projects
- Australian Research Council (ARC) Linkage Grants

Other research and evaluation

- Core funding for the Sax Institute
- Funding provided directly by policy areas for research projects
- Commissioned evaluations of policies and programs

Enablers

- NSW Health population health training programs
- NSW population health networks



https://www.health.nsw.gov.au/research/Pages/population-health-guidance-series.aspx



^{*} BBV=blood borne viruses, STI=sexually transmissible infections

Conclusion

- There is a substantial gap between evidence generation and use in policy practice.
- Effective research partnerships with end users can:
 - ensure a focus on the right research questions
 - reduce the time from evidence generation to practice implementation
 - improve patient and community outcomes
 - enhance research capability and capacity within health systems
 - reduce research waste