# A framework to embed translational research behaviours into health and medical research

### Framework to Assess the Impact of Translational health-research

Searles, A<sup>1,2</sup>; Ramanathan, S<sup>1,2</sup>; Deeming, S<sup>1,2</sup>; Reeves, P<sup>1,2</sup>; Herd, S<sup>1</sup>; Levi, C<sup>1,2,3</sup>; Nilsson, M<sup>1,2,3</sup> 1 Hunter Medical Research Institute (HMRI), Newcastle NSW, Newcastle 2 University of Newcastle, Newcastle NSW, Australia 3 Hunter New England Health Local Health District (HNEHLHD)



**Background**: The sub-optimal translation of many health and medical research outcomes is a well-documented issue. While measuring research impact has been identified as one method to drive greater benefit from research expenditure, most measurement frameworks are limited in their ability to shape future performance. The prospective capture of evidence to demonstrate research outputs and impact provides an opportunity to integrate Health Technology Assessment principles into the assessment of research impact.

#### FAIT and the encouragement of research translation

FAIT includes process metrics to monitor key research activities, including activities associated with research translation. The aim is to use process metrics that encourage activities and behaviours associated with research translation so that (1) they are identified to researchers and (2) their use is encouraged. There is a developing body of work as to what these activities and behaviours might be. For example, activities such as early engagement with end-users and the development of a strategic plan explaining the translational

**Framework to Assess the Impact of Translational health research (FAIT)** FAIT is a framework to encourage and measure research translation and research impact. It was designed to prospectively guide the collection of evidence representing research processes, outputs and impacts. It is also applicable across the research spectrum, from discovery to applied science. Through the use of process metrics, FAIT was also designed to encourage research translation. FAIT is based on a modified program logic model that guides the overall assessment. Three core methods are used: a modification to the Payback approach, Return On Investment (ROI) and case studies[1].

pathway (e.g. a program logic model)[1,2].

#### FAIT and Health Technology Assessment

The relationship of FAIT to Health Technology Assessment is based on the common goal of using an evidence base to assess the effectiveness and cost of funded research. With prospectively collected evidence and economic assessments, FAIT reports both the resources utilised in research and the impact of that research.

**Objective**: (i) Provide a brief history and description of FAIT (ii) Describe the ongoing implementation of FAIT with two research programs.

#### (i) A brief history and description of FAIT

The research impact literature was mined to understand the range of existing impact frameworks used to measure research translation and research impact; this provided insights for the development of FAIT. While FAIT was designed to be a prospective tool that is implemented at the start of a research program, it can be applied retrospectively. It is based on a modified program logic model (an initial step for implementation) that guides the overall assessment. FAIT is being applied in a health services setting and two Federally funded research programs. FAIT is the basis for a related project that is designing impact metrics for Medical Research Institutes.

ROI, an economic metric, easily understood, can be based on actual data &/or 'projected' future values. Reflects 'value for money'

**Method**: (i) FAIT was designed through a mixed methods approach that included a review of the literature. (ii) Description of the application of FAIT in two NHMRC Centres of Research Excellence (ongoing).

Metrics (e.g.

Modified

Payback

model)

Based on the Payback methodology. The domains of impact include "Clinical Implementation"; metrics used within each domain; HMRI has initiated a metric databank



**Return On** 

Case studies; good for describing complex and lengthy translation pathways, good for explaining serendipitous research outcomes, provides a qualitative perspective on largely quantitative findings

# (ii) Application of FAIT into two research programs (ongoing)

Two NHMRC Centres of Research Excellence (CRE) have agreed to implement FAIT as a means to encourage and measure research translation and research impact. Two forms of FAIT are being used: high intensity and low intensity. With HIGH intensity implementation, the evaluator ran workshops within each CRE sub-program and these interactions resulted in the generation of the logic model, and process and output metrics. With LOW intensity implementation, the evaluator ran a single workshop where CRE researchers designed their own logic



## model and determined process, output and impact metrics.

Post doctoral position appointed end 2016. To oversee implementation, data collection, analysis and reporting

**Results & discussion**: Prospective implementation of FAIT in the two CREs is ongoing. An initial process evaluation of the implementation strategies suggests the higher intensity implementation has been associated with more timely development of program logic models and metrics. The program logic model is a strategic plan for how the research will deliver 'impact'. Central to the generation of impact is the need for researchers to engage with end users. Both implementation strategies highlighted the importance of end user collaborations.

Health Technology Assessment is underpinned by an evidence-based approach to decision making. FAIT utilises this same principle so that the reported outputs and impacts are evidence based. FAIT's inclusion of ROI permits assessment of the value obtained from research investments.

For further information, please contact: Andrew Searles, HMRI Health Economist or Shanthi Ramanathan, Post Doctoral Scholar P: 02 4042 0494 E: andrew.searles@hmri.org.au, shanthi.Ramanathan@hmri.org.au

1 Searles, A., C. Doran, J. Attia, D. Knight, J. Wiggers, S. Deeming, J. Mattes, B. Webb, S. Hannan, R. Ling, K. Edmunds, P. Reeves and M. Nilsson (2016). "An Approach to Measuring and Encouraging Research Translation and Research Impact." Journal of Health Research Policy and Systems 14(60).

2 Grimshaw, J., M. Eccles, J. Lavis, S. Hill and J. Squires (2012). "Knowledge translation of research findings." Implementation Science 7(1): 50