



Cancer Institute NSW Model of Translational Research

Adapted from Westfall et al 2007¹

The agreed model of translational research focuses on three stages of translation:

T1 - Developing treatments and interventions.

- The interface between basic research and the clinical setting; striving to find how new knowledge of disease mechanisms can be developed into clinically relevant understandings; diagnostic and treatment regimes to be trialled in humans.
- Types of studies/activities – Observational studies; Case studies; Phase 1 and II clinical trials.

T2 - Testing the efficacy and effectiveness of these treatments and interventions.

- The translation of new clinical science and knowledge into routine clinical practice and health decision making.²
- The application of information and insights derived from basic, clinical and population health research to the provision of health services.³
- Translation of new clinically proven knowledge of disease processes, diagnostic or treatment techniques into routine clinical practice and health decision making.
- Types of studies/activities - Phase III clinical trials; observational studies; evidence synthesis and guidelines development.

T3 - Dissemination and implementation research for system-wide change.

- Moving evidence-based guidelines into health practice, through delivery, dissemination, and diffusion research.
- Practice based research, where the evidence from clinical trials on carefully selected patients is translated into guidelines for complex patients seen routinely in practice.
- Types of studies/activities - Dissemination research; implementation research; diffusion research, Phase IV clinical trials.

References:

1 Westfall JM, Mold J, Fagnan L. Practice-based research – “Blue Highways” on the NIH roadmap. *JAMA* 2007; 297(4):403-406.

2 Grimshaw JM, Eccles MP, Lavis JN, Hill SJ, Squires JE. Knowledge translation of research findings. *Implementation Sci* 2012; 7:50.

3 Wills P. NSW Health and Medical Research Strategic Review. NSW Ministry of Health: Sydney. 2012.