Abstract Title: Action for positive change in lung cancer care: Using accessible research methods in implementation science to drive change in clinical practice and build capacity.

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## Oral and poster abstract text

## **Background**

Lung cancer is the number one cause of cancer death in Australia. It is a justifiable research priority given the enormous disease burden. However, there are significant gaps in translation of evidence into practice. In 2012, Sydney Catalyst Translational Cancer Research Centre established an 'evidence into practice' research program across local health districts in Sydney and regional NSW.

**Methods:** We selected an overarching implementation science process model, the Knowledge to Action Cycle. Guided by the model steps, we utilised various research methods, commencing with a scoping review of evidence practice gaps in lung cancer care. For engagement with stakeholders and to select research priorities, we employed a modified Nominal Group Technique. To unpack and understand gaps at the local level, we conducted qualitative interviews (with patients and general practitioners) and a medical record audit. The culmination was the design and feasibility testing of a tailored intervention to improve early lung cancer diagnostic referral pathways across three sites.

**Results:** Research outputs include seven publications in peer-reviewed journals, leveraged funding (over \$1M), capacity building (PhD students, international fellowship) and impact on clinical practice (for example, new tools to improve communication between lung cancer multidisciplinary teams and general practitioners about clinical decision making). Our collaboration of lung cancer clinicians, health services researchers and implementation scientists is driving action for change in the Australian setting.

**Conclusion:** Our work program has facilitated knowledge translation in lung cancer care using accessible research methods. These methods can be readily applied or adapted for other health conditions.