



Clinician-Led Improvement in Cancer Care (CLICC): Testing an implementation strategy to change practice within hospitals in a clinical network

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Research team

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"Australia needs a stronger connection between health and medical research, and the delivery of health-care services. Embedding research into health care will ensure government investment in research benefits all Australians – through better health outcomes – and delivers the greatest economic value."

Simon McKeon, Strategic Review of Health and Medical Research Final Report February 2013





How to disseminate best practice?

Clinical practice guidelines have been extensively developed as a means to ensure clinical decision making is informed by recent, credible research evidence.

BUT timely and effective implementation of guidelines into practice is inconsistent.





Clinical networks - a medium for implementation

In NSW, a coordinated program of 30 clinical networks, institutes and taskforces has been established by the NSW Agency for Clinical Innovation (ACI).

These voluntary networks provide a framework for clinicians and consumers to meet across regional and service boundaries with a mandate to drive improvements in service delivery and care outcomes through innovation in clinical practice.





Clinical networks – a medium for implementation

Clinical networks embody, or have the potential to enable, the core features of successful implementation strategies¹⁻⁴:

- 1. Clinical networks contain clinical leaders who can design and champion change to improve care within their practices and influence wider culture change within their healthcare settings
- 2. Clinical networks are a 'ready made' organisational structure through which innovations may be promulgated and accelerated by clinicians at scale
- 3. Clinical networks provide a vehicle to monitor, evaluate and feedback changes as they are implemented to answer questions about effectiveness and the success of implementation strategies





An evidence gap... in practice

- Most commonly registered cancer in Australia and the second most prevalent cause of cancer death in men.⁵
- Evidence from 3 large RCTs has informed Australian, US and European clinical practice guidelines.
- Currently less than 10% of care within NSW complies with recommended care.⁶





CLICC study aims

To trial an implementation strategy that harnesses NSW hospitals within the ACI Urology network to implement a clinical practice guideline for the management of men with high-risk prostate cancer:

Phase 1. Assess whether a clinician-led and locally tailored intervention increases evidence based care in line with published guideline recommendation

Phase 2. Identify reasons why the intervention did or did not result in greater referral.





Study design

Phase 1: Prospective randomised cluster trial

Phase 2: Before and after mixed-methods study

Sample: 9 NSW hospitals with:

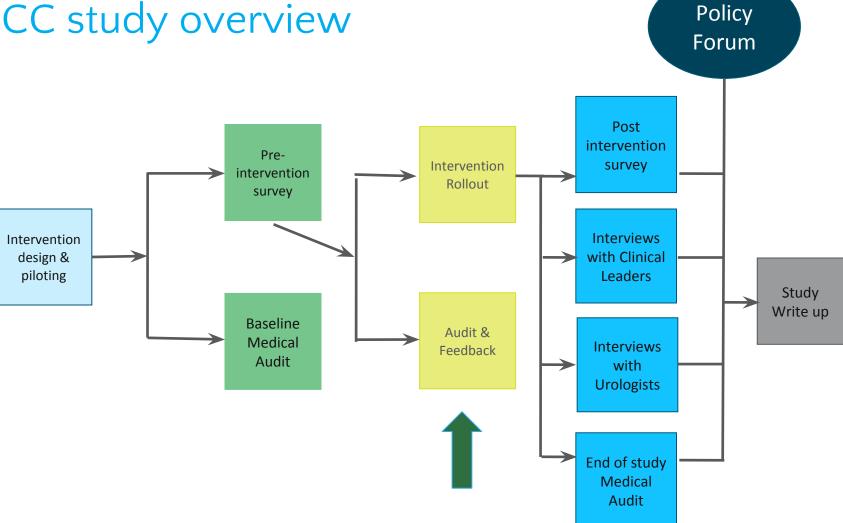
- (i) Urology MDT
- (ii) Member of ACI Urology Network

 $N \approx 4$ –10 Urologists that perform radical prostatectomy per hospital





CLICC study overview







Implementation strategy

In accordance with best practice in implementation research⁷⁻¹⁰ the CLICC intervention strategy:

- Addresses prospectively identified barriers.
- Uses program logic to promote clinician acceptance and change practice.
- Is locally tailored to each implementation site to take account of the organisational context.





Intervention design methods

Literature review

Components of interventions that have been successfully used in the implementation of clinical practice guidelines

Iterative workshops

ACI Urology Network Members (N=25)

Interviews with nursing and radiation oncology staff

National survey of urologists to explore current knowledge, attitudes and practice

Urologist members of USANZ (N=157), 45% response rate

Semi-structured interviews to identify site specific barriers and needs

Cancer Care Nurse Coordinators (N=7)

Radiation Oncologists (N=9)

Urologist Clinical Leaders (N=9)

Consumer Feedback

ACI Urology Network Consumer Representatives: What patients want from their Urologist at prostate cancer diagnosis (N≈15)

Consultation with Cancer Care Action Advisory Group

Evaluate feasibility with policy agencies – June 2013



resources

Program logic

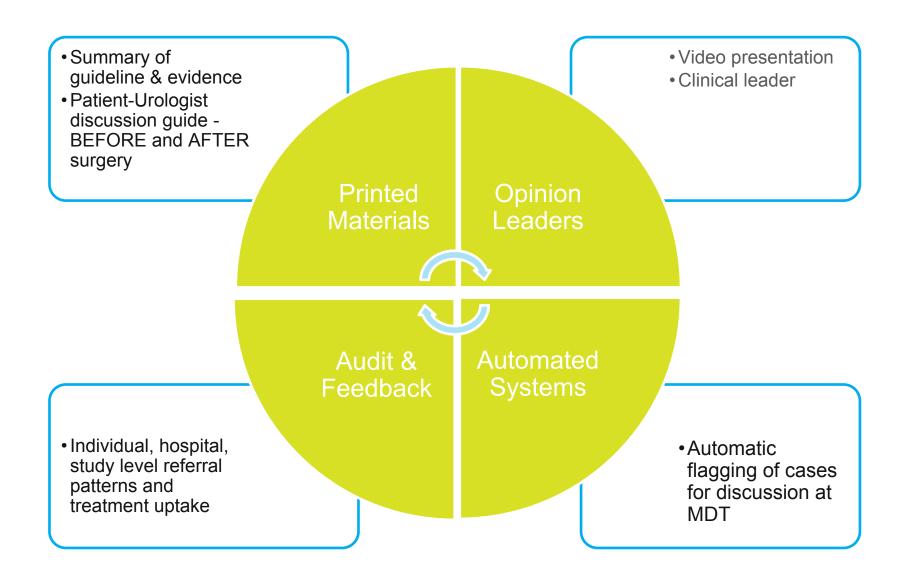


Barriers Intervention Behaviour Outcome Predisposing Patient -**Factors** Treatment preferences Increase in Provider education appropriate Printed materials utilisation of adjuvant radiotherapy for high Clinician -Physician-Increased referral risk patients with to: radiation focused positive margins after Knowledge - current oncology radical prostatectomy Reinforcing radiotherapy techniques components OR in accordance with Attitudes - evidence **Factors RAVES Trial** published Clinical Perceptions -**Practice Guidelines** overtreatment/toxicity Norms - ongoing clinical Audit & feedback trials Hospital -**Factors** Systems & processes -Context-**Enabling** Excluded from selective presentation of cases focused **Factors** Intervention Culture - variation in engagement with components Patient level: multidisciplinary team Hospital systems & Patient expectations Financial disincentives automatic case Health System/ Health system / wider flagging at Wider Context context: multidisciplinary Policy Policy, availability of Availability of resources





Intervention delivery: fidelity versus adaptation?







Evaluating CLICC intervention fidelity

- Intervention design (content/dose)
- Intervention delivery (standardisation)
- Receipt of intervention
- Process measures
- Enactment: change in knowledge, attitudes & beliefs (surveys)
- Engagement: participant responsiveness (interviews, document review)

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