The theory and practice of strategic research translation : How to make it happen

Professor Claire Jackson
Dr Tina Janamian and Dr Lisa Crossland
Context: National trends in health services

- COAG health reforms
- National PHC Strategy / PHC Strategic Framework
- NSW Government Integrated Care Program
- Shared boundaries: LHNs and MLs / PHNs
- McKeon Review
- Productivity focus
- Increased appetite and opportunity for ‘Co-creation’ between service delivery networks, innovators and researchers

Building a Culture of Co-Creation in Research
International trends

• Research productivity and relevance

• Research Impact (UK)

• Implementation Science (USA)

• Implementation Research (international) – methodologies / approaches to facilitate transmission of research into evidence-based policy and practice
Aims of the workshop

• To investigate health services research methodology which optimally links policy makers, researchers and end users
• Share research translation initiatives benefiting Australians with chronic disease
• Understand the adaption of the ‘co-creation’ framework to maximise current chronic disease research and its successful translation to practice
Existing IR methodologies: Normalisation Process Theory (NPT)²

- Of the many IR methodologies, NPT used by both our CREs as a framework for developing, evaluating and implementing complex interventions

- Establishes an implementation ‘downstream’ relationship with end-users

- NPT key components:
  - Coherence
  - Cognitive participation
  - Collective action
  - Reflexive monitoring
Model of the components of normalization process theory

- **Organising structures and social norms** - how a social context normatively accommodates a practice
  - Organising factors
    - Skill set workability
    - Contextual Integration
  - Collective Action
    - Interaction with already existing practices
  - Reflexive monitoring (how a practice is understood and assessed by action implicated in it)
  - Immediate factors
    - Interactional workability
    - Relational Integration

- **Group process and conventions** - how a practice is produced and reproduced in actual patterns of interpersonal behaviour

- **Coherence** (the meaningful qualities of a practice)
- **Cognitive Participation** (enrolment and engagement of individuals and groups)
The Fundamental Problem

• The focus is often ‘here is one I have prepared earlier - now eat it!’

• But the question is often: is this expensive internally-valid research translatable?

• What methodology is best suited to ensuring effective research uptake in a complex health service delivery environment?
Value Co-creation Concept

• Introduced in 2004 in the management world as a unique concept in creating value for customers and further developed to co-create value for all involved – applicable to any organisation\(^3\), service, industry, health services\(^6,7\)

• Emphasises the **ongoing**, **collaborative** nature of value creating processes between **multiple stakeholders** that creates opportunities for innovation, leading to superior market and financial performance\(^8\)

• Applying value co-creation to health services research: ongoing involvement of multiple stakeholders as co-creators from early phase of research development to implementation/adoptions of co-created outcomes\(^9\)

> “The interlocking of end user and researcher across the entire Centre research journey has taken time, patience and flexibility on both sides. Yet the benefits in terms of research translation and utility is significant. Research end users, are critical and willing partners in closing the primary care evidence–practice–policy loop, for the benefit of all communities.” \(^9\)
Co-creation paradigm requires a shift in our thinking to

- Engaging stakeholders personally and collectively in creating value together and expanding how the enterprise connects value creation opportunities with resources;

- Conceiving platforms of engagements as purposefully designed assemblages of persons, processes, interfaces, and artifacts, which afford environments of interactions to intensify co-creating actions and generate mutually valuable outcomes;

- Recognizing that actualized value is subjective and varies as a function of individuated experiences of co-created outcomes;

- Leveraging the capabilities of meshworks of social, business, civic, and natural communities in which individuals are embedded to virtualize new co-creative capacities of value creation; and

- Building ecosystems of capabilities together with other private, public, and social sector
Six steps to building a culture for co-creating value in research

1. Identify key stakeholders and increase their willingness to engage
2. Set up platforms purposefully designed to engage individuals more co-creatively
3. Identify and support new co-creation champions
4. Expand the circle of stakeholders and joint value creation opportunities
5. Deepen the impact and enable the viral spread of ‘win more-win more’ value creation
6. Engage stakeholders across private, public, and social sectors to expand benefit for all
Building a Culture of Co-Creation in Research
Building a Culture of Research Co-creation

Case studies

(1) The Beacon Model for complex diabetes care

Study Partners: UQ, QH, PAH, IPC, surrounding practices, ATSI community and providers, community stakeholders, Community Health, DoHA

(2) The Primary Care Practice Improvement Tool (PC-PIT)

CRE Partners: Department of Health; AAPM; RACGP; AGPAL; Australian Commission Safety and Quality in Healthcare; Australian Practice Nurses Association; AMLA; Improvement Foundation; patients & 100+ general practices nationwide

(3) Diabetic Retinopathy screening and monitoring of early stage disease in general practice

Study Partners: UQ, Queensland Health; Optimed; RANZCO; Qld buddy ophthalmologists; Qld participating general practices, patients with diabetes
(1) The Beacon Model for complex diabetes care

Jackson C, Russell T, Brown C, Tsai J, Ware R, Maher C
University of Queensland, School of Medicine
Context

• In 2007, a 12 month wait for OPD assessment for patients with complex Type 2 diabetes at Princess Alexandra Hospital

• Significant transport and access difficulty for Inala patients (SW catchment)

• High DNA rate (up to 40%)

• ‘Beacon’ practice model newly established by UQ at Inala (IPC), premised on a practice ethos to support and extend the capacity of all primary care in the area, and better integrate service delivery locally between general practice, specialist services and other state-funded care.
Forming the value proposition

• Real partnership

• A philosophy valuing multidisciplinary, multi-sector diversity and patient centeredness and

• A unique best practice integrated-care guideline

• Strong and enduring clinician leadership

• Commitment to innovative capacity building in the primary care sector with strong secondary sector support

• Innovation and flexibility

• Evidence-base

• Focused on efficiency and reduced duplication
Value co-creation - The Brisbane South Complex Diabetes Service

• **Subjects**
  – Patients from surrounding 21 postcodes referred to Princess Alexandra Hospital Dept. of Diabetes and Endocrinology and whose GPs consent to care via the new model

• **Location**
  – Managed at Inala Primary Care

• **Intervention**
  – DE Case manager commenced the care pathway with patients using defined screening, data collection and assessment and arranges appropriate Clinic Day review according to need – e.g. podiatry, doctor (all). Performs retinal photography
  – On Clinic morning, patients reviewed by the “Clinical Fellow”, an advanced-skilled GP trained via the UQ DGP’s online MMed (GP), who uses the pathway and co-consults with the specialist Endocrinologist and patient to develop an agreed management approach
  – The agreed management plan identifies clearly the actions for patient, their GP and the Service and follows the guideline as indicated
  – Variety of education opportunities for local GPs via IPC and for GPs nationally via the MMed (GP)
Glycaemic control for newly referred patients with T2DM at baseline and 12 months at the Brisbane South Complex Diabetes Service (BSCDS)\((n=99)\) and Princess Alexandra Hospital (PAH)\((n=67)\).

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<th>Baseline</th>
<th>12 months</th>
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<td>BSCDS</td>
<td>PAH</td>
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<td>HbA1c (mean ± SD)</td>
<td>9.0±2.0</td>
<td>8.3±1.9</td>
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<tr>
<td>% achieving HbA1c ≤ 7%</td>
<td>14.1 (14)</td>
<td>28.4 (19)</td>
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</tbody>
</table>
Effect on PAH waiting lists

Numbers on Waiting List

- Total waiting list number diab new
- Waiting list number endo new
- Waiting list - weight loss
- Bone Clinic
How do costs compare?

- Cost per outpatient visit (only comparator available)
  - PAH - $774

- Inala Complex Diabetes Service - $150 (seen 2-3x more often)
  - Costs in both settings inclusive of all clinical and administrative costs, infrastructure, IT, Medicare and state health costings exclusive of pathology.
The Co-creation Impact

- $10 million DoHA funding to develop GP ‘Superclinics’
- $2.5 million NHMRC Centre for Research Excellence
- Expansion of complex diabetes beacons across Brisbane South – IPC, UQ Healthcare Annerley, Logan and in 2015 West Australia
- Qualitative research to look at patient perspective
- Collaboration with Metro South Medicare Local to look at beacon’s using integrated guidelines in COPD, maternity care and pain management
- Support and dissemination via the Qld Clinical Senate
- Numerous publications, awards and keynotes
- International collaborations with the Kings Fund and Nuffield (UK), and Robert Graham Centre and AAFP, Washington
- Work with Urban Indigenous Health to develop a model involving video-consulting and focus on complex co-morbidity especially renal impairment
Six steps to building a culture of value co-creation

1. Identify key stakeholders and increase their willingness to engage
2. Set up platforms purposefully designed to engage individuals more co-creatively
3. Identify and support new co-creation champions
4. Expand the circle of stakeholders and joint value creation opportunities
5. Deepen the impact and enable the viral spread of ‘win more-win more’ value creation
6. Engage stakeholders across private, public, and social sectors to expand benefit for all
2. Developing high quality practice performance:

The Primary Care Practice Improvement Tool (PC-PIT)

Dr Lisa Crossland, Ms Susan Upham, Dr Tina Janamian and Prof Claire Jackson
Background


- Extensive work undertaken in the design and implementation of quality improvement tools in tertiary care. Few practice performance (organisational) tools designed for and rigorously trialed in, general practice settings

- Focus has been on single-strategy approaches; clinical indicators of quality care; education and training and tools requiring external facilitation

- Refocus on the importance of primary health care and the role of organisational development
Aim and significance

AIM - To improve the quality and performance of Australian primary health care services

SIGNIFICANCE - A tool to improve practice organisational function through a focus on elements integral to high quality primary care practice performance
Partnership Process

- **The End Users**
  - e.g. Practice Managers, GPs, Practice Nurses, Allied Health Professionals & patients

- **Development & trial of the Primary Care Practice Improvement Tool (PC-PIT)**

- **Formal CRE partners**
  - e.g. AAPM, RACGP, AGPAL, ACSQH, APNA

- **International networks**
  - e.g. Clinical Microsystems USA; Qulturum, Sweden

- **Key Stakeholders**
  - e.g. Australian Medicare Local Alliance
  - Australian Medicare Locals

Building a Culture of Co-Creation in Research
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<thead>
<tr>
<th>Purpose</th>
<th>Stakeholders/Partners</th>
<th>Platform</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>Review of an existing organisational tool</td>
<td>All staff in 6 high functioning practices; APNA, AAPM.</td>
<td>Pilot and formal partners discussion</td>
<td>Change to our fundamental research question – a new tool was needed</td>
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<tr>
<td>Presentation of elements integral to high performing practices</td>
<td>Partners (RACGP; AAPM; AGPAL; DoH)</td>
<td>Formal Meeting</td>
<td>Feedback on relevance of the PC-PIT</td>
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<tr>
<td>Development of the draft PC-PIT</td>
<td>Practice Managers</td>
<td>Expert Committee</td>
<td>Refinement of the online approach to the PC-PIT</td>
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<td>Content validation of the PC-PIT Individual feedback (quantitative and qualitative)</td>
<td>End Users of 6 high function practices</td>
<td>Pilot – practice visits</td>
<td>Understanding of key values and expressed needs of end users eg. need for simplification of wording/ layout and need for support resources</td>
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<tr>
<td>Presentation of the refined PC-PIT based on pilot feedback to key partners</td>
<td>Partners (RACGP; AAPM; AGPAL; DoH; Medicare Locals)</td>
<td>Formal partner meetings with discussion</td>
<td>Feedback from partners refined PC-PIT and links to current CQI practices</td>
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<tr>
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<tr>
<td>PC-PIT promotion and identification of key champions in QI</td>
<td>AAPM; Medicare Locals; Practice Managers and practice CEOs</td>
<td>AAPM Conference; PHCRIS Conferences; National Webinars</td>
<td>Introduction of the PC-PIT to 87 practices nationwide and recruitment of 20 trial practices;</td>
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| Trial and validation of the PC-PIT in general practices               | 20 selected general practices (all practice staff)                                   | Trial (Independent visits, interviews)        | Identification of the relevance and value of the PC-PIT in practice  
Need for additional support resources  
Need for discussion forums                                                                                                                                 |
| Expansion of the PC-PIT nationally and internationally               | International primary health care QI groups; other national primary health services   | International QI workshop; AAPM Conference;  | International links: Sweden PHC (Jongkoping); Singapore PHC QI; US FP  
National links: APA; Refugee Health; Physiotherapy ; Podiatry and Nutrition services; Aboriginal Medical Services for further trial 2015 |
| Discussion forum for Practice Managers                               | UQ and end users (Practice Managers)                                                | Online PC-PIT forum                           | To be launched in late 2014                                                                                                                                 |
| Identification and development of online, validated support resources | UQ and Expert Review Panel of end users                                              | Email and teleconference discussion          | To be undertaken in 2015                                                                                                                                 |

Building a Culture of Co-Creation in Research
Methods

Phase 1: Systematic literature review to identify the key elements integral to high quality practice performance defined as ‘systems, structures and processes which enable delivery of good quality patient care’ but which do not include clinical processes

- Cyclical partner feedback– co-creation approach
- Development and Pilot of the PC-PIT with 6 high functioning practices

Phase 2: National trial and validation of the PC-PIT in primary health care settings (regional, rural and urban)
7 key elements of high quality practice performance

1. Patient-centred & community focused care

2. Leadership & ‘leading’

3. Governance (i) Organisational governance (ii) Clinical governance

4. Communication (i) Team-based care (ii) Availability of information for patients (iii) Availability of information for staff

5. Change Management (i) Readiness for change (ii) Education & training (iii) Incentives for change

6. Performance (i) Process improvement (ii) Performance results

7. Information & Information technology
The PC-PIT

- Online
- Whole of practice approach
- Facilitated by Practice Managers (internal process, no external facilitation required)
- Additional support and training resources provided online
- Presently no cost to practices

Building a Culture of Co-Creation in Research
1. PC-PIT – PART ONE:

PATIENT CENTRED AND COMMUNITY FOCUSED CARE

The practice provides continuing and comprehensive medical care to individuals and their families, through a continuing patient–health professional relationship of trust, clinical expertise and the use of best available evidence. Clinical teams, resources and services are all coordinated in the practice. Patients have input into the way their care is provided.

We always work together to ensure our patients can access comprehensive coordinated care. We work in partnership with all services within and outside the practice. We use best available clinical guidelines. We focus on the health of our patients in the context of their families. We have a system in place to enable patients to have input.

I do not believe our practice takes the patient centred care approach as described.

Not Applicable
What have we done so far?

- Systematic literature review (published MJA Supplement)
- Pilot of PC-PIT with 6 high functioning practices (published MJA Supplement)
- Trial of PC-PIT (Report completed)
  - 100+ practices expressing interest nationally
  - 25 practices selected to participate
  - 200+ completed online PC-PIT forms
  - 15 Independent Visits conducted
The PC-PIT Quality Improvement Cycle in practice

**Step 1**
Independent PC-PIT Visit

**Step 2**
Comparison of Practice PC-PIT & Independent Visit Scores

**Step 3**
Qualitative interviews with staff & review of materials & documentation

**Step 4**
Review of the PDSA Plan & improvement outcome(s)

**Step 4: Your Practice Manager will facilitate the Plan-Do-Study-Act approach to undertake, monitor and review the improvement**

**Step 1: All practice staff complete the PC-PIT online**

**Step 2: Receive a whole practice score in a Practice PC-PIT Report**

**Step 3: Use the PC-PIT Report scores to identify a broad area you wish to improve**

**Building a Culture of Co-Creation in Research**
Using the PC-PIT in practice

- Promote practice management leadership
  - Initiate communication & identify common elements
  - Improve clinical & practice management teamwork
  - Achieve accreditation requirements

- Promote Practice management leadership
  - Redirect focus to areas of organisational improvement
  - Identify & address areas where organisational & clinical governance overlap

- Reinforce & sustain practice management leadership
  - Formalised approach to identify areas for improvement
  - Whole of practice approach - delegated responsibility

Clinical Management
Practice Management
Clinical management
Practice management
What Practice Managers are saying...

This is a very useful tool, capturing the most relevant areas of practice function.

Practices don’t have a standardised way of looking at practice function & performance; we all use different questionnaires or surveys in different ways… This tool provides a way of reviewing our practice across the most important areas… and I like how it involves all staff!

We are using it [the PC-PIT] to look at organisational improvements in the management of diabetes patients… looking at our register and improved patient identification, up to date information, recalls for regular follow-up… and improved HbA1Cs as indicators of success …
Expanding co-creation opportunities – addressing values

**End users value** – team-work and team approaches; importance of organisation and management in primary care; autonomy – an ‘in house approach’ balanced with external support if needed; sharing solutions and benchmarking; positive not punitive; patient care; inexpensive

**Partners and stakeholders value** - improvements to patient care; simple to use; a base to assist practices in CQI; embedded in existing CQI approaches; adaptable and adoptable across primary care; addresses organisation and management
Expanding the reach - Where to next?

- Embedding the PC-PIT in existing QI approaches by working with RACGP, AGPAL, AAPM, ACSQ
- Working with consumers - review of the PC-PIT by consumers (National Consumer Health Forum and local consumer health networks)
- Review and development of PC-PIT supporting resource suite
- Extending to other primary health care service models in rural and remote settings; Aboriginal Medical Services; Refugee Health; nutrition; physiotherapy; dermatology
Innovation in the total management of type 2 diabetes:

Co-creating approaches for diabetic retinopathy screening and monitoring in general practice

Dr Lisa Crossland, Dr Deborah Askew and Prof Claire Jackson

Building a Culture of Co-Creation in Research
Background

- Diabetes currently affects 4% of Australians
- The global prevalence is expected to double by 2030
- As part of the annual cycle of care GPs screen for most complications of diabetes
- DR screening is largely done by optometrists & ophthalmologists
- Approximately 25% of individuals with diabetes have Diabetic Retinopathy (DR)
- DR is the leading cause of preventable blindness in Australians under the age of 60
- Currently, only 50% are achieving the screening guidelines set out by the NH&MRC (2008)
Aims

• To test the **accuracy, acceptability** and cost effectiveness of general practice based DR screening compared to routine methods of DR screening

• To test the **accuracy, acceptability** and cost effectiveness of routine monitoring by the GP of mild-moderate DR levels with ophthalmic support and education via videoconferencing
Methods

• Open controlled trial
• 5 intervention general practices matched to 5 control practices (carrying out routine care)
• Extensive accreditation process for intervention practice GPs
• All photography and screening conducted onsite in each intervention practice
• Ophthalmic support
• Quantitative and qualitative data collected to assess outcomes
Embedding DR Screening and monitoring in general practice

**Platforms**
- Steering committee meetings
- WebEx live links
- Patient interviews; GP and ophthalmology interviews
- Conference presentations & workshops

**Formal partners**
Queensland Health; Optimed; RANZCO

**Key Stakeholders**
- Participating practices, GPs and practice nurses; patients; WebEx

**Individuals**
- GPs, Practice Nurses, Allied Health Professionals (diabetes educators), patients and individual champions from key partner organisations and stakeholder groups

Source: Venkat Ramaswamy and Kerimcan Ozcan, The Co-Creation Paradigm (2014)
## Platforms for engagement

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Stakeholders/Partners</th>
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<th>Outcome</th>
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</thead>
<tbody>
<tr>
<td>To introduce participating practices to the process of the trial</td>
<td>GPs and study team</td>
<td>Face-to-face introductory meeting</td>
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<tr>
<td>Set up of cameras; in-house training for practice staff</td>
<td>Practice Nurses; Optimed and study team</td>
<td>Face-to-face visits in practice</td>
<td>Identification of appropriate camera location; set up &amp; training for staff; development of a camera ‘cheat sheet’ made available to all nurses using the camera</td>
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<tr>
<td>Trial updates and feedback from GPs about how they are embedding DR screening in practice, any issues and potential solutions</td>
<td>GPs and study team</td>
<td>Teleconference</td>
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<tr>
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<td>Links between GPs and buddy ophthalmologists to discuss patient images</td>
<td>GPs, ophthalmologists and (in rural areas) patients</td>
<td>Live webinar link (with patients) or teleconference / email</td>
<td>Ongoing CPD for GPs and, in rural areas, ophthalmology consultation – patients and GPs</td>
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<td>and diagnoses</td>
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<tr>
<td>GP accreditation in DR screening and (first 50 patients)</td>
<td>GPs, ophthalmologists &amp; study team member (as facilitator)</td>
<td>Live webinar link with shared images on line</td>
<td>CPD and education in relation to DR screening</td>
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<tr>
<td>Monitoring of the progress of the trial and risks</td>
<td>Qld Health, Optimed, GP representative, RANZCO, study team</td>
<td>Steering Committee Meetings (teleconferences)</td>
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<tr>
<td>Steering Committee Meeting</td>
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<tr>
<td>To share the initial outcomes of the DR screening</td>
<td>GPs, primary health care settings</td>
<td>Conference presentations &amp; workshops (GP14; PHCRIS; RANZCO)</td>
<td>Identification of other stakeholders (optometrists; diabetes educators)</td>
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</tbody>
</table>
### Screening rates achieved (Feb 2, 2011-Feb 2, 2013)

<table>
<thead>
<tr>
<th>Total Study Pop</th>
<th>Referred for screening</th>
<th>Screening outcome on file</th>
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<tbody>
<tr>
<td></td>
<td>Intervention</td>
<td>Control</td>
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</table>
### Rates of monitoring mild-mod DR achieved

<table>
<thead>
<tr>
<th>Patients screened (Screening info on file)</th>
<th>NPDR (mild-mod)</th>
<th>Follow-up completed in ≤12months</th>
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<tbody>
<tr>
<td></td>
<td>Intervention</td>
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Issues impacting on screening and monitoring

- Up-to-date registers and effective recall systems
- Competing priorities of workflow – patients with chronic conditions and multiple morbidities
- GPs using verbal confirmation that patient has been screened – no record on file
- Patients rejection of annual screening or monitoring follow up
- Our evidence suggests that most screening and monitoring is completed in 3 year+ cycles
Benefits of DR screening in general practice

• Improves the screening process and decreases unnecessary travel for rural and older urban patients
• Improves patient access to DR screening
• Fits with the annual cycle of care
• Provides an opportunity for ongoing patient education on self management
• Has additional benefits related to the diagnoses and management of other pathology
• Professional development for GPs
• Improves links with and feedback from ophthalmologists and optometrists
DR screening in practice - making it work

Key enablers

- Camera and dedicated space for DR screening
- Identified photographers, 2-3 per practice is ideal
- Embedding screening in practice eg. targeted versus opportunistic screening; review with patient at time of screen versus recall to discuss outcomes with patient
- Up-to-date and maintained registers
- Streamlined processes for recall
- Strong communication and information sharing with external services
- Business case
DR screening in practice – making it work

Key considerations

- Business case – MSAC Review
- Recognition and promotion of DR screening as a new skill and role of GPs and practice nurses
- Appropriate systems and structures in place such as up-to-date diabetes registers; recall processes
- DR screening and review as part of daily workflow
- Support from all staff (GPs, Practice Nurses, reception)
- Competition with external services (optometrists)
- Patients expectations and understanding of annual screening
- Perceived costs of cameras, practice staff time in training, education and photography
End users value

- Creating positive links with buddy ophthalmologists
- CPD in DR screening for GPs
- Flexibility to determine their own approach to DR screening (e.g., opportunistic OR a targeted ‘screening clinic’, coordinated with visiting services such as podiatry etc)
- Value-adding to DR screening (the ability to also use non-mydriatic cameras to detect other pathology and monitor other conditions)
- Additional opportunities for patient education
- Cementing positive relationships with optometrists (rural settings)
Partners and stakeholders value

- Demonstrated improvements achieving annual/biennial patient DR screening across urban, regional and rural/remote sites
- The development of potentially national approaches to DR screening, adaptable to primary care settings nationwide
- Rural and urban elderly patients value DR screening and diabetes care in a ‘one stop shop’, reducing need for travel
Expanding the reach - Where to next?

• Extension of the primary health care DR screening model to other services expressing interest eg. Aboriginal Medical Services and centres providing outreach primary health care in rural and remote settings – sourcing cameras

• Development of an appropriate business model to support DR screening in primary health care

• Working with patients – re-education on the importance of annual/biennial DR screening

• Where appropriate - developing and maintaining links with local optometry services to improve screening rates and also feedback on outcomes of screening to general practices
The benefits of NPT

• Can be used in case study as well as
• Larger scale structured and comparative studies.
• Fits with the interpretive approach of ethnography and other qualitative research methods but
• Is also appropriate for systematic review and survey based research methods
Taking NPT and Co-creation forward …

• Co-creation of the new technique, technology or pattern of organisation…

• Use of NPT as part of co-creation approach, to understand the ways that a new technique, technology, or pattern of organisation becomes **routinely embedded** in a **social context** as the result of **individual and collective agency**

• Applying this as **combined method** to health services research: ongoing involvement of multiple stakeholders as co-creators from early phase of research development to implementation/adoption of co-created outcomes – closing the evidence-practice-policy gap
References


