Research on implementation of collaborative services – the Australian experience

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Community Pharmacy Agreements (CPA)

- Five-year agreements since 1990 - signed between the Pharmacy Guild of Australia and the Federal Government
- Increasing shift towards and funding for professional services

2CPA 1995-2000
- AU$ 4 M: Residential medication management reviews

3CPA 2000-2005
- AU $300M: Medication reviews
- Consumer information

4CPA 2005-2010
- AU $500M: Medication mgt
- Diabetes/Asthma disease mgt (pilot)

5CPA 2010-2015
- AU $660 M: Medication mgt
- Clinical interventions
- Primary health care
Collaborative medication reviews

- Research to policy

1999
Chen, TF et al. Medication regimen reviews – a collaboration between community pharmacists and general medical practitioners.” [Research report]

1999

2000

2000
Bennet A. et al. “A comparative study of two collaborative models for the provision of DMMR.” [Research report]

2000
Roberts, MS & Woodward, M. “The domiciliary medication review project.” [Research report]

2000
Gilbert, A and Beilby, J. “Quality use of medicines in the community implementation trial.” [Research report]

2001: Policy uptake – Home medicines reviews (HMRs) are a Government-funded service as part of the 3rd Community Pharmacy Agreement

www.guild.org.au/research
Research on HMR implementation

- Qualitative study (36 interviews – owners, pharmacists, pharmacy assistants)\(^1\)
  - Thematic content analysis with *NVivo* software for data management

- Quantitative study (735 pharmacies, 1303 individual respondents)\(^2\)
  - Facilitators’ scale
    - Factor analysis
  - HMR data
    - Descriptive statistics

Distribution of pharmacies (n=575) according to average number of HMRs conducted per month
Models of practice

Position of person conducting HMRs

- Employee pharmacist/s (full and part-time) 19.7%
- Combination of internal pharmacists and external consultants 3.8%
- Missing data 4.0%
- Owner pharmacist/s 18.8%
- External consultant pharmacist/s 53.7%
Implications of this model

- Lack of integration ("arms-length" approach)
- Lack of interaction with GPs and patients
- Will not build loyalty
- Less financially viable
- Important implications for future services e.g. Disease state management

In community pharmacy

FEW PHARMACIES ‘WALK THE TALK’ OF PRACTICE CHANGE WHICH REINFORCES THE GAP BETWEEN RHETORIC AND REALITY.

F or many, the profession has talked about the need to change its practice, from ‘product to patient’. This even has its own philosophical foundation, articulated as ‘pharmaceutical care’ by United States researchers Hepler and Strand in 1990. But while this model is very hard to argue with, most pharmacies continue to group. Very few pharmacies have achieved anything resembling this change-focused philosophy as the basis of their business model. But you’d be hard pressed to see if you only listened to rhetoric pervading most pharmacy conferences and trade journals.

In their book ‘Witching Powder Pyramids’, authors have identified a new reality for community pharmacy services and their providers – the profession is changing. With money being offered by the government to stimulate community pharmacy services and their providers – the profession is changing. With money being offered by the government to stimulate community pharmacy services, there is an expectation that there is a new reality for community pharmacy services.

However, in the light of the multitude of business environment changes rapidly unfolding, the profession’s existing ‘core competency’ of product sales (including dispensing) cannot be interpreted as ‘core rigidity’ for many who have not shifted their business models to deal with new PBS margins and ferocious price competition.

SPECIAL LEADERSHIP REQUIRED

As recent experience has born out, ‘services’ cannot just be added as the next ‘retail category’. If a customer-centric business model is to be truly from philosophy of practice and vision, to customer service and staffing, will need to be built from the ground up... A new approach, developing understanding of the service business model, is urgently required.”
Implementation research

• Policy to practice?

2003
Benrimoj SI et al.
An investigation into business and professional facilitators for change for the pharmacy profession in light of the Third Guild/Government Agreement
[Research report]

2004
Benrimoj SI et al.
Quantification of facilitators to accelerate uptake of cognitive pharmaceutical services (CPS) in community pharmacy.
[Research report]

2004
Dunphy D et al.
Change management and community pharmacy
[Research report]

2006
Roberts AS et al.

2007
Roberts AS et al.
[Book]

2009
Feletto EL et al.
Building organisational flexibility to promote the implementation of primary care services in community pharmacy.
[Research report]

2005: Policy uptake – change management concepts incorporated into all professional programs and services in the 4th Community Pharmacy Agreement

www.guild.org.au/research
Change management

• Change is hard, and generally more complex than first anticipated
• Often there is disagreement on how change should occur, between the policy level and the practitioner level:
  “the point of view of those who think they are creating change as an intentional process will be different from those who are on the receiving end”

In reality

• 4CPA programs experienced:
  – high rates of uptake/sign-up for programs
  – low rates of maintenance or sustaining new services
• The funded change management program was subject to significant political disagreement on approach and was only rolled out in the final 6 months of the 5 year Agreement
• “There was no overarching plan for rollout of programs and consideration of how projects and programs interrelate and how this might be better managed from the perspective of pharmacists participating in the programs”5

“Strategy” based on flawed assumptions…

Professional program sign-up incentives + Service payments, QCPP, IT support = Sustained delivery of professional services to consumers
Impact of incentives

• “Incentives do not alter the attitudes that underlie our behaviors. They do not create an enduring commitment to any value or action. Rather, incentives merely—and temporarily—change what we do.”^6

• “The essential challenge is to ensure that incentives, structures and operations at the systems, organisational and practitioner level are consistent with each other and aligned in a way that supports the desired practitioner behaviour”^7

5th Community Pharmacy Agreement

- $663 million in funding for programs to deliver professional services, including:
  - Medication management
  - Pharmacy Practice Incentive and Accreditation Program
  - Aboriginal and Torres Strait Islander Programs
  - Rural programs
  - R&D
  - Medication continuance
  - Additional programs to support patient services

www.5cpa.com.au
Medication management programs

• Existing programs:
  – Home Medicines Review ($52.11M)
  – RMMR ($70M)

• New programs:
  – MedsCheck ($29.6M)
  – Diabetes MedsCheck ($12.2 M)

• Meds Check is an in-pharmacy review of a patient’s medicines, focusing on education and self management and aims to:
  • Identify problems that the patient may be experiencing with their medicines;
  • Help the patient learn more about their medicines including how medicines affect medical conditions;
  • Improve the effective use of medicines by patients; and
  • Educate patients about how to best use and store their medicines.
Pharmacy Practice Incentives (PPI)

- Funding of $344 million is provided for the PPI Program
Implementation strategy in 5CPA

• Example: MedsCheck Program

Patient eligibility criteria
Guidelines for service delivery
Forms and claiming

Detect
Deliver
Document

• Proactive or opportunistic?
• How many patients to target?
• Who is responsible for identifying and approaching patients?

• Where: private room or counselling desk?
• When: appointment system?
• Who: pharmacist availability, must not be dispensing

• When: at time of consult or after?
• Who is responsible for this task and any follow-up?
• Where will it be performed? Back office or counselling desk?
“Implementation of programs and practices should not be viewed as “plug and play” where, somehow, new practices can be successfully added to ongoing operations without impacting those operations in any significant way.”
Many of the common techniques do not work

- Successful implementation is not achieved by any of the following\textsuperscript{8-10}:
  - Dissemination of information (literature, mailings, guidelines) by itself
  - Training alone, no matter how well done
  - Laws/compliance by itself
  - “Following the money” by itself
  - Making no changes to \textit{supporting roles and functions}


A new approach is needed

- We need to challenge our practices and beliefs if things are to change
- Just because a program or service has been shown to have good outcomes for patients does not mean it will be easy to implement in practice
- Implementation scientists have shown that the *usability* of a program or practice has little to do with the weight of the evidence regarding program outcomes

Where have we come from?

- Pharmaceutical Care: Hepler & Strand's seminal model
- Expanded role: Demonstrating the value of the pharmacists
- Barriers: time, money, education, attitudes
- Practice models: shift from retailing to cognitive services
- PCNE initiates Asthma TOM and OMA studies
- Compliance: Legislating pharmaceutical care
- Making the case for payment: remuneration of pharmaceutical care services
- From policy to practice: Implementation focus at all levels
- “How to”: the process for provision of pharmaceutical care
- Individual behaviour change approach: Skills, motivation, education
- Organisational approach: applying change management theories and concepts
- No magic bullet: Identification of facilitators and their complexity
- Pharmacists in primary healthcare: collaboration, quality, evaluation
- No “one size fits all”: Focus on flexibility and capacity building

Pharmacists in primary healthcare: collaboration, quality, evaluation

Pharmaceutical Society of Australia
Where are we now?

**1990**
- **Pharmaceutical Care:** Hepler & Strand's seminal model
- PCNE initiates Asthma TOM and OMA studies

**1995**
- **Expanded role:** Demonstrating the value of the pharmacists
- **Compliance:** Legislatng pharmaceutical care

**2000**
- **Barriers:** time, money, education, attitudes
- **Making the case for payment:** remuneration of pharmaceutical care services
- **Organisational approach:** applying change management theories and concepts

**2005**
- **Practice models:** shift from retailing to cognitive services
- **No magic bullet:** Identification of facilitators and their complexity

**2010**
- **From policy to practice:** Implementation focus at all levels
- **Individual behaviour change approach:** Skills, motivation, education
- **No “one size fits all”:** Focus on flexibility and capacity building

**2015**
- **Pharmacists in primary healthcare:** collaboration, quality, evaluation
- **From policy to practice:** Implementation focus at all levels

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**“How to”:** the process for provision of pharmaceutical care

**Pharmaceutical Society of Australia**
The implementation gap

• In 1999: “Pharmacists are being urged to change their practice, but many do not have a clear picture of how the new practice model is to fit into current reality.”¹³

• In 2012: “It is still very difficult to implement changes in daily pharmacy practice.”¹⁴

• And the real gap is for consumers:

  “Individuals cannot benefit from interventions they do not experience”¹⁵

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¹³ Holland, R.W. and C.M. Nimmo, Am J Health Syst Pharm, 1999. 56(17)
What we now know

- Evidence on effectiveness helps you select what to implement for whom
- Evidence on these outcomes does not help you implement the program or practice
- **Science to service gap** – Often what is known is not adopted to help consumers
- **Implementation gap** – Often no clear pathways to implementation; often what is adopted is not used with **fidelity** and good effect.
- What is implemented often disappears with time and staff turnover

We also know

- Successful uptake of knowledge requires\(^\text{18}\):
  - more than one-way communication and one-off training events
  - genuine interaction among researchers, decision makers, and other stakeholders AND
  - active, purposeful and planned implementation activities

Coaching for change

- Research in pharmacy and other health sectors shows that:
  - Community pharmacies need targeted, on-site support to assist their preparation for change and to build the capacity to integrate new professional programs over time.  
  - Educational outreach visits appear to improve the care delivered to patients. “Trained people visit clinicians where they practice and provide them with information to change how they practice. The information given may include feedback about their performance, or may be based on overcoming obstacles to change…”

At the pharmacy level

• The need for support to change pharmacy from a product to a product-service orientation is in at least 5 areas\textsuperscript{20}:
  – business planning (planning),
  – financial planning (performance),
  – staff management (people and processes),
  – marketing (service awareness), and
  – design layout (infrastructure)

\textsuperscript{20} Feletto E, et al. (2010) \textit{Building capacity to implement cognitive pharmaceutical services: Quantifying the needs of community pharmacies}. Res Soc Admin Pharm; 6(3); p163-173
Applying this in practice

• PSA has been running a small trial (n=15 pharmacies) to support pharmacies to adopt a changed model of pharmacy practice in which:
  – the pharmacist is repositioned as a primary healthcare provider; and
  – the pharmacy is positioned as a healthcare destination

• Not just about just being able to deliver and claim for the 5th Community Pharmacy Agreement programs

• Not a “one size fits all” solution for all pharmacies

• Focus is on setting the framework for and achieving sustainable delivery of consumer-focused health services

• Underpinned by evidence on change
Foundations for change process

Visit 1
- Creating the environment and infrastructure for change

Visit 2
- Translating the vision into action

Visit 3
- Monitoring progress
- Refinement of goals and actions

Visit 4
- Reviewing pharmacy changes and outcomes

Health Destination Pharmacy project kick off

1 day workshop
Program areas

- Working smarter
- Community engagement
- Collaborative care
- Professional services

Our team
Our community
Our networks
Our services
“This exercise [participating in the Trial] has made it clear to me what it is I want to be doing, and what I do well. Talking to customers and engaging and educating them on quality use of medicines/disease state management is what makes me tick.”

Pharmacist, #23

“I am really enjoying my practice in pharmacy more than ever.”

Pharmacist, #14
## Initial financial results

*Financial analysis undertaken by Bruce Annabel, JR Pharmacy Services*

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>Customer and script volumes</strong></td>
<td></td>
</tr>
<tr>
<td>Script no. growth</td>
<td>3.77% despite official Government data indicating PBS script volumes fell during this period</td>
</tr>
<tr>
<td>Customer no. growth</td>
<td>1.27%, continuing a similar trend from June quarter.</td>
</tr>
<tr>
<td><strong>Sales</strong></td>
<td></td>
</tr>
<tr>
<td>Av health sale $/Rx</td>
<td>Up from $10.14 to $13.93 compared to Q3 2011</td>
</tr>
<tr>
<td>Av total retail sale/customer</td>
<td>Up from $16.17 in same quarter 2011, to $19.65</td>
</tr>
<tr>
<td>Total sales</td>
<td>Up strongly for the quarter by $145,011 mostly contributed by health sales increasing by almost $90,000.</td>
</tr>
<tr>
<td><strong>Gross profitability</strong></td>
<td></td>
</tr>
<tr>
<td>Dispensary GP$/Rx</td>
<td>$14.46 is down compared with prior year likely due to external factors such as Government changes and banner pricing strategy</td>
</tr>
<tr>
<td>Total GP$</td>
<td>Increased over 12.37% compared with 7.26% up in the June quarter. Health sales contributed almost $54,000 of the $58,000 total store increase.</td>
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<tr>
<td>Total health GP%</td>
<td>Increased from 39.88% to 45.96%, despite total GP% remaining reasonably steady compared with last year, previous quarter and year ended June 2012</td>
</tr>
<tr>
<td>Total retail GP%</td>
<td>Reasonably steady compared with last year, previous quarter and year ended June 2012</td>
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<tr>
<td><strong>Staff</strong></td>
<td></td>
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<tr>
<td>Wages/sales %</td>
<td>Wages reduced despite strong growth in sales so wages/sales % fell to 11.52% from 13.54% last year</td>
</tr>
<tr>
<td>Wages/GP$</td>
<td>Improved significantly from 39.12% to 32.76% indicating a major productivity improvement</td>
</tr>
<tr>
<td>GMROL</td>
<td>The ultimate staff productivity metric ...improved 19.29% from last year.</td>
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Other participant highlights so far

- Pharmacy 33 held a diabetes awareness day that involved extensive collaboration with allied health and local GPs.
  - Positive feedback from health professionals involved
  - The pharmacy was full on the day and sold 40 diabetes blood glucose meters
- Pharmacy 35, after assessing local needs, set up a Baby Health Clinic in conjunction with a nurse and the local GP
- Pharmacy 12 has built consult rooms for professional services and has rostered a pharmacist “onto the floor” every day
Key messages

• Early results and should be interpreted with caution
• Insights so far include
  – Cultural change requires significant focus – workflow changes often needed to allow pharmacists to be available for greater engagement
  – Allocating time for planning is critical
  – Setting shared goals and targets for professional services ensures greater chance of success
  – Promoting health image to the community is important for consumer and health professional perception.
  – Owner engagement and whole of team approach is critical
Key messages (2)

• Greater engagement by having the pharmacist available “on the floor” appears to be yielding results in health sales and GP$. Longer term we expect this to be reflected in customer and script numbers.

• Regardless of skills or motivation, help is often needed to achieve sustainable changes in practice

• Understanding and addressing barriers is essential
Key messages (3)

- Regular monitoring of progress required
- Consider incentives for facilitating change (KPI’s)
- Working with a mentor/coach is a key to achieving goals
- ‘Professional Practice Pharmacist’ career path
In Australia today

• Drivers of innovation/change:
  – Current and future viability concerns due to competitive pressures and Government reforms are pushing pharmacies to search for other opportunities
  – Current health reform agenda in primary care is supportive a shift to more patient-focused services
  – There is increasing evidence of positive outcomes - including financial - for pharmacies moving away from the status quo
The Community Pharmacy Barometer™

• A biannual measure of community pharmacy confidence which aims to: “provide the profession and key stakeholders with independent qualitative and quantitative research on the perceptions, attitudes, knowledge, experiences and behaviours of community pharmacists as they relate to the future professional practice and business of community pharmacy.”

• The first report (April 2012) showed an overwhelming majority of pharmacists see service orientation as the key opportunity.

• The second report (Oct 2012) documented a strong trend to service provision by community pharmacy:
  – 81% of pharmacists surveyed were currently offering or have offered 5CPA services
  – 30% reported that they were extremely likely to adopt services created by pharmaceutical companies.

http://www.pharmacy.uts.edu.au/industry/Barometer.html

We need to move away from price and head towards service, especially fee for service where we stop being dependent on the government for revenue. This will also make the industry more professional and less retail orientated”
Funding models are important

• Implementation scientists suggest that a four-point approach to funding be developed to support implementation of evidence-based programs, including\textsuperscript{22}:

1. Start-up costs (e.g. Equipment, infrastructure)
2. Purveyor support (e.g. forums, assessments, organisational change)
3. Funding for the service itself
4. Ongoing support of infrastructure for sustainability

Research findings\textsuperscript{23-24}

- Policy makers in pharmacy have a key role in supporting community pharmacies to implement services, which must be part of a greater strategic plan or change management strategy.
- Each service must have an implementation strategy that includes individual and organisational level facilitators.
- Community pharmacies need targeted, on-site support to assist their preparation for change and to build the capacity to integrate new professional programs over time.

These things cost money!

1. Start-up costs (e.g. Equipment, infrastructure)
2. Purveyor support (e.g. forums, assessments, organisational change)
3. Funding for the service itself
4. Ongoing support of infrastructure for sustainability

Why we can’t ignore critical implementation factors

• There is evidence to show that when a program or project requires people to change how they do their jobs, if the change process is not managed it will impact:

  **Speed of adoption**
  • How quickly pharmacies will get “up and running” with the program
  • Not just registration, but actual delivery of services

  **Ultimate utilisation**
  • How many pharmacies will ultimately participate in the program
  • And therefore how many consumers receive the service

  **Proficiency**
  • How effective pharmacies will be at working in the new way and therefore being able to sustain the service
  • Also ultimately impacting how many consumers receive the service
Payments for clinical interventions go begging

KIRRILLY BURTON

Despite a 200 per cent increase in the number of recorded clinical interventions under the Fifth Community Pharmacy Agreement, Pharmacy Practice Incentives (PPIs), pharmacies are letting money go begging by failing to claim for them.

As reported in the Pharmacy Guild of Australia’s latest Forefront newsletter, the number of recorded clinical interventions increased from 230,857 in the six months ending January, 2012, to 737,582 in the 12 months ending in June.

Andrew Matthews, national director of Quality Assurance and Standards (QAS) at the Guild, said as of 1 June 2012, 85 per cent of 4723 participating community pharmacies had registered and were eligible for all six PPI priority areas.

However, he said only 70 per cent of pharmacies registered to provide dose administration aids and clinical interventions had claimed for their share of the money provided under the Agreement.

“You are just letting money go begging there, so make sure you claim,” he urged delegates while speaking at the Australian College of Pharmacy conference in Brisbane recently.

Since July 2011, GuildCare pharmacies have completed over 1.5 million cases, with over 60 per cent of these classified as clinical interventions.

This month, Dr Michael Ortiz presented 12 months of results at the Health Informatics Society of Australia conference.

GuildCare pharmacies have recorded over 900,000 clinical interventions, with 97 per cent of these accounting for clinical intervention categories comprising drug selection, overdose and underdose, compliance, undertreated and toxicity.

Compliance was the leading category, accounting for 51.10 per cent (377,255) of all clinical interventions in the 12 month period ending in June.

Drug selection including changing patient’s medication, means of administration and/or medication-taking behaviour represented 18.3 per cent (135,291) clinical interventions during the same period.

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Funding model

• As part of the primary care reform process, there is discussion about a shift to performance or outcomes-based funding models
• Currently most pharmacy services are not funded in this way, and are largely required to provide data to funders on:
  – the effectiveness of the interventions (at an individual level)
  – the adoption rate (at a setting level)
Pharmacy exceeds Government's expectations

NICK O’DONOGHUE

Pharmacists are exceeding the Federal Government’s expectations, with the profession surpassing targets for participation in Pharmacy Practice Incentive (PPI) programs and medication management services provided.

Figures from the Department of Health and Ageing 2011-12 annual report revealed pharmacists had carried out 74,376 Home Medicines Reviews (HMRs), 20 per cent more than the 61,500 the Government had targeted for the year.

Around 75 per cent of community pharmacies were participating in the PPI programs, compared with the Government’s target of having 40 per cent signed up.

While the figures published in the annual report are impressive, a Pharmacy Guild of Australia spokesperson told Pharmacy News, that the number of pharmacies signed up to the PPIs has continued to increase since the start of the 2012-13 financial year.

“The annual report paints a very satisfactory picture, as programs rollout and funds are fully and appropriately expended,” the spokesperson said.

“In fact, progress is even better than depicted in some case. For example, the uptake of PPIs, cited at above 75 per cent of pharmacies in the report, is now around 90 per cent.”

The report itself states that while the number of medication management services provided under the Fifth Community Pharmacy Agreement was measured on HMRs, it was “worth noting that during the year 125,172 Residential Medication Management Reviews were undertaken”.

Pharmacies classified as being in rural and remote areas also surpassed expectations for the uptake of the Rural Pharmacy Maintenance Allowance Program, with 89 per cent of the 955 stores accessing the program, compared with the Government’s target of 65 per cent.

Meanwhile, the report revealed the Department had made savings of $112.5 million through Expanded and Accelerated Price Disclosure between 1 April and 30 June, more than $50 million more than its target.
Outcomes or performance-based funding

• How would some pharmacy services measure up if asked to report on factors such as:
  – program reach (to individuals)
  – maintenance (both individual and setting)?
• Would the payers be getting value for money?

“Half-hearted or ill-advised attempts to implement well-defined practices and programs are a waste of time and resources and may further frustrate and disillusion human service consumers, providers, and system managers”25

Where to from here?

• Emerging research applying an implementation science approach
• Defining the range of professional pharmacy services within a model of pharmacy service provision\(^{26}\)
• Developing a professional services index to quantify rate and depth of implementation and service provision\(^{27}\)
• Ultimately allowing community pharmacy to be differentiated and recognised as providers of professional pharmacy services

Conclusion

• One of our great successes has been achieving funding for a range of services delivered by pharmacists.
• As funders around the world increasingly shift towards outcomes or performance-based remuneration models, we can no longer accept poor program implementation or future funding will be at risk.
• We all have responsibility for addressing this; there are implications for researchers, policy makers and practitioners.
Implications

Researchers
Dissemination and implementation research must be prioritised in order to bridge the implementation gap.

Practitioners
Must be supported to make changes to their businesses that facilitate sustainable delivery of services.

Policy makers
Remuneration and implementation models must reflect the evidence about how successful change occurs.

“Individuals cannot benefit from interventions they do not experience”