Pharmaceutical Society of Australia

Submission

Joint Select Committee on Preventative Health

Feb
2015

Purpose

The PSA makes this submission to the Joint Select Committee on Preventative Health and in this submission identifies the roles that pharmacists and pharmacies may play in addressing some of the issues that we have in dealing with preventative health issues in Tasmania.

We acknowledge that implementation of preventative health goals need to be initiated within the changing Tasmanian health care setting. PSA is also providing a submission to the development of the Health White paper outlining other ways pharmacists can contribute to improving health of all Tasmanians.

About PSA

PSA is the peak national professional pharmacy organisation representing Australia's pharmacists working in all sectors and locations. PSA's core functions include: providing high quality continuing professional development, education and practice support to pharmacists; developing and advocating standards and guidelines to inform and enhance pharmacists' practice; and representing pharmacists' role as frontline health professionals. Over 60% of pharmacists in Tasmania are members of the PSA, with nearly 15,000 members nationally.

Quality use of medicines (QUM) policy

Pharmacy practice in Australia is firmly underpinned by Australia's policy on Quality Use of Medicines (QUM).[1] Briefly, the elements of the policy are to:

a. Select management options wisely by: considering the place of medicines in treating illness and maintaining health; and recognising that non-drug therapies may be the best option for the management of many disorders.

b. Choose suitable medicines, if a medicine is considered necessary, so that the best available option is selected by taking into account: the individual; the clinical condition; risks and benefits; dosage and length of treatment; any co-existing

[1] Australian Government Department of Health and Ageing. The national strategy for quality use of medicines: Executive summary. Canberra: Commonwealth of Australia, 2002.

conditions; other therapies; monitoring considerations; and costs for the individual, the community and the health system as a whole.

c. Use medicines safely and effectively to achieve the best possible results by: monitoring outcomes; minimising misuse, over-use and under-use; and improving people's ability to solve problems related to medication, such as adverse effects or managing multiple medicines.

In the context of this policy, the role of pharmacists relates not only to medicines use and management but also in providing advice on non-drug management where appropriate, providing support and information, and working across the whole spectrum of health from maintenance of good health to management of ill health.

Accessibility to trained health professionals

Pharmacists are one of the most accessible and trusted health professionals.[2] While their primary expertise revolves around medication management issues, pharmacists also have training and good grounding in broader health and scientific issues. Pharmacists are ideally placed to offer healthy lifestyle advice to consumers, not only when dispensing their prescriptions but when dealing with requests for non-prescription products or treatment of minor ailments.

The most recent figures[3] available indicate there are 27,560 pharmacists in Australia of which 678 are practicing in Tasmania. The gender ratio is 6:4 (female to male). Unlike professions such as medicine or nursing which have a generally even distribution of age of practitioners, the pharmacy profession is moderately skewed towards a higher proportion of practitioners in the younger age groups.

In Australia there is a well-established network of community pharmacies to support equitable access for Australians to medicines, health information and professional advice, in most cases without the need to make an appointment. It has been quoted that every person in Australia visits a pharmacy on average 14 times a year. This equates to several hundred million intervention opportunities per year. At these visits, pharmacists and their staff regularly perform brief interventions which can involve general health advice but also more in-depth discussions on preventative health topics.[4] In Tasmania the wide geographic distribution of the 154 community pharmacies[5] means most Tasmanians have access to a local pharmacist often over extended trading hours.

PSA contends that the committee must not under estimate the significant additional opportunity that resides in the existing community pharmacy network and infrastructure and should utilise the expertise of pharmacists in preventative health areas and chronic disease management widely and more effectively. While this is not a new role for pharmacists, as

---

[2] Roy Morgan. Images of professions [survey]. 8 April 2008.

[3] Pharmacy Board of Australia. Pharmacy registrant data: December 2013. 2014; Jan. At: *www.pharmacyboard.gov.au/documents/default.aspx?record=WD14%2f13040&dbid=AP&chksum=HXwmz%2fcrCwQqSZvZzP%2bOkA%3d%3d*

[4] See for example: *www.pharmacyhealthlink.org.uk*

[5] Tasmanian Pharmacy Authority complete list of registered pharmacies http://www.pharmacyauthority.tas.gov.au/uploads/Practice%20Address.pdf

shown later in this submission, at present these activities are undertaken in an ad hoc manner due to the absence of appropriate resourcing and effective coordination.

The contribution of pharmacists is not confined to one health sector or one population group. Pharmacists participate in the acute care sector and in the community, for the management of chronic conditions and treatment of minor ailments, and provide care for young and old.

The role of pharmacists is extremely diverse. Pharmacists are involved in population level education and awareness campaigns as well as targeted or tailored interventions for individuals. Pharmacists engage and interact with consumers about a wide spectrum of health care needs ranging from prevention, early detection and screening stages through to treatment and palliation. This is a core element of their undergraduate training and a current requirement of both the pharmacist competency standards[6] and the community pharmacy accreditation program known as QCPP[7].

PSA would suggest to the Select Committee that the community pharmacy sector is an excellent environment to host preventative health initiatives, as demonstrated both in Australia and internationally. The sector offers a cost effective channel for the dissemination of key public health messages as it combines local accessibility, immediate access to health professional advice, availability of therapeutic products, and high quality professional service.

Given the right resources and support, PSA believes one of the strengths of pharmacists is that they are a trusted and effective resource for disseminating community wide messages. Consumers are receptive to health messages issued through pharmacies, and the visibility and accessibility of pharmacies often encourage consumers to obtain more information. Pharmacists are further able to tailor those messages for individual consumers who seek follow-up advice.

Harnessing the skills of pharmacists, and the ancillary staff within their own communities to champion preventive health initiatives large and small will benefit the entire community especially those that are the most disadvantaged. Pharmacists are located within many of our most disadvantage communities offering a range of programs that support populations adversely affected by the social determinants of health. These include seemingly straight forward programs such as prepacking dose administration aids (DAAs) and home delivery. But these two usually financially loss making activities are vital for consumers with limited transport in our poorly serviced outer suburbs and rural communities. DDAs assist those consumers with complex medications regimes needed to manage multiple chronic conditions. Pharmacists provide these services because we care about the community and its members.

However, community pharmacy is experiencing significant financial pressure and resourcing pressure from a range of factors which means new programs cannot be cross-subsidised from existing earnings or add to the existing workload without appropriate resourcing. Notwithstanding this PSA also believes the extensive network of community pharmacies can be more effectively utilised to deliver health initiatives to all Tasmanians. PSA believes community pharmacy is an ideal vehicle to help address the health care needs of rural Tasmanians at an earlier (less acute) stage.

---

[6] National Competency Standards http://www.psa.org.au/supporting-practice/national-competency-standards

[7] QCPP is a quality assurance program for community pharmacy, and provides support and guidance on professional health services and pharmacy business operations. *http://www.qcpp.com/about-qcpp/what-is-qcpp*

As noted in the 2013 Thriving Tasmania Report from the Ministerial Health and Wellbeing Advisory Council "*Prevention in healthcare is important, but so is the action taken to influence health and healthy choices, building and strengthening capacity and promoting wellbeing*." Pharmacists are uniquely placed to provide support to Tasmanians regardless of their socio-economic status in building that capacity.

The well-established network of over 150 community pharmacies, six public and private sector hospital pharmacies and over 670 pharmacists work to support equitable access for Tasmanians to medicines, health information and professional advice, in most cases without the need to make an appointment. Pharmacists are often the first health professional that a consumer interacts with to discuss health issues.

This makes pharmacists the ideal health professional to support any initiative designed to

- Continue to reduce smoking rates for Tasmanians
- Improve and maintain physical activity in all age groups including being a referral point
- Decrease obesity including focusing on those living with or at risk of a chronic disease
- Improve outcomes for Tasmanians living with or at risk of cardiovascular disease and diabetes
- Improve health literacy and increase resilience within the Tasmanian community

Collaborative partnerships

PSA has worked closely with health sector stakeholders, including local government, private business, the community sector, Tasmanian Medicare Local, the University of Tasmania and health providers, and are keen to continue to play our role in developing a clear direction for Tasmania's preventive health strategy.

Tasmania's pharmacy community is unique in that the majority of pharmacists are graduates of the University of Tasmania and many share an ongoing relationship with the University, as preceptors for students or in community based research projects. Pharmacists are accustomed to being involved in evaluation of health initiatives or research projects. Community and hospital based pharmacists often assist in the recruitment of participants to health promotion and prevention programs in a research setting.

PSA has been involved in a number of state-wide integrated health promotions and chronic disease management initiatives including

- Tobacco Coalition, QUIT Campaign 2009 which resulted in over 300 pharmacists and pharmacy assistants (representing almost 60% of the Tasmanian pharmacies) trained in smoking cessation. This demonstrated the willingness of pharmacists to be involved in health care messages to their communities.

- With the financial support of Tasmania Medicare Local almost 50 pharmacists have undertaking mental health first aid training in the last 12 months.

Pharmacists' skills in QUM can provide benefits and synergies in a collaborative team environment. This is observed where pharmacists have strong professional partnerships and active engagement with other health professionals. The partnership approach also supports

pharmacists liaising closely with general practitioners and referring in a timely and sensitive manner.

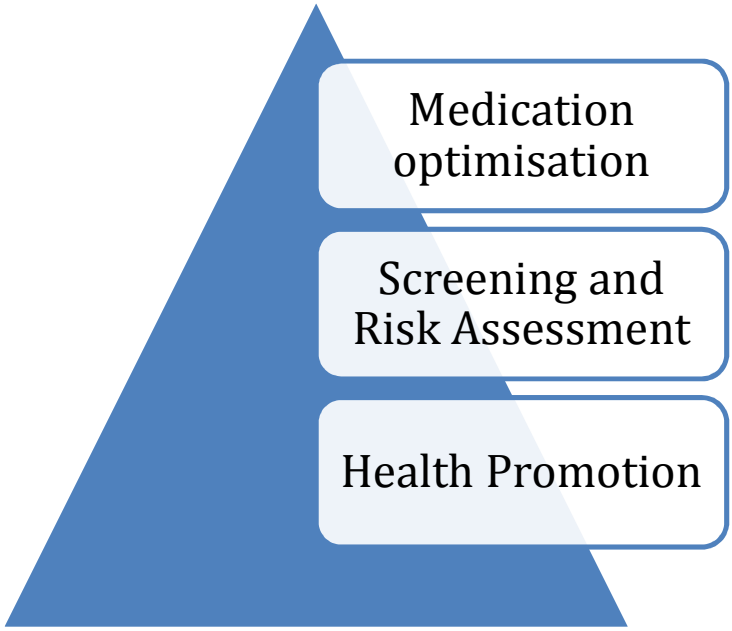
Pharmacists currently work in partnership with other health professionals in various settings including hospital wards or clinics, residential aged care facilities and in the community. Community pharmacists have strong professional links with other health practitioners within the local primary health care team. In particular, collaborative partnerships between community pharmacists and local general practitioners are fundamental to the provision of timely and seamless primary health care.

Some pharmacists have also been working in general practices with great success. This arrangement creates additional benefits in that pharmacists can provide information and education on medicines and medication management to prescribers and practice nurses.

However, formal recognition and funding of the contribution of pharmacists to such team arrangements are sadly lacking in Australia. Hence, PSA has been advocating for formal recognition of collaborative arrangements where we believe pharmacists' expertise would be used most effectively and could help create synergies in health care service delivery to the consumer. PSA's support for better integration of pharmacists in the health care team has been strongly advocated through many different practice areas but particularly in relation to mental health care.

Preventative health programs

The PSA believes that pharmacists can be involved at three levels when it comes to preventative health activities as outlined in the figure below.



Each of these areas builds on the expertise and accessibility of pharmacists. Health promotion activities may be delivered to large numbers, whilst medication optimisation may be a specialised service available.

Smoking cessation is an area where pharmacists are making a contribution in assisting consumers to adopt and maintain a healthier lifestyle thereby lessening the burden on existing chronic conditions and potentially reducing risks for future adverse health events.

The following are examples of preventative health areas that PSA believes the pharmacy profession has the capacity to contribute to and therefore warrant further consideration. Some are areas in which pharmacists in Australia and overseas already deliver services through pilot programs or fully funded services.

a. Conduct screening activities for National Health Priority Areas (e.g. osteoporosis screening) and other areas (e.g. the Bowelscan Program) to promote early identification and referral and where appropriate initiate earlier and less costly treatment for people at risk. Some screening activities are already undertaken through community pharmacies but many are done in an ad hoc manner.

b. Improve health literacy. Pharmacists have a key place in improving the Tasmanian consumers understanding of and ability to negotiate the health system through improving health literacy. PSA has a range of consumer resources designed to de-mystify common aliments (Self Care) Pharmacists are ideally placed to deliver tailored medication adherence and health literacy programs.

c. Heart checks targeting particular age groups to identify people at risk of vascular disease such as the Know Your Numbers Campaign targeting blood pressure assessment.

d. Influenza vaccinations and other immunisation activities. Currently, Queensland, the Northern Territory, South Australia and Western Australia have given commitments to allow pharmacists to immunise in the coming year.

e. Cancer awareness, prevention and early detection through encouragement of regular self-checks, reducing risks (e.g. smoking cessation programs), possible interventions where a person is regularly purchasing an OTC medicine to treat early symptoms and appropriate referral.

f. Chronic disease self-management support. Most Tasmanians living with a chronic disease as stated earlier visit their pharmacist regulary for repeat medication prescriptions. This is an ideal opportunity to assist consumers self-manage their conditions through targeted support programs.

Previous Tasmanian initiatives

PSA has closely collaborated with the Tasmanian Government in a range of health initiatives and clinical committees including smoking cessation programs and our involvement in the Tobacco Coalition, Adult Palliative Care Formulary Reference, DORA Project Committee and Opioid Substitution Treatment (OST) Tasmanian Reference Group.

During the swine flu epidemic PSA assisted the Communicable Disease Prevention Unit (CDPU) by seeking community pharmacies in low vaccination update areas, identified by the Department of Health, to provide appropriate facilities for swine-flu vaccinations by nurse immunisers contracted by CDPU. Fourteen pharmacies were identified in rural and regional areas that had low rates of vaccination and over a 3 week period over 5,000 patients were vaccinated.

Examples from other jurisdictions: UK Healthy Living Pharmacy initiative

The Healthy Living Pharmacy (HLP) initiative commenced in 2009 with an initial investment by Portsmouth Primary Care Trust, with a goal for community pharmacies to become Healthy Living centres, promoting and supporting healthy living by offering healthy lifestyle advice and support on self-care and a range of pressing public health concerns.[16]

In the 5 years since, HLPs have been implemented across the UK, based on a framework aimed at achieving consistent delivery of a broad range of high quality public health services through community pharmacies to meet local need, improving the health and wellbeing of the local population and helping to reduce health inequalities. Interest in HLPs has been growing, not only in the UK, but around the world.

Services offered by HLPs include stop smoking, weight management, emergency hormonal contraception, chlamydia screening, advice on alcohol, inhaler technique, minor ailments and medicine use reviews.

HLPs must have a team that actively promotes health and wellbeing , proactively offers brief advice on a range of issues such as smoking, physical activity, sexual health, healthy eating, alcohol and harm reduction and signposts to relevant local and or/national support. HLP teams proactively engage with the local community, through outreach activity and other health and social care providers and professionals.

One of the key distinctions of an HLP is having a “health champion” on site, who is proactive in promoting health and wellbeing messages, signposts the public to appropriate services and enables and supports the team in demonstrating the ‘ethos’ of an HLP.

Funding

Community pharmacy and pharmacists are not currently directly funded to provide health prevention and promotion initiatives. For models similar to HLP adequate funding, upskilling and resourcing and resourcing would be required. Tasmania is ideally placed to establish local networks working in collaboration with general practice, other health providers, local government, community groups and other regional organisations. Pharmacies could form a hub for any number of initiatives or be an active referral point. As such PSA recommend consideration is given to funding a similar model in Tasmania.

Summary

The pharmacy profession and PSA are well placed to contribute in addressing issues associated with preventive healthcare. Pharmacists are accessible health practitioners who, by working within a collaborative framework, can assist Government to achieve fiscally sustainable, efficient and quality preventive healthcare initiatives for all Tasmanians.

The pharmacy profession must be an integral part of delivering cost effective solutions and preventative health interventions to the community. PSA firmly believes the profession can value-add considerably to the existing health care system by integrating pharmacists more widely in preventative health initiatives. In Tasmania, especially in rural and regional centres where health inequalities are greatest, tapping into the skills and accessibility of pharmacists,

within a collaborative framework, can assist the Tasmanian Government to achieve the laudable health goals of Tasmania the healthiest state by 2025.

Supporting Documentation

- Building upon pharmacists' practice in Australia; A vision for the profession, June 2014 *http://www.psa.org.au/download/policies/A-vision-for-the-profession.pdf*
- Mental health care project - A framework for pharmacists as partners in mental health care *http://www.psa.org.au/policies/mental-health-care-framework*
- PSA Federal Government 2015-2016 Budget Submission *http://www.psa.org.au/news/submission-to-2015-15-federal-budget*
- Practice Guidelines for Providing Immunisation Services http://www.psa.org.au/download/practice-guidelines/immunisation-guidelines.pdf

BUILDING UPON PHARMACISTS' PRACTICE IN AUSTRALIA

A VISION FOR THE PROFESSION

JUNE 2014

AACP
AUSTRALIAN ASSOCIATION OF CONSULTANT PHARMACY

Australian Pharmacy Council

GPS Inc. Council of Pharmacy Schools: Australia and New Zealand

NAPSA

Pharmaceutical Society of Australia

shpa

Professional Pharmacists Australia

the australian college of pharmacy

PDL

The Pharmacy Guild of Australia

Pharmacy Board of Australia

The statement endorses pharmacists as leading healthcare professionals in medication management, sets out the principles that underlie the focus, nature and quality of their practice and provides guidance for the advancement of their practice through integrated development of a range of key enabling domains.

DRAFTING GROUP

John Jackson
Chairperson, Pharmaceutical Society of Australia

Bill Kelly
Pharmacy Board of Australia

Andy Gilbert
Australian Pharmacy Council/ Invited member

Yvonne Allinson
The Society of Hospital Pharmacists of Australia

Debbie Rigby
Australian Association of Consultant Pharmacy/Invited member

John Low
Australian Pharmacy Council

Anthony Tassone
The Pharmacy Guild of Australia

Jeff Hughes
Council of Pharmacy Schools, Australia and New Zealand

Michael Nunan
Early career pharmacist

Helen Dowling
The Society of Hospital Pharmacists of Australia

Paul Mackey
Pharmaceutical Society of Australia secretariat

CONTACT

Queries about this document can be directed to the Chairperson of the Drafting Group care of:
Pharmaceutical Society of Australia
PO Box 42, Deakin West
ACT 2600

Design & typeset:
Rebecca Jones
Pharmaceutical Society of Australia

CONTENTS

BUILDING UPON PHARMACISTS' PRACTICE IN AUSTRALIA

The health system in Australia is undergoing major reform aimed at improving access, enhancing primary care, integrating services and making the health workforce more flexible and responsive. Being an integral part of the health system, these reforms will affect the future of pharmacists either directly or indirectly.[1]

A number of health professions are benefiting from reforms occurring in the health system by developing current roles and taking up new opportunities. Unless pharmacists act to identify and promote expanded roles, they will miss opportunities that arise and their future will be at the mercy of the vested interests of other groups within the health system.

Similar health system reforms have been implemented in a number of comparable countries including Canada,[2] England,[3–5] Scotland,[6] New Zealand[7] and the United States[8,9] and by regional organisations.[10–12] In each of these situations comprehensive reviews of the role of pharmacists and opportunities for them in the changing health systems have led to the preparation of vision statements.

Within an overarching philosophy of pharmaceutical care,[13] common concepts have emerged in these vision statements. First, pharmacists must make the transition from a transaction-based, commoditised dispensing model of practice to a relationship-based, consumer-centric and collaborative model. Second, they must be competent, quality-focussed, information-based and accountable for outcomes. Third, the statements identified the principal opportunities for pharmacists as medication management, primary care and public health activities.

In response to the broad-ranging changes within the Australian health system and within the pharmacy profession itself, a number of local organisations have in recent years undertaken projects aimed at reviewing the current and future practice of pharmacists. In 2010 the Pharmaceutical Society of Australia [PSA] released an *Issues Paper on the Future of Pharmacy in Australia*[14] which examined the current status of pharmacy and aimed to stimulate debate on the challenges and opportunities facing the profession. The paper presented issues raised by key opinion leaders of the profession but did not offer options as to how the issues could be addressed.

"PHARMACISTS MUST MAKE THE TRANSITION FROM A TRANSACTION-BASED, COMMODITISED DISPENSING MODEL OF PRACTICE TO A RELATIONSHIP-BASED, CONSUMER-CENTRIC AND COLLABORATIVE MODEL."

A number of other publications have contributed to a profession-wide discussion of the future of pharmacy, most notably *The Roadmap: a Strategic Direction for Community Pharmacy*[15] prepared by The Pharmacy Guild of Australia in 2010. This document was a 'status report' of Australian community pharmacy, as well as a practical plan for its future direction set out in 'Program Development Templates'.

Seeking an all-inclusive response to the issues facing the profession, PSA convened a meeting of peak pharmacy organisations in July 2010. The Future of Pharmacy Stakeholder Forum resolved that, in concert with the work of individual organisations and in keeping with progress in comparative countries, the profession would benefit from the development of an all-of-profession vision for pharmacists' practice in Australia.

A subsequent meeting of the Forum endorsed the development of a vision statement for pharmacists' practice and elected a Drafting Group which compiled drafting principles and a preferred structure with three interdependent components:

- **a CAPTION which is a short statement encapsulating the unique aspect, focus and objective of the practice of pharmacists;**
- **a set of 10 FUNCTIONS which pharmacists undertake in order to give effect to the vision;**
- **eight ENABLERS which are key areas or domains requiring integrated development to enable pharmacists to undertake the functions.**

The initial draft titled *A Vision for Pharmacists' Practice in Australia* was considered at a facilitated workshop and a revised and expanded draft was subsequently released to the profession for feedback. Input was sought via publication in professional journals, listing on a professional organisation website, presentations at conferences and reports in newsletters of professional organisations. Following the consultation, a final draft of the statement was presented to meetings of the Australian Pharmacy Liaison Forum [APLF] during 2012. The APLF confirmed support for the document, recommended it be titled *Building upon pharmacists' practice in Australia: A vision for the profession,* and recommended the statement be sent to its member organisations for provisional endorsement. Eleven pharmacy and pharmacists' organisations considered the final draft during 2013 and provided feedback leading to the unanimous endorsement of this document.

The purpose of the vision statement is to inform members of the profession, pharmacy organisations, consumers, governments, other health professions and stakeholders of the preferred future practice of pharmacists in Australia. The statement endorses pharmacists as leading healthcare professionals in medication management and related activities, describes the focus, nature and quality of their practice and provides guidance for the advancement of their practice through integrated development of a range of key enabling domains. Subsequent steps will include consultation with members of the profession and external stakeholders, establishment of a revision process and development of the capacity to implement the vision.

THE CAPTION

Pharmacists are healthcare professionals who are sought after and valued for their expertise in medicines in working with consumers and the healthcare team to deliver optimal health outcomes.

For optimal health outcomes, patients and healthcare professionals need access to high quality medicines and medication management processes and reliable information about medicines. Pharmacists use a defined model of care and apply their unique knowledge, skills and experience, with a focus on patient safety and health outcomes, to respond to consumers' and healthcare professionals pharmaceutical needs.

The pharmacists' model of care includes:

1. establishment of a professional relationship with the patient or carer;
2. a pharmaceutical needs assessment;
3. development of a care plan that recognises patient preferences;
4. implementation of that plan, including provision of appropriate medication where necessary, and patient follow-up to ensure desired outcomes are met.

As members of the healthcare team working in a range of diverse and evolving settings, pharmacists participate in a structured, coordinated, seamless and effective continuum of care.

As the third largest and one of the most trusted groups of health professionals in Australia, the public access pharmacists more frequently and more readily than any other healthcare providers.[15]

Those pharmacists practising in direct patient care are supported by pharmacists working in academia, research, industry, government and other areas.

This statement of pharmacists' practice incorporates 10 principal functions which pharmacists undertake when practising in direct patient care. The capacity of pharmacists to perform these functions is enhanced through ongoing profession-wide support and development of eight key domains, referred to as enablers.

FUNCTIONS

Australia's pharmacists realise the vision expressed in the caption by undertaking the following 10 functions. The first two functions describe pharmacists' commitment to their relationship with consumers and patients, the next five functions describe the nature of the professional services provided, and the final three functions describe the principles that underpin the quality of the services provided.

1 FUNCTION

BEING ACCESSIBLE

- Using the network of community pharmacies, departments within community healthcare clinics, private and public hospitals, aged care facilities and consulting practices to provide access to quality and reliable pharmacist services.
- Collaborating within multidisciplinary healthcare teams to provide medication management and other services related to their unique skills and knowledge.

2 FUNCTION

BEING CONSUMER-CENTRED

- Recognising consumers' rights under the Australian Charter of Health Care Rights and associated documents.[16]
- Working with individuals to incorporate their preferences, health beliefs and attitudes into the development of agreed care plans.
- Conducting their practice in a manner that provides consumers with privacy for the delivery of appropriate and effective patient care.
- Improving health literacy by assisting consumers to understand and use information relating to health and medicine issues, disease prevention and treatment, safety and accident prevention, first aid and emergencies and maintenance of good health.

3 FUNCTION PROVIDING MEDICATION MANAGEMENT ACTIVITIES

- Participating in decisions as to whether a medicine is required and if so, the appropriate choice for the individual.
- Accepting responsibility for safe and efficient dispensing and supply of medicines and ensuring appropriate verbal advice and written information for the safe and effective use of the medicine is available for both consumers and other healthcare professionals.
- Providing leadership and advice on all aspects of medication management in all sectors of the health system.
- Providing consultation services including clinical assessments relating to medicine use and medication management.
- Providing general, focussed and advanced levels of practice.
- Optimising adherence to medication therapy through monitoring, patient-centred communication and shared decision-making.

4 FUNCTION PROVIDING PRIMARY CARE

- Responding to direct inquiries and providing triage for local communities.
- Providing primary care and advice to promote and maintain good health and for minor ailments including information and support in relation to non-dispensed medicines and other therapies.
- Prescribing *Pharmacist Only* and *Pharmacy* medicines with appropriate treatment advice.
- Providing formal referrals to medical practitioners or other healthcare professionals for assessment and ongoing care.

5 FUNCTION PROVIDING PREVENTIVE & PUBLIC HEALTH SERVICES

- Facilitating public health campaigns in local communities including health promotion, pandemic response, immunisation and monitoring.
- Providing access to screening and health checks to detect risk factors.
- Providing healthy lifestyle advice and monitoring.
- Providing community education on medicines and health.

6 FUNCTION PROVIDING CHRONIC DISEASE MANAGEMENT

- Participating in team-based care of patients through agreed medication management or care plans.
- Assisting to optimise outcomes from medicines and care plans.
- Undertaking prescribing and authorising continued supplies of medicines as part of care planning in collaboration with the consumer and medical practitioner.
- Facilitating continuance of relevant medicines with referral to a medical practitioner for re-assessment.

7 FUNCTION PROVIDING CONTINUITY OF CARE ACTIVITIES

- In conjunction with the consumer and their medical practitioner(s), collation of a medication history, completion of medication reconciliation and preparation of a current medication list on all occasions of transfer between episodes of care.
- Undertaking appropriate handover procedures when a patient moves to a new area of care or to the next care giver.
- Facilitating care by undertaking prescribing activities in collaboration with the healthcare team.
- Educating patients, carers and other members of the care team to ensure that they have the appropriate knowledge and skills to achieve the best possible outcomes from the use of the medicines.
- Acting as an advocate for the consumer to other team members regarding medication management through episodes of care within the health system.

8 FUNCTION

PROMOTING EVIDENCE-GUIDED PRACTICE & QUALITY USE OF MEDICINES

- Providing evidence-based advice about medicines to consumers and other healthcare professionals.
- Contributing towards medicine protocol development and medicines education within the healthcare team.
- Facilitating access to advanced medicines information resources, as required.
- Working with governments, industry, academia and other agencies to support and promote quality use of medicines.
- Practising in accordance with professional standards and guidelines.

9 FUNCTION

PROMOTING INNOVATION & RESEARCH

- Participating in the design, conduct and analysis of research into medicines, medicines use, health and professional practice and enabling information, communication and automation technologies.
- Providing leadership and mentoring, serving as a positive role model and promoting excellence and professionalism in research.
- Identifying and embracing new opportunities for professional pharmacist services that aim to improve health outcomes for consumers.

10 FUNCTION

PROMOTING MEDICATION SAFETY & QUALITY ACTIVITIES

- Advising, supporting and taking responsibility for safe medicine distribution and administration practices.
- Undertaking risk management and quality activities including audit and drug use evaluation as part of the health care team.
- Participating in practice-based research activities.

THE RELATIONSHIP OF THE FUNCTIONS AND THE COMPETENCY STANDARDS FOR PHARMACISTS' PRACTICE

The 10 functions should be considered in conjunction with the National Competency Standards Framework for Pharmacists in Australia 2010[17] which describes the skills, attitudes, values and beliefs that together enable a pharmacist to practice effectively, and the Advanced Pharmacy Practice Framework for Australia 2012[18] which aims to advance the capabilities of pharmacists, recognise excellence and create opportunities for future change.

ENABLERS

Australia's pharmacists practice in a well-resourced and accessible network of community and hospital pharmacies, aged care facilities and in multidisciplinary team settings. The capacity of pharmacists to strengthen and broaden current roles and pursue new opportunities aligned with the 10 functions will be dependent on the sustained development of the following enablers.

1 ENABLER

OPPORTUNITIES FOR PRACTICE

Pharmacists' current professional practice based on a defined model of care applied in medication supply and medication management services will be augmented with both focussed and advanced levels of practice. Additional opportunities for practice will be developed incorporating innovative patient-centred roles in which pharmacists will accept responsibility for delivery of outcome-focussed services, with enhanced levels of collaboration with other healthcare professionals.

2 ENABLER

VIABILITY & SUSTAINABILITY

Pharmacists will recognise both the opportunities and limitations that exist within the health system and be responsive to the financial constraints and other imperatives of governments and other funding agencies. Funding will be increasingly linked to outcomes associated with integrated models of care and will be derived from a range of government, private and community sector sources. Within this framework the ongoing contribution by pharmacists to improve health outcomes will be achieved by the application of the unique knowledge and skills that are the basis of their practice; assessment of patients' health care needs, appropriate referrals, participating in decisions about patients' needs for medicines and, if needed, providing the medicines, medication management, consultation and other innovative services within sustainable, adequately remunerated, appropriately managed and marketed practice models.

3 ENABLER

EDUCATION & TRAINING

Pharmacists' contribution to improved health outcomes for patients will be achieved through competency-based undergraduate and postgraduate education, a commitment to lifelong learning including credentialing for advanced practitioners, practice-based training and comprehensive continuing professional development, plus appropriately trained support staff. Their practice will include delivery of educational messages targeted to the community, other healthcare professionals, government and other funding agencies.

4 ENABLER

WORKFORCE

Utilising its existing and inherent skills and through continual development, the pharmacist workforce will maintain the capacity, capability and flexibility to function within a healthcare system which will progressively become more patient-centred and team oriented. The workforce will need to consist of a diverse range of practitioners from generalists to advanced practitioners, from educationalists to scientists. Recognition of advanced level practitioners will be an essential driver to pharmacists' ability to maintain and grow their role in the healthcare team.

5 ENABLER

LEGISLATION & POLICY

Regulation and policy must facilitate rather than hinder the advancement of pharmacists' practice within a framework of appropriate public safety. Access to, and use of, relevant and timely standards of practice, guidelines and framework documents and national harmonisation of medicines regulation and regulation of the profession, will facilitate quality and efficiency in pharmacists' practice.

6 ENABLER

INFORMATION & TECHNOLOGY

Access to, and use of, accurate, secure, standardised and integrated electronic information systems including data management, electronic communication networks, personal electronic health records, patient monitoring, e-prescribing, telehealth systems, remote care networks and automation will enable enhanced quality and efficiency of individual pharmacist's practice, facilitate a profession-wide approach to patient care and link pharmacists' practice within the profession and with other health professionals.

7 ENABLER

LEADERSHIP & PARTNERSHIPS

All pharmacists will share a sense of responsibility to lead in medication management activities, medication safety and quality services through continuing personal and professional development, empowering the leadership potential of colleagues, consulting and engaging widely, building and maintaining relationships, working within teams and encouraging contribution.

8 ENABLER

CULTURE & PROFESSIONALISM

A culture based on ethical values, attitudes and behaviours is necessary for effective practice as a pharmacist and to be a responsible health professional in the wider healthcare environment. Pharmacists will actively acquire and inculcate professional attitudes and behaviours within a culture of lifelong learning, in order to take on the responsibility to optimise patient well-being and to be patients' advocates.

DEVELOPMENT OF THE ENABLERS

To varying extents, each of the eight enablers is related to the other seven and their development will be interdependent, however they will all be driven principally by developments that arise in the first Enabler, *Opportunities for practice.* If a new opportunity for practice is to be successfully adopted it will need to be viable and sustainable, require an appropriately educated and trained workforce, emerge within a supporting legislative framework, be directed by appropriate policies, have access to the required information and technology, with leadership by practitioners working within ethical and professional partnerships.

DRAFTING PRINCIPLES & FUTURE STEPS

DRAFTING PRINCIPLES

- The Pharmaceutical Society of Australia initiated the meeting that resulted in this statement however the subsequent planning, drafting and consulting leading to the final document has been undertaken with input from all major pharmacy organisations on behalf of all pharmacists.
- The statement relates to the practice of pharmacists, not to the pharmacy profession or pharmacies. It is based upon the principle that pharmacists are health practitioners with unique knowledge and skills.
- It is not the purpose of the document to define or describe preferred roles for pharmacists. Rather the intention is to create a framework that supports pharmacists to build upon their current practice and further utilise their knowledge and skills in responding to community needs.
- Its purpose is to be an educational document for practitioners and pharmacy support staff, patients and consumers, regulators and health service planners, health professionals and other stakeholders.
- The statement is nationally consistent and not location specific. It applies in all settings in which pharmacists may practice.
- While the statement is applicable to all practising pharmacists, it will be directly applicable to those pharmacists working in patient care in primary, secondary and tertiary settings. It will be indirectly applicable to pharmacists practising in other settings such as academia, policy, regulation, research and pharmaceutical manufacturing in as much as the work of all pharmacists ultimately contributes to patient care.

FUTURE STEPS

- There has been repeated consultation with members and organisations within the profession during the development of the current statement and further consultation within the profession and with external stakeholders is proposed.
- Pharmacy organisations are encouraged to utilise the statement and the principles therein when preparing strategies, policies and programs.
- Academic institutions are encouraged to incorporate the principles of this statement in the undergraduate education of pharmacists.
- External stakeholders are invited to use this statement when considering engagement with pharmacists and the pharmacy profession.
- Comments can be submitted to the Chairperson of the Drafting Group, C/– PSA, PO Box 42, Deakin West, ACT 2600 or to john.jackson@psa.org.au.

CONTRIBUTORS

The Future of Pharmacy Stakeholder Forum

Eleven organisations nominated the listed individuals to attend the Future of Pharmacy Stakeholder Forum, convened by the Pharmaceutical Society of Australia in Melbourne on 23 July 2012.

Workshop

A facilitated workshop was conducted on 28 October 2010 to consider the draft vision statement, the draft work plan for remainder of project and the development of an implementation strategy. The following individuals attended the workshop:

Yvonne Allinson, Daniel Bowtell, Ashleigh Coome, Gabrielle Cooper, Janet Cooper (CPhA), John Coppock, Joe Demarte, Anne Develin, Bruce Elliot, Andy Gilbert, John Harvey, Libby Hotham, John Jackson, Shane Jackson, Grant Kardachi, Bill Kelly, Lyn LeBlanc, Shu Chuen Li, Alistair Lloyd, Geoff March, Timothy Mizzi, Joe Monteith, Lisa Nissen, Karen O'Leary, Warwick Plunkett, Toni Riley, Marie Ritchie, Dean Schulze, Sarah Sinclair, Anthony Tassone, Michael Tsui, Liesel Wett, Gilbert Yeates.

AUSTRALIAN ASSOCIATION OF CONSULTANT PHARMACY
Grant Martin
Debbie Rigby

AUSTRALIAN PHARMACY COUNCIL
John Low
Andrew Gilbert

COUNCIL OF PHARMACY SCHOOLS, AUST. & NEW ZEALAND
Nick Shaw
Greg Peterson

NATIONAL AUSTRALIAN PHARMACY STUDENTS ASSOCIATION
Ashleigh Coome
Sarah Sinclair

PHARMACEUTICAL SOCIETY OF AUSTRALIA
Warwick Plunkett
John Jackson

THE SOCIETY OF HOSPITAL PHARMACISTS OF AUSTRALIA
Karen O'Leary
Amber Roberts

PROFESSIONAL PHARMACISTS AUSTRALIA
Chris Walton
Geoff March

THE AUSTRALIAN COLLEGE OF PHARMACY
John Chapman
Jenny Bergin

PHARMACEUTICAL DEFENCE LIMITED
John Coppock
John Guy

THE PHARMACY GUILD OF AUSTRALIA
Dipak Sanghvi
Anthony Tassone

PHARMACY BOARD OF AUSTRALIA
Stephen Marty
Bill Kelly

EARLY CAREER PHARMACIST DELEGATE
Michael Nunan

REFERENCES

1. Council of Australian Governments. Heads of Agreement – National health reform. Canberra, Department of Health & Ageing; 13 February 2011
2. Blueprint for Pharmacy: the vision for pharmacy. Ottawa, Canadian Pharmacists Association; 2008
3. Pharmacy in England Building on strengths – delivering the future. London, Department of Health, HM Government; 2008
4. New models of pharmacy: what is emerging and what is possible. A review of the literature. London, The Royal Pharmaceutical Society; 2013
5. The Future of Community Pharmacy in England. London, A.T.Kearney; 2012
6. Prescription for Excellence, A Vision and Action Plan for the right pharmaceutical care through integrated partnerships and innovation. Edinburgh, The Scottish Government; 2013
7. Focus on the Future; Ten year vision for pharmacists in New Zealand. Wellington, Pharmacy Sector Action Group, Pharmaceutical Society of New Zealand; 2004
8. Roadmap to 2015: Preparing Competent Pharmacists and Pharmacy Faculty for the Future. Alexandria VA, American Association of Colleges of Pharmacy; 2006
9. Scope of Contemporary Pharmacy Practice: Roles, Responsibilities and Functions of Pharmacists and Pharmacy Technicians. Washington, Council on Credentialing in Pharmacy; 2009
10. Developing pharmacy practice. A focus on patient care. Handbook 2006. Geneva, World Health Organisation; 2006
11. European Community Pharmacy Blueprint. Brussels, Pharmaceutical Group of European Union; 2012
12. The FIP Community Pharmacy Section Vision 2020. Amsterdam, International Pharmaceutical Federation; 2012
13. Issues Paper on the Future of Pharmacy in Australia. Canberra, Pharmaceutical Society of Australia; 2010
14. The Roadmap, the Strategic Direction for Community Pharmacy. Canberra, Pharmacy Guild of Australia; 2010
15. The Menzies-Nous Australian Health Survey 2012. 23 Oct 2012. Available at: www.menzieshealthpolicy.edu.au/mn_survey/Menzies-NousAustralianHealthSurveyReport2012.pdf
16. The Australian Charter of Healthcare Rights available at http://www.safetyandquality.gov.au/national-priorities/charter-of-healthcare-rights/ and the Community Pharmacy Service Charter (a pharmacy adaptation of the Australian Charter) available at http://www.5cpa.com.au/initiatives-programs/the-charter
17. National Competency Standards Framework for Pharmacists in Australia 2010 available from http://www.psa.org.au/download/standards/competency-standards-complete.pdf
18. An Advanced Pharmacy Practice Framework for Australia 2012 available from http://advancedpharmacypractice.com.au/download/framework/advanced-pharmacy-practice-framework.pdf

BUILDING UPON PHARMACISTS' PRACTICE IN AUSTRALIA

A VISION FOR THE PROFESSION

PSA4366

Pharmaceutical Society of Australia

Mental health care project

A framework for pharmacists as partners in mental health care

FEBRUARY
2013

PSA Your voice.

Mental health care project

This mental health care framework for pharmacists has been developed as part of the Pharmaceutical Society of Australia's Mental Health Care Project. This is a PSA-supported initiative with no external funding.

The Framework project was led by the PSA in partnership with mental health consumers and carers, care coordinators, mental health policy and practice experts and nominees of the following organisations: Australian College of Mental Health Nurses, Australian General Practice Network, Australian Psychological Society, Mental Health Council of Australia, Pharmaceutical Society of Australia, Pharmacy Board of Australia, Royal Australian and New Zealand College of Psychiatrists, The Society of Hospital Pharmacists of Australia, and The Pharmacy Guild of Australia.

Contributors

The following groups, organisations and individuals have been involved in the development of this document. PSA is grateful to the individuals for providing expert advice and sharing their experiences and the organisations for supporting the participation of their nominees.

Expert Steering Committee

Julie Stokes	*Chair*
Monique Fielder	*Clinical Manager and Care Coordinator Representative*
Patrick Hardwick	*Mental Health Carer Representative*
Cindi Rees	*Mental Health Consumer Representative*
Alan Rosen	*Mental Health Professional Expert Member*
Jenny Fothergill	*Australian College of Mental Health Nurses*
Rashmi Sharma	*Australian General Practice Network*
Pam Connor	*Australian Psychological Society*
Melanie Cantwell Kate Judd	*Mental Health Council of Australia*
Danielle Filby	*Pharmaceutical Society of Australia*
Bill Kelly	*Pharmacy Board of Australia*
Anne Ellison	
Mark Oakley Browne	*Royal Australian and New Zealand College of Psychiatrists*
Mirco Kabat	
Anne Develin	*The Pharmacy Guild of Australia*
Diane Walters	*The Society of Hospital Pharmacists of Australia*

Project Team

Paul Mackey	*Project Manager*
Claire O'Reilly	*Consultant*
Jan Ridd	*Program Delivery Manager*
Kay Sorimachi	*Secretariat*

Queries

Any queries on this Framework or the project can be directed to the PSA:

Secretariat, PSA Mental Health Care Project
Pharmaceutical Society of Australia
PO Box 42
Deakin West ACT 2600

MHF@psa.org.au

Contents

Executive summary

In response to opportunities arising from the Australian Government's mental health reform agenda, the Pharmaceutical Society of Australia (PSA) has developed *A framework for pharmacists as partners in mental health care* (the 'Framework') in partnership with mental health consumers and carers, care coordinators, mental health policy and practice experts, pharmacists, general practitioners, psychiatrists, psychologists and mental health nurses.

This Framework:

- articulates the expertise of pharmacists and the roles they do and can fulfil as partners in mental health care; and
- is intended to be used as the basis for exploring future pharmacist roles as partners in mental health care to enhance mental health care service delivery to Australian consumers and carers.

This Framework will be used to engage with a variety of audiences including consumers, carers, mental health care organisations and health care practitioners to promote the role of the pharmacist as a partner in the delivery of mental health care.

While pharmacists recognise that medicines are not necessarily the primary or sole treatment option for mental illnesses, the 31.1 million mental health-related prescriptions in Australia in 2010-11 reflect that they are a significant modality of treatment. Of these, 86% of medicines were prescribed by general practitioners. These figures emphasise the need and opportunity for pharmacist involvement in mental health care. It is in this context that the Framework focuses on how pharmacists' skills and experience within their scope of safe and appropriate use of medicines can be applied to improve quality use of medicines for consumers with a mental illness.

Pharmacists have a strong primary health care role and, due to their accessibility, are often the first health professional contacted by a consumer with a health concern. Pharmacists are frequently consulted for advice on psychotropic medications and their accessibility and frequent contact with mental health consumers and carers means they are ideally placed to play a greater role in the management of mental illness or conditions.[1-3] Psychotropic medicines are frequently implicated as a cause of adverse drug events or drug-related problems and there is evidence of the benefits of pharmacists performing medication reviews within community mental health teams.[4]

Pharmacists deliver mental health care services from a range of health care settings. In the acute care setting, clinical pharmacists or 'specialised' mental health care pharmacists work closely with

"THIS FRAMEWORK AIMS TO PROVIDE EXAMPLES OF HOW PHARMACISTS' SKILLS AND EXPERTISE CAN BE UTILISED WITHIN THE CONTINUUM OF MENTAL HEALTH CARE"

other members of multidisciplinary teams. In the primary health care setting, many pharmacists perform a variety of roles related to mental health care although these tend not to be well defined or recognised. In the Framework pharmacists' roles have been divided into:

- **direct** services (e.g. medication adherence support, crisis intervention or medication review) which are grouped under or aligned broadly with four aims in mental health care service delivery by pharmacists:
  - health promotion
  - supporting early detection and intervention
  - minimising illness
  - maximising recovery; and
- **indirect** services (e.g. education, academic detailing or policy development).

Pharmacists may undertake a number of activities to support consumers and carers in the monitoring and treatment of mental illness. These roles may be to minimise the impact of mental illness or to maximise recovery in an episode of mental illness. This may involve providing advice and support to encourage medication adherence, medication supply services, reviewing medications, providing medicine information, supporting the management of physical co-morbidities or providing lifestyle support and advice.

This Framework aims to provide examples of how pharmacists' skills and expertise can be utilised within the continuum of mental health care irrespective of where the pharmacist is practising (e.g. primary health care, hospital or other settings). Further, the role of the pharmacist as a partner in mental health care is an evolving one and hence the roles described in the Framework represent both current and future roles within the entire continuum of mental illness.

In addition to articulating the contribution pharmacists make to the delivery of mental health care this Framework also identifies a number of barriers and enablers for pharmacists to perform these roles in an effective manner. Barriers have been grouped into two broad categories, pharmacists' attitudinal barriers and skills, and system-related barriers. The most fundamental barrier in the community pharmacy setting that has been identified is concern about privacy and confidentiality. Pharmacists and their staff need to be cognisant of the potential stigma that mental health consumers may experience and ensure the privacy of consumers and carers is respected at all times. The enablers are grouped into education and training (with the components of knowledge, skills, and attitudes and understanding) and those which improve integration into the mental health care team (covering practice models and approaches to care).

A framework for pharmacists as partners in mental health care

The Pharmaceutical Society of Australia (PSA) is the peak national professional pharmacy organisation representing Australia's pharmacists working in all sectors and locations. There are approximately 26,700 registered pharmacists (based on Pharmacy Board of Australia data released in September 2012).

PSA's core functions include: providing high quality continuing professional development, education and practice support to pharmacists; developing and advocating standards and guidelines to inform and enhance pharmacists' practice; and representing pharmacists' role as frontline health professionals.

Introduction

Pharmacists provide mental health care services from a range of health care settings. These may include (but are not limited to) community pharmacy, hospital pharmacy, within general practice clinics, and working through or within specialised community mental health care teams. The role of pharmacists in the acute care sector providing mental health care has, to date, generally been well recognised as clinical pharmacists or 'specialised' mental health pharmacists routinely deliver services through multidisciplinary teams.[a] However, the contribution of pharmacists to mental health care in the primary health care setting is not well understood by governments, consumers and other health practitioners and therefore roles have generally been more limited.

Responding to the opportunities currently available within the context of mental health and broader health reform in Australia, PSA has commissioned the development of *A framework for pharmacists as partners in mental health care (*the 'Framework'*)*. This Framework has been developed in consultation with an Expert Steering Committee comprising representatives from pharmacy and mental health organisations, the medical, nursing, psychology and psychiatry professions, and consumer and carer representatives.

Scope

This Framework:

- articulates the expertise of pharmacists and the roles they do and can fulfil as partners in mental health care; and
- is intended to be used as the basis for exploring future pharmacist roles as partners in mental health care to enhance mental health care service delivery to Australian consumers and carers.[b]

Each of the roles described in the Framework are not all necessarily expected to be performed by all pharmacists, however it can be used as a guiding document for pharmacists who are interested in further developing their role in mental health care.

The Framework sets out what is expected of pharmacists as partners in mental health care, irrespective of practice setting, current practice models or roles that pharmacists may not currently be performing but may do so in future. The focus of the Framework is on the role of the pharmacist as a medication expert and how they can contribute to the delivery of team based mental health care to improve health outcomes for mental health consumers.

The Framework aims to articulate how pharmacists can collaborate to help improve the delivery of mental health care services in a more timely manner. With this Framework we hope to

a. For example, see Standards of Practice for Mental Health Pharmacy produced by the Society of Hospital Pharmacists of Australia (SHPA) Committee of Specialty Practice in Mental Health Pharmacy (J Pharm Pract Res 2012; 42(2): 142–5).

b. In this document the terms 'consumer' and 'carer' are used. PSA recognises that other terminology may be used or preferred, for example, 'person', 'individual', 'people with a lived experience', 'people accessing mental health services', 'people with lived experience and their significant others' and 'people with a lived experience of mental health difficulties, their families and support people' (some of these terms are referred in the National Mental Health Commission's Paid Participation Policy (July 2012), available at: www.mentalhealthcommission.gov.au/media/23505/nmhc_paid_participation_policy.pdf)

raise the profile of the contribution pharmacists can make as part of the team in delivering mental health care by promoting synergies and efficiencies in the system and filling gaps utilising their expertise in medication management.

Capability statements for pharmacists

The Australian Pharmacy Council in 2009 developed a set of statements of professional capabilities detailing what is expected of pharmacists in the provision of mental health care. The capability statements are used to guide the mental health content of pharmacy programs at universities around Australia and New Zealand, and are used during the accreditation process of university courses and intern training programs.[5] The capability statements can also be used as a guide for pharmacists planning their continuing professional development in the area of mental health care.

The capability statements were based on the *Competency Standards for Pharmacists in Australia 2003*[6], and the publication is the first of its kind to comprehensively detail the expected capabilities of pharmacists in a specific disease state. PSA will be reviewing and revising the capability statements as part of its broader mental health care project. The revised capability statements will provide detail on the knowledge, skills and competencies required by pharmacists to perform the roles described in this Framework. Revision of the capability statements will be an important step to support the implementation of this Framework into everyday pharmacy practice.

Aims

The aims of this Framework are to:

- Develop an understanding of the pharmacists' role in mental health care within the pharmacy profession and the broader health system, focussing on pharmacists' core expertise in medication management.
- Articulate the roles (current and future) for pharmacists as partners in mental health care.
- Develop a common understanding of the ideal models of collaboration in mental health care delivery.

AUDIENCES

This Framework will be used to engage with a variety of audiences including consumers, carers, mental health care organisations and health care practitioners to promote the role of the pharmacist as a partner in the delivery of mental health care.

The purpose of engagement can be tailored to the audience, for example:

- advocating a greater role for pharmacists with policy makers;
- working with other health care professionals and organisations to develop multidisciplinary models of mental health care including pharmacists; or
- promoting to consumers, carers and the public about the role of pharmacists in the delivery of mental health care services.

Framework audience

The potential audiences of this Framework include but are not limited to:

Individuals

- Pharmacists, intern pharmacists, pharmacy students and pharmacy assistants
- Other health care professionals (including GPs and mental health nurses)
- Peer workers and community support workers
- Aboriginal health workers
- Mental health consumers and carers
- The general public

Organisations

- Government (particularly mental health directorates and commissions, alcohol and other drug areas and justice departments)
- Medicare Locals and Local Hospital Networks
- Public and private hospitals and mental health services
- Health care professional organisations
- Practitioner registration authorities and health professional accreditation councils
- Education providers
- Non-government organisations
- Multicultural sector organisations
- Community health centres
- Consumer and carer organisations

Background

"PHARMACISTS HAVE A STRONG PRIMARY HEALTH CARE ROLE AND, DUE TO THEIR ACCESSIBILITY, ARE OFTEN THE FIRST HEALTH PROFESSIONAL CONTACTED BY A CONSUMER WITH A HEALTH CONCERN"

Government mental health policy

Good mental health is recognised as a crucial aspect to good general health and hence the Australian Government has recognised mental health as a priority area for all levels of government since 1996. Mental health care in Australia is guided by the National Mental Health Strategy which was endorsed in 1992 as a framework to guide mental health reform. The strategy is a whole of government approach which aims to promote the mental health of Australians, prevent or reduce the impact of mental disorders and to assure the rights of people with a mental illness. The strategy is an overarching approach that includes the National Mental Health Policy (2008), the Fourth National Mental Health Plan (2009-2014) and the Council of Australian Governments National Action Plan on Mental Health (2006-2011).[7-9]

In December 2012 the Council of Australian Governments released *The Roadmap for National Mental Health Reform 2012-2022* which provides a pathway towards achieving the vision of an Australian society that values good mental health and wellbeing.

To date the skills and expertise of pharmacists in the area of mental health care have not been recognised in these policies and plans[c] highlighting a need to raise the profile of the potential contributions of pharmacists in providing care for mental health consumers and carers.

Pharmacists' role in primary health care

Pharmacists have a strong primary health care role and, due to their accessibility, are often the first health professional contacted by a consumer with a health concern. In this setting, available health information is often limited so that pharmacists are regularly required to elicit relevant clinical information before exercising careful professional judgement. The pharmacist will identify suitable management options and determine the most appropriate course of action. Commonly these interactions will result in a direct referral to a medical practitioner but may also involve the provision of information or treatments (including non-medicinal options) to manage the consumer's condition.

c. Relevant Australian Government documents are listed in the 'Resources' section (see p. 22).

"86% OF THESE WERE PRESCRIBED BY GPS RATHER THAN PSYCHIATRISTS, DEMONSTRATING THE KEY PRIMARY CARE ROLE REQUIRED IN THE MANAGEMENT OF MENTAL ILLNESS AND THE FREQUENT CONTACT CONSUMERS WITH A MENTAL ILLNESS AND THEIR CARERS HAVE WITH THEIR COMMUNITY PHARMACIST"

Mental health consumers and primary health care

General practitioners (GPs) are frequently the first point of contact for people with mental health concerns with more than 10% of GP encounters primarily being mental health related.[10] Medications are a significant modality of treatment for most mental illnesses and in 2010-11 there were 31.1 million mental health-related prescriptions in Australia, comprising 11% of all medicines subsidised under the Pharmaceutical Benefits Scheme.[11] Furthermore, 86% of these were prescribed by GPs rather than psychiatrists, demonstrating the key primary care role required in the management of mental illness and the frequent contact consumers with a mental illness and their carers have with their community pharmacist.[11] In addition to the primary care role of GPs and pharmacists, in 2010-11, 5.6 million Medicare Benefits Scheme-subsidised services were provided by psychiatrists, psychologists and other allied mental health professionals.[11]

Pharmacists are frequently consulted for advice on psychotropic medications and their accessibility and frequent contact with mental health consumers and carers means they are ideally placed to play a greater role in the management of mental illness or conditions.[1-3] Medication counselling provided by pharmacists improves adherence to antidepressant medications[12,13], and medication reviews conducted by pharmacists as part of the multidisciplinary mental health team may help identify and resolve psychotropic medication-related problems.[4]

While pharmacists are more likely to provide services to mental health consumers for high prevalent mental illnesses such as depression or anxiety disorders, pharmacists also play an important role in supporting consumers with less prevalent mental illnesses such as schizophrenia.

Community pharmacy practice research

There has been significant investment in research investigating the benefits of including pharmacists as partners in the mental health care team. As part of the Fourth Community Pharmacy Agreement Research and Development (R&D) program a project was commissioned to explore the scope for community pharmacies to provide increased levels of support for consumers with mild to moderate mental illnesses.[14] This project identified the need for in-depth training of pharmacy assistants and pharmacists in mental health, with a particular focus on mental health first aid skills and cognitive behaviour and the impact this has on pharmacists' interactions with consumers and carers.
The research findings concluded there was scope to increase the level of support provided to mental health consumers and carers through community pharmacy and a further project, *The Mental Health and Community Pharmacy Project*, has been commissioned as part of the Fifth Community Pharmacy Agreement (5CPA) R&D program to investigate this.[15]

A recent systematic review of the international literature on "Community pharmacy services to optimise the use of medications for mental illness" found that pharmacists can play an important role in the management of mental illness.[16] This review highlighted the range of services (and potential services) which can be provided by pharmacists across a number of different sectors including community pharmacy, medical centres and health maintenance organisations, community mental health centres, outpatient clinics and residential aged care facilities.

Fifth Community Pharmacy Agreement

As part of the Pharmacy Practice Incentives (PPI) program under the 5CPA, a series of primary health services have been grouped into a PPI priority area called Primary Health Care. There are five elements under this priority area: diabetes, respiratory disease, cardiovascular disease, mental health conditions and health promotion. While research has demonstrated the effectiveness of pharmacy screening and risk assessment and/or disease state management services in three of the disease state areas, more data and information on pharmacists performing these roles in the mental health field is needed. This 5CPA PPI program presents a significant opportunity for the community pharmacy sector to demonstrate its capability in providing services for consumers with a mental illness.

Pharmacist roles as partners in mental health care

Pharmacists deliver mental health care services from a range of health care settings. In the acute care setting, clinical pharmacists or 'specialised' mental health care pharmacists work closely with other members of multidisciplinary teams. In the primary health care setting, many pharmacists perform a variety of roles related to mental health care although these tend not to be well defined or recognised. Some of these are services that are provided on a daily basis currently while others may be roles pharmacists can potentially play in the future as partners in the mental health care team.

Pharmacists recognise that medicines are not necessarily the primary or sole treatment option for mental illnesses. However, the focus of this Framework is on how pharmacists' skills and experience within their scope of safe and appropriate use of medicines can be applied to improve quality use of medicines for consumers with a mental illness.

It is also important to note that pharmacists' skills in quality use of medicines will provide the most benefit when performed in a collaborative team based environment. This partnership requires active engagement with other members of the mental health care team, rather than pharmacists practising in isolation.

In Figure 1 (p. 12), pharmacists' roles have been divided into:

- **direct** services (e.g. medication adherence support, crisis intervention or medication review) which are grouped under or aligned broadly with four aims in mental health care service delivery by pharmacists:
  - health promotion
  - supporting early detection and intervention
  - minimising illness
  - maximising recovery; and
- **indirect** services (e.g. education, academic detailing[d] or policy development).

This Figure aims to provide examples of how pharmacists' skills and expertise can be utilised within the continuum of mental health care irrespective of where the pharmacist is practising (e.g. primary health care, hospital or other settings).

d. A non-commercial educational strategy where a trained person meets one-on-one with a health professional in their practice setting to provide evidence-based information with the intent of changing their practice to support and enhance judicious and cost-effective decision-making. (National Competency Standards Framework for Pharmacists in Australia 2010)

"PHARMACISTS' SKILLS AND EXPERIENCE WITHIN THEIR SCOPE OF SAFE AND APPROPRIATE USE OF MEDICINES CAN BE APPLIED TO IMPROVE QUALITY USE OF MEDICINES FOR CONSUMERS WITH A MENTAL ILLNESS."

Further, the role of the pharmacist as a partner in mental health care is an evolving one and hence the roles described in the Framework represent both current and future roles within the entire continuum of mental illness.

Health promotion

Pharmacists are regularly involved in the practice of health promotion in a variety of settings. Pharmacists also play an important role in educating and supporting pharmacy staff to deliver health promotion activities in the pharmacy.

Health promotion activities in the pharmacy may involve conducting a depression awareness campaign, supporting R U OK?Day[e] or mental health days/weeks,[f] or generally raising awareness about mental health issues in the community. Health promotion messages about mental health conditions may also be given at opportune times when a pharmacist notices initial signs or symptoms of mental illness, or simply have the opportunity to have a discussion about mental health, rather than it always being a planned and structured process.

Another avenue available to pharmacists participating in health promotion in their community is to deliver presentations to audiences such as school groups, community groups, carers and consumers, or parents groups about a variety of mental health-related topics that might include medicines used for depression, anxiety disorders, psychotic disorders, smoking cessation or illicit drug use.

In their role as a primary health care professional, pharmacists also have a unique opportunity to support consumers' potential by advocating and promoting a wellness approach to care during the recovery journey in any episode of mental illness.

Supporting early detection and intervention

While diagnosing is not part of a pharmacists' scope of practice, they can play an important role in identifying possible signs and symptoms of a mental illness. Due to their unique position in the primary health care setting of a community pharmacy, pharmacists have the opportunity to recognise potential psychological distress and there is a good opportunity for the pharmacist to have a conversation and discuss what they have noticed. Pharmacists who notice early signs that a person may be at risk of developing or exacerbating a mental illness can refer or encourage people to seek further assessment from their GP or other available mental health services.

Pharmacists may recognise early signs of depression or an anxiety disorder in a number of ways including verbal or non-verbal cues, direct product requests for analgesics, herbal sleeping aids or through changes in a person's social or medical history. The opportunity to intervene may be a formal part of a pharmacy's screening program[g] or it could be via an opportunistic observation. Pharmacies can provide a friendly non-confrontational environment that may facilitate and encourage people to seek help about their mental health symptoms.

Carers of consumers with mental illness also play an important role in prevention and early intervention of mental illness. Yet being a carer for someone with mental illness can also result in significant emotional, social and economic burden. Carers themselves are known to be at an increased risk of developing depression, anxiety and other mental health problems. Pharmacists should recognise carers' own health needs and be alert for early signs of mental illness and intervene and support when necessary. Pharmacists should refer a carer to their GP if they recognise any possible signs or symptoms of a mental illness. Carers may also benefit from contacting local peer support programs, carer respite services or other organisations which support families, carers and friends with mental health issues, and pharmacists can assist with this process.

e. More information at: www.ruokday.com

f. See, for example, web sites for World Mental Health Day (http://1010.org.au/) or World Federation for Mental Health (www.wfmh.org).

g. The relevant professional standard that applies is Standard 16 Screening and risk assessment in PSA's Professional Practice Standards (version 4, 2010). Available at: www.psa.org.au/supporting-practice/professional-practice-standards/version-4. Note that the purpose of these services is to identify consumers who may be at risk of disease or illness and to refer them for further investigations. These services are not used to make a diagnosis or to alter therapy prescribed by other health care providers.

Figure 1. Pharmacist roles as partners in mental health care

(These terms are further explained in the body of the document in subsequent sections.)*

<table>
<tr><th></th><th>HEALTH PROMOTION</th><th>SUPPORTING EARLY DETECTION AND INTERVENTION</th><th>MINIMISING ILLNESS</th><th>MAXIMISING RECOVERY</th></tr>
<tr><td rowspan="2">DIRECT SERVICES</td><td rowspan="2">• Conducting in-pharmacy health promotions, participating in health awareness campaigns (e.g. depression awareness campaign) or supporting R U OK?Day or World Mental Health Day
• Having opportunistic discussions with consumers and carers in the pharmacy about their mental health
• Promoting health literacy in partnership with consumers and carers</td><td rowspan="2">• Recognising potential early signs or symptoms of depression, anxiety or other mental health disorders in the community pharmacy setting
• Encouraging people at risk to seek help and referring to a GP or appropriate local mental health services
• Providing support and encouraging referral for carers (particularly people who may be at risk of mental illness)</td><td>• Providing lifestyle advice and support when commencing or changing medicines for a mental illness
• Educating and informing consumers and carers about their medicines
• Screening for and managing adverse drug reactions and allergies
• Supporting consumers to minimise the impact of side effects to psychotropic medicines
• Reviewing for potential drug interactions and alerting the prescriber
• Medication reconciliation
• Assessing consumer's risk associated with medicine use (e.g. falls risk)</td><td>• Working in partnership with the consumer and carer to encourage self-medication management and developing appropriate strategies when needed
• Monitoring for early signs of relapse of a mental illness
• Providing support to maintain adherence to treatments
• Supporting consumers and carers with the implementation of care plans
• Admission and discharge planning for acute mental health episodes</td></tr>
<tr><td colspan="2">• Liaising closely with GPs and other mental health professionals regarding medicine management issues
• Providing medicine information to consumers and carers, and support workers
• Ensuring consumers have a continuing and appropriate supply of medicines
• Providing staged supply services in collaboration with the consumer's GP
• Monitoring therapeutic drug levels
• Identifying and offering suggestions to manage medicine-related problems
• Supporting and managing physical co-morbidities such as diabetes and hypertension (e.g. smoking cessation, weight management)
• Assessing adherence to medications, providing education around medication adherence and providing other support (e.g. DAAs*)
• Providing medication management services (e.g. in-pharmacy medicines use reviews (e.g. MedsCheck*), HMRs* and RMMRs*)
• Providing home based services (including HMRs and home delivery of medicines)
• Providing appropriate care to groups requiring extra consideration (e.g. homeless people, ATSI or CALD groups, people requiring end of life care or with degenerative diseases, people in the justice health system or under a community treatment order)
• Providing appropriate care to different age groups (e.g. children, young people and older people)
• Providing support to people with co-existing drug and alcohol problems
• Participating in multidisciplinary mental health care activities</td></tr>
<tr><td>INDIRECT SERVICES</td><td colspan="4">Medicine information services
• Academic detailing on psychotropic medicines
• Drug information services
• Providing education on psychotropic medicines to other health professionals or pharmacy colleagues
• Delivering presentations to schools, consumers and carers, parent groups, or community clubs/groups on mental health topics and medicine information
Policy and advocacy roles
• Performing drug utilisation reviews and medicine policy reviews
• Participating in drug and therapeutics committees/medication advisory committees, including formulary management
• Participating in mental health service planning within a community
• Advocating on mental health issues at a local, state or federal level
• Contributing to mental health policy development at a local, state or federal level
Research and teaching
• Supervising and teaching pharmacy and other health professional students about psychotropic medicines and medication management
• Participating in clinical trials and outcome based research</td></tr>
</table>

Minimising illness and maximising recovery

Pharmacists may undertake a number of activities to support consumers and carers in the monitoring and treatment of mental illness. These roles may be to minimise the impact of mental illness or to maximise recovery in an episode of mental illness. This may involve providing advice and support to encourage medication adherence, medication supply services, reviewing medications, providing medicine information, supporting the management of physical co-morbidities or providing lifestyle support and advice.

Medication adherence support

Adherence to psychotropic medicines remains a significant challenge for consumers in the treatment of mental illnesses. Pharmacists play a very important role in supporting medication adherence in mental illness. For example, a recent Australian review reported that a multifaceted approach is required for interventions to improve antidepressant medication adherence to be effective.[17] Improving an individual's adherence to antidepressants requires complex behaviour change and interventions need to involve various components such as consumer/carer education, follow up and monitoring, and collaboration with mental health professionals.

Pharmacists currently support consumers with medication adherence in a number of ways. Pharmacists can help the consumer build knowledge, skills and understanding to use medicines effectively and safely. It is important for pharmacists to determine and appreciate the consumer's or carer's knowledge, beliefs and attitudes towards medicine use as these factors may impact greatly on adherence and guide the type of support pharmacists provide to assist consumers to improve adherence to medicines.

Pharmacists can become an advocate for the consumer to ensure that the consumer's voice is heard in relation to medicine treatment preferences. Pharmacists can also help improve adherence to medicines by working in partnership to determine a consumer's desire and ability to self-manage their medicines and encouraging consumers to be involved in self-medication management where appropriate. Involving mental health consumers and carers in treatment-decision making, also known as a 'shared decision making' approach, recognises the role of consumers and carers as key partners in care planning and can improve engagement and involvement with the consumer's health care.

Dose administration aids (DAAs) are devices or systems designed to assist in medication management. DAAs are an important service that pharmacists provide to assist consumers to manage medicines and help prevent medication misadventure or associated hospitalisations. This is particularly relevant in the mental health field where there are additional challenges in psychotropic medication adherence. Under the 5CPA PPI program, the provision of DAA services is a priority area for eligible community pharmacies who deliver DAA services to community-based consumers to a quality standard.

Staged supply services are another way that pharmacists can support treatment and adherence for mental health consumers. This is a service where a pharmacist will dispense and supply medicines to the consumer in instalments and can be particularly useful for consumers with a mental illness or drug dependency, or homeless people. This service allows the pharmacist to have close engagement with the consumer and to provide consistent and ongoing follow up which may be of particular benefit for people requiring closer supervision and regular support with adherence. This service is also currently a priority area for community pharmacies under the 5CPA PPI program.[h]

h. Additional information about staged supply services including guidelines for pharmacists can be downloaded at: www.psa.org.au/supporting-practice/professional-practice-standards/staged-supply-services

"PSYCHOTROPIC MEDICINES ARE FREQUENTLY IMPLICATED AS A CAUSE OF ADVERSE DRUG EVENTS OR DRUG-RELATED PROBLEMS AND THERE IS EVIDENCE OF THE BENEFITS OF PHARMACISTS PERFORMING MEDICATION REVIEWS WITHIN COMMUNITY MENTAL HEALTH TEAMS."

Medication management

A core role of the pharmacist is in using their skills and expertise in medication management to ensure the safe and appropriate use of medicines. There are a suite of medication management services provided by pharmacists that draw on this core role including hospital clinical pharmacy services,[i,j] Home Medicines Reviews (HMRs),[k] Residential Medication Management Reviews (RMMRs),[l] Medicines Use Reviews (MedsCheck) and Diabetes Medication Management (Diabetes MedsCheck).[m] Pharmacist-conducted RMMRs are now an important part of quality care provided for aged care residents. A recent meta-analysis demonstrated the benefits of medication reviews in the aged care setting by reducing prescribing of psychotropic medicines.[18] The impact of pharmacist interventions in improving the quality use of psychotropic medicines has also been demonstrated by successful pharmacist-led interventions that have resulted in a significant reduction in the use of benzodiazepines and antipsychotics in the aged care setting.[19-20] Given the Australian population is ageing rapidly, pharmacists can make a significant contribution to the management of mental health conditions in the aged care setting.

Pharmacists have extensive knowledge of safe and effective use of psychotropic medicines and can assist consumers and prescribers in monitoring any side effects, drug interactions and contraindications and help to minimise the impacts of these. Pharmacists can also provide adherence support to ensure mental health consumers achieve the best outcomes from therapy. Psychotropic medicines are frequently implicated as a cause of adverse drug events or drug-related problems and there is evidence of the benefits of pharmacists performing medication reviews within community mental health teams.[4]

Medication management activities are core activities of a hospital-based mental health pharmacist and may include medication reconciliation, assessment of current medication management, clinical review and review of clinical parameters (e.g. drug blood levels), participation in ward rounds or case conferences and ensuring adequate transition through the health system.

Enhancing continuity of care and medication safety

Mental health consumers often receive care from a number of health care providers in a range of settings. Communication about a consumer's medication management can be poor and medication information fragmented, particularly when a consumer moves in and out of hospital. Medication reconciliation[n] has been shown to reduce medication errors and harm associated with transitions in care.[o] Both community and hospital pharmacists play a key role in medication reconciliation and continuity of care. The role of the pharmacist in routinely compiling and maintaining an accurate current medication list is crucial to ensuring safe transition between settings and safe ongoing management of medicines. When consumers are admitted to hospital, community pharmacists can support medication reconciliation by communicating a consumer's medication information to hospital clinicians to enable treatment decisions to be based on an up-to-date medication history. When a consumer moves from acute care back into the community, hospital pharmacists play an important role in ensuring medication continuity by providing a discharge medication record for the consumer and primary health care providers. Pharmacists have a role in ensuring both continuation of medicine supply and the transfer of accurate information about the consumer's medicines to the next health care team as the risk of medication misadventure at transition points across the continuum of care is considerable.

i. 'Clinical pharmacy practice' is defined as the practice of pharmacy as part of a multidisciplinary health care team directed at achieving quality use of medicines. In hospitals, specific clinical activities may include obtaining an accurate medication history, provision of medicines information to health professionals and to patients, monitoring the therapeutic outcomes of medicines, and adverse drug reaction management. More information is available at: www.shpa.org.au/lib/pdf/practice_standards/clinical_pharm_ro.pdf

j. The Standards of Practice for Mental Health Pharmacy is produced by the SHPA Committee of Specialty Practice in Mental Health Pharmacy (J Pharm Pract Res 2012; 42(2): 142–5).

k. Guidelines for pharmacists can be downloaded at: www.psa.org.au/download/practice-guidelines/home-medicines-review-services.pdf

l. Guidelines for pharmacists can be downloaded at: www.psa.org.au/download/practice-guidelines/rmmr-and-qum-services.pdf

m. MedsCheck and Diabetes MedsCheck services are structured pharmacy services, which take place in the pharmacy, involving face-to-face consultations between the pharmacist and consumer. More information is available at: www.psa.org.au/supporting-practice/guidelines/medicines-use-review-and-diabetes-medication-management

n. 'Medication reconciliation' is a formal process of obtaining and verifying a complete and accurate list of each patient's current medicines (i.e. matching the medicines the patient should be prescribed to those they are actually prescribed). Where there are discrepancies, these are discussed with the prescriber and reasons for changes to therapy are documented. When care is transferred (e.g. between wards, hospitals or home), a current and accurate list of medicines, including reasons for change is transferred to the next care provider and also provided to the patient or carer. More information is available at: www.safetyandquality.gov.au/our-work/medication-safety/medication-reconciliation. Guidelines for pharmacists is available at: www.shpa.org.au/lib/pdf/practice_standards/med_reconciliation_ro.pdf

o. See for example: Duguid M. The importance of medication reconciliation for patients and practitioners. Aust Prescr 2012; 35: 15–9.

In the future the Personally Controlled Electronic Health Record (PCEHR) will potentially enhance the continuity of care by bringing all of a consumer's health information together in a single location, minimising the risk of medication misadventure at a crucial point in a consumer's health journey.

Providing medicine information

Consumers with a mental illness or carers of a person with a mental illness value written or verbal medicine information, especially in relation to side effects as many consumers may be taking multiple medications for mental illness or co-morbidities. Pharmacists play an important role in ensuring consumers and carers are provided with all relevant and up to date information to allow the consumer to make an informed decision about their medicines.

It is important to approach medicine use in mental illness with a shared decision making approach. This can allow the consumer or carer and the pharmacist, in collaboration with the medical practitioner, to openly discuss medicine use and discuss ways to help the consumer manage their medicines. Consumer Medicine Information (CMI) leaflets can be a useful tool to assist pharmacists in this process. CMI leaflets should be used by the pharmacist as a tool to engage consumers and carers in a conversation about the use of psychotropic medicines that is tailored to the individual's needs.

Educating consumers about medicines used for mental health conditions can be especially important when therapies are initiated in an acute inpatient setting. Hospital pharmacists play an important role in providing consumers the opportunity to discuss their medicines and improve their knowledge and potentially their adherence to medicines. However the acute care setting can be overwhelming and consumers discharged from hospital may be particularly vulnerable in the period when they are settling back in the community. It is important therefore for a community pharmacist to reinforce key messages and information about medicines at this critical time.

Management of physical co-morbidities

Consumers with a mental illness commonly have multiple mental illness co-morbidities. They also have significantly poorer physical health than the general population. Physical co-morbidities are estimated to account for up to 60% of premature deaths not related to suicide, and schizophrenia is often referred to as a 'life-shortening' illness.[21] The 2007 National Survey of Mental Health and Wellbeing identified that over half of all Australians with a mental illness also have at least one co-morbid physical condition in any 12-month period.[22]

Pharmacists may see consumers with a mental health condition more regularly than any other health professional and have a unique opportunity to provide support to consumers in managing physical co-morbidities. This may include monitoring of diabetes and helping consumers measure their blood glucose, blood pressure monitoring, weight management services and advice on smoking cessation services. Similarly pharmacists are in a position to provide advice on the management of all medicines that the consumer is taking, not just their psychotropic medicines. In addition to co-existing physical illnesses, consumers with a mental illness may have co-morbid substance use disorders that need to be managed concurrently for the consumer to get the best out of treatment.

Maximising recovery

The term 'personal recovery' has been defined as "being able to live well and to build and live the life one chooses in the presence or absence of mental ill health".[p] In addition a 'recovery-oriented approach' in mental health care aims to support people with mental illness to live well and to live the life they choose. Key components as part of a recovery-oriented practice that are relevant to how pharmacists practice include: encouraging self management of medicines, being person-centred in the care a pharmacist delivers and promoting a holistic approach to care.[23]

"PHARMACISTS MAY SEE CONSUMERS WITH A MENTAL HEALTH CONDITION MORE REGULARLY THAN ANY OTHER HEALTH PROFESSIONAL AND HAVE A UNIQUE OPPORTUNITY TO PROVIDE SUPPORT"

p. As defined in the National Recovery-Oriented Mental Health Practice Framework. 2nd Consultation draft, 10 July 2012. At: www.crazelateralsolutions.com/7edf5b95-a4a4-45d7-803b-561f46b3a89e.aspx

Many of the pharmacist roles described under 'minimising illness' are also very relevant in the pharmacists' role in supporting consumers to maximise recovery. This may involve supporting consumers to become more involved in the management of medicines for mental illness or the pharmacist becoming one of the health care professionals listed on a person's wellness plan.

In order to support a person's recovery journey pharmacists may assist by identifying drug interactions, helping to manage and avoid side effects of medicines, provide ongoing support to maintain medication adherence or monitor for early signs of a relapse of a consumer's mental illness. These roles may be performed more formally as part of medication management in hospital or services such as a HMR or MedsCheck or informally as part of everyday pharmacy practice, regardless of the practice setting of the pharmacist.

Indirect services

As shown in Figure 1, pharmacists perform a varied range of indirect services in mental health care that are highly valued by other health professionals as well as consumers and carers. Often these activities may be 'hidden' or may not be well understood, yet they play an important role in contributing to the quality use of psychotropic medicines.

These services have been broadly grouped into medicine information services, policy and advocacy roles and research and teaching. Pharmacists also provide medicine information to prescribers and other health care professionals, conduct medicine audits and policy reviews, contribute to decisions about whether a medicine is the best treatment option for a patient, and work with the consumer, carer and other members of the team to ensure the consumer has the knowledge and skills to use their medication safely and effectively.

Pharmacists are involved in policy and advocacy roles in mental health care in various ways across the health system. This could be by participating in service planning or policy development around medicine use at a local, state or federal level. In addition, other policy roles pharmacists are involved in may include performing drug utilisation reviews or in formulary management.

Recognition of consumers with particular needs

It is important to note that in addition to the roles described above, it is recognised that particular groups of mental health consumers may have other varied needs. These may include Aboriginal and Torres Strait Islander (ATSI) people, people from different culturally and linguistically diverse (CALD) backgrounds, consumers within the justice system or on a community treatment order or equivalent, homeless people, or people with degenerative disorders or requiring end of life care.

Feedback indicates that people within certain CALD communities may have negative attitudes to taking medication, family members may be intensely involved in the administration and monitoring of medicines and decisions to continue or not with treatment and there may be a lack of understanding of the nature and use of medications in some older people. In addition eating habits, changes in diet and religious beliefs (such as fasting) may lead to changes in intake and dosing of medications.

It is also important to address the different needs and issues of various age groups with children, young people and older people who may have specific needs.

Pharmacists working as partners in mental health care – barriers and enablers

An assessment was made of the barriers and enablers for pharmacists to work as partners in mental health care. Barriers have been grouped into two broad categories, pharmacists' attitudinal barriers and skills, and system-related barriers.

"PHARMACISTS SHOULD HAVE A PRIVATE AREA IN THE PHARMACY TO ALLOW POTENTIALLY SENSITIVE CONVERSATIONS TO OCCUR IN A SUITABLE MANNER."

The most fundamental barrier in the community pharmacy setting that has been identified is concern about privacy and confidentiality. The enablers are grouped into education and training (with the components of knowledge, skills, and attitudes and understanding) and those which improve integration into the mental health care team (covering practice models and approaches to care). These are summarised in Figure 2 and further articulated below.

Barriers

Privacy concerns around community pharmacy practice

Due to the stigma and discrimination that can occur with mental illness, privacy remains an important concern for many consumers and their carers. This is especially important for the pharmacy profession due to the potential lack of privacy in the community pharmacy setting. This is the most fundamental barrier to better mental health care in the community pharmacy setting. Pharmacists and their staff should be conscious of the potential stigma around psychotropic medicine use and ensure the privacy of consumers and carers is respected at all times. Pharmacists should have a private area in the pharmacy to allow these potentially sensitive conversations to occur in a suitable manner.

Pharmacists should be familiar with the *Community Pharmacy Service Charter* (developed through the 5CPA) that is required to be displayed in all community pharmacies. Furthermore pharmacists should abide by the *PSA Code of Ethics for Pharmacists* which includes the Principle statement "A pharmacist pays due respect for the autonomy and rights of consumers and encourages consumers to actively participate in decision making".

Mental health stigma

Mental health stigma continues to amplify the social exclusion and hamper the recovery of individuals with a mental illness and has often been described as the main barrier to receiving effective mental health care.[24-27] Mental health stigma has been defined as a negative attitude based on prejudice and misinformation[28-30] and it has been shown that stigma is not limited to the general public but also extends to health professionals.[31-33]

Figure 2. Main barriers and enablers to pharmacists becoming partners in mental health care

BARRIERS

Pharmacists' attitudinal and skills barriers

- Mental health stigma
- Suboptimal attitudes towards mental illness
- Inadequate communication skills
- Potential lack of understanding of off-label use of psychotropic medicines (e.g. use in children, off-label dosages or indications)
- Lack of awareness of cultural and ethnicity issues in mental health, and in the use of psychotropic medicines
- Lack of awareness of needs for particular groups in mental health care (e.g. children, young people and parents, homeless people, people with co-existing drug and alcohol problems)
- Lack of awareness of privacy needs in the community pharmacy setting

System-related barriers

- Privacy and confidentiality concerns in some community pharmacy settings
- Lack of integration of pharmacists into the mental health system
- Service structures not conducive for collaboration/ integration of pharmacists
- Lack of sustainable and viable service models
- Lack of understanding of pharmacists' contribution to the health system
- Mental health professionals not utilising pharmacists' expertise
- Pharmacists' lacking understanding of the mental health system and pathways to access mental health services
- Lack of time
- Structural discrimination in mental health (e.g. is the PBS Safety Net suitable for mental health consumers?)
- Mental health consumers may feel unwelcome in thepharmacy
- Lack of understanding by some pharmacists of hospital admission and discharge processes in mental health care

ENABLERS

Pharmacists' education and training

Knowledge

- Comprehensive knowledge of medicine management in mental health care
- Sound understanding of common mental illnesses and non-pharmacological treatments
- Awareness of relevant ethical, social, legal and cultural issues
- Awareness of needs of ATSI and CALD groups
- Awareness of needs of at risk groups (drug and alcohol use, homeless, people on community treatment orders)

Skills

- Effective communication skills (including motivational interviewing skills)
- Crisis management skills
- Recovery orientated practice
- Communicating with particular age groups (e.g. children, young people and older people)
- How to work within a multidisciplinary team

Other

- Attitudes and understanding towards mental health care
- Reducing mental health stigma
- Trained pharmacy support staff in adequate numbers
- Addressing barriers identified in this Framework in the education and training at an undergraduate pharmacy level
- Mental health undergraduate learning in a multidisciplinary environment

Enablers to improve integration into the mental health care team

Practice models

- Support of implementation of 5CPA PPI and other services
- Use of the Framework to promote roles of pharmacists as partners in the mental health care team
- Develop a range of service delivery models
- Redesigning pharmacy workflow to increase consumers' access to a pharmacist
- Other health care professionals support the pharmacist role within a mental health care team
- Liaising closely with GPs and other mental health care professionals

Approaches to care

- Supporting a recovery focus
- Supporting a therapeutic alliance approach to care
- Interdisciplinary teamwork approach, utilising pharmacists as part of the team
- Continuity of care focus to services
- Promoting to consumers that they have a regular pharmacist as part of their treating team
- Promoting a 'shared decision making' approach to care
- Promoting a holistic approach to care

Mental health stigma has been linked with lowered self-esteem, social withdrawal, poor self care and substance misuse.[31] Stigma can also impact on access to health services, adherence to treatments, hinder the recovery process and act as a barrier to seeking professional help when mental health symptoms first appear.[34,35] Independent of how well health professionals recognise mental illnesses or how knowledgeable they are about treatments and causes for mental illnesses, they may have as many negative stereotypes as the general public.[36-38]

While some studies have found pharmacists to have generally favourable attitudes towards people with depression and mental illness [39-42], pharmacists have also reported more stigmatising views towards people with schizophrenia than depression.[43] Furthermore, pharmacists have reported a higher level of comfort in discussing medication use in depression than schizophrenia[2], being uncomfortable discussing symptoms of mental disorders and felt they were less likely to follow up consumers with a mental illness than people with a cardiovascular illness.[2,39] This is consistent with Australian and international data measuring the stigma and attitudes of pharmacy students which show suboptimal attitudes are present in this cohort towards people with schizophrenia and depression.[44-48]

Many barriers to providing pharmacy services to consumers with a mental illness have been identified and may include: a lack of knowledge of mental health conditions, beliefs that consumers may present with awkward or challenging behaviours, the lack of privacy in the community pharmacy environment, the belief that consumers would not understand the medication information provided, or the stigma and cultural barriers surrounding mental illness.[47,49,50]

Lack of integration of pharmacists into the mental health system

Pharmacists practising in the community setting often do so within the four walls of a community pharmacy, limiting collaboration and integration into the health care team. This disconnect between community pharmacy and the mental health system presents a challenge that needs to be addressed to ensure consumers with a mental illness and their carers have access to the best possible health care. There can be a lack of communication between pharmacists and GPs or other mental health practitioners, or between community and hospital pharmacists that may limit effective collaboration to occur between health care settings and providers.

While hospital pharmacists often work more closely with their health professional colleagues in the acute care setting, this level of teamwork does not often occur in the community. Research has demonstrated the value of involving pharmacists as team members in the community mental health setting and closer collaboration between pharmacists and physicians has been shown to be a valuable strategy to improve care for mental health consumers.[51,52]

Within the current context of health care reform there are significant opportunities to more effectively utilise the skills of pharmacists in mental health care. This may be through opportunities for pharmacists within Medicare Locals to help improve the transition of care between the acute and community settings to help minimise medication misadventure, particularly in the mental health setting.

Lack of time

A common barrier for the successful implementation of professional pharmacy services is the lack of time available to deliver services in the busy community pharmacy setting. This may be particularly challenging when potentially sensitive mental health situations require the pharmacist's complete focus and attention. It should be an expectation of the pharmacy profession that issues such as workflow and human resources are given due consideration so that pharmacists can maximise their ability to contribute effectively to the delivery of mental health services.

Lack of sustainable and viable service models

The current lack of sustainable and viable service models for the integration of the pharmacist as a partner in mental health care remains a barrier to successful service delivery. These sustainable and viable models require adequate training of pharmacists and pharmacy support staff, adequate staffing levels and workflow models to support service implementation. While new options for pharmacists have recently become available through the professional programs component of 5CPA, the lack of sustainable models remains a barrier to the successful implementation of pharmacy-led professional services within community pharmacy. In addition to this, opportunities for pharmacists to integrate into mental health teams outside the community pharmacy setting currently do not exist.

"AN IMPORTANT PART OF AN EFFECTIVE THERAPEUTIC ALLIANCE IS ENGAGING WITH THE CONSUMER ABOUT TREATMENT WHERE THE MULTIDISCIPLINARY TEAM IS WORKING EFFECTIVELY TOGETHER"

Enablers

The competencies that are required by pharmacists to perform these roles as partners in the mental health care team are described below in three broad areas: knowledge, skills and attitudes. Further details on these competencies are available in the *Statement of Mental Health Care Capabilities for Pharmacists 2009*. This document will be reviewed and updated by PSA following the development of this Framework.

In addition the education and training needs of pharmacists and practice models have also been identified as enablers for pharmacists to be considered partners in the mental health care team.

Knowledge

Clinical knowledge

Pharmacists are expected to have a sound understanding of common mental illnesses. These may include depression, anxiety disorders, psychotic illnesses or substance use disorders. Pharmacists are expected to be able to apply this understanding of the key symptoms, treatments and diagnostic features of common mental illnesses in the provision of care for consumers with a mental illness. Pharmacists are expected to have a comprehensive knowledge of medicine management in mental health care which involves a high level of understanding of the pharmacology, pharmaceutical and pharmacokinetic properties of psychotropic medicines and apply this understanding to their everyday practice. In addition pharmacists should have an understanding of evidence-based non-pharmacological approaches to treating mental illnesses such as psychotherapy and psychosocial interventions.

Knowledge of ethical, social, legal and cultural issues

Pharmacists should be aware of ethical, cultural, legal and social issues that may impact on the care of the mental health consumer. They need to be culturally aware and responsive to the needs of particular groups which may need particular care. This may involve barriers arising from religious, cultural or linguistic issues with consumers or carers. For example medication adherence can be a major issue for particular from some CALD backgrounds due to differing beliefs about mental illness and the use of medicines.

Skills

Communication skills

Pharmacists need to have effective communication skills that are appropriate for the context of the situation. This involves a need to be aware of the possibility of stigma surrounding mental illness and the need to respect the consumer's privacy. It is important for the pharmacist to accept the person exactly as they are and make no moral judgment about the situation.

It is also important for pharmacists to understand the different needs of various age groups with children, young people and older people all requiring different approaches. For example children and young people may have many non-verbal ways that they may express views about their health care and pharmacists may need to be up-skilled to become 'youth friendly' to better support young people with mental illness.

Crisis management skills

Pharmacists should also have an appreciation of the issues relevant to dealing with a person who may be acutely unwell or impaired as a result of potential substance misuse. Pharmacists may need to assess whether a consumer who is acutely unwell has insight into their illness and may be in need of appropriate training to develop this skill.

Due to their accessibility and availability in the community, pharmacists may also be presented with a person who is behaving aggressively or who is acutely unwell and at risk of hurting themselves or others. Mental Health First Aid (MHFA) training, Applied Suicide Intervention Skills Training (ASIST), Accidental Counsellor training or other crisis training could be useful to assist pharmacists in developing these skills.

It is important pharmacists and pharmacy staff are aware of the local mental health services (including crisis assessment and treatment services) available in their area and who they can refer mental health consumers to, at an early intervention stage or in an acute crisis situation.[q]

Attitudes and understanding

Pharmacists need to be aware of their own attitudes towards mental illness and how this may impact on the care they provide to consumers with a mental illness. It is important for pharmacists to have a high level of understanding of mental health conditions and treatments, however it is also critical that they

q. Providing advice on all available mental health services is out of the scope of this Framework. Pharmacists should be aware of what is available in their local area to support their professional practice.

have a positive attitude towards mental health issues and treat mental health consumers as they would any other consumer they interact with and provide care for.

While there is still a lot unknown about mental health stigma, there is evidence to suggest three main processes as being fundamental to anti-stigma programs: protest, education and contact.[53] Protest-based interventions protest inaccurate information or misinformation about mental illness as a way to challenge the stigma while educational interventions provide accurate information and disprove myths about mental illness so participants can make informed decisions. Contact-based interventions facilitate personal contact with people with a mental illness as an approach to stigma reduction.[53,54] Evidence suggests that those interventions that incorporate an element of contact are more likely to be successful.[55-57]

Pharmacists' education and training

Mental health pharmacy education has traditionally focused on the pharmacology and therapeutics of psychotropic medicines, rather than focusing on how to communicate with consumers with a mental illness. Research suggests that educational programs for pharmacists in this area need to not only improve knowledge of mental health conditions, but also address suboptimal attitudes towards mental illness. Educational programs need to be multifaceted and involve contact with mental health consumers as a core element to successfully address mental health stigma and to allow pharmacists to take on a more significant role in the care of mental health consumers.[58-61]

There is a need for education and training to commence at an undergraduate level with a multidisciplinary approach to ensure pharmacists have the knowledge and skills to perform the roles described in this Framework. However, there also needs to be a focus of lifelong learning with pharmacists needing to continue to learn and grow in their skills and understanding in mental health care.

Practice models

To overcome the challenge of integrating pharmacists into the mental health care team and for pharmacists to effectively contribute as partners in the mental health care team, new or modified practice models may need to be investigated. This may involve the investigation of new practice settings or opportunities such as those which may become available with the establishment of Medicare Locals or within the mental health reform agenda.

In addition, clearer or more formal interprofessional work or team practices may need to be investigated covering aspects such as: communication within the health care team; agreed structure or pathway for support, monitoring, follow-up and referral; identifying elements of mental health care priorities for mental health consumers and carers; and identifying how pharmacists can support other health professionals (e.g. medication information and education, medication management strategies). Interdisciplinary teams have been recognised as an effective method of delivering integrated, comprehensive mental health services to the community[62] and would strongly benefit from regular input from a pharmacist as part of that team.

There are some simple strategies that may help improve the integration of pharmacists into mental health care teams such as including an opportunity for consumers or carers to nominate their regular pharmacist as part of their contact details with the community mental health team.

Another enabler to better patient care and multidisciplinary team work in mental health is the promotion of the use of a therapeutic alliance. A therapeutic alliance is a patient-centred approach that has become a key component of health treatment with the goal to achieve behavioural change in consumers.[63] An important part of an effective therapeutic alliance is engaging with the consumer about treatment where the multidisciplinary team is working effectively together.

A critical point in the journey of a mental health consumer is the transition between acute and community settings. It is well known that people are at high risk of medicine misadventure after discharge from hospital and given medicines are the major modality for most mental illnesses and the high rates of physical co-morbidities with mental illnesses, pharmacists' input at this time is particularly critical to ensure the safe and effective use of medicines. Improvements are needed to ensure seamless transition from hospital to community care for mental health consumers to ensure ongoing access and treatment.

Resources

Pharmacy-related

- The Society of Hospital Pharmacists of Australia Committee of Specialty Practice in Mental Health Pharmacy. Standards of practice for mental health pharmacy. J Pharm Pract Res 2012; 42(2): 142–5.
- Pharmaceutical Society of Australia. Code of ethics for pharmacists. 2011. Available at: www.psa.org.au/membership/ethics
- Fifth Community Pharmacy Agreement. Community pharmacy service charter. Available at: www.5cpa.com.au/5CPA/Initiatives/The_Charter/The+Charter.page
- National competency standards framework for pharmacists in Australia. 2010. Available at: www.psa.org.au/download/standards/competency-standards-complete.pdf
- Pharmaceutical Society of Australia. Professional practice standards. Version 4, 2010. Available at: www.psa.org.au/supporting-practice/professional-practice-standards/version-4
- The Pharmacy Guild of Australia. The roadmap – the strategic direction for community pharmacy. 2010. Available at: www.guild.org.au/The_Guild/tab-Pharmacy_Services_and_Programs/The_Roadmap/The%20Roadmap.page
- Australian Pharmacy Council. Application of the 'Competency Standards for Pharmacists in 2003' in the provision of mental health care: statement of mental health care capabilities. 2009. Available at: www.pharmacycouncil.org.au/PDF/Pharmacists%20Capability%20Statement%20%20June%20'09%20(v5).pdf
- An Advanced Pharmacy Practice Framework for Australia. 2012. Available at: www.psa.org.au/download/standards/advanced-pharmacy-practice-framework.pdf
- Board of Pharmacy Specialties (US) – Psychiatric Pharmacy. At: www.bpsweb.org/specialties/psychiatric.cfm
- The SANE Guide for Pharmacy Staff: a guide to mental illness for staff working in pharmacies, 2011.
- The Mental Health Professionals Network (MHPN). Available at: www.mhpn.org.au

Government-related

- Council of Australian Governments. The roadmap for national mental health reform 2012-2022. Available at: www.coag.gov.au/sites/default/files/The%20Roadmap%20for%20National%20Mental%20Health%20Reform%202012-2022.pdf.pdf
- The Commonwealth of Australia 2010. National standards for mental health services 2010. Available at: www.health.gov.au/internet/main/publishing.nsf/content/mental-pubs-n-servst10
- The Commonwealth of Australia 2009. Fourth national mental health plan – An agenda for collaborative government action in mental health 2009-14. Available at: www.health.gov.au/internet/main/publishing.nsf/content/mental-pubs-f-plan09
- The Commonwealth of Australia 2009. National mental health policy 2008. Available at: www.health.gov.au/internet/main/publishing.nsf/content/mental-pubs-n-pol08
- The Commonwealth of Australia 2007. National strategic framework for Aboriginal and Torres Strait Islander Health 2003-2013: Australian Government implementation plan 2007-2013. Available at: www.health.gov.au/internet/main/publishing.nsf/Content/6CA5DC4BF04D8F6ACA25735300807403/$File/nsfatsih2013.pdf
- The Commonwealth of Australia 2002. National practice standards for the mental health workforce. Available at: www.health.gov.au/internet/main/Publishing.nsf/Content/mental-pubs-n-workstds
- Mental Health Standing Committee, Australian Health Ministers' Advisory Council. Framework for reducing adverse medication events in mental health services (Feb 2009). At: www.health.gov.au/internet/mhsc/publishing.nsf/Content/F5CA1D8E154999F3CA257A5A001FF2CD/$File/adverse.pdf
- Multicultural Mental Health Australia. National cultural competency tool for mental health services. 2010. Available at: www.eccq.com.au/wp-content/uploads/2012/01/National-Cultural-Competency-Tool-for-Mental-Health-Services.pdf
- The National Mental Health Commission (and links to State and Territory Mental Health Commissions). Available at: www.mentalhealthcommission.gov.au

Abbreviations

The following abbreviations have been used in this document.

5CPA	Fifth Community Pharmacy Agreement
ASIST	Applied Suicide Intervention Skills Training
ATSI	Aboriginal and Torres Strait Islander
CALD	Culturally and linguistically diverse
CMI	Consumer Medicine Information
DAA	Dose administration aid
GP	General practitioner
HMR	Home Medicines Review
PPI	Pharmacy Practice Incentives (program under 5CPA)
PSA	Pharmaceutical Society of Australia
R&D	Research and Development
RMMR	Residential Medication Management Review

References

1. Pohjanoksa-Mäntylä M, et al. Is the Internet replacing health professionals? A population survey on sources of medicines information among people with mental disorders. Soc Psychiatry Psychiatr Epidemiol. 2011;46:373-9.
2. Maslen CL, et al. Role of the community pharmacist in the care of patients with chronic schizophrenia in the community. Int J Pharm Pract. 1996;4(12):187-95.
3. Happell B, et al. Wanting to be heard: mental health consumers' experiences of information about medication. Int J Ment Health Nurs. 2004;13(4):242-8.
4. Gisev N, et al. An expert panel assessment of comprehensive medication reviews for clients of community mental health teams. Soc Psychiatry Psychiatr Epidemiol. 2010;45:1071-9.
5. Australian Pharmacy Council. Application of the 'Competency Standards for Pharmacists in 2003' in the provision of Mental Health Care: Statement of Mental Health Care Capabilities.2009.
6. Competency Standards for Pharmacists in Australia. Canberra: Pharmaceutical Society of Australia 2003.
7. Commonwealth of Australia. Fourth National Mental Health Plan. Canberra 2009.
8. Council of Australian Governments. National Action Plan on Mental Health. 2006-2011. 2006.
9. Commonwealth of Australia. National Mental Health Policy 2008. Canberra 2009.
10. Britt H MG, Charles J, Henderson J, Bayram C, Pan Y, Valenti L, Harrison C, Fahridin S, et al. General practice activity in Australia, 2008–09. Canberra 2009.
11. Australian Institute of Health and Welfare. Mental health services - in brief. HSE 125. Canberra: AIHW 2012.
12. Finley PR, et al. Impact of a collaborative pharmacy practice model on the treatment of depression in primary care. Am J Health Syst Pharm. 2002;59(16):1518-26.
13. Finley PR, et al. Impact of a collaborative care model on depression in a primary care setting: a randomized controlled trial. Pharmacotherapy. 2003;23(9):1175-85.
14. Health Care Management Advisors. Managing mental illness and promoting and sustaining recovery: the role of community pharmacy. The Research and Development Program, Fourth Community Pharmacy Agreement, Department of Health and Ageing, Australian Government. 2010.
15. Wheeler A. RFT2010/11-02 Mental Health: Griffith University. The Research and Development Program, Fifth Community Pharmacy Agreement, Department of Health and Ageing, Australian Government. 2012.
16. Bell S, et al. Community pharmacy services to optimise the use of medications for mental illness: a systematic review. Aust New Zealand Health Policy. 2005;2:29.
17. Chong WW, et al. Effectiveness of interventions to improve antidepressant medication adherence: a systematic review. Int J Clin Pract. 2011;65(9):954-75.
18. Nishtala PS, et al. Psychotropic prescribing in long-term care facilities: impact of medication reviews and educational interventions. Am J Geriatr Psychiatry. 2008;16(8):621-32.
19. Westbury J, et al. An effective approach to decrease antipsychotic and benzodiazepine use in nursing homes: the RedUSe project. Int Psychogeriatr. 2010;22(1):26-36.
20. Westbury J, et al. A 12-month follow-up study of "RedUSe": a trial aimed at reducing antipsychotic and benzodiazepine use in nursing homes. Int Psychogeriatr. 2011;23(8):1260-9.
21. Lambert TJ, et al. Medical comorbidity in schizophrenia. Med J Aust. 2003;178 Suppl:S67-70.
22. Slade T, Johnston, A, Teesson, M, Whiteford, H, Burgess, P, Pirkis, J, Saw, S. The Mental Health of Australians 2. Report on the 2007 National Survey of Mental Health and Wellbeing. Canberra 2009.
23. Craze Lateral Solutions. National Recovery-Oriented Mental Health Practice Framework. 2nd Consultation draft, 10 July 2012. 2012.
24. Thornicroft G, et al. Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey. Lancet. 2009;373(9661):408-15.
25. Corrigan P. How Stigma Interferes With Mental Health Care. Am Psychol. 2004;59(7):614-25.
26. Link BG, et al. Stigma as a barrier to recovery: The consequences of stigma for the self-esteem of people with mental illnesses. Psychiatr Serv. 2001;52(12):1621-6.
27. Wahl OF. Mental health consumers' experience of stigma. Schizophr Bull. 1999;25(3):467-78.
28. Ucok A. Other people stigmatize...But, what about us? Attitudes of mental health professionals towards patients with schizophrenia. Noropsikiyatri Arsivi. 2007;44(3):108-16.
29. Ross CA, et al. Stigma, negative attitudes and discrimination towards mental illness within the nursing profession: a review of the literature. J Psychiatr Ment Health Nurs. 2009;16(6):558-67.
30. Roth D, et al. Attitudes toward mental illness in medical students: does personal and professional experience with mental illness make a difference? Med Educ. 2000;34(3):234-6.
31. Sartorius N. Stigma and mental health. Lancet. 2007;370(9590):810-1.
32. Stier A, et al. Explicit and implicit stigma against individuals with mental illness. Aust Psychol. 2007;42(2):106-17.
33. The World Health Organization. Mental Health Gap Action Programme: scaling up care for mental, neurological and substance use disorders. Geneva, Switzerland 2008.
34. Barney LJ, et al. Stigma about depression and its impact on help-seeking intentions. Aust N Z J Psychiatry 2006;40(1):51-4.
35. Thornicroft G, et al. Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey. The Lancet. 2009;373(9661):408-15.
36. Nordt C, et al. Attitudes of mental health professionals toward people with schizophrenia and major depression. Schizophr Bull. 2006;32(4):709-14.
37. Lauber C, et al. Do mental health professionals stigmatize their patients? Acta Psychiatr Scand. 2006;113:51-9.
38. O'Reilly CL, et al. Pharmacists' beliefs about treatments and outcomes of mental disorders: a mental health literacy survey. Aust N Z J Psychiatry. 2010;44(12):1089-96.
39. Phokeo V, et al. Community pharmacists' attitudes toward and professional interactions with users of psychiatric medication. Psychiatr Serv 2004;55(12):1434-6.
40. Cates ME, et al. Attitudes of pharmacists toward mental illness and providing pharmaceutical care to the mentally ill. Ann Pharmacother. 2005;39(9):1450-5.
41. Scheerder G, et al. Pharmacists' role in depression care: A survey of attitudes, current practices, and barriers. Psychiatr Serv. 2008;59(10):1155-60.
42. Scheerder G, et al. Community pharmacists' attitude toward depression: A pilot study. Res Social Adm Pharm. 2009;5(3):242-52.
43. Rickles N, et al. Relationship between attitudes toward mental illness and provision of pharmacy services. J Am Pharm Assoc. 2010;50(6):704-13.
44. Bell JS, et al. Pharmacy students' and graduates' attitudes towards people with schizophrenia and severe depression. Am J Pharm Educ. 2006;70(4):Article 77.
45. Bell JS, et al. Determinants of Mental Health Stigma Among Pharmacy Students in Australia, Belgium, Estonia, Finland, India and Latvia. Int J Soc Psychiatry. 2010;56(1):3-14.
46. Bell JS, et al. Attitudes of pharmacy students toward people with mental disorders, a six country study. Pharm World Sci. 2008;30(5):595-9.
47. Aaltonen SE, et al. Barriers to medication counselling for people with mental disorders: a six country study. Pharm Pract. 2010;8:122-31.
48. Volmer D, et al. Pharmacy students' attitudes toward and professional interactions with people with mental disorders. Int J Soc Psychiatry. 2008;54(5):402-13.
49. Eisenberg D, et al. Stigma and Help Seeking for Mental Health Among College Students. Medical Care Research and Review. 2009;66(5):522-41.
50. Corrigan PWP, et al. Understanding and Influencing the Stigma of Mental Illness. J Psychosoc Nurs Ment Health Serv. 2008;46(1):42-8.
51. Bell J, et al. Developing the role of pharmacists as members of community mental health teams: Perspectives of pharmacists and mental health professionals. Res Social Adm Pharm. 2007 Dec;3(4):392-409.
52. Bell JS, et al. Mental health case conferences in primary care: Content and treatment decision making. Res Social Adm Pharm. 2007;3(1):86-103.
53. Corrigan PW, et al. Disease and discrimination: Two paradigms that describe severe mental illness. J Ment Health. 1997;6(4):355-66.
54. Mann CE, et al. Putting the person back into psychopathology: an intervention to reduce mental illness stigma in the classroom. Soc Psychiatry Psychiatr Epidemiol. 2008;43:545-51.
55. Couture SM, et al. Interpersonal contact and the stigma of mental illness: A review of the literature. J Ment Health. 2003;12(3):291-305.
56. Stuart H. Fighting the stigma caused by mental disorders: past perspectives, present activities, and future directions. World Psychiatry. 2008;7(3):185-8.
57. Heijnders M, et al. The fight against stigma: an overview of stigma-reduction strategies and interventions. Psychol Health Med. 2006;11(3):353-63.
58. O'Reilly CL, et al. Consumer-led mental health education for pharmacy students: Impact on stigma and attitudes towards provision of pharmaceutical services Am J Pharm Educ. 2010;74(9):Article 167.
59. Nguyen E, et al. Evaluating the impact of direct and indirect contact on the mental health stigma of pharmacy students. Soc Psychiatry Psychiatr Epidemiol. 2012;47:1087-98.
60. O'Reilly C, et al. Mental health consumers and caregivers as instructors for health professional students: a qualitative study. Soc Psychiatry Psychiatr Epidemiol. 2012;47:607-13.
61. O'Reilly CL, et al. Impact of mental health first aid training on pharmacy students' knowledge, attitudes and self-reported behaviour: a controlled trial. Aust N Z J Psychiatry. 2011;45(7):549-57.
62. Rosen A, et al. Interdisciplinary teamwork and leadership: issues for psychiatrists. Australasian Psychiatry. 2005;13(3):234-40.
63. Castonguay LG, et al. The working alliance: Where are we and where should we go? Psychother: Theor Res Pract Train. 2006;43(3):271-9.

PHARMACEUTICAL SOCIETY OF AUSTRALIA LTD.
ABN 49 008 532 072

NATIONAL OFFICE
Pharmacy House
44 Thesiger Court
Deakin ACT 2600

PO Box 42
Deakin West ACT 2600

P: 02 6283 4777
F: 02 6285 2869
E: psa.nat@psa.org.au

BRANCH CONTACT DETAILS
P: 1300 369 772
F: 1300 369 771

AUSTRALIAN CAPITAL TERRITORY
44 Thesiger Court
Deakin ACT 2600

PO Box 42
Deakin West ACT 2600
E: act.branch@psa.org.au

NEW SOUTH WALES
82 Christie Street
St Leonards NSW 2065

PO Box 162
St Leonards NSW 1590
E: nsw.branch@psa.org.au

QUEENSLAND
PACE
Level 3, West Wing
20 Cornwall Street
Dutton Park QLD 4102

PO Box 6120
Buranda QLD 4102
E: qld.branch@psa.org.au

SOUTH AUSTRALIA
Suite 7/102
Greenhill Road
Unley SA 5061
E: sa.branch@psa.org.au

TASMANIA
161 Campbell Street
Hobart TAS 7000
E: tas.branch@psa.org.au

VICTORIA
Level 1, 381 Royal Parade
Parkville VIC 3052
E: vic.branch@psa.org.au

PSA3809

Pharmaceutical Society of Australia

Pharmaceutical Society of Australia

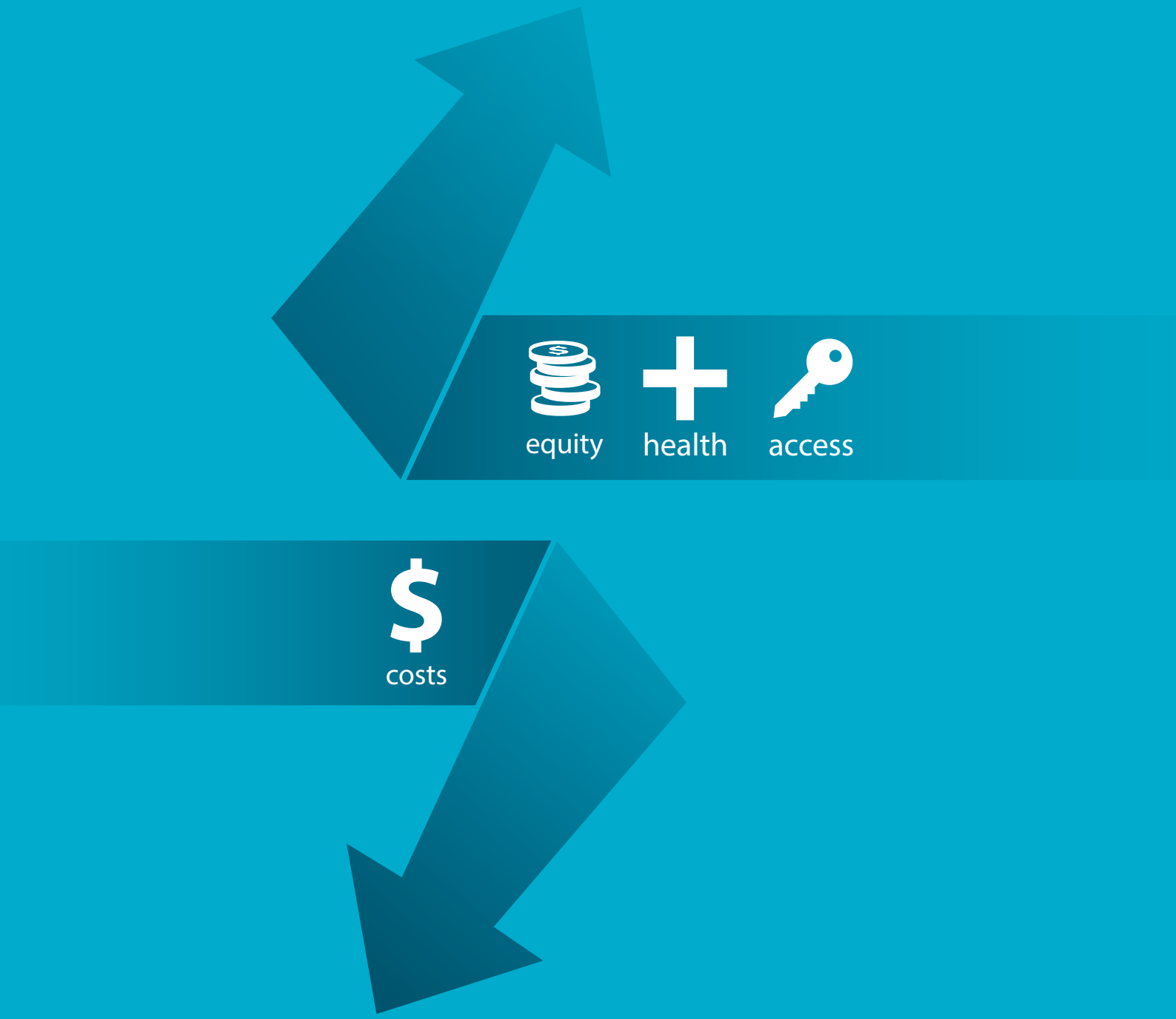
SUBMISSION TO THE 2015–16 FEDERAL BUDGET

Integrating pharmacists into primary care teams

Better health outcomes through cost-effective models of care

FEBRUARY
2015

PSA is pharmacy.



Pharmacists are highly trained, have deep expertise in medicines, and are located in communities throughout Australia. But their role is far more limited in Australia than in many other countries.[1]

Summary

Team-based models of primary care have emerged in response to growing health system demands created by increasingly complex patients.

Such models are correlated with improvements in equity, access and lower costs, as well as improvements in population health.[2]

Furthermore, as Pharmaceutical Benefits Scheme (PBS) spending per person is projected to increase by 22% by 2020[3], having a pharmacist contribute to more cost-effective prescribing provides a mechanism for ensuring the future sustainability of the PBS for all Australians.

This submission aligns with the key elements of Australia's policy on *Quality use of medicines* and in particular focuses on *the safe and effective use of medicines to achieve the best possible results*[4] by: monitoring outcomes; minimising misuse, over-use and under-use; and improving people's ability to solve problems related to medication, such as adverse effects or managing multiple medicines.

Pharmacists are highly qualified health professionals yet their skills, knowledge and expertise are often under-recognised and under-utilised. Australia now has a large and growing pharmacist workforce that is highly trained and with a much younger age-profile than most other health professions.

Pharmacist-delivered medication management and education services are the missing link in most general practices and Aboriginal Health Services. There are opportunities in these settings for a non-dispensing pharmacist to work with other members of the health care team to improve medication use and reduce errors for consumers with chronic disease.

This submission highlights two key areas in which existing health resources can be better coordinated and targeted within a collaborative primary health care model to improve health outcomes for Australians. Specifically, it identifies opportunities to better utilise the skills and expertise of pharmacists to address the Government's policy objectives in the following areas:

1 Improving health outcomes and cost-effectiveness of primary care

PSA recommends that Government introduces a Pharmacist Incentive Payment (PhIP) to integrate pharmacists within general practices to deliver medication management services within a collaborative framework.

2 Improving health outcomes for Indigenous Australians

PSA recommends that Government supports Aboriginal Health Services to integrate pharmacists within their teams to deliver essential medication adherence and education services in a culturally appropriate environment.

Background

"Improved primary health care is fundamental to achieving better health outcomes"[5]

'IT WILL BE IMPORTANT TO ENSURE THAT THE HEALTH SYSTEM PROVIDES VALUE FOR MONEY.'[32]

As part of its commitment to a sustainable health system, the Government has acknowledged that primary health care is best positioned to manage chronic disease and support preventive health, easing pressure on the hospital system.[6] The former Health Minister expressed a desire to find solutions now for a sustainable health system into the future, and foreshadowing the difficulty in finding money to pay for the services demanded by the increased burden of long-term health conditions.[7]

Medicines use is increasing

The growing burden of chronic disease[9] is seeing a commensurate increase in medicines use. Over 80% of Australians aged 65 years and over, and about 70% of Australians aged 45-64 regularly use pharmaceuticals, with these proportions expected to further increase.[10]

Medicines are the most common treatment used in health care and contribute to significant improvements in health when used appropriately. Australia spends over $16 billion each year on medicines or around $700 for every man, woman and child in Australia – every year.[12] By comparison, we don't spend very much on medication safety and we don't pay anywhere near enough attention to reducing the occurrence and severity of medication errors.

All medicines have the potential for side effects and can interact with other medicines. Each year 230,000 people are admitted to hospital, and many more people experience reduced quality of life, as a result of side effects of their medicines. This comes at a cost to the system of more than $1.2 billion.[13] The COAG Reform Council's recent report documented increases in potentially preventable hospital admissions.[14]

Much of this personal and financial burden is preventable, with increasing evidence of the impact that pharmacists can have on medication safety and adherence, and the resulting savings to the health system.[16,17]

Aboriginal and Torres Strait Islanders continue to experience worse health

It is not only ageing Australians with increasing co-morbidities who will continue to be exposed to the risk of medication misadventure unless improved multi-disciplinary systems and process are developed, evaluated, implemented and

integrated across health care settings.[18] Aboriginal and Torres Strait Islander people have two-to-three times higher levels of illness than non-Indigenous Australians.[19]

This is a key area of policy focus for the Government, who have indicated their commitment to achieving health equality between Indigenous and non-Indigenous Australians within a generation.[21]

Together with changes to lifestyle factors, long term medicine treatment is usually needed to prevent or reduce disease progression and thereby minimise or delay negative outcomes of ill health. Despite the high burden of chronic disease, under-use of medicines amongst Aboriginal and Torres Strait Islander people persists, due to a range of factors.[22]

Without improved medicine information and increased medicine adherence, it is likely that chronic disease for Aboriginal and Torres Strait Islander people will remain poorly controlled and morbidity and mortality rates will remain high.

Importance of medication adherence

Adherence to a medication regimen is central to good health outcomes. However, evidence is emerging that there is an increase in patients failing to collect their prescriptions.[23] Medication adherence for many patients with chronic disease is extremely poor, resulting in disease-related complications, higher levels of hospitalisation, and increased morbidity and mortality.[24] The economic costs of non-adherence are high.[25]

Central to good adherence is the quality of the health professional/patient relationship and effective health communication.[27] The Compliance to Medicines Working Group Report to the Pharmaceutical Benefits Advisory Committee highlighted the importance of the patient/clinician relationship and also identified that "*consumers value advice from a variety of health professionals about their medicines.*"[28]

Optimising the management of long-term conditions

Chronic diseases, or long-term conditions, place significant demands on the health care system and incur significant health care costs associated with medicines, diagnostic services, aged care, medical services and in particular, hospital expenses. In 2011 around 240 million prescriptions were dispensed through the PBS at a cost of $8.3 billion to the Australian Government and a further $2 billion in patient co-payments to pharmacies. For the PBS in particular, spending per person is projected to increase by 22% over the period to 2020.[29]

Optimising the management of long-term conditions through quality use of medicines (QUM) has been shown to reduce or delay the incidence of hospitalisation in patients with chronic diseases[30] and to reduce the need for, and spending on, expensive hospital admissions and medical services.[31]

The Government, through its policy *Healthy Life, Better Ageing*[33] seeks to address these rising costs and improve quality of lives. For most people the use of medicines is just one element of contribution to good or better health. This submission recognises the importance of a coordinated, team care approach where health professionals with different skills and expertise work in partnership to deliver care in a synergistic, cohesive and holistic manner. Such an approach was recommended by the National Health and Hospitals Reform Commission in its final report:

> *"We recommend improving the way in which general practitioners, primary health care professionals and medical and other specialists manage the care of people with chronic and complex conditions through shared care arrangements in a community setting."*[34]

About PSA

The Pharmaceutical Society of Australia (PSA) is the peak national professional pharmacy organisation representing Australia's pharmacists working in all sectors and locations.

PSA's core functions include:

- **providing high quality continuing professional development, education and practice support to pharmacists;**
- **developing and advocating standards and guidelines to inform and enhance pharmacists' practice; and**
- **representing pharmacists' role as frontline health professionals.**

PSA is also a registered training organisation and offers qualifications including certificate and diploma-level courses tailored for pharmacists, pharmacy assistants and interns.

80% of the life-expectancy gap between Indigenous and non-Indigenous Australians can be attributed to chronic diseases such as heart disease, diabetes and liver disease.[20]

30–50% of prescribed medicines for long term conditions are not taken as recommended.[26]

Box 1. Pharmacists can contribute to better medication management by (non-exhaustive)[41]:

- Identifying, resolving, preventing, and monitoring medication use and safety problems
- Reducing poly-pharmacy and optimising medication regimens on the basis of evidence-based guidelines
- Recommending cost-effective therapies
- Designing tailored adherence and health literacy programs
- Developing consumer medication action plans with self-management goals
- Communicating medication care plans to consumers, carers and other health care professionals in the team.

Pharmacists are an integral part of the primary care team

Pharmacists are highly qualified health professionals yet their skills, knowledge and expertise are often under-recognised and under-utilised. Australia now has a large and growing pharmacist workforce that is highly trained and with a much younger age-profile than most other health professions. After doctors and nurses, pharmacists are the largest health workforce.[35] Moreover, the workforce size is keeping pace with demand as compared with other health professions that are experiencing contractions in their workforces.[35,36]

Contemporary pharmacist training, often involving multidisciplinary teamwork, makes them ideally placed to take on collaborative roles.

During the recent debate that followed the proposal to introduce a co-payment for general practitioner (GP) services[37], some health policy experts suggested that the Government look instead to the existing health workforce.[38]

The Grattan Institute report on solutions for GP shortages in rural Australia underscored the need for GPs to be better supported by pharmacists and other health professionals.[39]

The breadth of locations in which pharmacists work, and their important contribution in each of these settings *(see Box 1)*, is well aligned with the shift towards more collaborative and patient-centred models of health care designed to improve the efficiency and effectiveness of the health system, particularly for consumers with chronic disease.[42,43]

The role for Australian pharmacists in collaborative, consumer-centred models has thus far been described in very limited and peripheral terms,[44] in contrast to international models.[45]

This unfortunately leaves Australia lagging behind in terms of applying the evidence; the models in which significant benefits have been demonstrated internationally are GP-led, but use an expanded staffing model in which nurses, pharmacists and others assume greater care management roles.[46]

Pharmacists are accessible health practitioners who, by working within a collaborative framework, can assist Government to achieve fiscally sustainable, efficient and quality healthcare.

This submission highlights two key areas in which existing health resources can be better coordinated and targeted within a collaborative primary health care model to improve health outcomes for Australians. In particular, it focuses on the safe and effective use of medicines to achieve the best possible results by: monitoring outcomes; minimising misuse, over-use and under-use; and improving people's ability to solve problems related to medication, such as adverse effects or managing multiple medicines.

Pharmacist-delivered medication management and education services are the missing link in most general practices and Aboriginal Health Services (AHSs). There are opportunities in these settings for a non-dispensing pharmacist to work with other members of the health care team to improve medication use and reduce errors for consumers with chronic disease.

This submission acknowledges the important role and significant impact that pharmacists can have on issues relating to health literacy and medication adherence and identifies opportunities to better utilise the skills and expertise of pharmacists to address the Government's QUM policy objectives.[47]

PSA recommends through the following proposals, that the Federal Government, in its 2015-16 Budget, allocates funding for practice pharmacists to work in general practices and Aboriginal Health Services to improve the quality use of medicines through a coordinated, collaborative and integrated approach to care.

Integrating pharmacists into General Practice

'Pharmacists co-located in general practice clinics can deliver a range of interventions, with favourable results in chronic disease management and quality use of medicines.'[48]

The integration of pharmacists within the general practice setting has been adopted by the NHS alliance in the UK.[49]

Many other countries, including New Zealand, Canada and USA, have pharmacists providing clinical services in general practice settings.[50] In Australia, the concept has received endorsement from leading medical organisations, acknowledging the value pharmacists add to the primary healthcare team.[51,52]

Role

A practice pharmacist is best defined as one who delivers clinical pharmacy and education services from or within a general practice medical centre or other primary care practice (multidisciplinary clinic, Aboriginal Health Service) through a coordinated, collaborative and integrated approach with an overall goal to improve patient outcomes through QUM.[53]

The practice pharmacist role is diverse and should be adapted to the needs of the practice setting and their patients.[54] The core roles include patient consultations, medication information and education, and drug use evaluation *(see Box 2)*.

Practice pharmacists assist with medication enquiries from patients and health professionals, conduct staff education, contribute to optimal prescribing, mentor new prescribers, participate in case conferences, liaise across health sectors, undertake medication management reviews, and evaluate drug utilisation to ensure optimal therapy.[57] Other roles pharmacists could undertake included point-of-care testing (e.g. blood pressure, blood glucose, International Normalised Ratio [INR]) and monitoring, clinical audits, health assessments, immunisation, transitional care and facilitation of shared medical appointments.[58,59]

As part of their collaborative work, an important element of the practice pharmacist's role is liaison with local community pharmacists, to ensure continuity of care.

'THE SKILLS OF HEALTH PROFESSIONALS ARE NOT BEING USED PROPERLY. USE OF ALL THE SKILLS OF OTHER PROFESSIONALS, SUCH AS NURSES AND PHARMACISTS, NEEDS TO BE ENCOURAGED.'[40]

Practice pharmacists have noted that being able to access the patient's medical file for a complete patient history enables meaningful, informed clinical interventions and enhances pharmacist–GP communication and collaboration.[60,61] Full access by the pharmacist to the patient's medical records is a necessity in order to provide optimal patient care.[62]

Current challenges

The major documented obstacles to effective GP-pharmacist collaboration in Australia include geographical isolation, poor communication, lack of time and lack of remuneration.[63,64]

PSA is aware that there are currently approximately 26 pharmacists working on average 18 hours per week within GP practices in Australia. The majority of these rely on remuneration from conducting Home Medicines Reviews (HMRs) to compensate for providing other unpaid services.[65] However, restrictive criteria of the HMR and Residential Medication Management Review (RMMR) programs create limited scope of services.

The absence of remuneration for practice pharmacist-delivered services has been identified as the biggest hindrance to the advancement to this area of practice in Australia.[66,67]

As outlined above, there are opportunities in general practice for a non-dispensing pharmacist to work with other members of the health care team to improve medication use and reduce error for consumers with chronic disease. However, this is only possible in very limited circumstances due to existing arrangements and funding restrictions. Currently a GP can call on the specialist skills of, for example, a nurse, physiotherapist or psychologist to help them meet the needs of consumers with chronic disease under programs nationally funded through the Medicare Benefits Schedule (MBS),[68,69] yet a pharmacist can't easily be included in the practice team to review and advise on the consumer's medicines regimen.

Given the central role of medicines in the care and treatment of consumers with chronic disease, this doesn't make sense. Many consumers with chronic diseases are missing out, and an opportunity to improve their health is being lost.

Proposed solution

PSA and the Australian Medical Association (AMA) have developed a possible model which is outlined below. The model is based on the Practice Nurse Incentive Program (PNIP) which provides payments to general practices to support an expanded and enhanced role for nurses working in general practice.[70] It is suggested that the Australian Government funds a similar program for pharmacists. A Pharmacist Incentive Payment (PhIP) would support the cost of employing a pharmacist for the majority of general practices.

The PhIP would pay $25,000 per year per SWPE* with a pharmacist working a minimum of 12 hours 40 minutes per week. Incentives would be capped at five per practice meaning that practices would be eligible to receive up to $125,000 per year to support their pharmacist workforce. A loading of up to 50% should apply for rural practices.

In line with the requirements for the PNIP, a practice must meet certain requirements to be eligible to receive the PhIP *(see Box 3)*.

* The Standardised Whole Patient Equivalent (SWPE) value of a practice is the sum of the fractions of care provided to practice patients, weighted for the age and gender of each patient. The average full-time GP has a SWPE value of around 1000 SWPEs annually. http://www.medicareaustralia.gov.au/provider/incentives/pip/payment-formula/#N101B6

Box 2. Examples of ways in which pharmacists can assist within a general practice (non-exhaustive) [55,56]:

Staff-directed services

- Sharing current drug information with doctors and practice staff
  - Education sessions
  - New evidence & therapeutic uses
  - New guidelines (summarized)
  - Teaching students & registrars
  - Patient education seminars
- Responding to medicine queries
  - PBS queries
  - Sourcing medications
  - Specific medication concerns from GPs e.g. switching anticoagulants, antidepressants, opioid equivalence
  - Questions about medication formulations
- Increasing practice efficiency and freeing up GP time
  - Providing seamless care with community pharmacists
  - Prompt medication reviews and advice

Patient-directed services

- Providing in-practice referral based medicine reviews
- Private consultations for medication-based concerns for patients
- Documentation and patient follow up on adverse drug events
- Counselling on smoking cessation, lifestyle issues and medicine-based activities
- Assisting patients navigate the health system and medication changes between health settings

Practice based quality assurance activities

- Documenting and follow up adverse drug events
- Optimising medication regimens
- Drug utilisation reviews (DURs)/Drug use evaluations (DUEs)
- Monitoring and advising on prescribing practices

Demonstrated benefits

A recent systematic review indicated co-location of pharmacists in general practice clinics resulted in interventions which significantly improved blood pressure, glycosylated haemoglobin (diabetes), cholesterol, osteoporosis management and cardiovascular risk.[71] Patient consultations resulted in significant reductions in medication-related problems and improvements in medication adherence.[72]

Co-location also enabled greater communication, collaboration and relationship building among the health professionals.[73,74] Unsurprisingly, there was a significantly higher rate of uptake of a practice pharmacist medication review recommendations by the GP.[75]

GP-based practice pharmacists in the UK have been said to "*contribute hugely to patient care and support the medicines optimisation agenda. Patient empowerment is enabled and patients have a forum whereby complex medicines-related queries can be answered, thus supporting adherence and improvement in health outcomes.*"[76]

Moreover, the 2010 UK PINCER and PRACtICE studies[77,78] found that pharmacists play a critical role in reducing medicine errors in general practice.

Integrating pharmacists in general practice not only helps to ensure the best outcome in terms of minimising potential adverse effects, but also achieves more cost-effective prescribing, with cost savings shown from $44-$101/patient.[79,80]

Therefore in addition to positively contributing to the Government's QUM objectives, this initiative will contribute to a more sustainable PBS. Furthermore, it will minimise upward pressure on the PBS patient co-payment, improving the future access and affordability for Australians.

The integration of pharmacists in GP practices needs to be afforded a priority by the Australian Government in its attempts to build a more effective primary care system.

Box 3. To be eligible for the proposed PhIP, a practice must:

- be accredited or registered against the RACGP *Standards for general practice*
- maintain practice accreditation
- have public liability insurance and GPs must have professional indemnity cover
- employ or retain services of a GP
- employ or retain services of a registered pharmacist/s

Integrating pharmacists into Aboriginal Health Services

Appropriate, effective interactions of Aboriginal and Torres Strait Islander people with culturally responsive clinical pharmacists could improve medication adherence and reduce the progression of chronic disease.[81]

Poor adherence to prescribed medicines is well documented and associated with adverse health outcomes in all population groups.[82] Social circumstances, deficiencies in health services and systems mean Aboriginal people often suffer even greater challenges in medicine management than non-Indigenous Australians. Social and emotional wellbeing issues may deeply pervade the lives of many Aboriginal people and may diminish the value that individuals place upon medicines and the potential of these medicines to improve their quality of life.[83]

Aboriginal Health Services (AHSs) play an important role in the primary health care of Aboriginal and Torres Strait Islander people.[84] AHSs are comfortable, safe environments that understand and address Aboriginal patients' needs. AHSs are multidisciplinary services which address the need for more holistic, accessible primary healthcare services for Aboriginal and Torres Strait Islander people.

Having pharmacists embedded within AHSs would facilitate the training of culturally responsive pharmacists and the building of relationship and trust between pharmacists and AHS Aboriginal patients and staff. Such relationships with patients together with closer collaboration with AHS GPs and other health professionals could assist continuity of care and empower Aboriginal and Torres Strait Islander people in their medication choices and management.

Role

A clinical pharmacist employed within an AHS would deliver medication advice and education to consumers and staff, and work with both consumers and other health professionals to improve medication adherence and reduce medication misadventure through tailoring medication regimens and overseeing medication management processes.

Other activities that pharmacists are well-equipped to deliver within an AHS include health promotion, disease prevention initiatives, and assistance with

consumer self-management and judicious use of medicines *(see Appendix 2)*. A pharmacist in an AHS could deliver the same services as outlined in the General Practice proposal above.

Improving medication adherence is often complex and multi-factorial and requires interventions at the system, provider and consumer level. Pharmacists can make a significant contribution at each of these levels. They can empower individuals, assess consumer needs and tailor solutions, and maximise the benefits arising from the health system by promoting timely and equitable access to medicines. Pharmacists can provide QUM education for Aboriginal and Torres Strait Islander people and health professionals.[85] Those pharmacists already working with Indigenous Australians assist with medication adherence through simplification of medication regimens, education for self-management and ongoing support and monitoring.

Without improved medicine information and increased medicine adherence, it is likely that chronic disease for Aboriginal and Torres Strait Islander people will remain poorly controlled and morbidity and mortality rates will remain high.

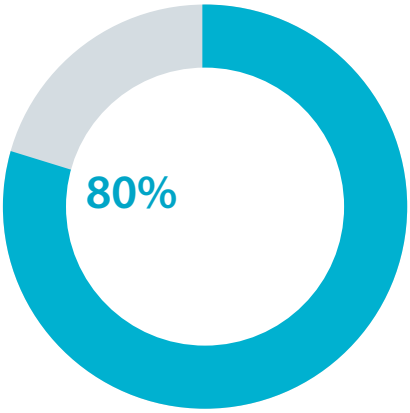
Pharmacists, who can ensure safe and effective medicine use, increase patient medication knowledge and provide education to health service staff, are particularly needed in remote areas, where there is often a scarcity of medical practitioners and lack of continuity of health professional staff.

Current challenges

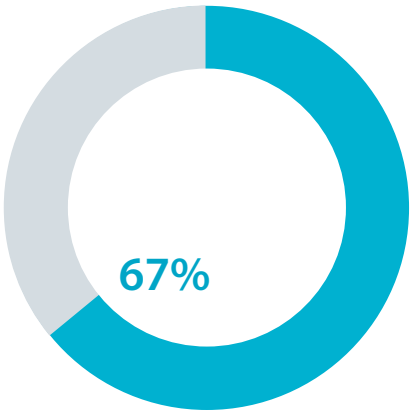
Despite the high burden of chronic disease, there has been longstanding under-use of medicines amongst Aboriginal and Torres Strait Islander people, especially in remote areas. Barriers to accessing medicines for remote Aboriginal and Torres Strait Islander people include financial and geographic constraints, failed patient-clinician interactions, poor healthcare delivery systems and complex therapeutic medication regimens.[86] Other barriers include poverty, racism, dispossession, lack of control, the stigma associated with a diagnosis of chronic disease, educational disadvantage, shared crowded households, increased patient mobility, and inadequate health professional support.[87,88]

The number of GP services per person in the lowest access rural areas is less than half that of the major cities.[89] Similarly 76% of pharmacists work in urban areas. There are many rural areas with little or no pharmacy services and many of Australia's rural hospitals operate without an onsite pharmacist due to lack of funded pharmacist positions.[90]

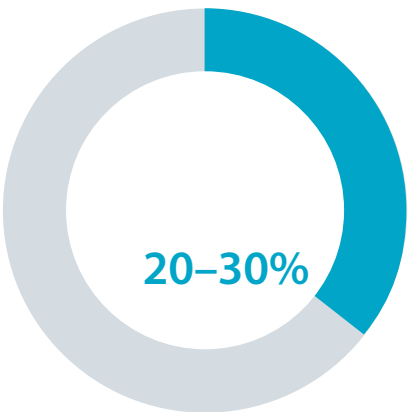
There is often much confusion around medicines and many Aboriginal and Torres Strait Islander patients in all locations still have low levels of medicine adherence relating to lack of appropriate or tailored



More than 80 per cent of people over 65 have 3 or more long-term health conditions.[8]



Two-thirds of Australians over 75 are on 5 or more medicines.[11]



Medication-related admissions account for 20-30% of all hospital admissions for people over 65.[15]

'AUSTRALIA'S MAINSTREAM MEDICAL MODEL FOCUSES ON COMPLIANCE WITH MEDICAL ADVICE AND OFTEN IGNORES THE COMPLEX HISTORICAL AND SOCIOCULTURAL INFLUENCES THAT SHAPE PATIENTS' RESPONSES TO THEIR HEALTH AND HEALTH CARE.'[81]

Box 4. Establishing clinical pharmacists within primary care settings, such as general practice and Aboriginal Health Services, can:

- reduce PBS expenditure
- reduce overall healthcare costs
- increase medication safety and adherence
- improve patient health outcomes and quality of life
- reduce medicine wastage and/or inappropriate medication use
- assist with transition of care across health care settings.

information, and lack of health professional engagement and patient support.[91,92]

Initiatives already in place such as the Aboriginal Health Service Remote Access (AHSRA or Section 100) Scheme, the Quality Use of Medicine Maximised for Aboriginal and Torres Strait Islander peoples (QUMAX) program and the Closing the Gap PBS Co-payment measure (CTG) have removed some of the financial barriers to accessing medicines, and have resulted in some increases in medicine utilisation by Aboriginal and Torres Strait Islander people.

However, complex medicine regimens result in some Aboriginal and Torres Strait Islander people finding medicines confusing and difficult to manage. Currently, communication from the doctor and/or pharmacist about medicines is often incomplete or ineffective. Dispensing protocols, the lack of pharmacist interaction and cultural training, and the physical settings of community pharmacies have made it difficult for some Aboriginal and Torres Strait Islander people to have productive relationships with their community pharmacists.[93]

HMR accredited pharmacists are currently providing very limited clinical pharmacy services to Aboriginal Australians. Although pharmacists would like to provide more HMRs to Aboriginal people the absence of pharmacist-AHS relationships are barriers to providing this service.[94]

Proposed solution

PSA recommends that the Federal Government consider an an adaptation of the PhIP to allow Aboriginal Health Services (AHS) across Australia to improve medication adherence and reduce the progression of chronic disease, by integrating clinical pharmacists in the AHS team. This would allow Australia's 200 AHSs to access up to $125,000 per year to employ a pharmacist, in keeping with the general practice proposal.

This initiative would give AHSs around Australia much greater access to the expertise of a pharmacist and where required, to deliver essential medication adherence and medication education services in a culturally appropriate environment.

Demonstrated benefits

Appropriate, effective interactions of Aboriginal and Torres Strait Islander people with culturally responsive clinical pharmacists could improve medication adherence and reduce the progression of chronic disease.[95]

Greater understanding and empowerment about medicine choices are likely to improve medicine adherence. In some cases, limited pharmacist interaction, and the physical settings of community pharmacies have made it difficult for Aboriginal and Torres Strait Islander patients to have productive relationships with pharmacists.[96]

Investment by the Government in such initiatives would be offset by reductions in chronic disease expenditure and reduced hospitalisations for the population of Australians beset by the poorest health outcomes. Making better use of pharmacists to improve the QUM by Indigenous Australians must be an integral element in the Government's efforts to achieve health equality between Indigenous and non-Indigenous Australians.

Solutions for a stronger, more sustainable primary care system

"Structural changes [are required] to improve seamlessness of care to ensure that a person with chronic illnesses has access to all the professional skills needed." [97]

Together with a focus on healthy ageing, the Government identified a focus on early intervention in primary care as one of its key policy objectives,[98] with a commitment made to: "*Strongly support improved coordination of care between doctors, practice nurses and allied health professionals.*"[99]

The Government has much to gain from investing in initiatives that improve coordination and management of chronic conditions. There is growing evidence that this results in improved utilisation of resources, including medicines and ancillary health services, leading to improved health outcomes.[100]

Pharmacists are ideally placed to support their fellow health professionals and improve the quality of care for patients *(see Box 4)*.

Yet structurally, the health system is effectively working against these goals. Currently almost all funding for pharmacist-delivered services comes not from within the MBS where the other programs sit, but from the PBS as part of the Community Pharmacy Agreements. This leaves the pharmacy programs largely isolated from other programs administered by different sections within the Department of Health.

Without collaborative and integrated arrangements, a large number of Australians with chronic diseases are missing out, and an opportunity to improve their health is being lost.

Emerging evidence suggests that ensuring the sustainability of the health system will be more about reducing wasteful spending than imposing cuts on critical elements of primary care – including pharmacists.[101] There is room in the system to make these smarter investments if the right structural changes are made.[102]

There is great potential to positively impact the health outcomes and quality of lives of all Australians, while reducing costs. Pharmacists are critical to the Government's efforts to achieve sustainable, efficient and quality healthcare.

'THERE IS GREAT POTENTIAL TO POSITIVELY IMPACT THE HEALTH OUTCOMES AND QUALITY OF LIVES OF ALL AUSTRALIANS, WHILE REDUCING COSTS.'

Appendix 1

Abbreviations

The following abbreviations have been used in this document.

AHS	Aboriginal Health Service
AMA	Australian Medical Association
GP	General practitioner
HMR	Home Medicines Review
PBS	Pharmaceutical Benefits Scheme
PhIP	Pharmacist Incentive Payment (proposed initiative)
PNIP	Practice Nurse Incentive Program
PSA	Pharmaceutical Society of Australia
QUM	Quality use of medicines
SWPE	Standardised Whole Patient Equivalent

Appendix 2

A day in the life of a clinic pharmacist

» RURAL PHARMACY

A day in the life of a clinic pharmacist

BY LINDY SWAIN

As I enter the clinic, the waiting room is overflowing and I know it is going to be another busy day. Whilst logging on to Medical Director (MD) and sipping on a coffee, Dr K asks me to develop a pain management plan for a palliative breast cancer patient she is visiting this morning.

Dr K wants the patient's regimen to allow for easy up titration of dosage of opioids as required. The patient has had multiple recent visits to hospital so I read through all the progress notes, pathology and referral letters, and check the latest palliative guidelines. I type my recommendations into Medical Director, and catch Dr K between patients to discuss.

Next the nurse brings me a patient she is worried about. The patient has her pockets stuffed with her many medicines and is confused about whether she took her tablets this morning. After much talking and listening, the patient agrees that her medicines are important and that a Webster pack may be of some assistance. We phone the pharmacy and organise it. Fortunately the QUMAX program will fund the cost of her Webster packs.

The practice manager comes by and asks me to assist her with the QUMAX progress plan and report. I phone a couple of local pharmacies to discuss the changes we are making to the QUMAX contracts. Dr C drops in to check what dose of insulin he should start Mr S on and the medical student comes by to discuss his diabetes project.

My 10.30am appointment, Mrs R, has arrived with her son, James. I contacted Mrs R last week as the pharmacy told me that she had not been picking up her Webster packs. James explains that his mum has early stage dementia and she volunteers that she has not taken any medicines for about a month. I take Mrs R's blood pressure. It is 210/145. I make an appointment for her to see the doctor. James agrees to pick up his mother's Webster packs, but is still worried that his mother may forget to take her tablets. I make some recommendations for Mrs R's medicines so that they will all be dosed in the morning. We organise for Mrs R's granddaughter to visit her each morning to remind to take her tablets.

In the lunch room, Dr J and I discuss which antipsychotics, anti-epileptics and mood stabilisers might decrease the effectiveness of oral contraceptives. I email her a list for future reference.

The home medication visit I was planning for the afternoon has cancelled. There has been a death in the community. It may be a couple of weeks now until I get to see Aunty M. I am a little concerned that Aunty M has not had a lithium level done for two years so ask the nurse to follow up and organise for Mrs M to have some pathology tests.

The Aboriginal health worker brings one of his friends in for a yarn. Mr J tells me he is managing his medicines well, but is a bit tired and a cough is waking him up. I notice he has very swollen ankles. On looking at his history I see that he has chronic heart failure. I send him in to see the doctor, who orders him some frusemide.

It has only been a couple of months since I started working one day a week at the Aboriginal Health Service. Already I am becoming a valued team member. The patients have complex needs and the GPs struggle to have time to address all their issues in one consult. Having a team approach to patient management is the only way to manage the case load. Many of my patient interactions are opportunistic. Being part of the team, being able to discuss the patient with other health professionals, and being able to access Medical Director for a complete patient history, enables me to conduct meaningful, informed clinical interventions.

"THERE ARE VERY FEW ABORIGINAL HEALTH SERVICES AND GP CLINICS WHICH HAVE A CLINICAL PHARMACIST IN-HOUSE."

There are very few Aboriginal health services and GP clinics which have a clinical pharmacist in-house. The pharmacist's role is a diverse one, including patient counselling around medication adherence, patient and health professional education, liaison with other pharmacists and health professionals, and decision making around medication choices. Although I am only in the clinic one day a week already I may have delayed or averted medical emergencies and hospitalisations. Salaried positions for pharmacists in these clinical settings would definitely save the Government health dollars.

One never knows what a day at the clinic will bring, but every day is challenging and rewarding. Now we just need the government to value the clinical pharmacists' role and start funding pharmacist positions in Aboriginal health services.

Lindy Swain is Clinical Pharmacist at Bullinah Aboriginal Health Service, Director of Rural Policy at PSA and a Pharmacist Academic, University Centre for Rural Health, Lismore, NSW.

References

1. Duckett S, Breadon P, Ginnivan L. 2013. Access all areas: new solutions for GP shortages in rural Australia. Grattan Institute Melbourne.
2. Naccarella L et al. A framework to support team-based models of primary care within the Australian health care system. MJA Open. 2012; 1 Suppl 3: 22-25
3. Australian Government, Australia to 2050: Future challenges. The 2010 intergenerational report.
4. Australian Government Department of Health and Ageing. The national strategy for quality use of medicines: Executive summary. Canberra: Commonwealth of Australia, 2002.
5. The Hon Peter Dutton, MP. Rebuilding Primary Care. Media Release. 13 May 2014
6. Ibid
7. Harrison D, Medicare unsustainable without overhaul says Peter Dutton. Sydney Morning Herald, 4 Jan 2014
8. Australian Bureau of Statistics. 4364.0 National Health Survey: summary of Results, 2007-08; 3464.0 National Health Survey: summary of results, 2001. Available at Australian Bureau of Statistics www.abs.gov.au
9. Salomon J et al., Healthy life expectancy for 187 countries, 1990–2010: a systematic analysis for the Global Burden Disease Study 2010, Lancet 2012; Vol 380; Issue 9859; 2144-2162
10. Richardson A. IBIS World Industry Report G4271a. Pharmacies in Australia September 2013.
11. NPSMedicinewise. Older people and medicines. Sept 2013. http://www.nps.org.au/topics/ages-life-stages/for-individuals/older-people-and-medicines
12. Australian Institute of Health and Welfare. Health expenditure Australia 2012-13. Health and welfare expenditure series no. 52. Cat. no. HWE 61. Canberra: AIHW; 2014.
13. Roughead L, Semple S, Rosenfeld E. Literature review: medication safety in Australia. Sydney: Australian Commission on Safety and Quality in Health Care; 2013. At: www.safetyandquality.gov.au/wp-content/uploads/2013/08/Literature-Review-Medication-Safety-in-Australia-2013.pdf
14. COAG Reform Council. Healthcare in Australia 2012–13: Five years of performance. Sydney: COAG Reform Council: 2014.
15. Roughead E and Semple S. Medication safety in acute care in Australia: where are we now? Australia and New Zealand Health Policy 2009, 6: 18.
16. Kalisch LM et al. Prevalence of preventable medication-related hospitalizations in Australia: an opportunity to reduce harm. Int J Qual Health Care 2012;24(3):239-49.
17. World Health Organisation. Adherence to long-term therapies: Evidence for action. Switzerland: WHO; 2003.
18. Roughead L, Semple S, Rosenfeld E. Literature review: medication safety in Australia. op. cit.
19. Australian Institute of Health and Welfare. Expenditure on health for Aboriginal and Torres Strait Islander people, 2010–11. An analysis by remoteness and disease. http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129544363
20. Australian Institute of Health and Welfare. The health and welfare of Australia's Aboriginal and Torres Strait Islander people: an overview 2011. Cat. no. IHW 42. Canberra: AIHW; 2011. At: www.aihw.gov.au/publication-detail/?id=10737418989
21. Liberal Party of Australia. The Coalition's Policy for Indigenous Affairs. Sept 2013
22. Pharmaceutical Society of Australia. Guide to providing pharmacy services to Aboriginal and Torres Strait Islander people. Jul 2014. http://www.psa.org.au/download/guidelines/Guide-to-providing-pharmacy-services-to-Aboriginal-and-Torres-Strait-Islander-people.pdf
23. Ortiz M. Are prescription copayments compromising patient care? Aust Prescr 2013;36(1):2–3. At: www.australianprescriber.com/magazine/36/1/article/1373.pdf
24. International Pharmaceutical Federation (FIP). FIP statement of professional standards the role of the pharmacist in encouraging adherence to long term treatments. 2003. https://www.fip.org/www/uploads/database_file.php?id=217&table_id=
25. Ibid.
26. Barber N, Parsons J, Clifford S, Darracott R, Horne R. Patients' problems with new medication for chronic conditions. Qual Saf Health Care 2004;13(3):172–5. At: www.ncbi.nlm.nih.gov/pmc/articles/PMC1743839/pdf/v013p00172.pdf
27. American College of Preventive Medicine. Medication adherence time tool: improving health outcomes. 2011. At: www.acpm.org/?MedAdherTT_ClinRef
28. Compliance to Medicines Working Group. Report to Pharmaceutical Benefits Advisory Committee. 2010;Apr. At: www.pbs.gov.au/publication/factsheets/shared/2010-09-20-CMWG-report-to-PBAC.pdf
29. Australian Government, Australia to 2050: Future challenges. op. cit.
30. Kalisch LM et al. op. cit.
31. Congressional Budget Office. Offsetting Effects of Prescription Drug Use on Medicare's Spending for Medical Services. November 2012. http://www.cbo.gov/publication/43741
32. Australian Government, Australia to 2050: Future challenges. op. cit.
33. Liberal Party of Australia. Policy for Healthy Life, Better Ageing. Sept 2013
34. National Health and Hospitals Reform Commission. A Healthier future for all Australians: final report. Canberra; Department of Health and Ageing. 2009: 19.
35. Heath Workforce Australia. A summary of Health Workforce 2025 – Volumes 1 to 3. 2012. http://www.hwa.gov.au/sites/default/files/SummaryHW2025Vol1-3FINAL.pdf
36. Health Workforce Australia. Australia's Health Workforce Series – Health Workforce by Numbers. Adelaide: HWA; 2013.
37. Australian Centre for Health Research, A proposal for affordable cost sharing for GP services funded by Medicare. Oct 2013
38. Doggett, J. The side effects of GP co-payments. Sydney Morning Herald, 1 Jan 2014
39. Duckett S, Breadon P, Ginnivan L. op. cit.
40. Duckett S. Needed reform in health care. Health Voices 2014;Apr:9–10. At: https://www.chf.org.au/pdfs/chf/HealthVoices_APRIL14_WEB.pdf
41. Smith MA, Nigro SC. The patient-centered medical home. In: Science and Practice of Pharmacotherapy I and II – PSAP-VII, Book 8. American College of Clinical Pharmacy; 2011:87-101.
42. Hogue MD et al. Pharmacist engagement in medical home practices: report of the APhA–APPM Medical Home Workgroup. J Am Pharm Assoc 2013;53(2):e118–24.
43. Australian Government. 2000. Third Community Pharmacy Agreement between the Commonwealth of Australia and the Pharmacy Guild of Australia.
44. See http://medicalhome.org.au/
45. Reid RJ et al. The Group Health Medical Home at year two: Cost savings, higher patient satisfaction, and less burnout for providers. Health Affairs, May 2010; 835-843
46. Ibid.
47. Australian Government Department of Health and Ageing. The national strategy for quality use of medicines: Executive summary. op. cit.
48. Tan ECK, Stewart K, Elliott RA, George J. Pharmacist services provided in general practice clinics: a systematic review and meta-analysis. Res Social Adm Pharm 2014;10(4):608–22.
49. NHS Alliance and Royal Pharmaceutical Society. Pharmacists and general practice: A practical and timely part of solving the primary care workload and workforce crisis. Oct 2014
50. Dolovich L, Pottie K, Kaczorowski J, et al. Integrating family medicine and pharmacy to advance primary care therapeutics. Clin Pharmacol Ther 2008;83(6):913–7.
51. United General Practice Australia. Expanding pharmacists' role must link with general practice to achieve improved patient outcomes. Media release 27 Feb 2014. At: www.gpra.org.au/expanding-pharmacists%E2%80%99-role-must-link-with-general-practice-to-achieve-improved-patient-outcomes
52. Australian Medical Association (AMA) and Pharmaceutical Society of Australia (PSA). Pharmacists working within general practice – the way ahead. Media Release. AMA Family Doctor Week, 20-26 July 2014
53. Freeman C, Cottrell N, Rigby D, Williams ID, Nissen L. The Australian practice pharmacist. J Pharm Pract Res 2014;44:240–8.
54. Ibid.
55. Tan E, Jackson J, Freeman C, and Cottrell N. Evidence for Practice Pharmacists in Australia – Executive Summary. Dec 2014.
56. ACT Medicare Local. General Practice and Pharmacy Integration – Model Development: A Discussion Paper. Jan 2015.

57. Tan ECK, Stewart K, Elliott RA, George J. Integration of pharmacists into general practice clinics in Australia: the views of general practitioners and pharmacists. Int J Pharm Pract 2014;22(1):28–37. At: http://onlinelibrary.wiley.com/doi/10.1111/ijpp.12047/pdf
58. Freeman CR, Cottrell WN, Kyle G, Williams ID, Nissen LM. Chronicles of a primary care practice pharmacist. Integrated Pharmacy Research and Practice 2012;1:13–18. At: www.dovepress.com/chronicles-of-a-primary-care-practice-pharmacist-peer-reviewed-article-IPRP
59. Taveira TH, Dooley AG, Cohen LB, Khatana SAM, Wu W-C. Pharmacist-led group medical appointments for the management of type 2 diabetes with comorbid depression in older adults. Ann Pharmacother 2011;45(11):1346–55.
60. Freeman CR, Cottrell WN, Kyle G, Williams ID, Nissen L. An evaluation of medication review reports across different settings. Int J Clin Pharm 2013;35(1):5–13.
61. Swain L. A day in the life of a clinic pharmacist. Australian Pharmacist 2014;33(10):25.
62. Tan ECK, Stewart K, Elliott RA, George J. Integration of pharmacists into general practice clinics in Australia: the views of general practitioners and pharmacists. op. cit.
63. Ibid.
64. Freeman C, Cottrell WN, Kyle G, Williams I, Nissen L. Integrating a pharmacist into the general practice environment: opinions of pharmacist's, general practitioner's, health care consumer's, and practice manager's. BMC Health Serv Res 2012;12:229. At: www.biomedcentral.com/content/pdf/1472-6963-12-229.pdf
65. Freeman C, Cottrell N, Rigby D, Williams ID, Nissen L. op. cit.
66. Tan ECK, Stewart K, Elliott RA, George J. Integration of pharmacists into general practice clinics in Australia: the views of general practitioners and pharmacists. op. cit.
67. Freeman C, Cottrell WN, Kyle G, Williams I, Nissen L. 2012. op. cit.
68. Medicare Benefits Schedule Allied Health Items. Jan 2013. http://www.health.gov.au/internet/mbsonline/publishing.nsf/Content/D997F6202824B29ACA257AC5007C9407/$File/201301-Allied.pdf
69. Practice Nurse Incentive Program. http://www.medicareaustralia.gov.au/provider/incentives/pnip.jsp?utm_id=9
70. Ibid.
71. Tan ECK, Stewart K, Elliott RA, George J. Pharmacist services provided in general practice clinics: a systematic review and meta-analysis. op. cit.
72. Tan ECK, Stewart K, Elliott RA, George J. Pharmacist consultations in general practice clinics: the Pharmacists in Practice Study (PIPS). Res Social Adm Pharm 2014;10(4):623–32.
73. Farrell B, Pottie K, Woodend K, et al. Shifts in expectations: evaluating physicians' perceptions as pharmacists become integrated into family practice. J Interprof Care 2010;24(1):80–9.
74. Tan ECK, Stewart K, Elliott RA, George J. Integration of pharmacists into general practice clinics in Australia: the views of general practitioners and pharmacists. op. cit.
75. Freeman CR, Cottrell WN, Kyle G, Williams ID, Nissen L. 2013. op. cit.
76. Royal Pharmaceutical Society. Pharmacists and GP surgeries. 2014;Sep. At: www.rpharms.com/policy-pdfs/pharmacists-and-gp-surgeries.pdf
77. Avery AJ, Rodgers S, Cantrill JA, et al. PINCER trial: a cluster randomised trial comparing the effectiveness and cost-effectiveness of a pharmacist-led IT-based intervention with simple feedback in reducing rates of clinically important errors in medicines management in gerenal practices. A report for the Department of Health Patient Safety Research Portfolio. 2010;Feb. At: www.birmingham.ac.uk/Documents/college-mds/haps/projects/cfhep/psrp/finalreports/PS024PINCERFinalReportOctober2010.pdf
78. Avery A, Barber N, Ghaleb M, et al. Investigating the prevalence and causes of prescribing errors in general practice: The PRACtICe Study (PRevalence And Causes of prescrIbing errors in general practiCe). A report for the GMC. 2012;May. At: www.gmc-uk.org/Investigating_the_prevalence_and_causes_of_prescribing_errors_in_general_practice___The_PRACtICe_study_Reoprt_May_2012_48605085.pdf
79. Bonner C, Watson PG. Therapeutic housekeeping: a case study involving collaboration between a medical practitioner and a clinical pharmacist in a medication management program for elderly patients. J Soc Admin Pharm 2001;18(3):97–102.
80. Greenhill G. Clinical pharmacist review of medication for the elderly in a general practice setting. Final report for the Pharmacy Education Program (PEP): 1996
81. Pharmaceutical Society of Australia. op. cit.
82. Davidson PM, Abbott P, Davison J, DiGiacomo M. Improving medication uptake in Aboriginal and Torres Strait Islander peoples. Heart Lung Circ 2010;19(5–6):372–7.
83. Emden C, Kowanko I, de Crespigny C, Murray H. Better medication management for Indigenous Australians: findings from the field. Aust J Prim Health 2005;11(1):80–90.
84. Baeza JI, Lewis JM. Indigenous health organizations in Australia: connections and capacity. Int J Health Serv 2010;40(4):719–42.
85. Davidson PM, Abbott P, Davison J, DiGiacomo M. op. cit.
86. Larkin C, Murray R. Assisting Aboriginal patients with medication management. Aust Prescr 2005;28(5):123–5. At: www.australianprescriber.com/magazine/28/5/article/731.pdf
87. Davidson PM, Abbott P, Davison J, DiGiacomo M. op. cit.
88. Murray MD, Young J, Hoke S, et al. Pharmacist intervention to improve medication adherence in heart failure: a randomized trial. Ann Intern Med 2007;146(10):714–25.
89. Duckett S, Breadon P, Ginnivan L. op. cit.
90. Tan ACW, Emmerton LM, Hattingh HL, La Caze A. Funding issues and options for pharmacists providing sessional services to rural hospitals in Australia. Aust Health Rev 2015;Jan. At: http://dx.doi.org/10.1071/AH14081
91. Emden C, Kowanko I, de Crespigny C, Murray H. op. cit.
92. Swain L, Barclay L. They've given me that many tablets, I'm bushed. I don't know where I'm going: Aboriginal and Torres Strait Islander peoples' experiences with medicines. Aust J Rural Health 2013;21(4):216–9.
93. Ibid.
94. Swain L, Griffits C, Pont L, Barclay L. Attitudes of pharmacists to provision of Home Medicines Review for Indigenous Australians. Int J Clin Pharm 2014;36(6):1260–7.
95. Pharmaceutical Society of Australia. op. cit.
96. Swain L, Barclay L. op. cit.
97. http://theconversation.com/australian-health-care-where-do-we-stand-internationally-30886
98. Liberal Party of Australia. Policy to Support Australia's Health System. Aug 2013.
99. Ibid.
100. The TRIAD Study Group, Health systems, patient factors and quality of care for diabetes: A synthesis of findings from the TRIAD Study. Diabetes Care, 2010; 3(4): 940-947.
101. Australian Institute of Health and Welfare. op. cit.
102. http://theconversation.com/health-spending-growth-at-30-year-low-31983

PHARMACEUTICAL SOCIETY OF AUSTRALIA LTD.
ABN 49 008 532 072

NATIONAL OFFICE
Pharmacy House
44 Thesiger Court
Deakin ACT 2600
PO Box 42
Deakin West ACT 2600
P: 02 6283 4777
F: 02 6285 2869
E: psa.nat@psa.org.au

BRANCH CONTACT DETAILS
P: 1300 369 772
F: 1300 369 771

AUSTRALIAN CAPITAL TERRITORY
44 Thesiger Court
Deakin ACT 2600
PO Box 42
Deakin West ACT 2600
E: act.branch@psa.org.au

NEW SOUTH WALES
82 Christie Street
St Leonards NSW 2065
PO Box 162
St Leonards NSW 1590
E: nsw.branch@psa.org.au

QUEENSLAND
PACE
Level 3, West Wing
20 Cornwall Street
Dutton Park QLD 4102
PO Box 6120
Buranda QLD 4102
E: qld.branch@psa.org.au

SOUTH AUSTRALIA
Suite 7/102
Greenhill Road
Unley SA 5061
E: sa.branch@psa.org.au

TASMANIA
161 Campbell Street
Hobart TAS 7000
E: tas.branch@psa.org.au

VICTORIA
Level 1, 381 Royal Parade
Parkville VIC 3052
E: vic.branch@psa.org.au

WESTERN AUSTRALIA
21 Hamilton Street
Subiaco WA 6008
E: wa.branch@psa.org.au

PSA4365

Pharmaceutical Society of Australia

Pharmaceutical Society of Australia

Practice guidelines for the provision of immunisation services within pharmacy

DECEMBER
2014

PSA is pharmacy.

Acknowledgments

The PSA is grateful for the contribution of the following individuals and organisations to the development and update of the *Practice guidelines for the provision of immunisation services within pharmacy*.

Professor Patrick Ball, Charles Darwin University

Ms Julianne Bryce, Australian Nursing and Midwifery Federation

Ms Bronwyn Flanagan, GlaxoSmithKline

Dr Shane Jackson, Pharmaceutical Society of Australia

Ms Toni Riley, Pharmacy Guild of Australia

Disclaimer

Neither the PSA, nor any person associated with the preparation of this document, accepts liability for any loss which a user of this document may suffer as a result of reliance on the document and, in particular, for:

- use of the Guidelines for a purpose for which they were not intended
- any errors or omissions in the Guidelines
- any inaccuracy in the information or data on which the Guidelines are based or which is contained in them
- any interpretations or opinions stated in, or which may be inferred from, the Guidelines.

Notification of any inaccuracy or ambiguity found in this document should be made without delay in order that the issue may be investigated and appropriate action taken. Please forward your notification to: Policy Unit, Pharmaceutical Society of Australia, PO Box 42, Deakin West, ACT 2600.

Endorsed by the PSA Board November 2014.

Contents

Preface

The update of the *Practice guidelines for the provision of immunisation services within pharmacy* occurred to reflect recognition of vaccination within the scope of practice of pharmacists.

Internationally there is significant experience with pharmacist-administered immunisation services.[1–4] In Australia, these immunisation services commenced in 2014.

This document provides guidance to pharmacists on professional issues and obligations relating to pharmacy immunisation services. These Guidelines may also be a useful resource for other stakeholders, including service providers or immunisers contracted or employed to administer vaccinations as part of a pharmacy immunisation service.

The PSA recognises the importance of continuity of care within the healthcare environment. These Guidelines promote specific policies and protocols designed to ensure safe and effective communication between healthcare providers.

How to use these Guidelines

These Guidelines are an educational resource for pharmacists to promote best practice and the delivery of high quality immunisation services in pharmacy. Pharmacists are expected to exercise professional judgement in applying the guidance provided to specific presenting circumstances.

Guidelines developed by the PSA are not definitive statements of correct procedure but usually reflect agreement by experts in the field. PSA guidelines are informed by available clinical evidence, and encourage the application of theoretical concepts shown to facilitate changes in practice and implementation of new services. PSA guidelines can be used as a support tool for balanced, professional decision-making in the context of the consumer's needs, beliefs and preferences, can contribute to quality assurance processes and may assist in the resolution of legal disputes or ethical dilemmas. They are not intended to provide clinical information. It is the responsibility of individual pharmacists to maintain their clinical skills, knowledge and competence.

Certain aspects with regard to the implementation of pharmacy immunisation services are considered outside the scope of these Guidelines. Pharmacists must, at all times, meet all legislative requirements, which may not be detailed in these Guidelines. Pharmacists should refer to the legislation detailing the administration of drugs, poisons and controlled substances in their respective State or Territory (refer to Appendix 1), or contact their State or Territory Department of Health for specific guidance on jurisdictional requirements. Other issues not covered within these Guidelines include models of supply or practice and funding arrangements for pharmacy immunisation services.

These Guidelines should be read and considered in conjunction with information and recommendations provided in the current edition of the *Australian Immunisation Handbook*.[5] The *Australian Immunisation Handbook* provides clinical guidelines for health professionals to support the safest and most effective use of vaccines in their practice. Recommendations in the handbook have been developed by the Australian Technical Advisory Group on Immunisation (ATAGI) and endorsed by the National Health and Medical Research Council (NHMRC).

Pharmacists are also encouraged to use this document in conjunction with existing operating procedures in the pharmacy.[6]

Terminology

The table lists definitions of terms commonly used in the Guidelines.

TERM	DEFINITION
Adverse event following immunisation (AEFI)	An unwanted reaction following administration of a vaccine, which may or may not be caused by the vaccine.
Anaphylaxis response kit	Anaphylaxis response equipment as described in the current edition of the *Australian Immunisation Handbook*.
Australian Immunisation Handbook	The Australian Immunisation Handbook was in its tenth edition at the time of writing. Always refer to the current edition of the handbook as it may have changed since the time of writing. For latest edition: **www.health.gov.au**
Immunisation	The process of inducing immunity to an infectious agent by administering a vaccine.
Immuniser	A regulated health practitioner who is authorised to supply and/or administer vaccines in accordance with State or Territory drugs and poisons legislation including nurse immunisers, nurse practitioners, medical practitioners and approved pharmacist immunisers. Note: This definition of an immuniser may not be recognised in all jurisdictions.
Immunity	The ability of the body to fight off certain infections as a result of vaccination or previous infection.
Nurse immuniser	A registered nurse who is authorised to deliver vaccinations by the State or Territory Department of Health (however named).
Pharmacy	A business entity involved in providing medicines.
Pharmacy immunisation service	Any immunisation service delivered in a pharmacy by an immuniser.
Pharmacy staff	Any person who works in the pharmacy, including the pharmacist.
Pharmacist immuniser	A registered pharmacist who is authorised to deliver vaccinations by the State or Territory Department of Health (however named).
Primary healthcare provider	Primary healthcare professional responsible for the consumer's care.
Service provider	An entity contracted to deliver immunisation services in a pharmacy.
Vaccination	The administration of a vaccine. If vaccination is successful, it results in immunity.
Vaccine	The material used for immunisation, including extracts of killed viruses or bacteria or live weakened strains of viruses or bacteria.

Introduction

Immunisation is a vital public health initiative that improves the health of individuals and populations by reducing the incidence and spread of disease.[2,7,8]

Since the principles of immunisation were first established over 200 years ago, vaccination has reduced the burden of previously common bacterial and viral diseases.[5,9,10]

The protection afforded by immunisation is two-fold. Aside from immunity directly conferred upon the individual through vaccination, when a large proportion of the population is immunised there is a subsequent disease reduction in the unimmunised segment.[7] This phenomenon, known as herd immunity, is an important aim of immunisation programs.

The first Australian immunisation programs were established in the 1920s and Australia has since had an excellent record of preventing disease through immunisation.[11,12] Long-standing mass childhood immunisation programs for poliomyelitis, pertussis, diphtheria, tetanus, measles, mumps, rubella and, more recently, *Haemophilus influenzae* type b (Hib) have meant the incidence of these vaccine-preventable diseases in Australia is low.[11–13]

Immunisation efforts in Australia are supported by the Immunise Australia Program overseen by the National Immunisation Committee.[8,14] The Immunise Australia Program aims to increase national immunisation rates by funding programs administering vaccines recommended in the *National Immunisation Program (NIP) Schedule*. It also communicates information about immunisation to the general public and healthcare professionals.[15] Two immunisation registers, the Australian Childhood Immunisation Register (ACIR) and the National Human Papillomavirus Vaccination Program Register (HPV Register), have been established to support the documentation of immunisation records.[16] However, even with these current immunisation programs and support initiatives, some population groups in Australia remain at risk of vaccine-preventable disease.[17,18]

Despite – and sometimes because of – their success, immunisation programs face certain challenges. Firstly, immunisation programs generally target healthy populations; services must be proactive as healthy consumers will

not always seek out vaccinations.[19] In addition, myths and misconceptions relating to the safety of immunisation still persist leading to a fall in vaccination rates in some areas and among some consumer groups.[7,19] Finally, a successful immunisation program can lead to complacency among healthcare professionals and the public. When there is no longer firsthand experience of the serious consequences of disease, immunisation can be undervalued,[19,20] and the public's focus can shift towards the risk of rare adverse events and previously mentioned myths and misconceptions around immunisation.[19] For these reasons, health promotion and consumer education as well as increased accessibility to immunisation services are particularly important.

Improving immunisation coverage, and ensuring an adequately skilled immunisation workforce were identified as priority areas in the Department of Health report *National Immunisation Strategy for Australia 2013–2018*.[12] The need to continue to develop additional settings for immunisation in order to reach specific population groups was previously identified in the Australian Government Department of Health and Ageing report ***Vaccine preventable diseases in Australia, 2005 to 2007***.[13] Services provided through pharmacies, by appropriately trained pharmacist or nurse immunisers, may increase accessibility to vaccinations and relevant information and improve immunisation coverage in Australia.

"VACCINATION HAS REDUCED THE BURDEN OF PREVIOUSLY COMMON BACTERIAL AND VIRAL DISEASES."

Pharmacy immunisation services

Pharmacists have an important role in promoting immunisation and reducing the impact of vaccine-preventable disease in the community.

"PHARMACY IMMUNISATION SERVICES PROVIDE AN OPPORTUNITY TO OFFER IMMUNISATION HEALTH PROMOTION, EDUCATION AND RISK-ASSESSMENT."

Pharmacists have always had a role in the dispensing and distribution of vaccines, with a focus on critical cold chain management procedures for vaccine products. Although these services remain essential, pharmacists are now adopting a broader role in providing immunisation services.[21]

Authorised immunisers

Any person administering vaccines must be an authorised immuniser. An authorised immuniser is either a medical practitioner, or an appropriately qualified and competent registered pharmacist or registered nurse.

An appropriately qualified and competent registered pharmacist or registered nurse[22]:

- has completed an approved course of study and maintained authority to immunise
- holds a current statement of proficiency in cardiopulmonary resuscitation (CPR) and first aid including anaphylaxis training
- is permitted under State or Territory legislation to administer vaccines
- is authorised by the State or Territory Department of Health (however named).

Registered pharmacists, medical practitioners and registered nurses are listed in the Australian Health Practitioner Regulation Agency (AHPRA) registers. The immuniser must have professional indemnity insurance cover appropriate to their immunisation activities.

Pharmacist and nurse immunisers

Pharmacist and nurse immunisers should provide evidence of completed training, i.e. a certificate from an authorised training provider.

Pharmacist immunisers

Pharmacist immunisers must not be responsible for any other professional activity when providing vaccinations in a pharmacy, including dispensing.

If the immuniser is a pharmacist, there must be at least two registered pharmacists, not including intern pharmacists, in the pharmacy at the time of providing vaccinations.

There is no endorsement for pharmacist immunisers on the AHPRA National Register of Practitioners.[23] Authorisation is required and provided by the State or Territory Department of Health (however named).

Nurse immunisers

There is no endorsement for nurse immunisers on the AHPRA National Register of Practitioners.[23] Authorisation is required and provided by the State or Territory Department of Health (however named).

Legislative requirements

The legislative requirements governing the administration of vaccines differ between States and Territories. The *NIP Schedule* details the types of vaccines authorised for administration. The requirements and processes for administration of vaccines are jurisdiction-specific. Refer to Appendix 2: *NIP Schedule.*

The pharmacist must ensure the immuniser is authorised to administer the vaccine or vaccines in the specific State or Territory. Immunisation services must not proceed unless all legislative requirements are met. For further information, pharmacists should contact the Department of Health for the relevant jurisdiction**.**

Refer to Appendix 4: *Contact information for Commonwealth and State and Territory health authorities and communicable disease control*.

Service agreements

Pharmacy staff should collaborate effectively with the immuniser to provide immunisation services. When contracting an external immuniser or service provider, pharmacists are encouraged to develop a service agreement outlining the roles and responsibilities of each party.

Refer to the Guideline 6: *Allied health, and complementary and alternative therapy when practised by pharmacists* of the *Guidelines for practice-specific issues.*[24]

Specific State and Territory legislation may require that a medical officer be contactable for the time when providing vaccinations. Pharmacists should consider formalising this type of arrangement through a service agreement.

Health promotion and risk assessment

Pharmacy immunisation services provide an opportunity to offer immunisation health promotion, education and risk-assessment services to consumers**.** Providing primary and preventive health care is a recognised role of pharmacists.[25]

Pharmacists are encouraged to promote and improve public health by educating consumers about immunisation recommendations, assisting consumers identify their vaccination status, and motivating at-risk consumers to be immunised. Consumers can be identified through health promotion and risk-assessment analysis. Pharmacists should provide advice to consumers about their immunisation needs, ensuring enough time and resources are allocated when promoting and explaining the service to consumers and local healthcare professionals. Refer to Appendix 2: *NIP Schedule*.[15]

Pharmacists should review local area demographics to target consumers in high-risk populations including infants and children, Aboriginal and Torres Strait Islander people over 15 years of age, the elderly and consumers with chronic disease. Pharmacists should provide consumers identified as being at-risk of vaccine-preventable disease (as a result of incomplete immunisation coverage) with appropriate information on 'catch-up' vaccination services and refer them to their primary healthcare provider.[15] At all times, pharmacists should only provide advice within the limits of professional knowledge and experience.[25]

Pharmacists are encouraged to maintain knowledge of current immunisation policy advice and scientific evidence, and should be able to provide the consumer with appropriate information about vaccination and immunity to help address questions and concerns. Refer to Appendix 3: *Consumer information resources.*

The *NIP Schedule* may not cover the specific needs of a consumer travelling or residing outside mainland Australia.[15] Pharmacists should refer consumers travelling to areas of considerable risk, or who have chronic diseases placing them at increased risk of disease or illness during their travel, to their primary healthcare provider or dedicated travel medicine centre. If the consumer is travelling to an area requiring a yellow fever vaccine, pharmacists must refer them to an approved provider at an approved yellow fever vaccination clinic.

"THE IMMUNISATION SERVICE AREA SHOULD BE EQUIPPED APPROPRIATELY TO ALLOW CONSUMERS TO SIT OR LIE WHEN RECEIVING TREATMENT."

Procedures and requirements

Pharmacists must ensure appropriate procedures exist to guarantee resources are available and in-date prior to each vaccination session. Refer to Section 2.2.2: Equipment for vaccination in the current edition of the *Australian Immunisation Handbook*.[5]

The following requirements must be available when providing immunisation services including[5]:

- adrenaline for anaphylaxis treatment and anaphylaxis information (i.e. posters)
- a suitably private area within the pharmacy to conduct vaccinations
- a cold chain management system for vaccines and vaccine products
- a disposal system for sharps and medical waste
- a policy and procedures manual for the immunisation service.

All pharmacy staff must be trained about the immunisation service including emergency procedures, alteration to pharmacy layout and workflow, developing relationships with the consumer and other health professionals, remuneration, marketing and obtaining external support.

Refer to Appendix 5: *Immunisation service delivery checklist for pharmacies*.[26,27] Refer to *QCPP Vaccination services in the pharmacy checklist T3M* if Quality Care Pharmacy Program (QCPP) accredited.

When establishing an immunisation service, pharmacy staff should seek assistance with the implementation process. Evidence shows the benefit of targeted, on-site support when preparing for change and building capacity to integrate new professional services over time.[28–31]

Emergency procedures

Pharmacists must ensure appropriate resources are available for responding to emergency situations in the immunisation service area. This includes an anaphylaxis response protocol and anaphylaxis response kit.

The pharmacy should have adequate stock levels of adrenaline appropriate to the volume of the service to provide a desired response to anaphylaxis either in the form of auto-injectors or ampoules of adrenaline and syringes. Always replenish adrenaline supply after use and regularly check the expiry dates.

Refer to Appendix 5: *Immunisation service checklist for pharmacies* and Section 2.1.1: Preparing an anaphylaxis response kit in the current edition of the *Australian Immunisation Handbook*[5] for information regarding preparation of an anaphylaxis response kit.

Pharmacists must verify immunisers have current cardiopulmonary resuscitation (CPR) and first aid certification. Pharmacists may consider first aid training for all staff involved in the immunisation service to enable them to assist in an emergency. All pharmacy staff, as well as the immuniser, must be familiar with the pharmacy's emergency procedures.

There should be a written protocol for responding to emergencies following the administration of vaccines, developed in collaboration with the immuniser or service provider. All pharmacy staff should be trained to recognise signs of adverse events such as anaphylaxis and vasovagal reactions. A laminated copy of the protocol should be placed in full view for all pharmacy staff.

Refer to Appendix 6: *Anaphylaxis response protocol*, *Australian Society of Clinical Immunology* and *Allergy's First Aid Treatment for Anaphylaxis* and the *Australian Immunisation Handbook* Section 2.3: Post-vaccination.

Immunisation service area

Immunisation services should be delivered in a private consultation area to protect the privacy and confidentiality of consumers. There should be adequate seating for consumers in the immunisation service area allowing them to remain in the general vicinity for at least 15 minutes following vaccination.

The immunisation service area should be equipped appropriately to allow consumers to sit or lie when receiving treatment. Pharmacists should ensure the area is of sufficient size and appropriate layout to accommodate efficient workflow including adequate room for the consumer, their carer and the immuniser, as well as the equipment and documentation required for the service. The immunisation service area should have sufficient space and appropriate surfaces for the immuniser to treat potential adverse events, and hand-washing facilities to meet relevant State or Territory health authority requirements.

Cold chain maintenance

The pharmacy must have equipment for storing vaccines including a reliable and stable refrigerator compliant with cold chain requirements. Pharmacists should monitor and record refrigerator storage conditions and ensure it has capacity to store vaccines appropriately. The refrigerator must be placed in a secure area, accessible only to staff, and with its power source clearly marked to prevent accidental power cuts.

All cold chain equipment should be placed in the immunisation service area or within the dispensary. Access to vaccines should be restricted, as per the relevant State or Territory legislation governing the storage of controlled substances.

Pharmacists must be familiar with and adhere to the *National Vaccine Storage Guidelines: Strive for 5*.[32] These guidelines provide practical advice about maintaining the cold chain and preventing and managing cold chain breaches. The guidelines detail the importance of storing vaccines at between +2 °C to +8 °C to maintain potency. Protocols for purchasing, transporting, storing, managing and monitoring temperature consistency of vaccines are included in these guidelines.[32]

Pharmacists should implement a procedure for dispensing and/or storing vaccines prior to administration to ensure compliance with cold chain requirements, and restrict access to these dispensed medicines. For vaccines provided by the immuniser, pharmacists should be aware of and respect maintenance of cold chain procedures and not remove vaccines from the storage environment.

If storing, handling or transporting vaccines, pharmacists must develop a written vaccine management protocol to ensure the cold chain is maintained and auditable. The vaccine management protocol should be included in the policy and procedure manual. The protocol should outline monitoring processes and adherence to cold chain guidelines including storage and monitoring requirements, identification of persons responsible for ensuring vaccine potency, contingency plans in the event of mechanical or power failure and reporting of cold chain breaches. For audit purposes, pharmacists should ensure pharmacy staff can demonstrate application of, and compliance to, the vaccine management policy or protocol.

The National Vaccine Storage Guidelines: Strive for 5[32] and the current edition of the *Australian Immunisation Handbook*[5] must be available in the immunisation service area.

Refer to see Section A: Cold chain management in the *Australian Pharmaceutical Formulary and Handbook*[33], the *QCPP Requirements Manual*[6] and Section 2.1.2: Effective cold chain: transport, storage and handling of vaccines in the current edition of the *Australian Immunisation Handbook*[5] for further information about cold chain management.

Disposal of sharps and medical waste

Pharmacists must ensure equipment for the appropriate disposal of sharps and medical waste is available in the immunisation service area, as outlined in Section 2.2.1 Occupational health and safety of the current edition of the *Australian Immunisation Handbook*.[5]

Refer to State and Territory health authorities for management guidelines for the safe disposal of clinical waste or NHMRC's *Australian guidelines for the prevention and control of infection in healthcare*.[34]

Policy and procedures manual

A policy and procedure manual for immunisation services should be developed in collaboration with the immuniser or service provider. If the pharmacy is QCPP accredited, use the QCPP template provided to develop this document. Refer to *QCPP Vaccination services in the pharmacy check list T3M*.[6]

The immunisation service policy and procedure manual may contain a number of requirements, including:

- a clearly defined aim or purpose for the service enabling pharmacy staff to understand the role the service has in the delivery of primary and preventive health care
- a checklist or flow chart of the service including how it works and how it is integrated into the established functions of the pharmacy
- a clearly defined description of the roles and responsibilities of all pharmacy staff and immunisers involved in the service
- a training schedule for all pharmacy staff informing them of their roles and responsibilities within the immunisation service (roles and responsibilities should match the existing defined roles of staff members in the delivery of pharmacy services e.g. discussion of the immunisation service with consumers and the referral process to the pharmacist and/or immuniser)
- a vaccine management protocol for ensuring compliance with cold chain storage and monitoring requirements, including identifying persons responsible for ensuring vaccine potency, contingency plans in the event of mechanical or power failure and reporting of cold chain breaches
- a policy for communication and provision of service information to local healthcare providers and consumers (including the contact details for the medical officer who has agreed to be contactable during periods in which immunisations are administered, if required by State or Territory legislation)
- a protocol for responding to medical emergencies following the administration of vaccines, including the management of anaphylaxis, the use of emergency response equipment, and the roles and responsibilities of pharmacy staff and the authorised immuniser *(see Appendix 6)*.

"PHARMACISTS SHOULD IMPLEMENT A PROCEDURE FOR DISPENSING AND/OR STORING VACCINES."

"PHARMACISTS MUST ENSURE A WORK HEALTH AND SAFETY PROTOCOL IS AVAILABLE."

- a procedure for referring consumers for appropriate medical advice and care if presenting with an adverse event following immunisation (AEIF)
- a work health and safety protocol with specific reference to minimising the risk of needle stick injury, exposure to blood and bodily fluids and the transmission of infectious diseases, including a process for post-exposure prophylaxis
- guidelines and procedures for the development and maintenance of the immunisation service area including (as necessary) screening, furniture, equipment for storing and administering vaccines, and facilities for sharps and medical waste disposal
- a waste management policy detailing process for the removal of sharps and medical waste from the pharmacy premises
- a process and requirement for documenting immunisation services including the creation and maintenance of consumer records, addition of details to the consumer's electronic health record where possible, and processes for ensuring authorised immunisers report vaccinations to appropriate immunisation registers
- a policy for documentation and storage of consumer records (with consumer consent) that ensures consumer confidentiality is maintained
- details of the responsibilities for maintenance of the service and associated documentation (e.g. access, storage, security, backups)
- a process for maintaining access to, and currency of, relevant health information for consumers
- a process for the development and update of relevant forms and templates (i.e. screening and needs assessment tools, and consumer immunisation history statements)
- a policy for the management of enquiries and complaints about the service both from consumers and other healthcare providers
- details of an incident reporting and risk management system to document, monitor and address deviations from prescribed protocols and procedures
- details of a monitoring and audit timetable for service review to ensure continuous improvement of the services.

Refer to the PSA Professional Practice Standards, Standard 2: Managing Pharmacy Practice[25] for further information regarding the development of a policy and procedures manual.

Professional indemnity insurance

Pharmacists must ensure the pharmacy has appropriate insurance cover before hosting immunisation services. The immuniser's professional indemnity insurance does not negate the need for pharmacy to be covered under its insurance policy.

Staff education and training

Pharmacists should ensure all pharmacy staff are trained about integrating immunisation services into the existing pharmacy workload and workflow. All pharmacy staff must be informed about their roles and responsibilities within the service, including relevant policies and procedures. Pharmacists should consider delivering staff training in collaboration with an immuniser wherever possible.

All pharmacy staff

Pharmacists should ensure all pharmacy staff are trained in recognising anaphylaxis and vasovagal episodes (temporary fall in blood pressure) and encouraged to participate in anaphylaxis training. All staff must be aware of their responsibilities in an emergency.

Pharmacists should inform the pharmacy staff about:

- their role in emergency response procedures
- the role and responsibilities of the immuniser
- immunisation service delivery including appointment arrangements, referral of consumer queries and handling of consumer complaints
- policies and procedures for collecting consumer healthcare information including Aboriginal and Torres Strait Islander status
- privacy legislation
- cultural safety.

Pharmacists

Examples of appropriate educational training for pharmacists include:

- health promotion and immunisation services
- the principles of vaccination and immunity
- knowledge of the ***NIP Schedule***[15]
- management of adverse events following immunisation including current CPR, First Aid certificate and anaphylaxis training
- appropriate training courses if becoming an immuniser.

Work health and safety

Pharmacists must ensure a work health and safety protocol is available, with specific reference to government protocols to minimise the risk of needle stick injury, exposure to blood and bodily fluids and the transmission of infectious diseases. Any person responsible for the provision of pharmacy immunisation services must be aware of protocols for the disposal of sharps and medical waste and procedures for post-exposure prophylaxis. Pharmacy protocols and procedures should be consistent with the ***Australian Guidelines for the prevention and control of infection in health***, developed by the NHMRC.[34]

Providing immunisation services

Consumer clinical needs assessment

The immuniser is responsible for a consumer's clinical needs assessment and pre-vaccination screening. Pharmacists should collaborate with the immuniser to ensure the correct processes exist to allow the immuniser to establish consumer immunisation status and to confirm their immunisation needs. When available, the consumer's immunisation record, Aboriginal and Torres Strait Islander status and relevant medical history should be considered as part of the clinical needs assessment. The accuracy of all information must be confirmed verbally with the consumer, or where appropriate, the consumer's carer.

Pharmacists should ensure the immuniser undertakes appropriate pre-vaccination screening with each consumer prior to vaccination to identify contraindications or precautions to vaccines to be administered. Immunisers may utilise the Pre-vaccination screening checklist *(see Appendix 7)* to assist with pre-vaccination screening.

Refer to Section 2.1.4: Pre-vaccination screening in the current edition of the *Australian Immunisation Handbook*[5] for further information about pre-vaccination screening including contraindications and false contraindications to immunisation.

Consumer consent

Consumer consent must be obtained and documented by the immuniser prior to providing immunisation services. Consent must be obtained before each vaccination, after establishing there are no conditions that contraindicate immunisation.

As part of the consent process, the consumer should be:

- provided with appropriate and reliable information (preferably written) about immunisation procedures including the risks and benefits associated with specific vaccines
- informed of any fees associated with the service and consent to such costs
- asked if they have a regular primary healthcare provider and if, in the interest of ensuring continuity of care, they consent to providing that provider with a copy of their vaccination statement.

Pharmacists should ensure appropriate processes exist for the immuniser to obtain and document consumer consent.

Refer to Appendix 7: *Pre-vaccination screening checklist to obtain and record consumer consent prior to the provision of immunisation services.*

"PHARMACISTS SHOULD ENSURE APPROPRIATE PROCESSES EXIST FOR THE IMMUNISER TO OBTAIN AND DOCUMENT CONSUMER CONSENT."

"ALL CONSUMER INFORMATION SHOULD BE STORED IN A MANNER THAT ENSURES PRIVACY AND CONFIDENTIALITY."

Refer to Section 2.1.3: Valid consent in the *Australian Immunisation Handbook*[5] for further information regarding valid consent, including how to obtain consent in special populations (i.e. children or people with impaired decision-making ability).

Confidentiality and consumer privacy

Pharmacists must ensure that any person involved in providing immunisation services in the pharmacy understands privacy legislation and respects and safeguards the consumer's privacy and confidentiality at all times, particularly in relation to information obtained as a result of providing these services.[34]

All consumer information should be stored in a manner that ensures privacy and confidentiality. Access to, and disclosure of, consumer information must comply with the relevant privacy legislation. Information can only be used for the purpose it was collected, unless otherwise authorised by the consumer. All information relating to immunisation services must be retained for a minimum of seven years, in keeping with other professional service programs.[35]

Refer to the *Australian Privacy Principles*: Criterion 3.36, PSA P*rofessional Practice Standards*, Standard 1: Fundamental Pharmacy Practice[25] and the PSA Privacy obligations for pharmacists[37] for further information about privacy obligations for pharmacists.

Administration of vaccines

Authorised immunisers must administer all vaccines in the pharmacy.[22] Vaccines must be administered in accordance with standards outlined in Section 2.2 Administration of vaccines in the current edition of the *Australian Immunisation Handbook*.[5]

Pharmacists must ensure that protocols and procedures for the service conform to the standards outlined in the current edition of the *Australian Immunisation Handbook*.[5]

Consumer aftercare

Pharmacy staff should support the immuniser by encouraging consumers to remain in the vicinity following vaccination for at least 15 minutes. Consumers should be offered seating in an area near the immunisation service area so assistance and treatment can be provided if necessary.

Pharmacists must ensure there are procedures to refer consumers experiencing adverse events following immunisation (AEFI) for appropriate medical advice and care. Consumers may return to the pharmacy at a later time for advice and treatment to manage delayed adverse events or to confirm information provided by the immuniser. Pharmacists should refer consumers who present with adverse events for treatment based on the severity of the adverse event. Appropriate referral pathways include the immuniser, the consumer's primary healthcare provider or an emergency care facility.

Refer to Appendix 8: *Post-vaccination procedures checklist, including immediate aftercare procedures.*

Consumer vaccination documentation

Appropriate documentation of all vaccinations is a core requirement of any immunisation service.

The following information should be included in the consumer's vaccination records:

- consumer's full name and date of birth
- details of the vaccine given including the dose number, brand name, batch number
- date and time of vaccination
- site of administration
- full name of the immuniser administering the vaccine
- the date that the next vaccination is due (if appropriate).

Refer to Appendix 9: *Consumer vaccination statement template.*

Pharmacists should store a copy of the consumer vaccination record and any relevant consumer consent and screening documents. All documents should be stored in a format and location to allow timely access and easy retrieval. Pharmacists must ensure consumer information is stored in a manner that protects consumer confidentiality, and that access and disclosure processes comply with the relevant privacy legislation.

If the consumer consents, pharmacists should report the administration of all vaccines to their nominated primary healthcare provider.[22]

Refer to Appendix 8: A *Post-vaccination procedures checklist including documentation procedures.*

Identification and management of adverse events following immunisation

Consumers should receive appropriate information regarding adverse events following immunisation (AEFI) from the immuniser as part of the consent process and following vaccination. Pharmacists must ensure that appropriate processes for the provision of information to consumers are in place.

Refer to Appendix 3: *Consumer information resources: vaccinations and immunity*, to support and reinforce information provided by the immuniser.

When vaccination is taking place, pharmacists should know which consumers have been vaccinated and be familiar with common possible AEFIs. Pharmacists may consider processes to discreetly identify consumers who have been vaccinated to enable the provision of appropriate assistance or treatment if required.

Refer to Section 2.3.2: Adverse events following immunisation in the current edition of the *Australian Immunisation Handbook*[5] and the product information for specific vaccine products for further information regarding AEFI.

Refer to Appendix 8: *Post-vaccination procedures checklist, including AEFI procedures.*

Collaboration with other healthcare providers

Pharmacists should collaborate with other healthcare providers in the local community when providing immunisation services, particularly local general practitioners, other pharmacies, carers, and community nurses. All communications with other healthcare providers should be documented in the consumer's history. Pharmacists must gain consumer consent before disclosing immunisation information to other healthcare providers *(see Appendix 7)*.

Refer to the PSA Code of Ethics Principle 9 – Collaboration.[38] Review the relevant Professional Practice Standards (Fundamental Pharmacy Practice and Continuity of Care through Medication Liaison Services),[25] and the relevant Competency Standards (Domain 2: Communication, collaboration and self-management).[39]

Immunisation reporting and management

"PHARMACISTS SHOULD REGULARLY MONITOR PRACTICE AGAINST SERVICE POLICIES AND PROCEDURES."

Reporting to immunisation registers

Pharmacists should ensure appropriate processes exist for the immuniser to report the administration of vaccines to any relevant immunisation registers such as the National Human Papillomavirus Vaccination Program Register (HPV Register) and the Australian Childhood Immunisation Register (ACIR). All childhood immunisations administered to children aged less than 7 years must be reported to the ACIR. Only immunisers are able to make reports directly to immunisation registers. However, pharmacists should have sufficient understanding of reporting requirements to inform consumers on the purpose and function of the register as necessary.

Refer to Appendix 8: *Post-vaccination procedures checklist, including reporting procedures.*

Reporting adverse events following immunisation (AEFI)

Pharmacists should collaborate with the immuniser to ensure any AEFI are reported to the relevant State or Territory Departments of Health, and any other body as mandated by jurisdictional requirements to enable the identification of possible local trends in adverse events. State and Territory health authorities report all AEFI to the Therapeutic Goods Administration (TGA). AEFI may be reported[40,41]:

- directly to the TGA via the online Australian Adverse Reaction Reporting System
- via phone
- via fax, email, or mail using a *Report of suspected adverse reaction to vaccines* form (known as a 'blue card').

Refer to TGA at: **www.tga.gov.au** for full details on how to report an adverse event.

Monitoring and auditing of immunisation services

Pharmacists should regularly monitor practice against service policies and procedures to identify areas or issues for improvement or change. The monitoring of services may include:

- review of risk management documentation including 'near-miss' reports
- revision of policies
- evaluation of compliance with service protocols.

Immunisation services provided in pharmacies and accredited under QCPP are externally audited as part of the QCPP audit cycle. Compliance of immunisation services and vaccine management protocols must be demonstrated.[42] Refer to *QCPP Vaccination services in the pharmacy check list T3M*

Appendices

Appendix 1: State and Territory drugs and poisons legislation

STATE	RELEVANT LEGISLATION
ACT	Medicines, Poisons and Therapeutic Goods Act 2008: **www.legislation.act.gov.au**
	Medicines, Poisons and Therapeutic Goods Regulation 2008: **www.legislation.act.gov.au**
NSW	Poisons and Therapeutic Goods Act 1966: **www.legislation.nsw.gov.au**
	Poisons and Therapeutic Goods Regulation 2008: **www.legislation.nsw.gov.au**
NT	Medicines, Poisons and Therapeutic Goods Act 2014 **nt.gov.au**
	Medicines, Poisons and Therapeutic Goods Regulations 2014: **nt.gov.au**
QLD	Public Health Act 2005: **www.legislation.qld.gov.au**
	Public Health Regulation 2005: **www.legislation.qld.gov.au**
SA	Controlled Substances Act 1984: **www.legislation.sa.gov.au**
	Controlled Substances (Poisons) Regulations 2011: **www.legislation.sa.gov.au**
TAS	Poisons Act 1971: **www.thelaw.tas.gov.au**
	Poisons Regulations 2008: **www.thelaw.tas.gov.au**
VIC	Drugs, Poisons and Controlled Substances Act 1981: **www.austlii.edu.au**
	Drugs, Poisons and Controlled Substances Regulations 2006: **www.austlii.edu.au**
WA	Poisons Act 1964: **www.austlii.edu.au**
	Poisons Regulations 1965: **www.austlii.edu.au**

Appendix 2: National Immunisation Program schedule

The National Immunisation Program (NIP) schedule is updated regularly. To learn more about the NIP, see their website, **www.immunise.health.gov.au** or contact their information line on 1800 671 811.

The most recent NIP schedule can be accessed at: **www.immunise.health.gov.au**

Appendix 3: Consumer information resources

Note: Refer to the Australian Immunisation Handbook 10th edition 2013 www.immunise.health.gov.au

CONSUMER INFORMATION RESOURCES ON VACCINATION AND IMMUNITY
Immunisation information for parents
• Australian Academy of Science. The science of immunisation: questions and answers. 2012 www.science.org.au/immunisation
• Australian Government Department of Health. Immunise Australia Program. Understanding childhood immunisation booklet. 2013 www.immunise.health.gov.au
• Australian Government Department of Health. Immunise Australia Program. National Immunisation Program Schedule. 2013 www.immunise.health.gov.au
• Western Australia Department of Health. Vaccine information for parents. 2010 www.public.health.wa.gov.au
• New South Wales Government Health. NSW Immunisation Schedule. 2013 www.health.nsw.gov.au
• Victorian Department of Health. Immunisation: starting school? Immunisation information for parents enrolling a child. 2014 www.health.vic.gov.au
• Victorian Department of Health. Common reactions to vaccines. 2013 health.vic.gov.au
• National Centre for Immunisation Research and Surveillance. NCIRS fact sheets. 2014 www.ncirs.edu.au
Immunisation for adults
• Australian Academy of Science. The science of immunisation: questions and answers. 2012 www.science.org.au
• Victorian Department of Health. Immunisations for adults. 2014 www.health.vic.gov.au/immunisation
• New South Wales Government Health. Vaccine administration record for adults www.health.nsw.gov.au
• National Centre for Immunisation Research and Surveillance. Adult vaccination: vaccines for Australian adults. NCIRS Fact sheet. 2012 www.ncirs.edu.au
• Victorian Department of Health. In your language [immunisation factsheets]. 2014 www.health.vic.gov.au
• National Centre for Immunisation Research and Surveillance. NCIRS fact sheets. 2014 www.ncirs.edu.au
Immunisation for Aboriginal and Torres Strait Islander people
• Australian Government Department of Health. Immunise Australia Program. Influenza fact sheet – Aboriginal and Torres Strait islander persons. 2014 www.immunise.health.gov.au
• Australian Government Department of Health. Immunise Australia Program. Influenza – Aboriginal and Torres Strait Islander persons poster. 2014 www.immunise.health.gov.au
Australian Immunisation Handbook
• Australian Government Department of Health. Anaphylaxis and vasovagal episodes. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
• Australian Government Department of Health. Contact details for Australian, State and Territory government health authorities and communicable disease control. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
• Australian Government Department of Health. Comparison of the effects of diseases and the side effects of NIP vaccines. Australian Immunisation Handbook, 10th edition. 2013 ncirs.edu.au
• Australian Government Department of Health. Adverse events following immunisation. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
Avian bird flu
• New South Wales Government Health. Factsheet: Avian influenza ('bird flu'). 2012 www.health.nsw.gov.au
Chickenpox *(Varicella zoster)* vaccine
• NPS MedicineWise. Chickenpox (varicella zoster) vaccine. 2013 www.nps.org.au
• Australian Government Department of Health. Varicella. Australian Immunisation Handbook, 10th edition 2008 www.immunise.health.gov.au
• Queensland Government Health. Chickenpox Varicella. 2014 health.qld.gov.au
• Victoria Department of Health. Chickenpox - immunisation. 2014 www.betterhealth.vic.gov.au
Cholera vaccine
• NPS MedicineWise. Cholera vaccine. 2012 www.nps.org.au
• Australian Government Department of Health. Cholera. Australian Immunisation Handbook, 10th edition 2008 www.health.gov.au
Diphtheria vaccine
• NPS MedicineWise. Diphtheria vaccine. 2013 www.nps.org.au
• Australian Government Department of Health. Diphtheria. Australian Immunisation Handbook, 10th edition. 2013 www.health.gov.au
• Queensland Government Health. Diphtheria. 2014 health.qld.gov.au
***Haemophilus influenzae* type b (Hib) vaccine**
• NPS MedicineWise. Haemophilus influenzae type b (Hib) vaccine. 2013 www.nps.org.au
• Australian Government Department of Health. Haemophilus influenzae type b (Hib). Australian Immunisation Handbook, 10th edition. 2013 www.health.gov.au
• Queensland Government Health. Haemophilus influenza type b Hib. 2013 health.qld.gov.au
• Victorian Department of Health. Haemophilus influenzae type b (Hib). 2013 www.betterhealth.vic.gov.au

CONSUMER INFORMATION RESOURCES ON VACCINATION AND IMMUNITY

Hepatitis A vaccine

- NPS MedicineWise. Hepatitis A vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Hepatitis A. Australian Immunisation Handbook, 10th edition. 2013 www.health.gov.au
- Queensland Government Health. Hepatitis A. 2013 health.qld.gov.au
- New South Wales Government Health. Hepatitis A. 2013 www.health.nsw.gov.au

Hepatitis B vaccine

- NPS MedicineWise. Hepatitis B vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Hepatitis B. Australian Immunisation Handbook, 10th edition. 2013 www.health.gov.au
- Queensland Government Health. Hepatitis B and immunisation. 2013 health.qld.gov.au
- Victorian Department of Health. Infant hepatitis B. 2013 www.health.vic.gov.au

Human papillomavirus (HPV) vaccine

- Australian Government Department of Health. Human papillomavirus. Australian Immunisation Handbook, 10th edition. 2013 www.health.gov.au
- National HPV Vaccination Program Register. Parents and teens information www.hpvregister.org.au/parents-teens
- NPS MedicineWise. Human papillomavirus (HPV) vaccine. 2014 www.nps.org.au
- Australian Government Department of Health. Immunise Australia Program. Human papillomavirus (HPV). 2013 www.immunise.health.gov.au
- Queensland Government Health. Human papillomavirus HPV and immunisation. 2011 health.qld.gov.au

Influenza (flu) vaccine

- NPS MedicineWise. Influenza (flu) vaccine. 2013 www.nps.org.au
- NPS MedicineWise. Preventing flu (influenza). 2013 www.nps.org.au
- Australian Government Department of Health. Immunise Australia Program. Influenza (flu). 2013 www.immunise.health.gov.au
- Western Australia Department of Health. Influenza vaccine: what you need to know. 2014 www.public.health.wa.gov.au
- Western Australia Department of Health. Influenza fact sheet. 2013 www.healthywa.wa.gov.au
- Queensland Government Health. Influenza the flu. 2014 health.qld.gov.aup
- New South Wales Government Health. Influenza. 2014 www.health.nsw.gov.au

Japanese encephalitis vaccine

- NPS MedicineWise. Japanese encephalitis vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Japanese encephalitis. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au

Measles vaccine

- Australian Government Department of Health. Measles. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
- Queensland Government Health. Measles and immunisation. 2014 health.qld.gov.au

Measles, mumps and rubella (MMR) vaccine

- NPS MedicineWise. Measles, mumps and rubella (MMR) vaccine. 2013 www.nps.org.au
- Victorian Department of Health. Measles, mumps and rubella. 2014 www.health.vic.gov.au

Meningococcal C vaccine

- NPS MedicineWise. Meningococcal C vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Meningococcal disease. Australian Immunisation Handbook, 10th edition. 2013. www.immunise.health.gov.au
- Queensland Government Health. Meningococcal disease. 2013 health.qld.gov.au

Mumps vaccine

- Australian Government Department of Health and Ageing. Mumps. Australian Immunisation Handbook, 10th edition. 2013. www.immunise.health.gov.au
- Queensland Government Health. Mumps and immunisation. 2013 access.health.qld.gov.au
- New South Wales Government Health. Factsheet: Mumps. 2013 www.health.nsw.gov.au

Pneumococcal vaccine

- NPS MedicineWise. Pneumococcal vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Pneumococcal disease. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
- Queensland Government Health. Pneumococcal disease. 2013 health.qld.gov.au
- Victorian Department of Health. People at risk of pneumococcal disease: immunisation information. 2014 www.health.vic.gov.au

Polio (poliomyelitis) vaccine

- NPS MedicineWise. Polio (poliomyelitis) vaccine. 2013 www.nps.org.au
- Australian Government Department of Health and Ageing. Poliomyelitis. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
- Queensland Government Health. Poliomyelitis Polio. 2014 health.qld.gov.au

CONSUMER INFORMATION RESOURCES ON VACCINATION AND IMMUNITY

Q fever vaccine

- NPS MedicineWise. Q fever vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Q fever. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
- Queensland Government Health. Q fever. 2014 health.qld.gov.au
- New South Wales Government Health. Factsheet: Q fever. 2012 www.health.nsw.gov.au

Rabies vaccine

- NPS MedicineWise. Rabies vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Rabies and other lyssaviruses (including Australian bat lyssavirus). Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au

Rotavirus vaccine

- NPS MedicineWise. Rotavirus vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Rotavirus. Australian Immunisation Handbook, 10th edition. 2013. www.immunise.health.gov.au
- Queensland Government Health. Rotavirus. 2013 health.qld.gov.au
- New South Wales Government Health. Factsheet: Rotavirus infection. 2012 www.health.nsw.gov.au

Rubella vaccine

- Queensland Government Health. Rubella German measles. 2013 health.qld.gov.au

Shingles *(Herpes zoster)* vaccine

- NPS MedicineWise. Shingles (herpes zoster) vaccine. 2012 www.nps.org.au
- Australian Government Department of Health. Zoster (herpes zoster). Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au

Tetanus vaccine

- NPS MedicineWise. Tetanus vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Tetanus. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
- Queensland Government Health. Tetanus. 2013 health.qld.gov.au

Tuberculosis (TB) or Bacillus Calmette-Guérin (BCG) vaccine

- NPS MedicineWise. Tuberculosis or Bacillus Calmette-Guérin (BCG) vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Tuberculosis. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au

Typhoid vaccine

- NPS MedicineWise. Typhoid vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Typhoid. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au

Whooping cough (pertussis) vaccine

- NPS MedicineWise. Whooping cough (pertussis) vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Pertussis. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
- Western Australia Department of Health. Pertussis (whooping cough) fact sheets. 2014 www.public.health.wa.gov.au
- Australian Government Department of Health. Immunise Australia Program. Whooping cough brochure. 2012 www.immunise.health.gov.au
- Queensland Government Health. Whooping cough Pertussis. 2014 health.qld.gov.au
- New South Wales Government Health. Factsheet: Whooping cough (pertussis). 2013 www.health.nsw.gov.au

Yellow fever vaccine

- NPS MedicineWise. Yellow fever vaccine. 2013 www.nps.org.au
- Australian Government Department of Health. Yellow fever fact sheets. 2014 www.health.gov.au/yellowfever
- Australian Government Department of Health. Yellow fever. Australian Immunisation Handbook, 10th edition. 2013 www.immunise.health.gov.au
- Queensland Government Health. Yellow fever. 2014 health.qld.gov.au

Appendix 4: Contact details for Commonwealth and State and Territory health authorities and communicable disease control

Note: Refer to the Australian Immunisation Handbook 10th edition 2013 www.immunise.health.gov.au

AUSTRALIAN GOVERNMENT HEALTH AUTHORITIES	
Australian Government Department of Health	1800 671 811
Australian Childhood Immunisation Register (ACIR) (national register that records vaccinations given to children under 7 years of age)	1800 653 809 (Immunisation register) Email: acir@humanservices.gov.au Website: www.humanservices.gov.au

STATE AND TERRITORY GOVERNMENT HEALTH AUTHORITIES	
ACT	Immunisation Information Line: (02) 6205 2300 Website: www.health.act.gov.au/health-services
NSW	Contact via the state-wide Public Health Unit access line: 1300 066 055 Website: www.health.nsw.gov.au/publichealth/immunisation
NT	Phone: (08) 8922 8044 Website: www.health.nt.gov.au
QLD	Phone: 13 4325 84 Website: www.qld.gov.au/health/conditions/immunisation
SA	Phone: 1300 232 272 Website: www.sahealth.sa.gov.au
TAS	Public Health Hotline: 1800 671 738 Website: www.dhhs.tas.gov.au/peh/immunisation
VIC	Phone: 1300 882 008 Website: www.health.vic.gov.au/immunisation
WA	Phone: (08) 9388 4868 or (08) 9328 0553 (after hours Infectious Diseases Emergency) Website: www.public.health.wa.gov.au

COMMUNICABLE DISEASE CONTROL	
ACT	**Australian Capital Territory Communicable Disease Control** 24-hour line: (02) 6205 2155
NSW	**NSW Communicable Diseases Branch** Phone: 1300 066 055
NT	**Northern Territory Centre for Disease Control** Phone: 08 8922 8044 (8.30am to 5.00pm) (After hours Royal Darwin Hospital 08 8922 8888 for CDC on-call doctor)
QLD	**Queensland Health Communicable Diseases Branch** Phone: (07) 3328 9724
SA	**South Australia Communicable Disease Control Branch** 24-hour line: 1300 232 272
TAS	**Communicable Diseases Prevention** 24-hour Public Health Hotline: 1800 671 738
VIC	**Victoria Communicable Disease Prevention and Control Unit** 24-hour line: 1300 651 160
WA	**Western Australia Communicable Disease Control Directorate** Phone: (08) 9388 4999 (8:30am to 5:00pm) After hours line: (08) 9382 0553 (infectious diseases emergency)

Appendix 5: Immunisation service checklist for pharmacies

Note: Refer to the Australian Immunisation Handbook 10th edition 2013 **www.immunise.health.gov.au**

CHECKLIST FOR IMMUNISATION SERVICE DELIVERY	DATE COMPLETED
Ensure the authorised immuniser is either a medical practitioner, or an appropriately qualified and competent registered pharmacist or registered nurse. An appropriately qualified and competent registered pharmacist or registered nurse: • has completed an approved course of study and maintained recency of practice to immunise • holds a current statement of proficiency in cardiopulmonary resuscitation (CPR) and first aid • is permitted under State or Territory legislation to administer vaccines • is authorised by the State or Territory Department of Health (however named)	
Ensure specific State or Territory legislative requirements have been met. Contact the health authorities in your relevant State or Territory in regard to the legislative requirements (contact information is listed in Appendix 4)	
Ensure the pharmacy's insurance policies are appropriate for the delivery of immunisation services	
Sign a service agreement between the pharmacy and the immuniser outlining the roles and responsibilities of each party, if required	
Develop a policy and procedure manual for the service	
Establish a private consultation area that meets the following requirements: • area is sufficient to accommodate the consumer (both sitting and lying), their carer if appropriate, and the immuniser, as well as all equipment required to store and administer vaccines • provides appropriate space and furnishings to allow consumers to sit or lie and receive treatment as necessary • allows for space, surfaces and equipment to respond to any adverse events and medical emergencies as necessary • provides equipment for the appropriate disposal of sharps and medical waste • makes available appropriate hand washing facilities	
Ensure adequate seating is available adjacent to the immunisation service area for all consumers and their carers who will be advised to remain in the general area for at least 15 minutes following vaccination	
Ensure appropriate equipment for storing and administering vaccines is available (e.g. a reliable and stable refrigerator with adequate capacity to store vaccines appropriately) For more information about appropriate equipment for storing and administering vaccines, refer to: • Effective cold chain: transport, storage and handling of vaccines in the Australian Immunisation Handbook • Basic principles for safe vaccine management in National vaccine storage guidelines: Strive for 5 www.immunise.health.gov.au	
Ensure an anaphylaxis response kit is available and in date, whether provided by the immuniser or the pharmacy (see current edition of the *Australian Immunisation Handbook*). An anaphylaxis response kit should be on hand at all times and should contain: • adrenaline 1:1000 (minimum of 3 ampoules – check expiry dates) • minimum of three 1 mL syringes and 25 mm length needles (for intramuscular injection) • cotton wool swabs • pen and paper to record time of administration of adrenaline • laminated copy of adrenaline doses (Table 2.3.2 Australian Immunisation Handbook) www.immunise.health.gov.au • laminated copy of *Recognition and treatment of anaphylaxis* (back cover of current Australian Immunisation Handbook ncirs.edu.au/immunisation	
Use immunisation service identifiers (i.e. consumer stickers) for quick identification of consumers who have received vaccinations should they require further assistance	
Display an emergency response protocol *(See Appendix 6:* Anaphylaxis response protocol*)*	
Display adverse events following immunisation information sheet (inside front cover Australian Immunisation Handbook www.ncirs.edu.au/immunisation	

CHECKLIST FOR IMMUNISATION SERVICE DELIVERY	DATE COMPLETED
Train all staff about their roles and responsibilities within the immunisation service so they are familiar with relevant policies and procedures including: • their role in emergency response procedures • the role and responsibilities of the immuniser • immunisation service delivery including appointment arrangements, referral of consumer queries, and handling of consumer complaints • policies and procedures for collecting patient healthcare information, including Aboriginal and Torres Strait Islander status • privacy legislation • cultural safety	
Train all pharmacists about the specific aspects of the immunisation service including: • health promotion and immunisation services • the principles of vaccination and immunity • the National Immunisation Program Schedule www.immunise.health.gov.au • management of adverse events following immunisation, including current CPR certification	
Ensure systems are developed to document and store consumer immunisation records (with consumer consent)	
Maintain access to, and currency of, relevant health information for consumers	
Ensure a work health and safety protocol with specific reference to minimising the risk of needle stick injury, exposure to blood and bodily fluids and the transmission of infectious diseases is developed and practised Pharmacy protocols and procedures should be consistent with the *Australian guidelines for the prevention and control of infection in healthcare (2010)*	
Promote an immunisation service to consumers	
Develop a consumer immunisation booking and reminder service	
Ensure the immuniser provides the consumer with immunisation information, including information about the risks of vaccination and of not being vaccinated	
Ensure consumer vaccination consent forms are completed by the immuniser prior to vaccination, and consumer consent is documented *(See Section 2.1.3 Valid consent* Australian Immunisation Handbook*)*	
Ensure a pre-immunisation checklist is used by the immuniser to identify contraindications or precautions to vaccines administered Confirm the pre-immunisation checklist is completed and documented *(See Appendix 7)*	

Appendix 6: Anaphylaxis response protocol

Note: Refer to the Australian Immunisation Handbook 10th edition 2013 **www.immunise.health.gov.au**

ANAPHYLAXIS RESPONSE PROTOCOL

SIGNS OF ANAPHYLAXIS

Anaphylaxis causes respiratory and/or cardiovascular signs or symptoms *AND* involves other organ systems, such as the skin or gastrointestinal tract. Signs include:

- signs of airway obstruction, such as cough, wheeze, hoarseness, stridor or signs or respiratory distress
- upper airway swelling (lip, tongue, throat, uvula or larynx)
- tachycardia, weak/absent carotid pulse
- hypotension that is sustained and with no improvement without specific treatment (Note: in infants and young children limpness and pallor are signs of hypotension)
- loss of consciousness with no improvement once supine or in head-down position
- skin signs, such as pruritus (itchiness), generalised erythema (redness), urticaria (weals) or angioedema (localised or general swelling of the deeper layers of the skin or subcutaneous tissue)
- abdominal cramps, diarrhoea, nausea and/or vomiting
- sense of severe anxiety and distress.

DIFFERENTIATING BETWEEN ANAPHYLAXIS AND A VASOVAGAL EPISODE

(adapted from the Australian Immunisation Handbook 10th ed. 2013)

		ANAPHYLAXIS	VASOVAGAL EPISODE
ONSET		Usually within 15 minutes but can occur within hours of vaccine administration	Immediate usually within minutes of, or during, vaccine administration
SYMPTOMS/ SIGNS	RESPIRATORY	• Cough, wheeze, hoarseness, stridor, or signs of respiratory distress (e.g. tachypnoea, cyanosis, rib recession) • Upper airway swelling (lip, tongue, throat, uvula or larynx)	• Normal respiration; may be shallow, but not laboured
	CARDIOVASCULAR	• Tachycardia, weak/absent carotid pulse • Hypotension – sustained and no improvement without specific treatment *(Note: in infants and young children, limpness and pallor are signs of hypotension)* • Loss of consciousness – no improvement once supine or in head-down position	• Bradycardia, weak/absent peripheral pulse, strong carotid pulse • Hypotension – usually transient and corrects in supine position • Loss of consciousness – improves once supine or in head-down position
	SKIN	• Pruritus generalised skin erythema urticaria (weals) or angioedema (localised or general swelling of the deeper layers of the skin or subcutaneous tissues)	• Generalised pallor, cool clammy skin
	GASTRO-INTESTINAL	• Abdominal cramps, diarrhoea, nausea and/or vomiting	• Nausea/vomiting
	NEUROLOGICAL	• Sense of severe anxiety and distress	• Feels faint, light-headed

MANAGEMENT OF ANAPHYLAXIS

- If patient is unconscious, place them on their left side and position to keep the airway clear.
- If patient is conscious, place them supine in head-down and feet-up position (unless this results in breathing difficulties).
- If any respiratory and/or cardiovascular symptoms or signs of anaphylaxis, give adrenaline by IM injection into the anterolateral thigh *(see Adrenaline use below)*. Note: Adrenaline is not required for generalised non-anaphylactic reactions (such as skin rash or angioedema). If in doubt, IM adrenaline should be given. No serious or permanent harm is likely to occur from mistakenly administering adrenaline to an individual who is not experiencing anaphylaxis.
- Call for assistance. Never leave the patient alone.
- If oxygen is available, administer by facemask at a high flow rate.
- If there is no improvement in the patient's condition within 5 minutes, repeat doses of adrenaline every 5 minutes until improvement.
- Check breathing; if absent, commence basic life support or appropriate cardiopulmonary resuscitation (CPR) *(See Australian Resuscitation Council guideline* www.resus.org.au/policy/guidelines*)*
- In all cases, transfer the person to hospital for further observation and treatment.
- Complete full documentation of the event, including the time and dose(s) of adrenaline given.

ADRENALINE USE

- The recommended dose of 1:1000 adrenaline is 0.01 mL/kg body weight (equivalent to 0.01 mg/kg up to a maximum of 0.5 mL) given by deep intramuscular injection into the thigh (not the deltoid region).
- Adrenaline 1:1000 must not be administered intravenously.
- The dose of 1:1000 (one in one thousand) adrenaline may be repeated every 5 minutes, as necessary, until there is clinical improvement.

DOSES OF 1:1000 (ONE TO ONE THOUSAND) ADRENALINE

AGE	DOSES OF 1:1000 *(one to one thousand) adrenaline*
Less than 1 year (approx. 5–10 kg)	0.05–0.1 mL
1–2 years (approx. 10 kg)	0.1 mL
2–3 years (approx. 15 kg)	0.15 mL
4–6 years (approx. 20 kg)	0.2 mL
7–10 years (approx. 30 kg)	0.3 mL
10–12 years (approx. 40 kg)	0.4 mL
> 12 years and adult (over 50 kg)	0.5 mL

ASSIGNED ROLES AND RESPONSIBILITIES

The person who will administer adrenaline is the immuniser. If it is not possible, ... will administer adrenaline.

The person who will call the ambulance is ..... .

The person who will meet and direct the paramedics to the consumer is ..... .

They should meet the paramedics at ..... .

The person who will provide clinical handover to the paramedics is the immuniser.
If this is not possible, ... will provide the clinical handover.

The person who will record the details of treatment provided, including time and dose of adrenaline administered, is ..... .

The person who will manage other customers in the pharmacy is ..... .

The person who will report the adverse event following immunisation to the relevant State or Territory health authorities is the immuniser and/or ..... .

Appendix 7: Pre-vaccination screening checklist

Note: Refer to the Australian Immunisation Handbook 10th edition 2013 www.immunise.health.gov.au

PRE-VACCINATION SCREENING AND CONSENT TOOL FOR PHARMACY-HOSTED IMMUNISATION SERVICES

CONSUMER DETAILS

Name:	Date of birth:
Address:	Phone:
Allergies:	Medicare no.:

PRIMARY HEALTHCARE PROVIDER DETAILS

Name:
Address:
Phone:
Email:

VACCINATION(S)

I expect to be vaccinated against the following infectious diseases (list all) .....

at today's visit on .....

☐ I have not received vaccines for the following infectious diseases before (list all that apply)

.....

OR

☐ I have received these vaccines for the following infectious diseases before (list disease and last date of vaccination for all that apply)

.....

GENERAL HEALTH AND SUITABILITY FOR VACCINATION

Please tell your nurse, doctor or pharmacist if you answer **yes** to any of the following statements, as vaccination may not be suitable for you today.

- You are unwell today
- You have a disease that lowers immunity (e.g. leukaemia, cancer, HIV/AIDS) or are having treatment that lowers immunity (e.g. oral steroid medicines such as cortisone or prednisolone, radiotherapy, chemotherapy)
- You have had a severe reaction following any vaccine
- You have any severe allergies (to anything)
- You have had any vaccine in the past month
- You have had an injection of immunoglobulin, or have received any blood products or a whole blood transfusion within the past year
- You are pregnant
- You have a history of Guillain-Barré syndrome
- You were a pre-term infant
- You have a chronic illness
- You have a bleeding disorder
- You are of Aboriginal or Torres Strait Islander descent
- You do not have a functioning spleen
- You are planning a pregnancy or anticipating parenthood
- You are a parent, grandparent or carer of a newborn
- You live with someone who has a disease that lowers immunity (e.g. leukaemia, cancer, HIV/AIDS), or lives with someone who is having treatment that lowers immunity (e.g. oral steroid medicines such as cortisone and prednisone, radiotherapy, chemotherapy)
- You are planning travel
- You have an occupation or lifestyle factor(s) for which vaccination may be needed (discuss with doctor/nurse) Please specify:

.....

.....

CONSENT

- I have been provided with, read, and understood information regarding the possible side effects of each vaccine, and if I have any further questions, I will ask the immuniser prior to being vaccinated.
- I request to have each vaccine and understand that it is completely voluntary.
- I have been informed of, and agree to pay, the fees or charges associated with this service.
- I consent to the pharmacy or service provider issuing a copy of my vaccination statement to my nominated primary healthcare provider.
- I agree to remain in the general vicinity of the pharmacy for 15 minutes following vaccination to enable the provision of medical assistance or treatment if required.
- I consent to the provision of emergency care if required, and authorise the pharmacy or service provider to access medical care on my behalf as required. I understand that I am responsible for any costs associated with any emergency care that may be provided.

Name: .....

Signature: ..... Date: .....

Appendix 8: Post-vaccination procedures checklist

Note: Refer to the Australian Immunisation Handbook 10th edition 2013. www.immunise.health.gov.au

POST-VACCINATION PROCEDURES CHECKLIST	COMPLETED (Y/N)
FOR PHARMACISTS	
Be familiar with the immuniser's post-vaccination care procedures including: • the disposal of used needles, syringes and vaccine vials or ampoules in accordance with standard infection control guidelines • provision of comfort and the use of distraction techniques to alleviate any distress and pain felt by the consumer (Note: paracetamol is not used routinely at the time of vaccination but may be recommended as required for fever or pain) • the provision of appropriate consumer information regarding the vaccination and possible adverse events Refer to Section 2.3.1: *Immediate after-care* in the latest edition of the *Australian Immunisation Handbook*	
FOR IMMUNISER	
Provide immunisation information to consumers. *See Appendix 3:* Consumer information resources for a list of vaccines and immunity to support and reinforce the information provided by the immuniser.	
Inform the vaccinated person and/or their parent or carer about the possible common adverse events following immunisation and how to recognise and manage them. Provide appropriate consumer information on adverse events following immunisation and give advice on when to seek medical attention. The following resources could be given: • Australian Immunisation Handbook adverse events following immunisation (inside front cover) www.ncirs.edu.au/immunisation • Victorian Department of Health Vaccine side effects docs.health.vic.gov.au	
Advise the vaccinated person and/or their parent or carer to remain in a nearby area for a minimum of 15 minutes after the vaccination. The area should be close enough to the immuniser so the vaccinated person can be observed and medical treatment can be readily obtained if needed.	
Remind the vaccinated person and/or their parent or carer to promptly report any significant adverse event following immunisation to the authorised immuniser or their primary healthcare provider. An adverse event report can be made to the Therapeutic Goods Administration (TGA), and to the relevant State or Territory Department of Health, or any other body as mandated by jurisdictional requirements. *See Section 2.3.2* Australian immunisation Handbook *How to report adverse events following immunisation.* TGA Report an adverse event to a vaccine www.tga.gov.au/reporting-problems	
Provide consumers with a statement of vaccinations received following each appointment *(see Appendix 9)*	
With the consumer's consent, forward a copy of the consumer's vaccination statement to their nominated healthcare provider	
Report all National Immunisation Program (NIP) and private vaccinations given to children under 7 years of age to the Australian Childhood Immunisation Register (ACIR). *See Section 2.3.4* Australian immunisation Handbook *Australian Childhood Immunisation Register.* Report all Human Papillomavirus vaccinations to the HPV register.	
Record the consumer's vaccination details in pharmacy immunisation records, and on the consumer's electronic healthcare record if available.	

Appendix 9: Consumer vaccination statement template

Note: Refer to the Australian Immunisation Handbook 10th edition 2013 **www.immunise.health.gov.au**

Pharmacy logo					
CONSUMER VACCINATION STATEMENT					
Consumer details					
Name		Date of birth			
Phone		Email			
Address		Medicare no.			
AUTHORISED IMMUNISER					
Name		Contact details			
Signed		Date			
VACCINATION(S)					
Infectious disease					
Brand name		Dose			
Batch number		Site of administration			
		Right arm	Left arm	Right leg	Left leg
Date of vaccination	Time	Date of next vaccination (if required)			
Infectious disease					
Brand name		Dose			
Batch number		Site of administration			
		Right arm	Left arm	Right leg	Left leg
Date of vaccination	Time	Date of next vaccination (if required)			
Infectious disease					
Brand name		Dose			
Batch number		Site of administration			
		Right arm	Left arm	Right leg	Left leg
Date of vaccination	Time	Date of next vaccination (if required)			
Infectious disease					
Brand name		Dose			
Batch number		Site of administration			
		Right arm	Left arm	Right leg	Left leg
Date of vaccination	Time	Date of next vaccination (if required)			
PHARMACY DETAILS					
Name					
Address					
Phone		Email			

References

1. Anderson C, Blenkinsopp A, Armstrong M. The contribution of community pharmacy to improving the public's health: summary report of literature review 1990–2007. Technical Report. London: Pharmacy Health link; 2009.
2. Ernst ME, Chalstrom CV, Currie JD, et al. Implementation of a community pharmacy-based influenza vaccination program. J Am Pharm Assoc 1997;37(5):570–80.
3. Grabenstein JD. Pharmacists as vaccine advocates: roles in community pharmacies, nursing homes, and hospitals. Vaccine 1998;16(18):1705–10.
4. Pinheiro B, Costa S, Guerrerio J, et al. Immunization delivery: a new service provided in Portuguese pharmacies. Part 3: Patients' satisfaction with the first pharmacy-based influenza immunization campaign [poster]. 69th International Pharmaceutical Federation (FIP) Congress. 2009.
5. Department of Health. Australian immunisation handbook, 10th edition. 2013. Canberra: Department of Health; 2013. At: www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home
6. Quality Care Pharmacy Program. QCPP requirements manual 2011. Canberra: Pharmacy Guild of Australia; 2011. Updated January 2013.
7. Andre FE, Booy R, Bock HL, et al. Vaccination greatly reduces disease, disability, death and inequity worldwide. Bull World Health Organ 2008;86(2):140–6. At: www.who.int/bulletin/volumes/86/2/07-040089/en/
8. Department of Health. Immunise Australia Program. About the program. 2013. At: www.health.gov.au/internet/immunise/publishing.nsf/Content/about-the-program
9. Plotkin SL, Plotkin SA. Chapter 1. A short history of vaccination. In: Plotkin SA, Orenstein WA, Offit PA, eds. Vaccines. 5th edn. Philadelphia: Elsevier; 2008.
10. McIntyre P, Gidding H, Gilmour R, et al. Vaccine preventable diseases and vaccination coverage in Australia, 1999 to 2000. Commun Dis Intell 2002;26(Suppl):S1–S111.
11. Department of Health. Immunise Australia Program. Timeline of mass immunisation programs and initiatives. 2013. At: www.health.gov.au/internet/immunise/publishing.nsf/Content/past-immu-prog
12. Department of Health. National immunisation strategy for Australia 2013–2018. Canberra; Commonwealth of Australia; 2014. At: www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/A894B6DF512D815DCA257BA300053819/$File/nat-immune-strategy-2013-18-final.pdf
13. Chiu C, Dey A, Wang H, et al. Vaccine preventable diseases in Australia, 2005 to 2007. Commun Dis Intell 2010;34(Suppl):S1–S167.
14. Department of Health. Immunise Australia Program. Immunisation advisory bodies: National immunisation committee (NIC). 2013. At: www.health.gov.au/internet/immunise/publishing.nsf/content/advisory-bodies
15. Department of Health. Immunise Australia program. National immunisation program schedule.2013. At: www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/nips-ctn
16. Department of Health. Immunise Australia program. 2013. At: www.immunise.health.gov.au/
17. Australian Institute of Health and Welfare. 2009. Adult vaccination survey: summary results.Canberra: Australian Institute of Health and Welfare; 2011. At: www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=10737418286
18. Hull B, Dey A, Mahajan D, et al. Immunisation coverage annual report, 2009. Commun Dis Intell Q Rep 2011;35(2):132–48. At: www.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi3502b.htm
19. Elliman D; Moreton J. The district immunisation coordinator. Arch Dis Child 2000;82(4):280–2.
20. Plotkin SA. Vaccines: past, present and future. Nat Med 2005;11(4 Suppl):S5–S11.
21. Pharmaceutical Society of Australia. Position statement on immunisation in pharmacies. Canberra: PSA; 2009. At: www.psa.org.au/download/policies/immunisation-in-pharmacies%282%29.pdf
22. Australian Medical Association. Position statement on vaccinations outside of general practice. At: https://ama.com.au/position-statement/vaccinations-outside-general-practice-2011
23. Nursing and Midwifery Board of Australia. Registration and Endorsement. 2013. At: www.nursingmidwiferyboard.gov.au/Registration-and-Endorsement.aspx
24. Allied health, and complementary and alternative therapy when practised by other persons in the pharmacy. In: Pharmacy Board of Australia. Guidelines on practice-specific issues. Melbourne: Pharmacy Board of Australia; 2011. At: www.pharmacyboard.gov.au/Codes-Guidelines.aspx
25. Professional Practice Standards. Version 4. Canberra: PSA; 2010. At: www.psa.org.au/download/standards/professional-practice-standards-v4.pdf
26. Feletto E, Wilson LK, Roberts AS, et al. Building capacity to implement cognitive pharmaceutical services: quantifying the needs of community pharmacies; Res Social Adm Pharm 2010;6(3):163–73.
27. Roberts AS, Benrimoj SI, Chen TF, et al. Practice change in community pharmacy: quantification of facilitators. Ann Pharmacother 2008;42(6):861–8.
28. Roberts A, Benrimoj SI, Dunphy D, et al. Community pharmacy: strategic change management. Sydney: McGraw-Hill; 2007.
29. Baker R, Camosso-Stefinovic J, Gillies C, et al. Tailored interventions to overcome identified barriers to change: effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews 2010, Issue 3. Art. No.: CD005470. doi: 10.1002/14651858.CD005470.pub2.
30. Jamtvedt G, Young JM, Kristoffersen DT, et al. Audit and feedback: effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews 2006, Issue 2. Art. No.: CD000259.
31. O'Brien MA, Rogers S, Jamtvedt G, et al. Educational outreach visits: effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews 2007, Issue 4. Art. No.: CD000409.
32. Australian Government Department of Health. National vaccine storage guidelines: strive for 5. Canberra: 2013. At: www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/IMM77-cnt
33. Pharmaceutical Society of Australia. Australian pharmaceutical formulary and handbook: the everyday guide to pharmacy practice. APF22. 22nd edn. Canberra: PSA; 2012.
34. National Health and Medical Research Council. Australian guidelines for the prevention and control of infection in healthcare. Canberra: National Health and Medical Research Council; 2010. At: www.nhmrc.gov.au/guidelines/publications/cd33
35. Pharmaceutical Society of Australia. Guidelines for pharmacists providing medicines use review (MedsCheck) and diabetes medication management (Diabetes MedsCheck) services. Canberra: PSA; 2012. At: www.psa.org.au/guidelines/medscheck
36. Australian Government. Australian privacy principles. 2013. At: www.oaic.gov.au/privacy/privacy-act/australian-privacy-principles%20
37. Pharmaceutical Society of Australia. Privacy principles for pharmacists. 2013. At: www.psa.org.au/supporting-practice/privacy-obligations-for-pharmacists
38. Pharmaceutical Society of Australia. Code of ethics for pharmacists. 2011. At: www.psa.org.au/download/codes/code-of-ethics-2011.pdf
39. National competency standards framework for pharmacists in Australia. Canberra: PSA; 2010. At: www.psa.org.au/supporting-practice/national-competency-standards
40. Therapeutic Goods Administration. Australian Adverse Drug Reaction Reporting System. 2014. At: www.ebs.tga.gov.au/ebs/ADRS/ADRSRepo.nsf?OpenDatabase
41. Therapeutic Goods Administration. Report of suspected adverse reaction to medicines or vaccines. 2014. At: www.tga.gov.au/pdf/forms/problem-medicines-forms-bluecard-140311.pdf
42. Pharmacy Guild of Australia. Quality Care Pharmacy Program: implementation information and rulings. Canberra: Pharmacy Guild of Australia; 2012. At: www.qcpp.com/qcpp-home

PHARMACEUTICAL SOCIETY OF AUSTRALIA LTD.
ABN 49 008 532 072

NATIONAL OFFICE
Pharmacy House
44 Thesiger Court
Deakin ACT 2600
PO Box 42
Deakin West ACT 2600
P: 02 6283 4777
F: 02 6285 2869
E: psa.nat@psa.org.au

BRANCH CONTACT DETAILS
P: 1300 369 772
F: 1300 369 771

AUSTRALIAN CAPITAL TERRITORY
44 Thesiger Court
Deakin ACT 2600
PO Box 42
Deakin West ACT 2600
E: act.branch@psa.org.au

NEW SOUTH WALES
82 Christie Street
St Leonards NSW 2065
PO Box 162
St Leonards NSW 1590
E: nsw.branch@psa.org.au

QUEENSLAND
PACE
Level 3, West Wing
20 Cornwall Street
Dutton Park QLD 4102
PO Box 6120
Buranda QLD 4102
E: qld.branch@psa.org.au

SOUTH AUSTRALIA
Suite 7/102
Greenhill Road
Unley SA 5061
E: sa.branch@psa.org.au

TASMANIA
161 Campbell Street
Hobart TAS 7000
E: tas.branch@psa.org.au

VICTORIA
Level 1, 381 Royal Parade
Parkville VIC 3052
E: vic.branch@psa.org.au

WESTERN AUSTRALIA
21 Hamilton Street
Subiaco WA 6008
E: wa.branch@psa.org.au

PSA4589

Pharmaceutical Society of Australia