Pharmacist prescribing forum

Report

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Pharmacy Board of Australia

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Disclaimer

United by a common interest in exploring the development of non-medical prescribing more broadly across the pharmacist workforce, the Pharmacist Prescribing Forum on 26 June 2018 was attended by an invited audience from primary, secondary and tertiary care settings, management, research, workforce, education providers, consumers, professional organisations and regulatory bodies.

It must be emphasised that the ideas and views expressed in this report do not necessarily reflect the view of the Pharmacy Board of Australia (the Board).

It is not possible to reflect the wide variety of views and ideas expressed at the forum; this paper aims to provide a summary of emergent themes from the collective wisdom of the group based on the analysis of the data collected on the day.

Message from William Kelly – Chair, Pharmacy Board of Australia

As the body that hosted the Pharmacist Prescribing Forum in Melbourne on 26 June 2018, the Pharmacy Board of Australia is pleased to provide this report about the day.

The forum provided an opportunity for a diverse group of health practitioners from both within and outside of the pharmacy profession, workforce development experts, state and territory regulators and researchers to explore how prescribing by pharmacists could be an effective and sustainable response to meeting the current and emerging healthcare needs of the Australian community.

Before attending the forum, participants considered and discussed questions outlined in a background paper which summarised the national and international literature and experiences of pharmacists prescribing.

The forum started with two keynote presentations, the first by Debra Thoms, Chief Nursing and Midwifery Officer, Commonwealth Government, who shared lessons from the nursing and midwifery profession's journey of prescribing. This was followed by a presentation from Lisa Nissen, Professor and Head, School of Clinical Sciences at Queensland University of Technology, who provided an overview of the work carried out previously to underpin the development of the *Health Professionals Prescribing Pathway* and the *NPS MedicineWise Prescribing Competencies Framework* and also provided an overview of pharmacist prescribing models currently in place internationally.

This presentation was followed by a number of structured, facilitated workshop discussions which allowed the participants to explore the public need for pharmacists prescribing and how these activities could be carried out safely; if any additional education and training requirements would be required; any legislative considerations; and how to ensure good stakeholder engagement to ensure the model meets expectations and to help in implementation.

The outcomes of the forum identified strong support for enhancing the role of pharmacists in the quality use of medicines by expanding a pharmacist's ability to prescribe. Participants highlighted many ways in which pharmacists could enhance timely access to medicines, reduce medicines related misadventures and improve the efficiency and cost effectiveness of the use of medicines. These actions could contribute to reducing unnecessary presentations or admissions to hospitals, reducing hospital length of stay and improved continuity of care particularly for aged care patients, for people with multiple complex conditions and for those living in rural and remote settings.

The forum outcomes will help inform:

- pharmacists on their potential future role in prescribing medicines
- ongoing work by the profession to establish models which will guide the establishment of a regulatory framework to support pharmacists prescribing Schedule 4 and Schedule 8 medicines in Australia, and
- employers to develop workforce models which include pharmacist prescribers in the delivery of high quality healthcare services.

The Board looks forward to continuing to work with different stakeholders to successfully develop proposals for pharmacist prescribing that can be implemented and sustained to effectively meet the current and future health needs of the Australian community.

William Kelly
Chair, Pharmacy Board of Australia

Contents

Background

Health service reform is driven by the need to improve access to medicines, increase patient choice, and to mitigate ongoing rural and remote workforce shortages.(1) Health costs associated with the ageing population and the increased burden of chronic disease are also driving reform.(2, 3) An objective of our National Medicines Policy is that all Australian communities receive equitable and timely access to healthcare including medicines (Figure 1).(4) These objectives are aligned with the National Registration and Accreditation Scheme (the National Scheme).(5) The aims of the National Scheme include facilitating workforce mobility across Australia, and enabling the continuous development of a flexible, responsive and sustainable Australian health workforce.(5) Non-medical prescribing can help in achieving these healthcare goals in the Australian context.

Planning for future healthcare needs will require all health practitioners to be working to the full extent of their scope of practice and to enable this, a redistribution of tasks will be required.(5-8) As there are documented shortages in many areas of Australia of medical practitioners as well as other health practitioners with prescribing rights,(6) expanded prescribing rights to other health practitioners is an important strategy.(8) The National Health Workforce Planning and Research Collaboration stated that the number of Australian prescribers needs to increase to maintain the current access to medicines.(2)

Non-medical prescribing is part of the strategy to reform healthcare in Australia and internationally.(6) The *NPS Prescribing Competencies Framework 2012* and the *Health Professionals Prescribing Pathway* both define prescribing as '*an iterative process involving the steps of information gathering, clinical decision-making, communication, and evaluation that results in the initiation, continuation or cessation of a medicine*.'(7, 8) In Australia, non-medical prescribing has been successfully extended to dentists, nurse practitioners, midwives, podiatrists and optometrists applying different prescribing models (refer to Appendix A of the Pharmacist prescribing forum background paper found at Appendix A of this report).(7) Non-medical prescribing can result in improved access to medicines for communities, promote workforce flexibility, contribute to cost-effective care, and has been demonstrated to be safe in international settings.(2, 5, 6, 9)

The *Health Professionals Prescribing Pathway* proposed three models of non-medical prescribing:

- Autonomous prescribing. The prescriber has been educated and authorised to autonomously prescribe in a specific area of clinical practice.

- Prescribing under supervision. The supervised prescriber has been educated to prescribe and has a limited authorisation to prescribe medicines that is determined by legislation, requirements of the National Board and policies of the jurisdiction, employer or health service.

- Prescribing via a structured prescribing arrangement. Prescribing occurs where a prescriber with a limited authorisation to prescribe medicines by legislation, requirements of the National Board and policies of the jurisdiction or health service prescribes medicines under a guideline, protocol or standing order.(7)

In each circumstance, the prescriber must recognise, and prescribe according to their competence for their scope of practice, in accordance with legislative authorisation and with a collaborative approach to patient care.(7)

Non-medical prescribing may contribute to the delivery of sustainable, responsive and affordable access to medicines.(1, 2, 4) It may reduce costs, increase access, and improve outcomes for patients without compromising safety and quality.(4, 9) It promotes a flexible workforce, which is an important initiative to ensure consistency of healthcare as the Australian population ages.(2, 4) A well-trained pharmacist workforce with expertise in medicines management with the ability to prescribe has the potential to facilitate safe and improved access to medicines for all Australians (Figure 1).(9-12)

Non-medical prescribing (including deprescribing) can also play an important part in reducing polypharmacy in the Australian population. One-third to one-half of older Australians use five or more prescription medicines, and although deprescribing is feasible,(13) it is often not carried out.(14) Pharmacists and medical practitioners identify polypharmacy and potentially inappropriate prescribing similarly.(15) They largely agree which medicines can be trialled for cessation (deprescribing) in older adults.(15) As the medicines experts, pharmacists have the skills to review and optimise medicines for all Australians.

Non-medical prescribing has been shown internationally to be effective. A 2018 systematic review of non-medical prescribing compared to medical prescribing included a total of 46 studies where 20 studies specifically reported pharmacist prescribing.(9) This systematic review found that non-medical prescribing was as effective as medical prescribing for health outcomes. An Australian study found pharmacists and medical practitioners had substantial agreement on the number of medicines to continue and discontinue for frail older people, with the qualitative analysis indicating similar clinical reasoning.(16) Pharmacists' ability to accurately and safely complete medication charts at Victorian hospitals was evaluated, which found pharmacists undertaking these responsibilities are at least as safe as medical practitioners.(17-19)

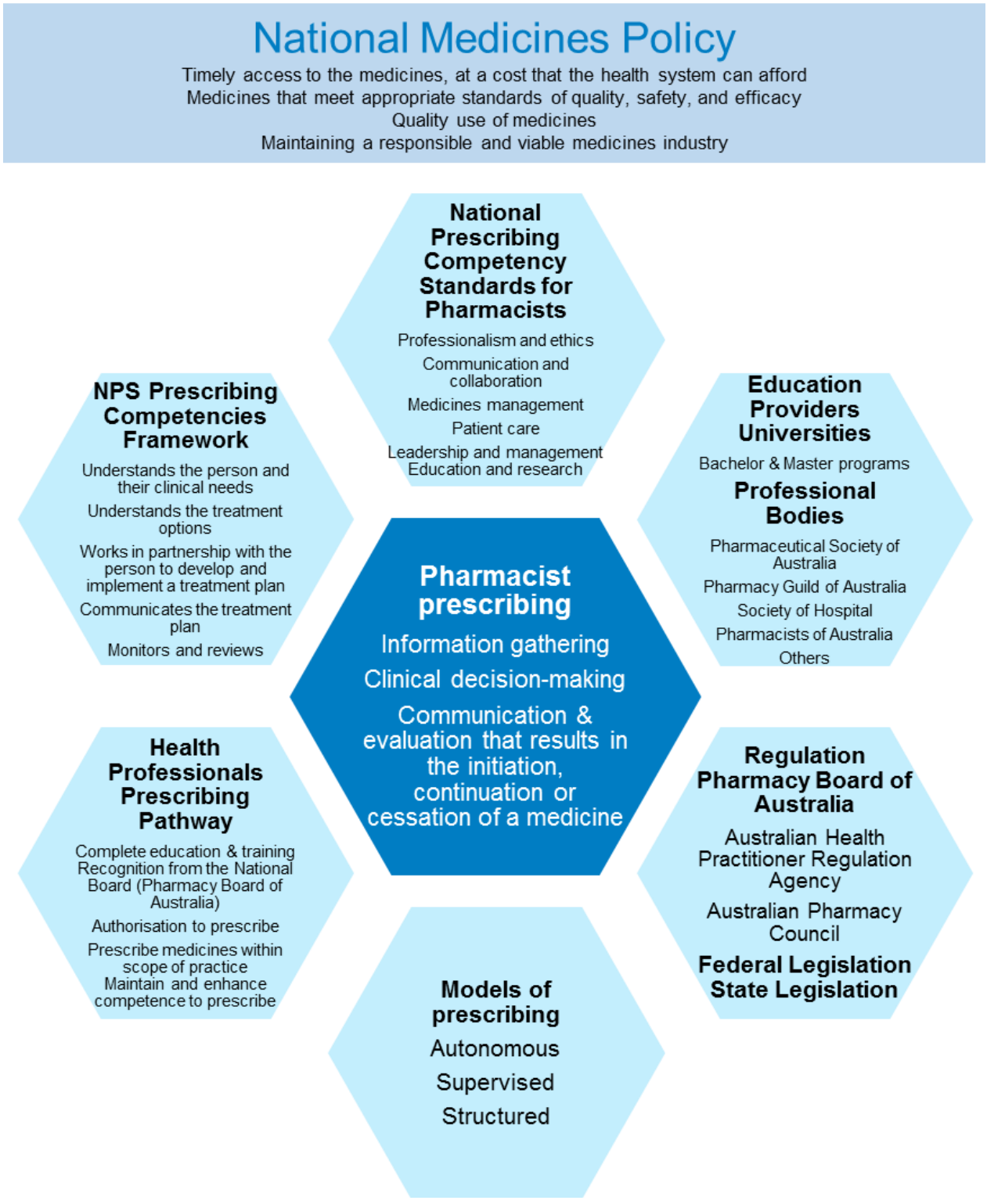

Figure 1: Interplay between the established systems that facilitate and underpin non-medical prescribing. (5, 7, 8, 20, 21)

The forum

The forum was held on 26 June 2018 with over 70 participants attending, representing key stakeholder groups and individual participants. Participants were provided with a background paper before the forum which summarised the national and international literature and experiences of pharmacists prescribing (Appendix A) and were encouraged to discuss questions within the paper with relevant people to help inform discussions on the day. The schedule for the day is provided at Appendix B.

The forum drew on previous work carried out by Health Workforce Australia to develop the *Health Professionals Prescribing Pathway* and the synergistic work by the National Prescribing Service to produce the *NPS MedicineWise Prescribing Competencies Framework* and the *ASPRINH (Assessment of Prescribing in Health) Project* which mapped the *NPS Prescribing Competencies Framework 2012* to selected Australian university curriculums for 10 health professions and the *National Competency Standards Framework for Pharmacists in Australia 2016*.(8, 10, 21) The forum also drew on research commissioned by the Pharmacy Board of Australia on mapping the *National Competency Standards Framework for Pharmacists in Australia 2016* to the *NPS Prescribing Competencies Framework 2012* (8, 11, 21) and mapping the curriculum of seven programs with differing structures (Bachelor, Bachelor (Hons), Masters programs) and setting (metropolitan and rural), to the *NPS Prescribing Competencies Framework 2012*.(11)

Mr William Kelly (Chair of the Pharmacy Board of Australia) opened the day, and welcomed participants (Appendix C). He explained that the Board was hosting the forum to allow participants to explore how prescribing by pharmacists could be an effective and sustainable response to meeting the current and emerging healthcare needs of the Australian community. Mr Kelly outlined the objectives of the forum were to develop a common understanding of the current situation in relation to pharmacist prescribing; to identify whether there was an unmet healthcare need that could be filled by pharmacists to improve the use of medicines; models for how these activities may occur, and to identify and acknowledge any concerns.

Associate Professor Bhavini Patel (Chair of the Pharmacy Board's Policy Codes and Guidelines Committee) explained that the program was designed to use the wealth of expertise among participants to generate discussion and ideas on key issues that would guide and inform the future of pharmacist prescribing. The outcomes from the forum would provide a useful basis from which the pharmacy profession could develop an approach for future pharmacist prescribing.

Associate Professor Patel described the specific themes that would frame the discussions of the day. The discussions would allow the keynote speakers and participants to participate in structured facilitated workshop discussions to explore: the public need for pharmacists prescribing; how pharmacist prescribing could be carried out safely; if any additional education and training requirements would be required; any legislative considerations; and how to effectively engage with stakeholders to ensure pharmacist prescribing meets expectations and to support implementation. These discussions were supplemented by the use of electronic polling software which offered all participants the opportunity to submit individual responses and did not require participants to reach consensus.

Key issues explored during discussions included the:

- public need for enhancing the role of pharmacist prescribing (for Schedule 4 and Schedule 8 medicines), and filling this need safely
- models of prescribing (structured, supervised and/or autonomous) to be considered
- teaching and assessment of the non-pharmacological therapeutic elements of prescribing (e.g. shared decision-making, coordination and communication) to prepare pharmacists to prescribe
- legislative considerations to ensure a uniform approach is applied to allow consistency and workforce mobility, and
- engagement of key stakeholders.

The following topics were deemed to be out of scope for the forum discussions:

- issues associated with eligibility to access under the Pharmaceutical Benefits Scheme
- impact on workloads and industrial relations, and
- jurisdictional health policy supporting enhanced pharmacist prescribing.

Keynote speakers

The first keynote address was presented by Adjunct Professor Debra Thoms (Chief Nursing and Midwifery Officer, Commonwealth Department of Health). Professor Thoms reflected on the experience of the nursing and midwifery profession in its journey in non-medical prescribing. She described how nurses and midwives have been prescribing using nurse initiated or protocol based pathways for decades under the supervision of an approved prescriber. Nurse practitioners were approved and authorised to practise as autonomous prescribers in 2000 and gained eligibility to participate in the Medical Benefits and Pharmaceutical Benefits Scheme in 2010. This approval was followed by endorsement for prescribing for midwives in 2010 together with eligibility as providers under the Medical Benefits and Pharmaceutical Benefits Scheme. The most recent step in the journey has been to explore how the nursing profession could improve access to medicines by enhancing its current role in medication management. Professor Thoms offered the following advice:

- identify the public need and how pharmacists would add value to patients and improve medicines management
- work within the nationally consistent frameworks of the *Health Professionals Prescribing Pathway* and the *NPS Medicinewise Prescribing Competencies*(7, 8)
- develop clear prescribing models, and
- identify the prerequisites (e.g. minimum level of experience, educational requirements and supervised practice/mentoring).

The second keynote speaker was Professor Lisa Nissen (Head, School of Clinical Sciences at Queensland University of Technology). Professor Nissen summarised the history of the development of the *Health Professionals Prescribing Pathway* and the *NPS MedicinesWise Prescribing Competencies*.(7, 8) She outlined the very broad definition of prescribing which encompasses a number of cognitive steps in relation to the use of medicines.

Definition of prescribing:(8)

'An iterative process involving the steps of information gathering, clinical decision-making, communication and evaluation, which results in the initiation, continuation or cessation of a medicine.'

She cautioned people not to think of prescribing as only the act of writing a prescription. She also provided an overview of the barriers and enablers of prescribing models in place internationally and highlighted the literature which supported safe prescribing practice by pharmacists with high satisfaction levels among consumers and other health professions. The different prescribing models have increasing levels of responsibility but all require good levels of collaboration and communication across the healthcare team members.

After each keynote speaker, Associate Professor Bhavini Patel facilitated discussion and feedback on the preset questions from the participants. The biographies of the keynote speakers are provided at Appendix D.

Facilitated workshops

The afternoon session consisted of four workshops with participants allocated to attend two sessions. The workshops were facilitated by an expert who set the scene for each topic and participants worked in small groups to discuss the preset questions and generate ideas. The facilitator then invited group feedback and helped the participants to reach consensus which was then presented back to the large group.

Topics for the four workshops were:

1. **Legislative considerations under the National Law – facilitated by Professor Anne Tonkin (Chair, Scheduled Medicines Expert Committee).**

   Participants were given an overview of the documents and guidelines developed for the National Boards to help put forward a proposal for endorsement for prescribing under the National Law and provided with an opportunity to provide feedback (Australian Health Ministers' Advisory Council (AHMAC) Guidance for National Boards and Australian Health Practitioner Regulation Agency (AHPRA) Guide for National Boards developing submissions).

They were then asked to consider the following questions:

- In order to meet different patient care needs (e.g. transfer of care, warfarin management, chronic disease management, etc.), would there be different models of prescribing and different requirements to be met by pharmacists?
- How can we ensure that different stakeholders work together effectively to identify and then address the different patient care needs that can be better met by enhanced pharmacist involvement in prescribing?

2. **Education and training requirements – facilitated by Professor Debra Rowett (Immediate Past President of the Australian Pharmacy Council)**

   Participants were asked to consider the following questions in relation to education and training needs:

   - What is required from an education and training perspective, for the three different *Health Professionals Prescribing Pathway* prescribing models?(7)
   - Which *Health Professionals Prescribing Pathway* prescribing models should we aim for newly-registered pharmacists to be able to perform? (7)
   - What changes need to be made to the teaching and assessment of the non-therapeutic elements of prescribing (e.g. shared decision-making, coordination and communication) to prepare pharmacists to prescribe?

3. **How to ensure consistency in state and territory drugs and poisons legislation – facilitated by Mr Neil Keen (Chief Pharmacist, Health Department of Western Australia)**

   Participants were asked to consider the following questions in relation to state and territory legislation:

   - What type of 'prescribing' will pharmacists be performing – exactly?
   - What legislation is relevant, and what needs to change for pharmacists to be authorised to perform the required tasks in their practice – exactly?
   - What are the barriers and enablers relating to drugs and poisons legislation for the three different *Health Professionals Prescribing Pathway* prescribing models? (7)

4. **Stakeholder engagement and management – facilitated by Professor Debra Thoms.**

   Participants were asked to consider:

   - Why is it important to engage stakeholders and to identify the relevant stakeholders?

   They were then asked to consider why each stakeholder group was important, how they could be engaged, what their main concerns might be and how these could be overcome or how they could be reassured.

Wrap-up session

The afternoon was completed by bringing all the participants back into one session for a lively feedback session followed by a question and answer session, facilitated by Associate Professor Patel. The participants were then asked to vote on the key issues raised during the day and provide ideas for the next steps in this process.

Key outcomes of the forum

Data was collected throughout the forum through discussions of four key themes; potential prescribing models to meet public need, education and training; legislative considerations; and stakeholder engagement. This was supplemented by results from the electronic polling software and the collection of shared thoughts through the creation of word clouds. (Note: a word cloud is a graphical representation of word frequency that gives greater prominence to words that appear more frequently. The larger the word in the visual the more common the word was in the polling.) Further detail on data collection, management and analysis is found in Appendix E.

The views expressed in this report are those of the participants. While it is not possible to present all of the diverse views and ideas expressed at the forum, key summaries have been identified and presented.

The full list of questions posed at the forum is provided at Appendix F.

The public need for improving medicines management

The forum participants highlighted a number of areas where medicines management for patients could be improved. There was strong support for enhancing the role of pharmacists in the quality use of medicines by expanding a pharmacist's ability to prescribe while maintaining public safety.

Participants highlighted many ways in which pharmacists could enhance timely access to medicines, reduce medicines related misadventures and improve the efficiency and cost effectiveness of the use of medicines. These actions could contribute to reducing unnecessary presentations or admissions to hospitals, reducing hospital length of stay and improved continuity of care, particularly for; aged care patients, for people with multiple complex conditions and for those living in rural and remote settings (Figure 2).

Figure 2: Patient care needs that can be enhanced through pharmacist prescribing

Participants explored this further in group discussions, which were subsequently reported to the full group. Participants felt that based on national and international evidence, pharmacists who prescribe could add the greatest value to the management of patients with complex and chronic conditions, including co-morbidities (e.g. mental health patients with chronic physical co-morbidities or palliative care patients), and vulnerable patients (e.g. aged and socio-economically disadvantaged). Combining the expertise of pharmacists as medicines experts with prescribing ability could enhance the quality use of medicines

through optimising dosing, reducing polypharmacy through deprescribing where appropriate and improved antimicrobial stewardship.

Participants identified that the setting and the context of patients was important to consider. The following settings; aged care, at transitions of care, rural and remote locations, primary care (e.g. within general practice and Aboriginal Medical Services) and hospitals were identified as having the most potential for benefit.

There was also overwhelming support (88%, n=41) for enhanced pharmacist involvement in prescribing by participants attending the forum (Figure 3).

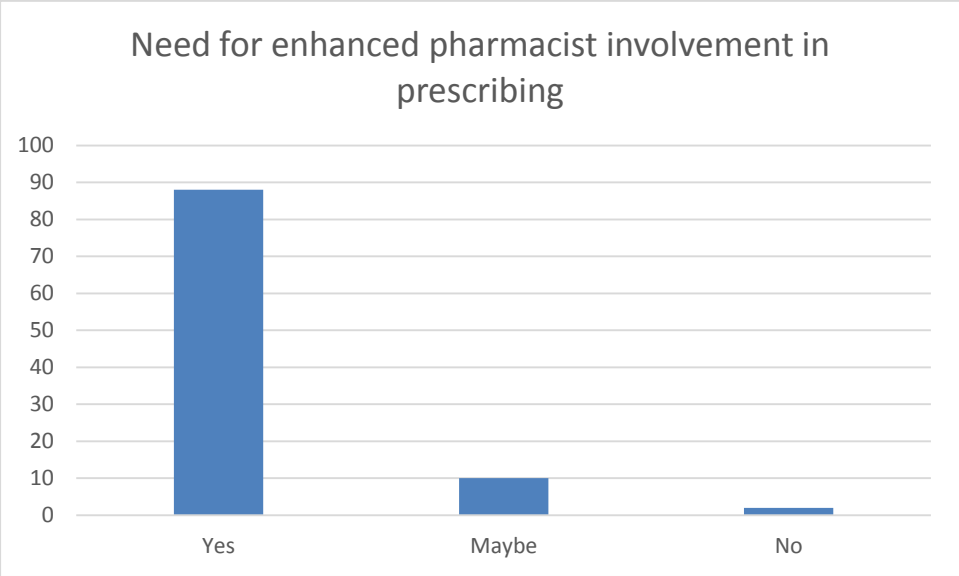

Figure 3: Participants agreeing with the need for enhanced pharmacist involvement in prescribing, by percentile

Following group discussions, the majority of the participants agreed that to fill these needs safely, the prescribing and dispensing functions should be separated and there was strong support for team-based collaborative care. Other themes that emerged that would contribute to safe prescribing included appropriate training and education, mentoring and supervision, clear roles and accountability, and the successful use of clinical information sharing systems to reduce the risk of fragmentation of care.

Models of pharmacists prescribing Schedule 4 and Schedule 8 medicines

Participants acknowledged that under state and territory drugs and poisons legislation pharmacists in Australia are responsible for the supply of Schedule 2 (Pharmacy Only) and Schedule 3 (Pharmacist Only) medicines. The supply of Pharmacist Only medicines, involves four stages comparable to the prescribing of Schedule 4 (Prescription Only) medicines: information gathering, clinical decision-making, communication, monitoring, and review. Pharmacists are also authorised to supply Prescription Only medicines without a prescription, in limited situations to support continued therapy.

Participants noted that the *Health Professionals Prescribing Pathway* presents three prescribing models differentiated from each other by the graded level of autonomy in prescribing medicines and that the patient need and the setting should determine which model should be used.(7) The majority of the participants (67%, n=108) supported pharmacists prescribing under all three models: autonomous, supervised and via a structured prescribing arrangement (Figure 4; during polling participants were able to vote for more than one option).

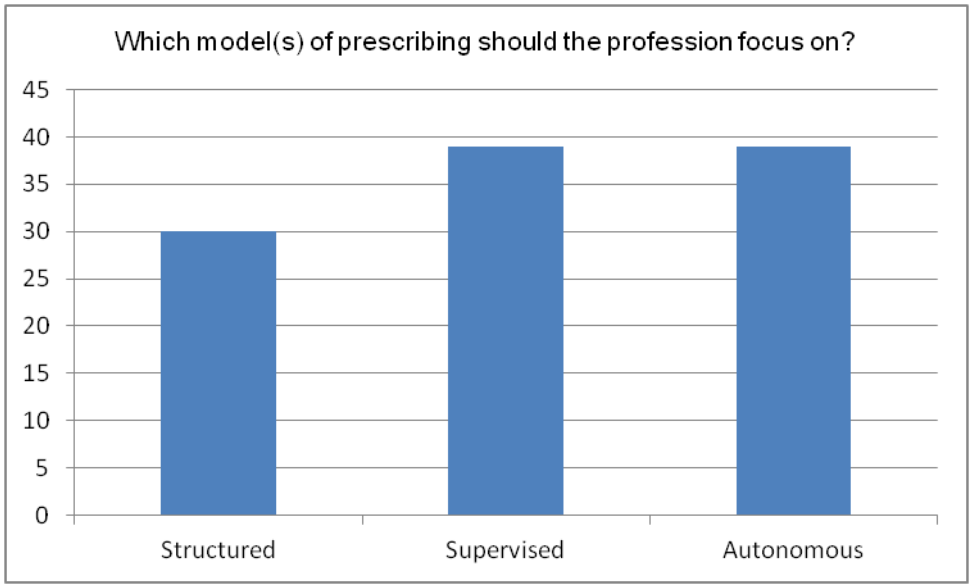

Figure 4: What model(s of prescribing should the profession focus on?

Following group discussions, participants reported that they were supportive of pharmacist involvement in all three models of prescribing. Participants supported a pragmatic approach with the implementation of the structured and supervised models first, followed by autonomous prescribing with strong support for 'collaborative or team prescribing within the scope of practice of the pharmacist'.

Education and training considerations

Participants noted that education and training requirements would differ for the three models. The majority of participants agreed that there was evidence that pharmacists could meet the requirements outlined in the *NPS MedicineWise Prescribing Competencies Framework* to prescribe via a structured prescribing arrangement without the need to undertake significant additional education and training.(8) Enhancement of the following areas within the current education and training pathway for pharmacists were identified to enable pharmacist prescribing; patient assessment, shared decision-making, information sharing, interprofessional practice, and understanding scope of practice.

There was strong support for the profession aiming for pharmacists to have the knowledge and skills to prescribe via a structured prescribing (71%, n=48) arrangement at initial registration. About half the participants (42%, n=43) felt that prescribing under supervision may require additional experience or study. The majority of participants (76%, n=45) did not support changing programs of study to enable autonomous prescribing at initial registration (Figure 5).

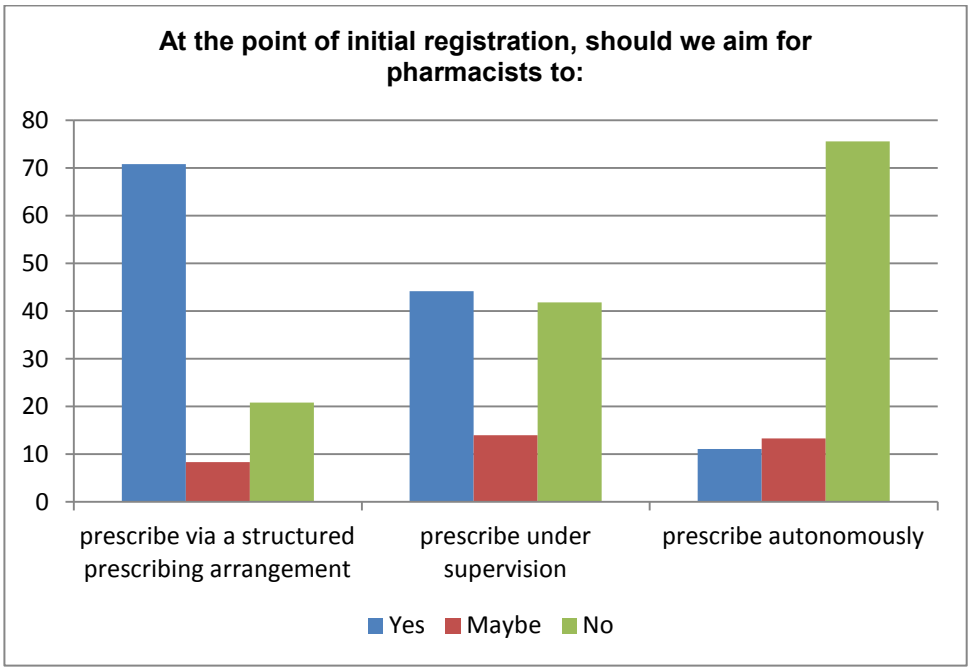

Figure 5: At the point of initial registration, what should we aim for pharmacists to be able to do?

Most participants felt that currently, pharmacists had the relevant competencies to undertake prescribing via a structured prescribing arrangement and under supervision (Figure 6). Participants felt that a change in emphasis in the way content is delivered and assessed for specific competencies in current programs of study may be all that is required to support future pharmacists to undertake these types of prescribing. (Note: the poll in Figure 6 only allowed participants to select one answer and therefore participants who voted for a supervised prescribing arrangement by default agreed that pharmacist had the competencies to undertake prescribing via a structured prescribing arrangement.)

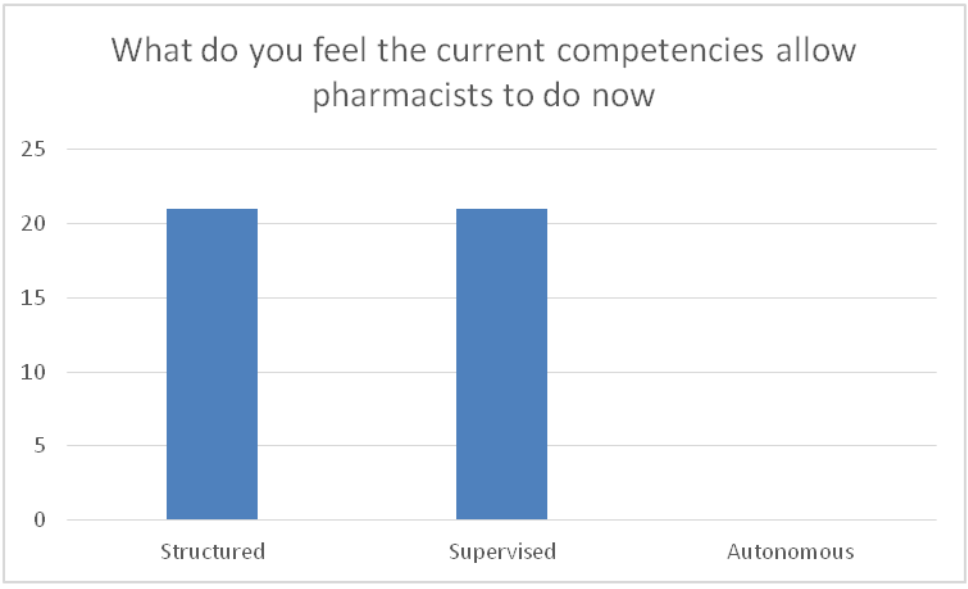

Figure 6: What do you feel the current competencies allow pharmacists to do now?

Following group discussions, participants suggested that for autonomous prescribing, a postgraduate qualification including formal supervision and mentoring arrangements would be necessary after a minimum level of experience within the pharmacist's scope of practice (Figure 7).

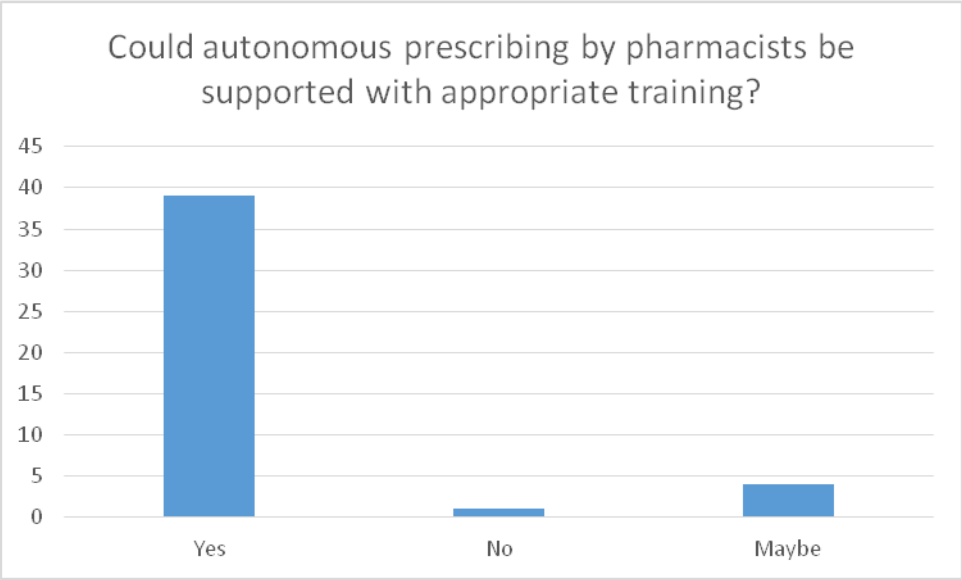

Figure 7: Could autonomous prescribing by pharmacists be supported with appropriate training?

Legislative considerations

Participants noted the pathway to request approval of an endorsement for scheduled medicines for pharmacists under the Health Practitioner Regulation National Law, as in force in each state and territory (the National Law). Participants also noted that this is distinct from the authority to prescribe which would be conferred under state and territory medicines and poisons legislation.

Participants identified the following perceived barriers to pharmacists successfully delivering services that involve prescribing: variation in state and territory legislative requirements, political processes of other health professionals, and funding (e.g. payment for pharmacy prescribing services and access to the Pharmaceutical Benefits Scheme).

All participants agreed that there should be uniform arrangements to enable pharmacists to prescribe Schedule 4 and Schedule 8 medicines under the medicines and poisons legislation of each state and territory to allow workforce mobility and equivalent access to services by consumers/patients. For example, this would include the authority to prescribe under all three models, national recognition of education and training courses, endorsement of the registration of pharmacists by the Board where appropriate (e.g. autonomous prescribing) and the use of scope of practice to determine which medicines a pharmacist could prescribe (i.e. no need for a specific formulary).

During group discussions participants recommended that this process could be achieved through the Council of Australia Governments process where the states and territories could make a binding commitment.

In addition, participants felt that pharmacists were already well placed to undertake prescribing via a structured prescribing arrangement and prescribing under supervision and that this could be adequately governed through relevant jurisdictional policy or legislation without the need for additional regulation by the Pharmacy Board of Australia.

Wrap-up

There was a strong desire among the group to progress work to enable pharmacists prescribing Schedule 4 and Schedule 8 medicines. Participants were asked to consider the next steps and were asked via polling 'What would you like to see happen next?' (Figure 8, during polling participants were requested to respond in a single sentence).

Figure 8: The participants expressed preferences for what they would like to see happen next

A thematic analysis of the polling responses to the question 'What would you like to see happen next?' showed that the following action areas were supported (Figure 9):

- 9% supported the need to gain more evidence
- 14% supported further engagement with key stakeholders
- 32% supported the development of pharmacist prescribing models
- 23% supported the development of a plan with a clear goal and timelines, and
- 18% said 'just do it'.

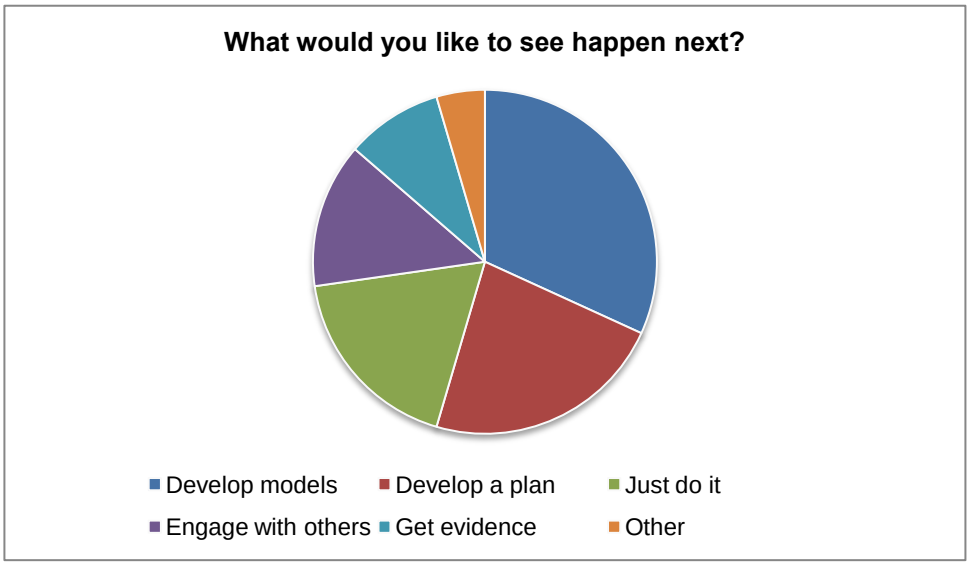

Figure 9: The participants expressed preferences for what they would like to see happen next

Overall, the forum provided the profession with some momentum for pharmacist prescribing to progress.

Summary

The forum provided an opportunity for a diverse group of health practitioners from both within and outside of the pharmacy profession, workforce development experts, state and territory regulators and researchers to explore how prescribing by pharmacists could be an effective and sustainable response to meeting the current and emerging healthcare needs of the Australian community.

The key outcomes of the forum were:

- strong support by participants for enhancing the role of pharmacists in the quality use of medicines by expanding a pharmacist's ability to prescribe
- agreement that the prescribing and dispensing functions should be separated
- strong support for team-based collaborative care
- the majority of participants felt that pharmacists were already well placed to undertake prescribing via a structured prescribing arrangement and prescribing under supervision and that these activities could be adequately enabled and governed through relevant jurisdictional policy and/or legislation without the need for additional regulation by the Pharmacy Board of Australia
- there was strong support for pharmacists to have the knowledge and skills to prescribe via a structured prescribing arrangement and under supervision at initial registration
- strong agreement that additional education and training would be required for autonomous prescribing especially in relation to addressing the competencies required for diagnosis and assessment
- an acknowledgment of perceived barriers to prescribing which were identified as: variation in state and territory legislative requirements, political processes of other health professionals, and funding
- all participants agreed that there should be uniform arrangements to enable pharmacists to prescribe Schedule 4 and Schedule 8 medicines across the state and territory medicines and poisons legislation to allow workforce mobility and equivalent access to services by consumers/patients, and
- participants supported a pragmatic approach with the implementation of the prescribing via a structured prescribing arrangement and prescribing under supervision models first, followed by autonomous prescribing with strong support for 'collaborative or team prescribing within the scope of practice of the pharmacist'.

Achieving these outcomes, would require action in the following three key areas:

- the development of pharmacist prescribing models
- the development of a plan with a clear goal and timelines, and
- further engagement with key stakeholders such as consumers/patients and the Council of Australian Governments.

Participants highlighted many ways in which pharmacists could enhance timely access to medicines, reduce medicines related misadventures and improve the efficiency and cost effectiveness of the use of medicines. These actions could contribute to reducing unnecessary presentations or admissions to hospitals, reducing hospital length of stay and improved continuity of care particularly for aged care patients, for people with multiple complex conditions and for those living in rural and remote settings.

There was a strong desire among the group to progress work to enable pharmacists prescribing Schedule 4 and Schedule 8 medicines and the forum has provided the profession with some momentum for this to occur. The outcomes from the forum will help inform:

- pharmacists on their potential future role in prescribing medicines
- ongoing work by the profession to establish models which will guide the establishment of a regulatory framework to support pharmacists prescribing Schedule 4 and Schedule 8 medicines in Australia, and
- employers to develop workforce models which include pharmacist prescribers in the delivery of high quality healthcare services.

What are the next steps?

The Board looks forward to continuing to work with different stakeholders to successfully develop proposals for pharmacist prescribing that can be implemented and sustained to effectively meet the current and future health needs of the Australian community.

In order to progress this work, the Board will develop and publish a discussion paper that will include the outcomes of the forum and a range of consultation questions to further explore:

- models of prescribing that can be pursued by the profession including the supporting evidence
- identification of gaps in evidence that may need to be addressed by the profession, and
- issues that need to be considered and addressed to assess the regulatory need for an endorsement in relation to scheduled medicines.

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Pharmacist prescribing forum

Background paper

26 June 2018

Pharmacy Board of Australia

Pharmacist prescribing forum – Background paper

26 June 2018

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Foreword

On behalf of the Pharmacy Board of Australia, I would like to thank you for accepting the invitation to attend this forum to consider the need and opportunities for expanding pharmacist involvement in prescribing in Australia.

With a growing need worldwide to improve the safe and timely access to medicines and to ensure the most efficient use of healthcare resources, there has been an enhanced involvement of health professions not typically associated with prescribing, to prescribe. In Australia, there is a significant agenda for health reform with many people in our communities not able to access the care they need or to access it in a timely manner.

Prescribing by pharmacists is an established component of practice in a number of countries. In Australia we have seen recent developments in pharmacy services such as administration of vaccines and continued dispensing by pharmacists. It is timely to consider potential models of pharmacist prescribing in order to improve access to medicines by the public to meet their healthcare needs.

This forum will explore the potential role of pharmacists in prescribing in order to contribute to supporting access to medicines in Australia. This aligns with the objectives of the National Registration and Accreditation Scheme, including '*to enable the continuous development of a flexible, responsive and sustainable Australian health workforce and to enable innovation in the education of, and service delivery by, health practitioners*'.

The forum is expected to help the Pharmacy Board of Australia and stakeholders in assessing how prescribing by pharmacists can be an effective and sustainable response to meeting the emerging healthcare needs of the Australian community. It will be an opportunity to explore, identify and articulate the roles of different stakeholders to successfully develop proposals about pharmacist prescribing that can be implemented and sustained as part of a broader range of health services to effectively meet the health needs of the community.

You will note some discussion questions on pages 14 to 20 of this paper, which we encourage you to discuss within your organisation before attending the forum. You can use the tables to record your organisation's initial collective thoughts, which can be further explored through the discussion on the day.

I look forward to meeting you and to our valuable discussions.

William Kelly
Chair, Pharmacy Board of Australia

Background

Health service reform is driven by the need to improve access to medicines, increase patient choice, and mitigate ongoing rural and remote workforce shortages.(1) Health costs associated with the ageing population and the increased burden of chronic disease are also driving reform.(2, 3) An objective of our National Medicines Policy is that all Australian communities receive equitable and timely access to healthcare including medicines (Figure 1).(4) These objectives are aligned with the National Registration and Accreditation Scheme.(5) The aims of this Scheme include facilitating workforce mobility across Australia, and enabling the continuous development of a flexible, responsive and sustainable Australian health workforce.(5) Non-medical prescribing can help in achieving these healthcare goals in the Australian context.

Planning for future healthcare needs will require all health practitioners to be working to the full extent of their scope of practice and to enable this, a redistribution of tasks will be required.(5-8) As there are documented shortages in many areas of Australia of medical practitioners as well as other health practitioners with prescribing rights,(6) expanded prescribing rights to other health practitioners is an important strategy.(8) The National Health Workforce Planning and Research Collaboration stated that the number of Australian prescribers needs to increase to maintain the current access to medicines.(2)

Non-medical prescribing is part of the strategy to reform health in Australia and internationally.(6) The *NPS Prescribing Competencies Framework 2012* and the *Health Professionals Prescribing Pathway* both define prescribing as '*an iterative process involving the steps of information gathering, clinical decision-making, communication, and evaluation that results in the initiation, continuation or cessation of a medicine*.'(7, 8) In Australia, non-medical prescribing has been successfully extended to dentists, nurse practitioners, midwives, podiatrists and optometrists applying different prescribing models (Appendix A).(7) Non-medical prescribing can result in improved access to medicines for communities, promote workforce flexibility, contribute to cost-effective care, and has been demonstrated to be safe in international settings.(2, 5, 6, 9)

The *Health Professionals Prescribing Pathway* proposed three models of non-medical prescribing:

- Autonomous prescribing. The prescriber has been educated and authorised to autonomously prescribe in a specific area of clinical practice.

- Prescribing under supervision. The supervised prescriber has been educated to prescribe and has a limited authorisation to prescribe medicines that is determined by legislation, requirements of the National Board and policies of the jurisdiction, employer or health service.

- Prescribing via a structured prescribing arrangement. Prescribing occurs where a prescriber with a limited authorisation to prescribe medicines by legislation, requirements of the National Board and policies of the jurisdiction or health service prescribes medicines under a guideline, protocol or standing order.(7)

In each circumstance, the prescriber must recognise, and prescribe according to their competence for their scope of practice, in accordance with legislative authorisation and with a collaborative approach to patient care.(7)

Non-medical prescribing may contribute to the delivery of sustainable, responsive and affordable access to medicines.(1, 2, 4) It may reduce costs, increase access, and improve outcomes for patients without compromising safety and quality.(4, 9) It promotes a flexible workforce, which is an important initiative to ensure consistency of healthcare as the Australian population ages.(2, 4) A well-trained pharmacist workforce with expertise in medicines management with the ability to prescribe has the potential to facilitate safe and improved access to medicines for all Australians (Figure 1).(9-12)

Non-medical prescribing (including deprescribing) can also play an important part in reducing polypharmacy in the Australian population. One third to one half of older Australians use five or more prescription medicines, and although deprescribing is feasible,(13) it is often not undertaken.(14) Pharmacists and medical practitioners identify polypharmacy and potentially inappropriate prescribing similarly.(15) They largely agree which medicines can be trialled for cessation (deprescribing) in older adults.(15) As the medicines experts, pharmacists have the skills to review and optimise medicines for all Australians.

Non-medical prescribing has been shown internationally to be effective. A 2018 systematic review of non-medical prescribing compared to medical prescribing included a total of 46 studies where 20 studies specifically reported pharmacist prescribing.(9) This systematic review found that non-medical prescribing was as effective as medical prescribing for health outcomes. An Australian study found pharmacists and medical practitioners had substantial agreement on the number of medicines to continue and discontinue for frail older people, with the qualitative analysis indicating similar clinical reasoning.(16) Pharmacists' ability to accurately and safely complete medication charts at Victorian hospitals was evaluated, which found pharmacists undertaking these responsibilities are at least as safe as medical practitioners.(17-19)

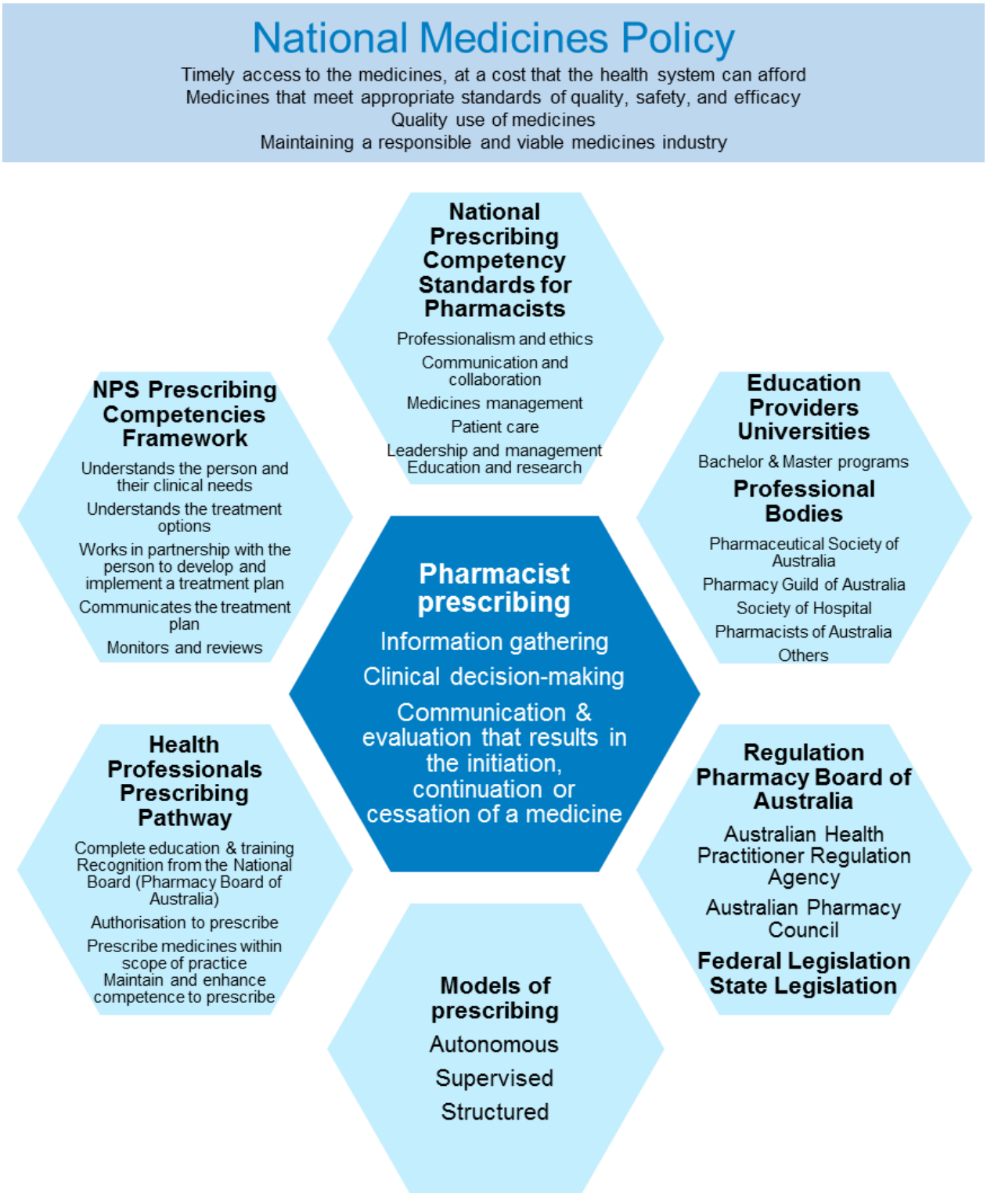

Figure 1: Interplay between the established systems that facilitate and underpin non-medical prescribing. (5, 7, 8, 20, 21)

National frameworks and policies for prescribing medicines

The Australian National Medicines Policy aims to improve health outcomes for all Australians through access to and optimal use of medicines.(4) The National Medicines Policy has four objectives including timely and affordable access to medicines and the quality use of medicines (Figure 1).(4)

The National Medicines Policy's objective to realise the quality use of medicines led to the 2012 release of the *NPS Prescribing Competencies Framework 2012*.(4, 8) This framework defines a demanding set of competencies relevant to all autonomous prescribers of all medicines. The *NPS Prescribing Competencies Framework 2012* was developed with reference to the World Health Organisation's *Guide to Good Prescribing: A Practical Manual*.(8, 22) It was intended for multiple purposes including developing and accrediting prescribing curriculums, and providing guidance for national health professional registration boards.(8) The *NPS Prescribing Competencies Framework 2012* defines seven competency areas (Appendix B).(8)

The *Health Professionals Prescribing Pathway* defines a national five step framework for health professions to progress to being endorsed to prescribe (Appendix C).(7) The *Health Professionals Prescribing Pathway* recommends that prescribing models, education and training are aligned to the *NPS Prescribing Competencies Framework 2012* (Figure 1).(7, 8) Together, the *NPS Prescribing Competencies Framework 2012*(8) and the *Health Professionals Prescribing Pathway*(7) detail the competencies and pathways for non-medical professions including pharmacy to be considered for endorsement to prescribe.(8)

The *National Competency Standards Framework for Pharmacists in Australia 2016* (Appendix D),(21) state the competency standards needed to consider pharmacist activities to support all four objectives of the National Medicines Policy, with an emphasis on the quality use of medicines.(4)

The Pharmacy Board of Australia commissioned research to map the *National Competency Standards Framework for Pharmacists in Australia 2016* to the *NPS Prescribing Competencies Framework 2012*.(8, 11, 21) Using a conservative approach, the mapping process demonstrated that 60-87% within each area of the competency standards for pharmacists was entirely consistent with the prescribing competencies (green bars in Figure 2), with a further 13-33% within each area to be partly consistent (orange bars in Figure 2).

Some of the competencies (7-33%) were unable to be mapped in the competency areas of shared decision-making, coordination and communication (blue bars in Figure 2).(11) This review confirmed that the current *National Competency Standards Framework for Pharmacists in Australia 2016* are favourably mapped against the required prescribing competencies.

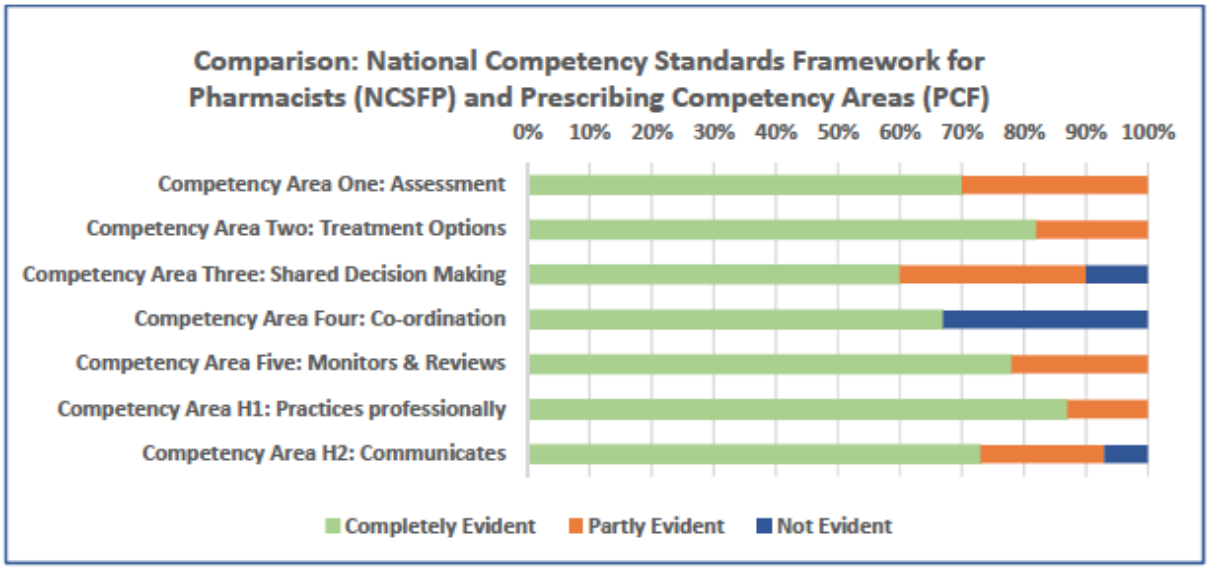

Figure 2: Mapping the National Competency Standards Framework for Pharmacists to the Prescribing Competency Areas. Table developed for the Pharmacy Board of Australia (Nissen L, Kyle G, Cardiff L, Rosenthal M, Shah S, 2017).(11)

International prescribing models

Pharmacist prescribing has become an accepted part of the scope of practice of pharmacists in other comparable developed countries including New Zealand and the United Kingdom, and some provinces and territories within Canada. These countries apply differing prescribing models, education and training standards as well registration requirements.(23-29) In Canada, the prescribing authority, the model, education and training requirements and continuing professional development requirements vary between the provinces and territories.(27-29) The Canadian provence of Alberta has implemented a model that correlates to the autonomous prescribing model in the Health Professionals Prescribing Pathway. All pharmacists registered on the clinical register in Alberta may prescribe most medications with the exception of controlled drugs (equivalent to the Australian Schedule 8 medicines such as opiates) and benzodiazepines by adapting a prescription or may prescribe in an emergency.(30) Pharmacists who have been granted an additional prescribing authorisation may also prescribe to initiate drug therapy and/or manage ongoing drug therapy.(30) The variation in pharmacist prescribing models across the different provonces in Canada has the potential to lead to confusion in the area of pharmacist prescribing.

The New Zealand, United Kingdom and Canadian models are useful to review when considering applicable models in the Australian context, due to the similarities in the healthcare systems (Table 1).(23-26)

Table 1: Pharmacist prescribing in New Zealand, United Kingdom and Canada

	Health Professionals Prescribing Pathway prescribing model	Education and training requirements
 New Zealand (23-26)	Supervised	Postgraduate Certificate in Pharmacist Prescribing accredited by the Pharmacy Council of New Zealand. 60 days of full-time university education and 20 days of experiential learning under a designated medical prescriber. Prerequisite: Postgraduate diploma in clinical pharmacy and clinical experience.
 United Kingdom (23, 31)	Structured or Autonomous (moving towards only autonomous prescribing)	The General Pharmaceutical Council of Great Britain accredited university training. Autonomous: 26 days of full-time university education and a minimum of 12 days experiential learning under a designated medical prescriber. Prerequisite for autonomous prescribing: Two years of clinical experience following registration as a pharmacist.
 Canada (27-29)	The models of prescribing are different in each provence	There is significant heterogeneity between provinces in the type of prescribing functions that pharmacists can undertake and in the rules governing each function.

The international uptake rate by pharmacists to prescribe has been variable between countries, which may relate to the prescribing model and education requirements. The New Zealand education and training requirements that lead to prescribing under supervision is arduous.(24-26) It has led to low uptake rates (<0.5% of registered pharmacists).(24) In the United Kingdom, 8% of registered pharmacists have completed the requirements for pharmacist prescribing.(31)

In the United Kingdom, prescribing pharmacists may use a model that they call structured or autonomous prescribing. Pharmacists with rights to undertake structured prescribing have the ability to undertake further training in order to prescribe autonomously.(31)

Current situation in Australia

In Australia, a number of health professions have prescribing rights (Appendix A). Medical practitioners, dentists, nurse practitioners, midwives, pharmacists, optometrists and podiatrists can prescribe within their scope of practice. Pharmacists are authorised under state and territory drugs and poisons legislation to supply Schedule 2 and Schedule 3 medicines. Optometrists and podiatrists have a limited list of medicines that they are endorsed to prescribe, which has resulted in practical and logistical problems for these professions. The process for modifying lists is extensive and requires Ministerial or Board approval so cannot be readily adapted in response to evolving evidence, guidelines and practice.(32) Medical practitioners, dentists, nurse practitioners and midwives can prescribe within their scope of practice. For full details of prescribing rights by profession in each state and territory, refer to Appendix A.

In a climate where polypharmacy and escalating medicines use is ubiquitous among older Australians, prescribing pharmacists could have the capability to lead and champion rationalised medicines use, rather than increasing medicine use.(3, 13, 20) Pharmacists routinely advise prescribers on the quality use of medicines and strategies to improve medicine use for better health outcomes for patients.(21) Pharmacists can competently assess a person's complex medication regimen for medicines burden, overall interactions and their clinical significance, monitoring requirements and adverse drug events. Pharmacists with additional prescribing rights would potentially be able to prescribe and deprescribe a broader range of medications.

Scheduled medicines

Pharmacists in Australia are authorised under state and territory drugs and poisons legislation to supply Schedule 2 (Pharmacy Only) and Schedule 3 (Pharmacist Only) medicines (Appendix A).(21) The provision of these medicines require the pharmacist to undertake the four stages of prescribing: information gathering, clinical decision-making, communication, monitoring, and review.(20)

Continued or emergency supply by pharmacists

Pharmacists can authorise the supply of Schedule 4 (Prescription Only) medicines without a prescription in limited situations. The emergency supply provisions in most state and territory laws allow for a three-day supply with restrictions.(33) The continued dispensing provision allows the Australian Pharmaceutical Benefits Scheme-subsidised provision of prespecified medicines (the oral contraceptive pill and statins) once in a 12 month period without a prescription.(34, 35) Both continued dispensing and emergency supply require information gathering, clinical decision-making and communication, with the person requested to return to the prescriber for monitoring and review for ongoing supply.

A current Victorian government initiative aims to manage medicines for chronic conditions in a collaborative care arrangement between general practitioners and pharmacists. In this initiative, the general practitioner leads patient care in collaboration with the pharmacist who undertakes regular monitoring and dose adjustments of the medicines. The patient is assessed by the general practitioner who writes an agreed management plan including monitoring requirements and dosage adjustments. The pharmacist receives a copy of the management plan. The patient attends the pharmacy for the specified monitoring and medicine supply. The pharmacist can adjust medicine doses as specified in the management plan, and when necessary the pharmacist refers the patient back to the general practitioner.(35)

In-patient medication charts

A partnered pharmacist charting process was implemented at The Alfred Hospital, Melbourne, in the General Medicine Unit and Emergency Short Stay Unit in 2012 as an alternative to medical prescribing.(17) The process involves medicine review and subsequent medicine charting on patient admission. It is a partnership between a pharmacist who is credentialed in the workplace and a medical

practitioner. As part of the process, the credentialed pharmacist takes a medicine history and performs a venous thrombo-embolism risk assessment.(36) The pharmacist and the admitting medical practitioner have a face-to-face discussion about current medical and medicine-related problems, and develop a shared medicines management plan. Appropriate medicines and venous thrombo-embolism prophylaxis are then charted by the pharmacist on the in-patient medication chart from which nurses administer the medicines. The pharmacist and the treating nurse then discuss the medicines management plan, including any urgent medicines to be administered, drug-related monitoring and reasons for any medicines changes.

An expanded evaluation of the model was undertaken in 2017 in general medical units in seven public hospitals in Victoria which was funded by the Department of Health and Human Services, Victoria, Australia. Patients were included from the following hospitals: Box Hill Hospital (Eastern Health), Dandenong Hospital (Monash Health), Echuca Hospital (Echuca Regional Health), Geelong Hospital (Barwon Health), Monash Medical Centre (Monash Health), Maroondah Hospital (Eastern Health) and The Royal Melbourne Hospital (Melbourne Health). The results will be reported later this year.

Possible frameworks for pharmacist prescribing in the Australian context

As described in the *Health Professionals Prescribing Pathway* (Appendix E)(7), possible frameworks for pharmacist prescribing in Australia include autonomous prescribing, prescribing under supervision and prescribing via a structured prescribing arrangement.

Autonomous prescribing

Under this model, pharmacist prescribers would prescribe within their scope of practice without the need to be supervised or authorised by another autonomous prescriber. The pharmacist prescriber would be cognisant of their role in the healthcare team and respect the role of other team members, ensuring appropriate communication between all team members including the person taking the medicine. Under this model, pharmacist prescribers would be responsible and accountable for patient assessment and clinical management decisions including prescribing.

In the United Kingdom, autonomous pharmacist prescribers have to undertake a General Pharmaceutical Council accredited program that is generally conducted part-time over six months to be able to undertake a process analogous to the Australian autonomous prescribing.(23)

> *Example:* A pharmacist in a hospital reviews a medication chart and observes that there are some missing therapies. The patient has been using regular opioids and is experiencing considerable nausea. No antinauseants are prescribed. The hospital pharmacist notes that this appropriate therapy has been omitted from the chart. The pharmacist prescribes an antinauseant on the medication chart and writes a note in the progress notes to explain why this has been done and when it should be reviewed.

Prescribing under supervision

Under this model, pharmacist prescribers would have limited authority to prescribe medicines. They could prescribe a scheduled medicine or class of scheduled medicines within their scope of practice under the supervision of a specific autonomous prescriber. Pharmacists prescribing under supervision would implement an agreed clinical management plan that was patient-specific. The pharmacist prescriber would be cognisant of their role in the healthcare team, ensuring appropriate communication between team members including the person taking the medicine.

> *Example*: A community pharmacist and general practitioner discuss de-escalating the proton pump inhibitor for a patient. The patient was using a high dose proton pump inhibitor (esomeprazole 40mg daily) for gastrointestinal reflux associated with a short course of diclofenac (a nonsteroidal antiinflammatory). The patient has now ceased the diclofenac, and no longer has any gastrointestinal reflux symptoms. The patient, general practitioner and pharmacist agree to a dose reduction schedule with dose reductions every two weeks and the pharmacist implements this agreed process.

Prescribing via a structured prescribing arrangement

This model would require an established diagnosis by an appropriately trained healthcare professional, usually a medical practitioner. Protocols would need to be developed collaboratively and define clearly the roles of each member of the team, with clear referral responsibilities and pathways.

> *Example:* A pharmacist is working in a general practice that uses a Health Care Home model. The healthcare team has decided to target optimal blood pressure control as a quality improvement exercise. Together, the general practitioners, allied health practitioners, practice nurses and practice pharmacist develop a protocol for managing blood pressure. The general practitioners identify patients to refer to the shared care arrangement. The group of patients attend regular shared consultation sessions with the dietician and physiotherapist for nonpharmacological interventions. At each session, the nurse measures their blood pressure. The pharmacist titrates the antihypertensive therapy according to the protocol to ensure blood pressure control stays within the target range. This change is updated in the clinic's medical software and in the patient's *My Health Record*. The pharmacist issues the patient a new prescription that can later be presented at a community pharmacy to be dispensed.

Education and training for pharmacist prescribing

In Australia, 18 universities deliver approved undergraduate or graduate entry masters programs that lead to initial registration for pharmacists. The Pharmacy Board of Australia, under the Health Practitioner Regulation National Law, as in force in each state and territory, has assigned the accreditation function (which includes the accreditation of programs of study) to the Australian Pharmacy Council as the independent accrediting authority for Australian pharmacy education and training under the National Registration and Accreditation Scheme.(5, 37) To ensure that current curriculums deliver a consistently high quality pharmacy graduate, the Australian Pharmacy Council sets and reviews the standards for education and training.(38) The standards for the accreditation of pharmacy programs in Australia are being reviewed in 2018 by the Australian Pharmacy Council, ready for the Pharmacy Board of Australia to consider them for approval (Figure 3).

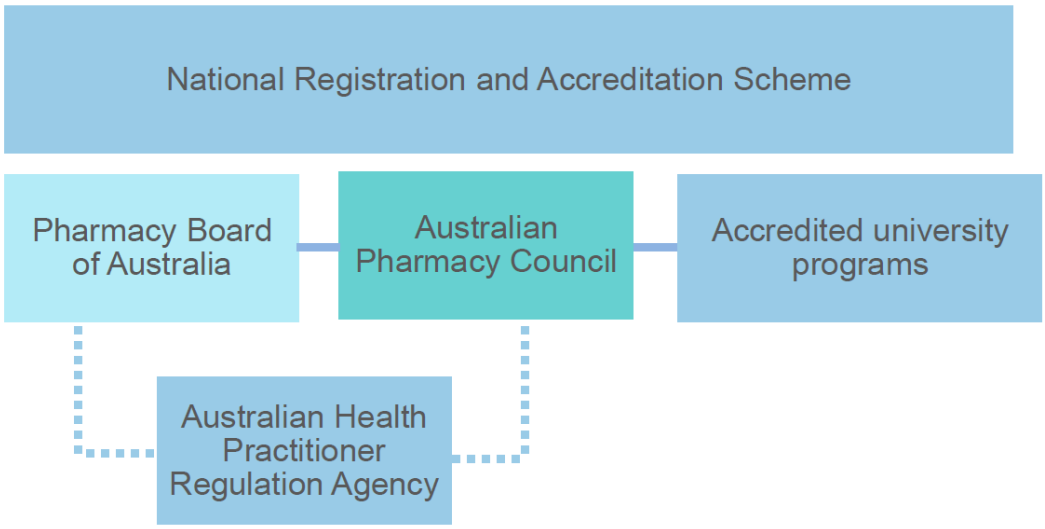

Figure 3: Scheme for accreditation of university programs in Australia.

Pharmacy programs of study that lead to registration

The *NPS Prescribing Competencies Framework 2012* was mapped to selected Australian university curriculums for ten health professions and the *National Competency Standards Framework for Pharmacists in Australia 2016* in the *ASPRINH (Assessment of Prescribing in Health) Project*.(8, 10, 21) The *ASPRINH (Assessment of Prescribing in Health) Project* found that new registrants would be '*very well qualified to complete most prescribing tasks, as defined by the NPS Prescribing Competencies Framework 2012.*(8, 10) As the *National Competency Standards Framework for Pharmacists in Australia*

2016 reflect the expectations of a registered pharmacist,(21) the project concluded that: '*the practice of currently registered pharmacists would reflect the majority of components relevant to prescribing*.'

Following the *ASPRINH (Assessment of Prescribing in Health) Project* the Pharmacy Board of Australia commissioned a second study which looked at a broader range of pharmacy programs of study. The curriculum of seven programs with differing structures (Bachelor, Bachelor (Hons), Masters programs) and setting (metropolitan and rural), were mapped to the *NPS Prescribing Competencies Framework 2012*.(11) This involved 188 units of study and 1179 learning outcome statements.

Overall, 37% of all learning outcomes reviewed mapped to at least one of the performance criteria described in the *NPS Prescribing Competencies Framework 2012*, although many mapped to multiple performance criteria. Just under half (44%) of all learning outcomes reviewed were considered supportive of learning required to prescribe medicines.

This review found that the current curriculum performed favourably in relation to the competencies relating to Treatment Options and Professional Practice, and identified a gaps in those relating to Shared Decision Making, Co-ordination and Monitors and Reviews (Figure 4).

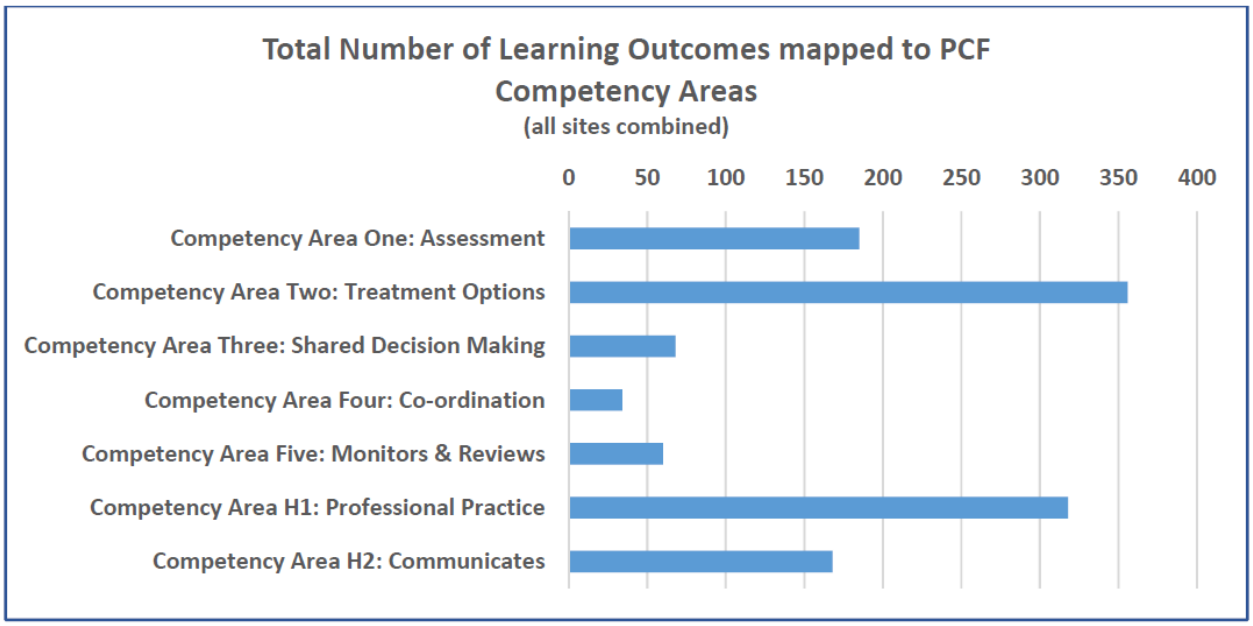

Figure 4: Number of learning outcomes mapped to prescribing competency framework competency areas.

Maintaining competency for pharmacist prescribers

Maintaining competency to prescribe can be achieved by meeting the Pharmacy Board of Australia continuing professional development requirements, as described in the Pharmacy Board of Australia's *Registration standard: Continuing professional development.*(39)

Stakeholders

Pharmacist prescribing can contribute to responsive and affordable access to medicines for patients.(1, 2, 4) It can increase access to medicines and improve outcomes for patients without compromising safety and quality.(4, 9) Polypharmacy and increasing medicines use is pervasive in the Australian community and prescribing pharmacists have an enhanced capability to lead and champion rationalised medicines use, rather than increasing medicine use.(3, 13) A key facilitator in this space is that patients find pharmacists easy to access in the community and this accentuates pharmacists' importance in this area. The patient (and their carer) are the profession's key stakeholders; as such, ensuring that we engage these key stakeholders in the planning and implementation phase of pharmacist prescribing is crucial.

The views of all key stakeholders must be considered during the planning and implementation phase. In addition to patients and carers, these stakeholders will include, but are not limited to: community pharmacists, hospital pharmacists, consultant pharmacists, pharmacy organisations, educators, government, regulators, funders, other healthcare providers including medical practitioners and nurses, training organisations and accrediting organisations.

Questions for discussion

You may wish to make some handwritten notes in the tables below ahead of the forum.

The Health Professionals Prescribing Pathway outlines three models of prescribing.

We invite you to consider the following for each model in relation to pharmacist prescribing.

	Autonomous prescribing	**Prescribing under supervision**	**Prescribing under a structured prescribing arrangement**
How will this model provide increased access and improved quality use of medicines for patients?			
What are the advantages of this model?			

	Autonomous prescribing	Prescribing under supervision	Prescribing under a structured prescribing arrangement
What are the barriers to implementing this model?			
Are there any safety or conflicts of interest issues raised by this model?			
What safeguards need to be considered for this model?			

	Autonomous prescribing	Prescribing under supervision	Prescribing under a structured prescribing arrangement
Should this model be limited to a particular practice setting? **(E.g. primary healthcare, hospital, rural and remote)**			
Should there be additional prerequisites for this model? **(E.g. years of experience, additional study/assessment of competence)**			
Should the profession aim for all pharmacists with general registration to be able to prescribe under this model?			

	Autonomous prescribing	Prescribing under supervision	Prescribing under a structured prescribing arrangement
Is there a role for workplace/site-based credentialing in this model? **If so, please describe.**			
Can medicines be safely supplied or dispensed under this model?			

Should a pharmacist who is authorised to prescribe who works in multiple settings (e.g. general practice and hospital) be able to prescribe in each setting?	

A number of legislative considerations are required to enable prescribing by pharmacists for each of the three models.

We invite you to consider what these may be ahead of discussion at the forum.

Model of prescribing	National Law	State and territory medicines and poisons Acts
Autonomous prescribing		
Prescribing under supervision		
Prescribing under a structured prescribing arrangement		

The authorisation to prescribe is conferred under each state and territory legislation.

What lessons can we learn from the international experience?	
How can we ensure consistency across the different states and territories?	
What forums are available for these discussions to occur?	
Who are the right stakeholders to lead these discussions?	

The profession will need to work in partnership with a range of stakeholders to enable pharmacist led prescribing.

We invite you to consider who the main stakeholders might be.

Stakeholder name	How can they help?	How best to engage them?	What would be their main concerns?	What strategies could be used to overcome those concerns?

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Definitions

Term	Definition	Reference
Administer	To personally (or personally observe) apply or introduce a medicine to the patient's body.	Section 14 of the *Health Practitioner Regulation National Law Act*(40)
Community pharmacy	Community pharmacy is a primary care business operating from approved premises by the jurisdiction for the supply of scheduled medicines.	
Endorsement of registration	An endorsement of registration by a National Board (approved by Ministerial Council under section 14 of the National Law) recognises that a person has additional qualifications and expertise in an approved area of practice and/or for scheduled medicines.	
Hospital pharmacy	An approved pharmacy department within a public or private hospital to supply medicines and provide in-patient and outpatient services.	
Medicine	A medicine in this context is a pharmacologically active substance that is included in a current Poisons Standard schedule.	The *Federal Poisons Act* (Standard For The Uniform Scheduling Of Medicines And Poisons)(41)
Multidisciplinary settings	Multidisciplinary settings that employ or contract the services of a pharmacist but do not involve the supply of medicines. These settings include, but are not limited to, medicine review services, outreach services, residential aged care facilities and general practice.	
Prescribe	To authorise the supply or administration of a medicine to a patient.	Section 14 of the *Health Practitioner Regulation National Law Act*(40)
	An iterative process involving the steps of information gathering, clinical decision-making, communication, and evaluation that results in the initiation, continuation or cessation of a medicine.(8)	Health Professional Prescribing Pathway(7)
Prescriber	A health professional authorised to undertake prescribing within their scope of practice.	Prescriber
Safe prescribing models	The Health Professionals Prescribing Pathway defines three distinct safe prescribing models. The three models are not mutually exclusive; health professionals may work within one or more prescribing models in clinical practice. These models are: (1) autonomous prescribing (2) prescribing via a structured prescribing arrangement, and (3) prescribing under supervision.	Safe prescribing models
Scope of practice	The area and extent of practice for an individual health professional, usually defined by a regulator, a profession or employer, after taking into consideration the health professional's education, training, experiences, expertise and demonstrated competency. (8)	Health Professional Prescribing Pathway(7)
Supply	To provide a medicine to a patient for their later use or administration	Section 14 of the *Health Practitioner Regulation National Law Act*(40)

Appendix A: State and territory legislation for health professionals to prescribe medicines

The tables below are adapted from the Background Paper for the Registered Nursing/Midwifery Prescribing Symposium (42)

State or territory	Prescribing	Limited prescribing	Possess medicines only	Possess and supply	Administer in accordance with protocol but not prescribe	Prescribe or supply	Relevant state or territory legislation
New South Wales	Medical practitioner Dentist Veterinary practitioner Nurse practitioner Midwife Optometrist Podiatrist	Pharmacist (prescribe Schedule 2 & 3)	Medical superintendent of hospital (possess medicines only unless is an authorised prescriber)	Dental therapist Oral health therapist Dental hygienist Ambulance officer Registered nurse involved in vaccination program			Poisons Act 1966 Poisons and Therapeutic Goods and Regulation 2008
Victoria	Medical practitioner Dentist practitioner Veterinary practitioner Nurse practitioner Authorised registered midwife Authorised: - optometrist - podiatrist			Registered nurse			The Drugs, Poisons and Controlled Substances Act 1981 The Drugs, Poisons and Controlled Substances Regulations 2006

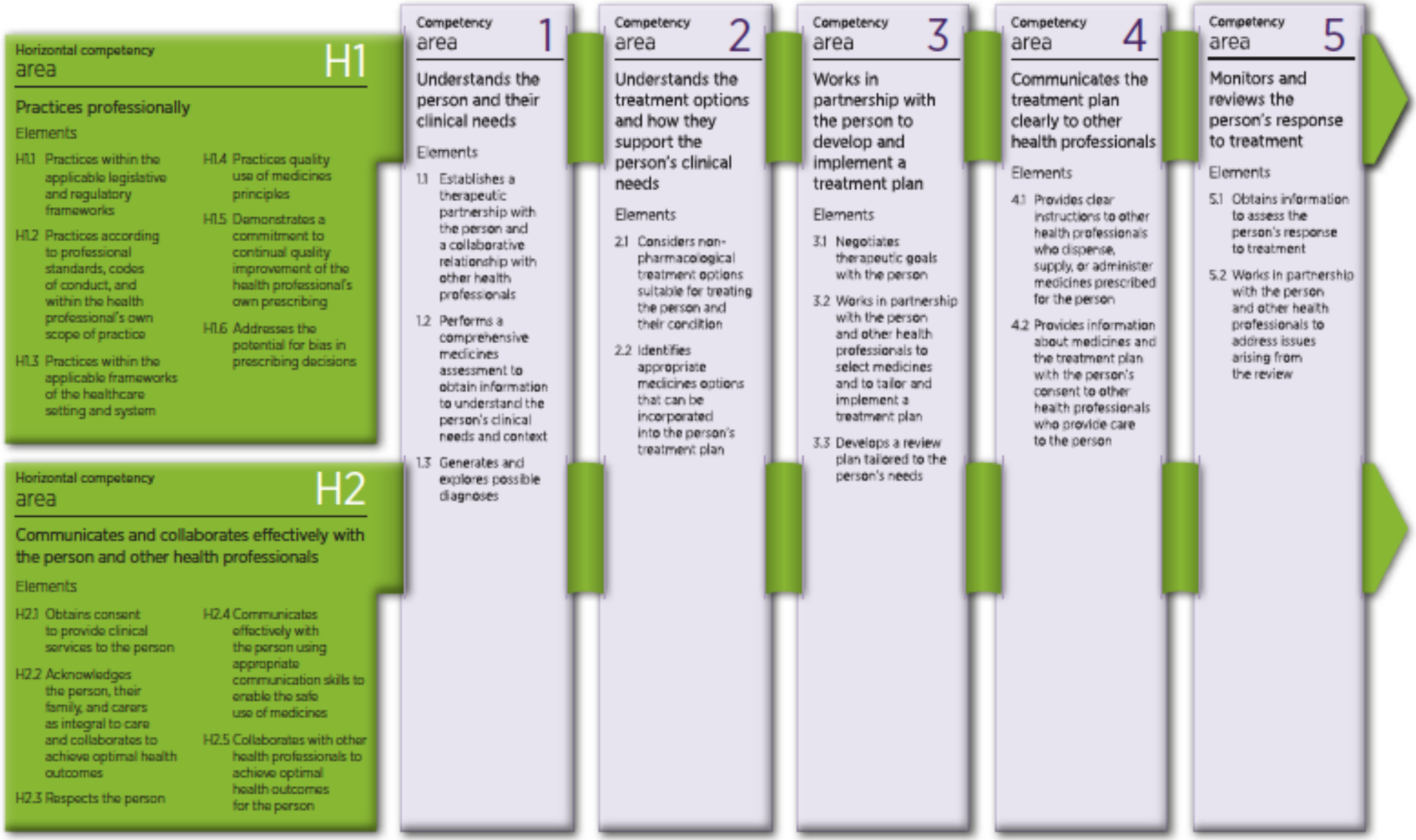
State or territory	Prescribing	Limited prescribing	Possess medicines only	Possess and supply	Administer in accordance with protocol but not prescribe	Prescribe or supply	Relevant state or territory legislation
Queensland	Medical practitioner Nurse practitioner Endorsed midwife Surgical podiatrist	Pharmacist (prescribe Schedule 2 & 3)		Indigenous health worker Registered nurse Midwife Oral therapist		Physician assistant (under supervision of medical officer)	Health Act 1937 Health (Drug and Poisons Regulation 1996) Health (Drugs and Poisons Regulation 1996)
Western Australia	Medical practitioner Dentist Veterinary surgeon Nurse practitioner Endorsed: - midwife - optometrist - podiatrist	Pharmacist (prescribe Schedule 2 & 3)		Registered nurse			Medicines and Poisons Act 2014
South Australia	Medical practitioner Dentist Veterinary surgeon	Pharmacist (prescribe Schedule 2 & 3) Nurse practitioner (Schedule 2, 3, 4 or 8 within scope of practice approved by their Local Health Network)			Registered nurse Registered midwife		Controlled Substances (Poisons) Regulations 2011

State or territory	Prescribing	Limited prescribing	Possess medicines only	Possess and supply	Administer in accordance with protocol but not prescribe	Prescribe or supply	Relevant state or territory legislation
Tasmania	Medical practitioner Dentist Veterinary surgeon Nurse practitioner Endorsed midwife	Pharmacist		Registered nurse Midwife			Poisons Act 1971 consolidated 2015 Tasmanian poisons regulations 2008
Australian Capital Territory	Medical practitioner Intern medical practitioner Dentist Veterinary surgeon Nurse practitioner Endorsed midwife	Pharmacist		Health practitioners employed at institutions Nurse Midwife Trainee dentists (under supervision of dentist) Dental hygienist Dental therapist Oral health therapist Optometrist Podiatrist			Medicines, Poisons and Therapeutic Goods Act 2008 Medicines, Poisons and Therapeutic Goods Regulation 2008 Drugs of Dependence Act 1989 Drugs of Dependence Regulation 2009

State or territory	Prescribing	Limited prescribing	Possess medicines only	Possess and supply	Administer in accordance with protocol but not prescribe	Prescribe or supply	Relevant state or territory legislation
Northern Territory	Medical practitioner Dentist Veterinarian Nurse practitioner Endorsed midwife Optometrist Podiatrist Podiatric surgeon	Pharmacist (prescribe Schedule 2 & 3)		Aboriginal and Torres Strait Islander health practitioner Approved ambulance officers Dental therapists Dental hygienists Oral health therapists Nurse and midwife			Medicines, Poisons and Therapeutic Goods Act Medicines, Poisons and Therapeutic Goods Regulation

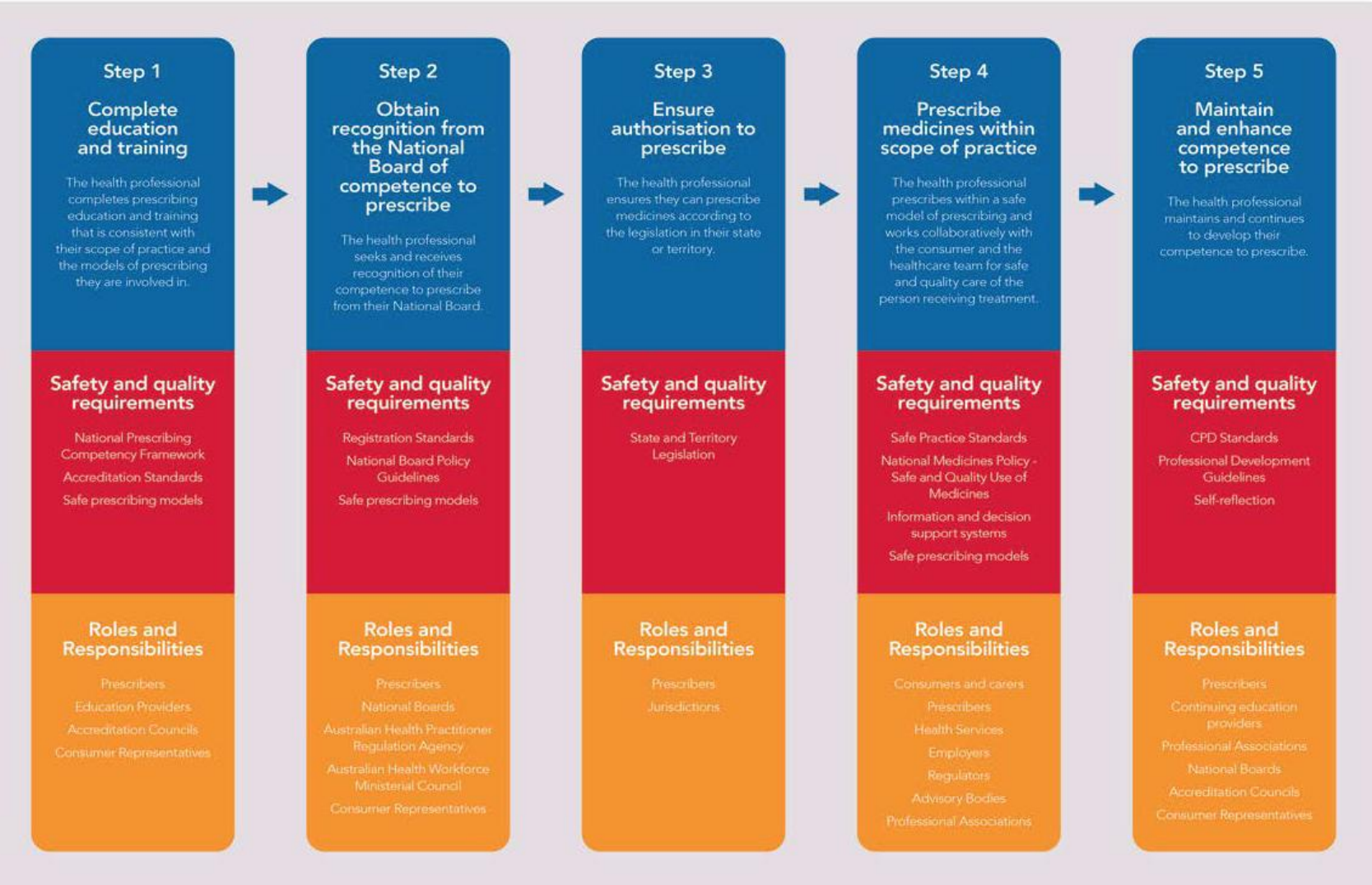
Appendix B: National Competency Standards Framework for Pharmacists in Australia 2016 (21)

The Five Vertical Competencies and Two Horizontal Competency areas (7, 8)



Appendix C: The five steps to safe and competent prescribing pharmacists

Reproduced from the Health Professionals Prescribing Pathway 2013 (7)



Appendix D: National Competency Standards Framework for Pharmacists in Australia 2016 (21)

Domain 1	Professionalism and ethics
*Standard 1.1	Uphold professionalism in practice
*Standard 1.2	Observe and promote ethical standards
*Standard 1.3	Practise within applicable legal framework
*Standard 1.4	Maintain and extend professional competence
*Standard 1.5	Apply expertise in professional practice
*Standard 1.6	Contribute to continuous improvement in quality and safety
Domain 2	**Communication and collaboration**
*Standard 2.1	Collaborate and work in partnership for the delivery of patient-centred, culturally responsive care
*Standard 2.2	Collaborate with professional colleagues
*Standard 2.3	Communicate effectively
*Standard 2.4	Apply interpersonal communication skills to address problems
Domain 3	**Medicines management and patient care**
Standard 3.1	Develop a patient-centred, culturally responsive approach to medication management
Standard 3.2	Implement the medication management strategy or plan
Standard 3.3	Monitor and evaluate medication management
Standard 3.4	Compound medicines
Standard 3.5	Support Quality Use of Medicines
Standard 3.6	Promote health and well-being
Domain 4	**Leadership and management**
*Standard 4.1	Show leadership of self
*Standard 4.2	Manage professional contribution
Standard 4.3	Show leadership in practice
Standard 4.4	Participate in organisational planning and review
Standard 4.5	Plan and manage physical and financial resources
Standard 4.6	Plan, manage and build human resource capability
Standard 4.7	Participate in organisational management

Domain 5	Education and research
Standard 5.1	Deliver education and training
Standard 5.2	Participate in research
Standard 5.3	Research, synthesise and integrate evidence into practice

Appendix E: Health Professionals Prescribing Pathway (7)

The Health Professional Prescribing Pathway defines three distinct safe prescribing models. These models are: (1) autonomous prescribing; (2) prescribing under supervision; (3) prescribing via a structured prescribing arrangement. The three models are not mutually exclusive; health professionals may work within one or more prescribing models in clinical practice.

Autonomous prescribing	The prescriber can prescribe medicines within their scope of practice without the approval or supervision of another health professional. The prescriber ensures that he or she communicates appropriately with all team members. Autonomous prescribers are educated to prescribe. They are authorised to autonomously prescribe within a specified area of clinical practice.
Prescribing under supervision	The prescriber can prescribe medicines within their scope of practice under the supervision of an authorised autonomous prescribing health professional. The prescriber and their supervisor ensure to communicate appropriately with all team members. Supervised prescribers are educated to prescribe. They have limited authorisation to prescribe medicines determined by legislation, the National Board and policies of the jurisdiction, employer or health service.
Prescribing via a structured prescribing arrangement	The prescriber has limited authorisation to prescribe medicines under a guideline, protocol or standing order. Sufficient documentation of the structured prescribing arrangement is required to describe responsibilities and communication between team members.

Forum report – Appendix B: Forum agenda

Pharmacist prescribing forum hosted by the Pharmacy Board of Australia

Tuesday, 26 June 2018
Victoria Ballroom, Parkroyal, Melbourne Airport

09.30 – 10.00	Registration, morning tea
10.00 – 10.20	Forum opening William Kelly, Chair, Pharmacy Board of Australia Associate Professor Bhavini Patel, Chair, Policies, Codes and Guidelines Committee, Pharmacy Board of Australia • Welcome and introduction • Setting the scene
10.20 – 11.20	Keynote 1 and table discussion Adjunct Professor Debra Thoms, Chief Nursing and Midwifery Officer, Australian Government Department of Health • Public need and public safety issues
11.20 – 12.20	Keynote 2 and table discussion Professor Lisa Nissen, Head of School of Clinical Sciences, Queensland University of Technology • Non-medical prescribing
12.20 – 13.00	Lunch
13.00 – 14.10	Workshop discussions 1 and 2 1. Scheduled Medicines Endorsement – Professor Anne Tonkin, Chair, Scheduled Medicines Expert Committee, Australian Health Practitioner Regulation Agency 2. Education and training – Professor Debra Rowett, Discipline Lead Pharmacy, School of Pharmacy and Medical Sciences, University of South Australia
14.10 – 14.30	Afternoon tea
14.30 – 15.30	Workshop discussions 3 and 4 3. Legislative considerations – Neil Keen, Chief Pharmacist, Western Australia Health 4. Stakeholder management – Adjunct Professor Debra Thoms, Chief Nursing and Midwifery Officer, Australian Government Department of Health

15.30 – 16.30	Wrap up Associate Professor Bhavini Patel, Chair, Policies, Codes and Guidelines Committee, Pharmacy Board of Australia • Where we got to with voting • Next steps
16.30	Close William Kelly, Chair, Pharmacy Board of Australia

Appendix C: Prescribing forum attendance list

Bellingan, Michelle	Council of Pharmacy Schools, James Cook University	Head of Pharmacy
Boyles, Peter	Department of Health and Human Services Tasmania	Chief Pharmacist
Brizzi, Joe	Australian Health Practitioner Regulation Agency	Executive Officer, Pharmacy
Bronger, Catherine	Pharmacy Guild of Australia	National councillor
Bull, Jillian	Australian Health Practitioner Regulation Agency	Senior Policy/Project Officer
Cardiff, Lynda	Queensland University of Technology – 'Pharmacist prescribing in Australia' project team	Project Manager
Clark, Bronwyn	Australian Pharmacy Council	CEO
Clifford, Rhonda	University of Western Australia	Head of School, Allied Health
Collie, Laura	Office of the Chief Health Officer, New South Wales Health	Public Health Registrar
Criddle, Deirdre	South Metropolitan Health Service	Complex Care Coordinator/Pharmacist, Co/NeCT – Complex Needs Coordination Team, Perth
Dillon-Smith, Charmaine	Australian Health Practitioner Regulation Agency	Communications Coordinator
Dooley, Michael	The Society of Hospital Pharmacists of Australia	Federal President
Evans, Samantha	Australian Health Practitioner Regulation Agency	Pharmacy Professional Officer, Victoria Office
Flynn, Charles	Physiotherapy Board of Australia	Chair
Freeman, Chris	Camp Hill Healthcare	Consultant Practice Pharmacist
George, Owain	Pharmacy Council of New Zealand	Registrar
Gregory, Lesley	University of Western Australia	Pharmacist
Guy, John	Pharmaceutical Defence Limited	Professional Officer
Hale, Andrew	Royal Brisbane and Women's Hospital	Pharmacist
Halloran, Petrina	Australian Health Practitioner Regulation Agency	Policy Manager Nursing and Midwifery
Halstead, Peter	Pharmacy Premises Registering Authorities of Australia	Member
Hughes, Jeff	Curtin University	PhD in Pharmacist prescribing on Australia
Humphreys, Jill	Australian Health Practitioner Regulation Agency	Executive Officer
Huxhagen, Karalyn	KH Consulting	Community pharmacist, Accredited Consultant pharmacist and advocate for rural pharmacy
Jackson, Shane	Pharmaceutical Society of Australia	National President

Kalisch Ellett, Lisa	Quality Use of Medicines and Pharmacy Research Centre, UniSA	Pharmacist
Keen, Neil	Western Australia Health	Chief Pharmacist
Kelly, Williaml	Pharmacy Board of Australia	Chair
Kirsa, Sue	Australian Pharmacy Council	President
Kirschbaum, Mark	Pharmacy Board of Australia	Board Member
Kyle, Greg	Queensland University of Technology – 'Pharmacist prescribing in Australia' project team	Professor of Pharmacy and Head of Discipline for Pharmacy
Lee, Justin	Queensland Health	Director, Medication Services Queensland
Lord, Nick	Australian Health Practitioner Regulation Agency	Executive Officer, National Registration and Accreditation Scheme Review
Loveday, Bill	Queensland Health	Director, Medicines Regulation and Quality
MacFarlane, Brett	Australian College of Pharmacy	Chief Pharmacist
Mackson, Judith	New South Wales Ministry of Health	Chief Pharmacist
Martin, Grant	Australian Association of Consultant Pharmacy	CEO
McBride, Liza-Jane	Queensland Health	Team Leader Allied Health Workforce Capability and Capacity
McIntosh, Kylie	Safer Care Victoria	Principal Policy Officer Medicines
McMaugh, Jarrod	Pharmaceutical Society of Australia, Victorian Branch	Vice President
Morris, Steve	South Australia Health	Executive Director South Australia Pharmacy and Chief Pharmacist
Moy, Chris	Australian Medical Association	Chair, AMA Ethics and Medico-Legal Committee
Newman, Suzanne	The Society of Hospital Pharmacists of Australia	Specialty Practice Group Manager
Nissen, Lisa	Scheduled Medicine Expert Committee	Jurisdictional representative
O'Malley, Joe	Australian Association of Consultant Pharmacy	Chair
Page, Amy	Alfred Health	Lead Pharmacist, Rehabilitation Aged and Community Care
Patel, Bhavini	Pharmacy Board of Australia	Board Member
Phillips, Rachel	Psychology Board of Australia	Deputy Chair
Pirpinias, Michelle	Australian Health Practitioner Regulation Agency	Senior Policy Officer
Print, Adele	University of Auckland	Professional Teaching Fellow
Quaine, Julianne	Australian Government Department of Health	Assistant Secretary, Pharmacy Branch
Raffoul, Natalie	NPS MedicineWise	Senior Clinical Program Officer
Riley, Toni	Victorian Pharmacy Authority	Chair

Robertson, Chris	Australian Health Practitioner Regulation Agency	Executive Director, Strategy and Policy
Rowett, Debra	University of South Australia and Southern Adelaide Local Health Network	Discipline Lead Pharmacy, School of Pharmacy and Medical Sciences and Director Drug and Therapeutics
Sansom, Lloyd	Australian Government Department of Health	Expert
Shirtcliffe, Andi	New Zealand Ministry of Health	Chief Adviser Pharmacy
Shutt, Anita	Department of Health and Human Services Tasmania	Section Leader, Medication Strategy and Reform
Simmonds, Brett	Pharmacy Board of Australia	Board member
Simpson, Tom	Tasmanian Health Service	Executive Director, Statewide Hospital Pharmacy
Smith, Megan	Department of Health and Human Services Victoria	Manager Standards and Monitoring, Drugs and Poisons Regulation
Sunderland, Bruce	Curtin University	PhD in Pharmacist prescribing on Australia
Terrill, Desiree	Department of Health and Human Services	Senior Policy Adviser, Health and Wellbeing Workforce Reform
Thoms, Debra	Australian Government Department of Health	Chief Nursing and Midwifery Officer
Tong, Erica	Alfred Hospital	Deputy Director of Pharmacy, Chief Pharmacy Information Officer
Tonkin, Anne	Scheduled Medicines Expert Committee	Chair
Toubani, Amel	Australian Health Practitioner Regulation Agency	Senior Policy and Project Officer
Twomey, Trent	Pharmacy Guild of Australia	Senior National Vice-president
Weekes, Lynn	National Prescribing Service	CEO
Weeks, Greg	Barwon Health	Director of Pharmacy, Barwon Health
Wellard, Rod	Pharmacy Board of Australia	Board Member
Wood, Pene	La Trobe University	Lecturer, Clinical Pharmacy, School of Pharmacy and Applied Science
Yeates, Gilbert	Pharmaceutical Defence Limited	Deputy Chairman

Appendix D: Bios of keynote speakers and facilitators

KEYNOTE 1 AND FACILITATOR STAKEHOLDER ENGAGEMENT AND MANAGEMENT

Adjunct Professor Debra Thoms FACN(DLF) FACHSM(Hon) RN RM Adv Dip Arts BA MNA Grad Cert Bioethics

Debra Thoms is the Commonwealth Chief Nursing and Midwifery Officer, a role she started in August 2015. She was formerly the inaugural Chief Executive Officer of the Australian College of Nursing, a position she was appointed to in May 2012 after six years as the Chief Nursing and Midwifery Officer with New South Wales Health.

During her career Debra has gained broad management and clinical experience including as a clinician in remote and rural Australia, as CEO of a rural area health service, general manager of the Royal Hospital for Women in Sydney as well as Chief Nursing and Midwifery Officer within the Health Departments of South Australia and New South Wales.

In 2005 Debra was selected to attend the Johnson and Johnson Wharton Fellows Program and the Wharton School of Business at the University of Pennsylvania. Her contribution to nursing and healthcare has been recognised by an Outstanding Alumni Award from the University of Technology, Sydney and she also holds appointments as an Adjunct Professor with the University of Technology, Sydney.

KEYNOTE 2

Professor Lisa Nissen BPharm, PhD, AdvPracPharm, FPS, FHKAPh, FSHP

Dr Lisa Nissen is Professor and Head of the School of Clinical Sciences at Queensland University of Technology. She is an experienced pharmacy practitioner, researcher and educator having worked in hospital and community pharmacy in metropolitan and rural areas Australia. Her focus is on improving the quality use of medicines in the wider community, across the healthcare continuum, with a focus on health service development and factors that influence the prescribing of medicines.

Lisa is a strong believer in the benefits multidisciplinary healthcare teams can bring to patient care and takes this passion into the classroom with a commitment to the development and implementation of innovative interprofessional education for health students. She has received national and international awards for teaching excellence and has been acknowledged for her contributions to the pharmacy profession. Lisa was one of Australia's first credentialed Advanced Practice Pharmacists.

FACILITATOR LEGISLATIVE CONSIDERATIONS UNDER THE NATIONAL LAW

Professor Anne Tonkin BMBS, MEd, PhD, FRACP

Anne Tonkin was Director of the Medicine Learning and Teaching Unit in the School of Medicine at the University of Adelaide until the end of 2014. She was involved with curriculum development and implementation, and enjoyed lecturing and clinical teaching.

She is a physician by training, specialising in clinical pharmacology, and has been involved with drug regulation at a national level for many years. She was Chair of the South Australia Medicines Advisory Committee and a member of the South Australia Medicines Evaluation Panel until the end of 2017.

She is a member of the South Australia Board of the Medical Board of Australia, and has been Chair since 2012. She was appointed to the Medical Board of Australia in 2015. She has also served the Australian Medical Council in various roles in medical school and college accreditation over the past 15 years. She continues part-time practice as a relieving general physician at the Royal Adelaide Hospital.

FACILITATOR EDUCATION AND TRAINING REQUIREMENTS

Professor Debra Rowett PSM B.Pharm, Adv Prac Pharm, FPS, MSHPA

Debra Rowett is Professor and Discipline Leader Pharmacy, School of Pharmacy and Medical Sciences at the University of South Australia and Director of the Drug and Therapeutics Information Service (DATIS), Southern Adelaide Local Health Network. Debra stepped down this year as President of the Australian Pharmacy Council having served on the Pharmacy Board of South Australia and then the Australian Pharmacy Council over a period of 20 years. Debra was the lead for the Health Professions Accreditation Collaborative Forum Working Group work on developing a cross professional Accreditation Standard for prescribing which focuses on the importance of enhancing interprofessional practice for the safe and effective use of medicines.

Debra has worked extensively in the area of quality use of medicines, inter-professional practice, health policy and workforce development. Debra has been at the forefront of academic detailing training and implementation in Australia and is a member of the national Drug Utilisation SubCommittee of the Australian Pharmaceutical Benefits Advisory Committee. Debra was awarded the prestigious SHPA Fred J Boyd award in 2016.

FACILITATOR HOW TO ENSURE CONSISTENCY IN STATE AND TERRITORY DRUGS AND POISONS LEGISLATION

Mr Neil Keen BPharm, MPharm, MBA, FSHP

Neil Keen is Chief Pharmacist for the Department of Health in Western Australia. This role is primarily responsible for regulatory and compliance matters for drugs and poisons across the state. The position is also concerned with funding, policy and workforce matters for pharmacists in both public and private health sectors within Western Australia. Neil has had a varied career in pharmacy, with extensive clinical experience and prior roles in management as a director of pharmacy. Neil's current interests are in the areas of chronic disease, prevention and health promotion, and medicines as they relate to public health.

LEAD FACILITATOR PRESCRIBING FORUM

Associate Professor Bhavini Patel BPharm (hons), MSc (ClinPharm), Adv.Prac.Pharm. FSHPA

Bhavini is a clinical pharmacist based in Darwin who has expertise working with patients with kidney disease and became an advanced practice pharmacist in 2015. Bhavini was the Director of Pharmacy at the Royal Darwin Hospital for 13 years, where she developed a team of innovative and passionate pharmacists and technicians providing clinical pharmacy and medicine supply services across the Northern Territory including in primary care settings. She is also the pharmacy professional lead at Charles Darwin University.

Over the last five years she has transitioned into health leadership roles with a focus of improving access and the provision of quality care at a health systems level. She is currently the Executive Director of Medicines Management and Transformation and Change in Northern Territory Health in which she provides strategic leadership advice and leadership for all matters relating to medicines management as well as collaborating with clinicians and other staff to lead transformational change. Bhavini has been a National Board member since the inception of the National Registration and Accreditation Scheme in 2009 and provides a clinical pharmacist and health policy perspective to the Board as well as a rural and remote focus. She is currently the Chair of the Policies, Codes and Guidelines Committee and has led a number of Board sponsored projects, which have informed the development of registration standards and guidelines to help pharmacists provide safe and effective care to patients.

Appendix E: Data collection, management and analysis

The data was collected in specific theme-framed discussions with four key themes; potential prescribing models to meet public need, education and training; legislative considerations; and stakeholder engagement. A series of predesigned questions were posed to participants. Quantitative results were captured using electronic polling software and are presented in this report. The use of electronic polling software offered all participants the opportunity to submit individual responses and did not require participants to reach consensus. Participant responses were analysed thematically, and were supplemented through the creation of word clouds in NVivo 12 for Mac.

Nominal group technique was used to generate ideas and reach consensus. The nominal group technique was chosen as this method is a robust technique to stimulate original ideas and research consensus. This technique has two parts. The first part of this method uses small group discussions to generate and share ideas. The group formulates ideas that are written down as a list. The second part of this method sees the group members reach agreement to rank the ideas in order of priority as the most to least important issues. This process was repeated for each of the four themes.

Appendix F: Questions posed at the forum

Keynote 1 and table discussion

1. Is there a need for pharmacist led prescribing (for Schedule 4 and Schedule 8 medicines)?
2. If so, how could pharmacists fill this need safely?

Polling session 1

Which patient care needs can be better met through enhanced pharmacist involvement in prescribing?

Keynote 2 and table discussion

1. What are the implications of the varied understanding of the terms 'prescribing' and 'to prescribe'? For example, the broad definition in the *NPS Prescribing Competencies Framework 2012* compared to the narrower meaning in drugs and poisons legislation.
2. Which models(s) of prescribing should the profession focus on, structured, supervised and/or autonomous?

Polling session 2

Which model(s) of prescribing should the profession focus on?

- Structured
- Supervised
- Autonomous

Workshop discussions 1

1. Do you have any feedback on the documentation and resources developed for National Boards?
    - Australian Health Ministers' Advisory Council (AHMAC) Guidance for National Boards
    - AHPRA Guide for National Boards developing submissions under the AHMAC Guidance for National Boards
2. In order to meet different patient care needs (e.g. transfer of care, warfarin management, chronic disease management, etc.), would there be different models of prescribing and different requirements to be met by pharmacists?
3. How can we ensure that different stakeholders work together effectively to identify and then address the different patient care needs that can be better met by enhanced pharmacist involvement in prescribing?

Workshop discussions 2

1. What is required from an education and training perspective, for the three different *Health Professionals Prescribing Pathway* prescribing models?
2. Which *Health Professionals Prescribing Pathway* prescribing models should we aim for newly-registered pharmacists to be able to perform?
3. What changes need to be made to the teaching and assessment of the non-therapeutic elements of prescribing (e.g. shared decision-making, coordination and communication) to prepare pharmacists to prescribe?

Workshop discussions 3

1. What type of 'prescribing' will pharmacists be performing – exactly?
2. What legislation is relevant, and what needs to change for pharmacists to be authorised to perform the required tasks in their practice – exactly?
3. What are the barriers and enablers relating to drugs and poisons legislation for the three different *Health Professionals Prescribing Pathway* prescribing models?

Workshop discussions 4

1. Why is it important to engage stakeholders?
2. Who are the relevant stakeholders?
3. You will be assigned to one of the following stakeholder groups:
    - Professional associations/pharmacists
    - Consumers/public/patients
    - Workforce people/funders
    - Regulators
4. For your assigned stakeholder group, please discuss:
    - Why is that stakeholder group important?
    - How can that stakeholder group help the process?
    - How should they be engaged?
    - What would be their main concerns?
    - What strategies could be used to overcome those concerns?

Polling session 3

1. Do you agree that there is a need for enhanced pharmacist involvement in prescribing?
2. Using one word, which patient care needs can be better met through enhanced pharmacist involvement in prescribing?
3. What do you feel our current competencies allow us to do now? Select only one answer.
4. Should the profession aim for all newly-registered pharmacists to be able to prescribe under a structured prescribing arrangement?
5. Should the profession aim for all newly-registered pharmacists to be able to prescribe under supervision?
6. Should the profession aim for all newly-registered pharmacists to be able to prescribe under an autonomous prescribing arrangement?
7. Could autonomous prescribing be supported with appropriate training? Select only one answer.
8. What would you like to see happen next? Please respond in a single sentence.