SHPA response to Pharmacists in 2030 – Consultation paper, November 2023

The Society of Hospital Pharmacists of Australia (SHPA) is the national, professional organisation for the 6,100+ Hospital Pharmacists, and their Hospital Pharmacist Intern and Hospital Pharmacy Technician colleagues working across Australia's health system, advocating for their pivotal role improving the safety and quality of medicines use. Embedded in multidisciplinary medical teams and equipped with exceptional medicines management expertise, SHPA members are progressive advocates for clinical excellence, committed to evidence-based practice and passionate about patient care.

SHPA congratulates the Pharmaceutical Society of Australia (PSA) on the development of the *Pharmacists in 2030* consultation paper and welcomes the opportunity to provide feedback. SHPA has for years advocated for collaborative care in all health settings to achieve the best patient health outcomes and continues to be the leader in pharmacist-led prescribing practices in collaborative care settings, and specialisation of pharmacy practice in recognition of our highly skilled workforce.

As part of the announcement of our *Transformation 2024* Agenda, SHPA is committed to ensuring our future pharmacy workforce is fit for the task of more complex, interconnected care, through continued development of specialty pharmacy practice and collaborative care models. We also celebrate the positive progression of our pharmacy profession this year through milestone achievements such as the National Credentialling program for Partnered Patient Medication Charting (PPMC)[1], and the launch of The Australian and New Zealand College of Advanced Pharmacy (ANZCAP).[2]

Consideration of *SHPA's Pharmacy Forecast Australia 2023*[3], as well as our recent submission to *Unleashing the Potential of our Health Workforce – Scope of Practice Review*[4], in which we focus on the critical role of collaborative prescribing and clinical specialisation would be relevant to *PSA's Pharmacists in 2030*.

If you have any queries or would like to discuss our submission further, please do not hesitate to contact Jerry Yik, Head of Policy and Advocacy on jyik@shpa.org.au.

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Question 1: What do you think has been the biggest achievement / progress of pharmacists in 2023? Why is this achievement so important?

SHPA highlights the continuing rollout and expansion of the Pharmacist Partnered Medication Charting (PPMC) in Australian hospitals as an important achievement of 2023. In the PPMC model, an appropriately credentialed pharmacist conducts an interview with the patient/carer and obtains the best possible medication history (BPMH), then co-develops a medication plan for that patient with the treating doctor, patient/carer and nurse, and charts the patient's regular medications and the doctor charts any new medications. Since the initial 2012 pilot[5] in Victoria, PPMC has been widely implemented to various extents across all states and territories and has demonstrated the effectiveness of collaborative prescribing in hospitals in improving medicines related health outcomes and increasing efficiencies within the patient hospital journey.

The PPMC model has been proven to reduce the proportion of inpatients with at least one medication error on their chart by 62.4% compared with the traditional medication charting method, while also reducing the length of inpatient stay by 10.6%.[6] Additionally, a Deakin University economic evaluation of more than 8,500 patients estimated savings of $726 per admission where PPMC was undertaken, and cost modelling of the number of general medical patients admitted that could be expected to benefit from state-wide-roll-out of the PPMC model operating during business hours suggested potential savings on inpatient costs of $202 million per annum.[7]

The widespread adoption of PPMC in Australian hospitals is an acknowledgement of the expert knowledge and broad scope of practice of hospital pharmacists, and a step forward in encouraging collaborative care models to better manage the increasing complexities of patient care. The PPMC model also promotes professional development and credentialling of hospital pharmacists, resulting in improved job satisfaction and thus improved workforce retention.

Question 2: Are there other megatrends which should be considered in the formation of pharmacists in 2030?

Challenges in pharmacy workforce retention

As noted in *SHPA's Pharmacy Forecast Australia 2023* report, the retention of pharmacists particularly in the aftermath of COVID-19 is an important issue, with only half of people surveyed in 2022 saying they would stay in the pharmacy profession for more than 10 years.[3] Between 2017-18 and 2021-22, a decreasing trend was also noted in the percentage of younger registered pharmacist cohort (<35 years), from 44.7% to 39%.[8]

Challenging working conditions, inadequate remuneration, and lack of professional opportunities continue to be key reasons for pharmacists leaving the workforce and especially impact regional and remote areas where they already face an undersupply of pharmacists. Given Australia's ageing population, increasing prevalence of chronic diseases including mental health and behaviours of concern, it is likely that there will be continued demand and challenges in the sustainability of the pharmacy workforce.

For these reasons, it is important to develop strategies to expand the scope of practice for pharmacists and pharmacy technicians. SHPA supports the development of funding models that recognises the specialisation of pharmacists and leverage the expertise of this highly skilled workforce to improve remuneration and job satisfaction.

Delayed diagnoses and more advanced disease progression

The COVID-19 pandemic has highlighted increasing barriers that patients face in accessing GP services, leading to delayed diagnoses and subsequent advanced disease progression. The deterioration of patients waiting on essential primary care not only contributes to complexity of disease progression, but also loss of productivity as a result. We must address these issues by upskilling pharmacists to become referral points to assist with earlier diagnosis and encourage specialisation of pharmacists to address highly complex patients.

Consideration of this trend is important in understanding the need for structured recognition of pharmacists' specialisation in addressing the escalating complexities and demands of contemporary health care. Since the launch of SHPA's Specialty Practice Program in 2017, SHPA has developed its *Standards of Practice Series*[9] for different clinical disciplines and has continued to empower pharmacists to professionally develop from the available expertise of this highly skilled workforce across 31 established Specialty Practice groups.

Similarly, SHPA has also launched The Australian and New Zealand College of Pharmacy (ANZCAP) which currently recognises 40 different specialty areas of practice. Recognition of pharmacists at Resident, Registrar and Consultant levels of different specialities will put the pharmacy workforce in good stead to provide appropriate and qualified care to Australian patients who are presenting to primary and acute health services with advanced disease progression.

Reduced access to medicines for Australian patients

Continued supply of essential medicines is critical for safe healthcare delivery for all Australians. According to a 2019 report from Therapeutic Goods Administration (TGA), approximately 90% of medicines used in Australia are sourced from overseas.[10] With added impact of the COVID-19 pandemic, conflict and weather events in Australia and abroad on medicines supply chain, the issues surrounding acute medicines shortages currently and, in the future, is an important trend to consider for Australian patients' medicines access.

SHPA's Pharmacy Forecast Australia 2023 report highlighted that foreign policy, trade, and international alliances would impact the affordability and quality of pharmacy services and medicines.[3] While the issues surrounding medicines supply chain may be outside the scope of an individual pharmacist's control, professional pharmacy organisations can advocate for policy and regulatory changes to address these issues. An example would be to advocate for a coordinated approach to addressing medicines shortages, and centralising procurement capabilities within each jurisdiction. This would potentially save the workload of individual pharmacies investing time into resolving supply issues on their own.

Question 3: How can pharmacists contribute to the achievement of the intended outcomes described in the revised National Medicines Policy?

There are 250,000 medication-related hospital admissions in Australia every year.[11] This is reflective largely of the current shortfalls of primary care service delivery and highlights the significant overhaul required in how we deliver primary care and preventative care, as it can be assumed pharmacists have been involved in all the episodes of medicines supply preceding and causing these medication-related hospital admissions. Pharmacists have a key role in this area to promote medicines safety and quality medication management according to the four pillars of the National Medicines Policy[12] (NMP).

Pharmacist prescribing within collaborative care models

SHPA supports collaborative care in all healthcare settings to achieve best patient health outcomes. Hospital pharmacists prescribing within collaborative teams is an example of the better utilisation of their clinical expertise and efficient medication management in the delivery of safe, reliable, and timely access to medicines. The PPMC model as introduced earlier is a primary example of a collaborative care model that relies on the expertise of pharmacists in medication management. Through various trials and pilots, the PPMC model has demonstrated improved patient outcomes, reduced healthcare costs and optimisation of medication use.[5,6,7,13] SHPA also recently announced the National Credentialing program for PPMC as part of its *Transformation 2024* agenda.[14]

Clinical stewardship and specialist pharmacists for management of complex diseases

Due to the increasing complexity of disease states, specialisation and clinical stewardship of pharmacists is an important aspect of delivering quality use of medicines safety. Historically the role of stewardship has been limited to antimicrobial stewardship pharmacists, but the scope of stewardship is expanding into roles in different areas such as anticoagulation and analgesia. This highlights the demand for specialisation of pharmacists and acknowledges pharmacists' role in promoting quality use of medicines.

Deprescribing of inappropriate medications

Pharmacists adhere to the *SHPA Standards of Practice Series*[9] and part of this is to optimise medication management and minimise unnecessary treatment where appropriate. Deprescribing is an important aspect of patient medication management that contributes to quality use of medicines and medicines safety. An example of this is in aged care, where older patients are likely to have complex medication regimens. There is growing evidence for deprescribing, particularly around the withdrawal of potentially inappropriate medicines known to cause harm, such as long-term benzodiazepines and antipsychotics.[15]

A clearly defined role of a deprescribing stewardship pharmacist could assist in improving care for older patients suffering significant decline, who often present to hospitals with delirium or falls. Referral to pharmacists working within a dedicated collaborative geriatrics team could ensure timely and comprehensive medicines review, informed by shared decision-making with patients, carers and family members and focused on agreed goals of care.[16] The *SHPA Standard of practice in geriatric medicine for pharmacy services*[17] includes the role of pharmacy in deprescribing and the *SHPA Position Statement on Geriatric Medicine and Aged Care Clinical Pharmacy Services*[18] advocates for the employment of Geriatric Medicine Pharmacists in hospitals and aged care service.

Pharmacist role in preventative health to reduce hospitalisation rates

Funding for pharmacist-led services such as medication reviews and vaccination in community pharmacies can better utilise this highly skilled workforce to promote preventative care in primary healthcare settings. Public hospital emergency departments saw the highest number of presentations ever recorded across Australia in 2020-21, and since 2016-17, the increase in presentations (14%) exceeded population growth (5%).[19] In future, acute health services are unlikely to be able to cope with this increasing influx of patient flow through emergency departments and hospital wards, given the ageing population, current and forecast healthcare worker shortages to meet the needs of an ageing population. There is a collective interest across primary and secondary care in reducing hospitalisations and there needs to be a collaborative effort to address the current system and funding inefficiencies of primary prevention in the community setting.

Question 4 and 5: Where do current health systems create inefficiencies or barriers to pharmacists working effectively within the healthcare team to support patient wellbeing? What are some examples of these?

Fee-for-service funding model does not incentivise pharmacists to achieve positive health outcomes

Australia's healthcare system is funded through the Medicare system, a market-based fee-for service funding model which relies on practitioners to be available and accessible to provide subsidised healthcare at affordable prices, to a large enough population to ensure adequate practitioner income. In 2021, it was estimated that 1.5 million Australians did not have enough money to pay for the healthcare they needed.[20] Failure of this market-based model in numerous rural and remote locations has contributed to increasing inequity in healthcare access and health outcomes, with local governments, charitable foundations, the Royal Flying Doctor Service, and public hospitals stepping into support and enable access to rural primary healthcare.[3]

The community pharmacy sector operates based on a privately owned business model, and as these private businesses are paid per dispensing, it is difficult to promote deprescribing as this is in direct conflict with the financial outcomes of the business. SHPA believes the health service funding model should focus on value-based activities and/or outcome-based activities to ensure pharmacists can continue to uphold the four pillars of the NMP.

Recognition of pharmacy technicians crucial to expanding the scope of pharmacists

SHPA convenes a Technicians and Assistants Specialty Practice group, comprising of a network of SHPA members who are technicians or work closely with technicians, and are interested and invested in recognising, developing and optimising the crucial role of technicians and assistants in hospital pharmacy.

Pharmacists in 2030 cannot be achieved without reviewing the current scope of practice for pharmacist technicians and assistants. Unlike comparable international pharmacy settings, pharmacy technicians in Australia are not registered health professionals and there are no standardised requirements for qualifications across jurisdictions. This potentially has contributed to the slow implementation of expanded roles for pharmacists as the expansion of pharmacist roles goes hand in hand with the expansion of the scope of pharmacy technicians and assistants. The consideration of pharmacists in 2030 must be inclusive of pharmacy technicians if we are to achieve optimisation of pharmacist roles and skillset.

The National Skills Commission's Skills Priority List 2023[21] indicates that hospital pharmacists, doctors, and nurses are in shortage around Australia. Better utilising the existing skilled pharmacy and pharmacy technician workforce and prioritising implementation of evidence-based expanded roles could support the overall reduced workforce capacity in the pharmacy sector.

Questions 6 to 8: How do we sustainably design and fund equitable, universal access to pharmacists for all patients?; How can pharmacists contribute to equitable access to health care, particularly for priority populations?; How do we sustainably expand access to pharmacists expertise to be available anywhere a medicine is prescribed, dispensed, supplied or administered?

Ensure pharmacists are embedded in all areas where medicines are used

Pharmacists are highly skilled in medication management and is vital to the safe and quality use of medicines in patient care. The design of health services should incorporate the expertise of a pharmacist across all settings where medicines are used. With increased recognition of the importance of clinical specialisation and pharmacists becoming leaders in clinical stewardship, pharmacists embedded within collaborative teams across multiple specialties can help improve patient health outcomes and improve universal access to all patients. This is particularly relevant for priority areas such as Aboriginal health, aged care, and mental health, where specialist pharmacists with a defined role description, such as deprescribing stewardship pharmacists and Aboriginal Health Services pharmacist, can play a key role in medicines optimisation and deprescribing.

Another example of pharmacists in all collaborative care models include the rollout of PPMC. With the expansion of pharmacists' scope of practice, PPMC is an excellent example of embedding pharmacists in multidisciplinary teams to promote quality and safe use of medicines. For this model to achieve universal access and sustainability, it is important that we promote consistency in the national rollout, to ensure patient experience of this service is consistent across different jurisdictions. Furthermore, pharmacy leaders need to advocate for the removal of legislative obstacles to pharmacist-led prescribing programs at state government level while simultaneously working to develop professional pharmacist prescribing credentialling programs.

Ensure the design of programs have clear objectives and inbuilt evaluation tools to adapt to changing needs of current healthcare issues

Sustainable service delivery requires clarity around the program goals and outcomes, and robust evaluation tools. Inbuilt evaluation tools must be adaptable to the changing needs of current health issues, and service models must be flexible to respond to interim evaluations of the initiative.

As an example, the Home Medicines Review (HMR) program is an initiative to support collaborative service delivery with general practitioners (GPs) and pharmacists in enhancing the quality use of medicines and reduce adverse medicines events in the primary care setting. In the *Initial evaluation of sixth community pharmacy agreement medication management programs: home medication review* final evaluation report[22] commissioned by the Department of Health and Aged Care (DOHAC) in 2016, a review of existing literature on home medication reviews (HMRs) showed that there was a lack of clear clinical evidence supporting the effectiveness of the HMR model. Given the nature of the intervention and the fact that is impact may take a long time to become clear, building up this body of evidence is likely to be a relatively complex and costly process. Additionally, the evaluation found HMRs were underutilised in Indigenous communities, people of culturally and linguistically divers (CALD) backgrounds, and people living in isolated or sparsely populated areas, which are communities that we should be prioritising to promote equity in health care access.[22] It also identified a lack of engagement by GPs in referring patients to HMR service. The evaluation report concluded substantial changes in the delivery of the HMR program particularly around referral rules would greatly benefit the sustainability of the HMR program in meeting its objectives.[22]

The current patient eligibility for HMRs does not clearly define nor incentivise pharmacists to target higher priority populations. It is important that initial service design and subsequent feedback from program evaluations are considered by governing bodies to implement appropriate program reforms and ensure equitable access of service to all patients.

There is also a need to address data gaps on cultural safety of Australian health services to better understand how we can target priority areas such as services for Indigenous populations, improve equity in health service access. Work is required to collate robust data on these services, in partnership with key advisory bodies such as Aboriginal Community Controlled Health Organisations, to provide a more comprehensive assessment of cultural safety across the Australian health system.[3]

Ensure sustainable funding models for new initiatives

For consultations that do not require a physical examination or in-person observation of the patient, pharmacists in any setting should be funded via the Medicare Benefits Schedule (MBS) to deliver clinical services to individuals, such as follow-up medication reviews, monitoring and management of medication regimens as part of a multidisciplinary chronic disease management plan, and individual or group-based services such as health promotion activities. Funding should also be implemented through a dedicated funding stream via the state or federal government, and not through cross-subsidisation funding models.

With ongoing growing demand for health services, it is important that we review the current fee-for-service funding model to support access for all Australians in all regions. Using the primary care sector as an example, the current fee-for-service funding model for various expanded scope or pharmacist-led consultation and prescribing programs, need to be designed to be sustainable for both consumers and the pharmacy workforce. Many of these are fee-for-service activities, while they can increase healthcare access in the short-term, can inadvertently increase out-of-pocket costs in healthcare for Australians, as these services are currently not eligible for patient's safety net calculations. This is not sustainable and increases the health access inequity or a two-tier health system, the impacts of which we are already seeing with bulk-billing rates for primary care medical appoints on the decline.[23]

Question 9: How do we further empower pharmacists to lead medicine stewardship wherever there are medicines, such as in primary care, aged care and hospital-based roles (e.g. opioid stewardship, antimicrobial stewardship)?

SHPA believes the building on the unique expertise of the pharmacy profession is a key component in establishing a more highly skilled and flexible workforce in both community and hospital pharmacy settings. Pharmacists' specialisations are already well-established within hospital setting and transition of care, and SHPA has recognised this specialisation within the hospital pharmacy sector through the support of the Specialty Practice program and Residency Programs.

SHPA has for years championed pharmacist-led prescribing practices in collaborative care settings, which have been in Australian hospitals for over a decade, and invested in the specialty skills and recognition that are a cornerstone of safe, expanded scope of practice. Historically, SHPA's Residency Program has delivered a structured, formalised, and accredited national program to enhance the clinical skills of hospital pharmacists and contribute to safe and quality care of patients. The subsequent introduction of Advanced Training Residencies across four clinical specialties in 2019 enabled pharmacists to undertake a two-year structured professional development program to advance in key clinical areas, involving clinical practice, governance, and research.

These programs have now evolved to the launch of SHPA's Australian and New Zealand College of Pharmacy (ANZCAP) in October 2023, a landmark recognition programme for pharmacists and pharmacy technicians working across Australia and New Zealand. ANZCAP provides a platform for practitioners to track and manage their careers towards three progressive levels of specialisation:

- Resident
- Registrar
- Consultant (Fellow)

Through recognition and national endorsement of clinical expertise across 40 specialty disciplines, and continued learning and development in foundational and advanced clinical pharmacy, ANZCAP empowers pharmacists to become leaders in medicine stewardship in all healthcare settings. The credentialling of pharmacists practising at full scope achieved through ANZCAP will play an important role in career progression, impactful recruitment and retention, and aid in achieving better remuneration and role recognition for the pharmacy sector.

Question 10: What are the most significant medicine safety problems pharmacists should focus on addressing?

The World Health Organisation (WHO) launched *Medication Without Harm* as the theme for the third Global Patient Safety Challenge in 2017, aiming to reduce the level of severe, avoidable harm related to medications by 50% over 5 years, globally.[24] The announcement of this global challenge sought commitment of high-level delegates, ministers of health and experts to drive change in reducing patient harm generated by unsafe medication practices and medication errors. Similarly, the Australian Health Minister declared Quality Use of Medicines (QUM) and Medicines Safety as the 10th National Health Priority Area in 2019, encouraging a collaborative effort involving Commonwealth, State and Territory governments in reducing medication-related harm.

An estimated 250,000 hospital admissions in Australia are medication related, with an annual cost of AUD $1.4 billion to the healthcare system, and two-thirds of medication-related hospital admissions are potentially preventable.[11] This is reflective largely of the current shortfalls of primary care service delivery and highlights the significant overhaul required in how we deliver primary care and preventative care, as it can be assumed pharmacists have been involved in all the episodes of medicines supply preceding and causing these medication-related hospital admissions.

Hospital pharmacists as experts in medication management should be integrated in multidisciplinary health teams, to lead, facilitate, and promote high standards of medication management to ensure safe and optimal medication use for all Australians. Previously, SHPA has identified three key areas of focus in medication harm that had the most significant impact to medication-related outcomes:

1. Polypharmacy leading to medication harm

Reducing polypharmacy is one of the areas identified by the WHO's Medication Without Harm challenge, and underpins recommendations formed in Australia's Choosing Wisely initiative, highlighting the significance of this issue in contributing to medication harm. Polypharmacy is more likely to affect older people as they are more likely to be living with several chronic conditions that require medications to prevent or control symptoms. Page et al identified 36.1% of older Australians were affected by continuous polypharmacy in 2017, with rates of polypharmacy the highest among those aged 80-89 years.[25] Polypharmacy is associated with increased risk of adverse drug reactions, increased likelihood of drug interactions, and increased errors in prescribing and monitoring of medicines. Compounded by the aging population, reducing unnecessary polypharmacy through pharmacist-supported deprescribing in collaborative teams should be a key priority and strategy to reducing medication harm.

SHPA holds an annual MedsAware: Deprescribing Action Week[26], which seeks to empower Australians and their carers, family and friends, in partnership with pharmacists, doctors, nurses and other care team members, to optimise every medicines regimen to ensure it is current, effective and safe[27] As part of the *Transformation 2024* Agenda, SHPA has committed to pushing for formal recognition of deprescribing as a core tenet of medicines safety, and incorporates deprescribing in SHPA's *Standards of Practice Series*[9].

2. Poor clinical information management within hospitals

SHPA has long supported investments in technology to achieve closed loop medication management, however this is currently difficult to achieve for the vast majority of hospitals in Australia. The flow and provision of accurate and timely clinical information is essential to achieving positive patient outcomes and providing safe and quality care. Due to the lack of nationally coordinated approach, many hospitals do not implement electronic medical management systems which fully integrate with all existing clinical software, resulting in frequent transcription of clinical information susceptible to human error, placing patients at risk of medication-related harm.

SHPA members estimate a patient's medicines information is transcribed four times during a typical admission. In 2009, the National Health and Hospitals Reform Commission final report found that an estimated 52–88% of transfer documents contain an error.[28] The risks of transcription continue beyond the hospital as well with 60% of adverse drug events related to the incomplete or incorrect transfer of medication information during transitions of care to, within and from acute care settings.[29]

The Australian Commission on Safety and Quality in Health Care's (ACSQHC) 2017 report on *Safety Issues at Transitions of Care* provides some recommendations on improving clinical system interoperability through improved access to structured information across different electronic systems, improving the security of communication systems, and allowing access to a reliable national clinician database to improve timely communication between practitioners.[30]

3. Post-operative opioid prescribing and misuse

Opioid related harm is a significant issue in Australia, with nearly 150 hospitalisations and 14 emergency department (ED) presentations involving opioid harm every day and three people dying from drug-induced deaths involving opioid use.[31] New findings have revised traditional thinking relating risk of dependence to patient factors and found that total duration of opioid use is the strongest predictor of opioid misuse, with each additional week of use associated with a 44% increase in the rate of misuse among opioid-naive patients.[32] A systematic review has indicated that post-surgical prescribing in hospitals (at discharge) is an important point of intervention.[33]

Opioid stewardship involves coordinated interventions to improve, monitor and evaluate the use of opioids in patients with acute and chronic pain as well as acute episodes on chronic pain. Hospital pharmacists are well placed to take an active role in patient's pain management and to reduce the risk of patients developed opioid dependence through harm reduction programs. *SHPA's Standard of Practice for Pain Management in Pharmacy*[34] supports the implementation of pharmacist-led opioid stewardship care models, to mitigate harm associated with opioids prescribed in hospital. Pharmacist-led opioid stewardship programs have been trialled in Victorian and Queensland hospitals with successful outcomes obtained, resulting in the recent Victorian Inquiry into Drug Law Reform recommending a sector-wide trial based on an opioid stewardship model.[35]

Question 11: What are the most important scope of practice changes required for pharmacists to respond to these problems between now and 2030 to contribute to a sustainable health system?

SHPA's Pharmacy Forecast Australia 2023 report focuses on expanding pharmacists and pharmacy technician's scope of practice to support safer, more efficient, and cost-effective healthcare delivery. This includes adopting the successful multidisciplinary collaborative care models of practice used in the acute care setting, including non-dispensing, clinical pharmacists in GP practices and various other primary care settings. As further discussed in SHPA's response to the *Unleashing the Potential of our Health Workforce – Scope of Practice Review*[4], SHPA identifies the most important scope of practice changes required for pharmacists and pharmacy technicians to achieve a future sustainable health system:

- All state and territory governments should amend legislation in a nationally consistent manner, to recognised credentialed pharmacists as prescribers in collaborative prescribing arrangements
- Pharmacists should be granted authorisation to write a prescription for the supply of PBS medicines under the National Health Act, to enable equitable and affordable access to medications prescribed by credentialed pharmacists through collaborative prescribing arrangements
- Pharmacy technicians should undertake technician-led dispensing and supply of medications in all community pharmacies, to allow pharmacists to perform alternative patient-facing clinical roles, which will support the safe and quality use of medications whilst alleviating pressures on the primary healthcare system

In addition to collaborative prescribing, the expansion of pharmacists' roles in all collaborative care settings, and the expansion of the scope of pharmacy technicians, pharmacists are well placed in communities to take lead in preventative health care. They are often the first point of contact for a patient seeking medical advice in the community and can become a referral point, as well as providing education on disease prevention and symptom management. Preventative health will ultimately result in a more sustainable health system.

Questions 12 to 15: What innovation in workforce training could be adopted to facilitate scope of practice changes?; What strategies are needed to attract future pharmacists to the profession?; What strategies are needed to retain current pharmacists in the profession?; What strategies are required to facilitate pharmacists' career progression?

It is important to recognise that the expansion of scope of practice of the pharmacy workforce is closely linked to improving job satisfaction, workforce retention, and career progression.

Workforce training innovations to facilitate scope of practice changes and pharmacists' career progression

SHPA convenes a Specialty Practice program to support and recognise the highly skilled pharmacy workforce and their expertise in medication management. Specialty practice supports the growth of clinical stewardship roles where pharmacists are becoming leaders of medicines optimisation, working collaboratively with other health professionals in specialty areas. This provides opportunities for pharmacist-led care models and increase in specialised roles as part of a pharmacists' career progression. Specialty Practice also supports SHPA's structured program, ANZCAP, which provides a platform for pharmacists to document their continued professional development and support a nationally recognised endorsement of their clinical specialty. SHPA encourages all pharmacists and pharmacy technicians to undertake recognition through ANZCAP at Resident, Registrar or Consultant levels throughout their pharmacy career.

SHPA also recommends that federal and state governments provide regulatory support and additional investment into innovative pharmacy services such as PPMC, to address system wide capacity issues with emergency departments, bed access and flow, and elective surgery waitlists. Government support and funding for safe implementation of this care model in hospitals can also support the specialisation of pharmacists and improve workplace safety and wellbeing of the pharmacy workforce, thereby improving workforce retention.

Pharmacy technicians are qualified and trained to provide a range of pharmacy services in hospitals. As pharmacists' roles have evolved to allow more time for clinical activities and direct patient care, pharmacy technician roles have also expanded to support medication management function on hospital wards. A stronger pharmacy technician workforce would enable clinical pharmacists to perform more direct patient care activities as part of their broadening scope of practice to improve medication safety and ultimately better patient health outcomes. For example, a 'Tech-check-tech' model, which includes a pharmacy technician performing administrative tasks in the place of a pharmacist, is already implemented in various hospitals across Queensland, Victoria, and South Australia. Expanding the roles of pharmacy technicians in models such as this can help support pharmacists to expand their own clinical services and roles in progressing their careers.

Workforce strategies to attract and retain pharmacists

SHPA has previously submitted key recommendations for developing a sustainable pharmacy workforce to support retention and growth of the pharmacy workforce.[36,37,38] Using pharmacists and other health professionals to their full scope of practice is an efficient and effective way to improve access to healthcare delivery and lessen the impact of workforce shortages and distribution problems, particularly in regional and rural communities. As discussed above, programs such as PPMC, ANZCAP, specialty pharmacy practice and the expansion of scope of pharmacy technicians are all important strategies that help support a safe working environment, higher job satisfaction, and development of pharmacist expertise and career progression resulting in higher retention in the pharmacy workforce.

SHPA also recommends various strategies to attract future students to the Pharmacy profession through several ways:

- Increase the uptake of students in accelerated graduate-entry pharmacy courses and increase student subsidies for accelerated university placements to attract student candidates.
- Waive HECS fees for all regional, rural and remote areas where currently there is a large shortfall and difficulty in recruiting students in these regions.
- Provide continued investment in hospital pharmacy internships to improve workforce retention and sustainability.

As the role of pharmacists evolve through scope of practice changes and innovative service delivery, it is important to change the traditional perception of pharmacist roles and showcase the variety of roles and responsibilities of a pharmacist to attract future students to the profession.

Question 16: What roles should pharmacy assistants take up or contribute to?

As pharmacists progressively move away from dispensary-based supply functions and transition to team-based patient-centric roles outside of the dispensary, there is a greater need to develop and expand the

scope of practice of pharmacy technicians and assistants in order to ensure future sustainability of the pharmacy workforce.

Traditionally, hospital pharmacy technicians undertake roles in imprest and pharmaceutical stock management and dispensing of medicines. In UK where the scope of pharmacist technician has been well developed, pharmacy technicians have integrated roles in anticoagulation clinics, care home medication management as well as working with ambulances for procurement, distribution and auditing.[39] The lack of formalised credentialling for pharmacy technicians in Australia has resulted in their varied responsibilities across the different states, with legislative and industrial frameworks providing further challenges to expanding their scope of practice.[40]

SHPA represents network of SHPA members who are technicians or closely work with technicians, through a Technicians and Assistants Specialty Practice group, and is invested in recognising the crucial role of technicians and assistants in the pharmacy sector. SHPA has published *Standard of Practice for Pharmacy Technicians*[41] to support Clinical Pharmacy Services to outline a comprehensive list of current pharmacy technician activities.

Question 17: What strategies are required to support pharmacists' wellbeing?

The challenges of supporting the wellbeing of pharmacists have been highlighted by the demands on pharmacist during the COVID-19 pandemic. In *SHPA's Pharmacy Forecast Australia 2022*, it was predicted that by 2027, 1 in 10 workplaces might not be considered a safe working environment when it comes to the wellbeing of staff.[16] At its core, workforce wellbeing is a work health and safety (WHS) issue that affects staff effectiveness and retention as well as patient safety and quality care. SHPA has previously discussed strategies to uphold pharmacists' wellbeing in their *Pharmacy Forecast Australia 2022* report as well as through advocacy work in health workforce strategies, presenting the following key recommendations[16]:

- Raise awareness to normalise and embed deeper understanding or worker wellbeing
- Build leadership skills around proactive wellbeing interventions to influence positive workplace culture
- Foster culture of two-way workload and wellbeing management
- Advocate for the importance of workplace wellbeing in achieving success
- Structured training for individuals to identify wellbeing factors and how to maintain this in times of flux
- Focus training for leaders on fostering supportive work culture, with positive focus on prevention
- Identify staff mental health and wellbeing as a high risk in operational WHS plans to monitor impacts of workplace issues on staff mental health and wellbeing
- Appreciate individual stressors and wellbeing needs in considering the impact of wellbeing initiatives
- Explore value (not just cost) or resourcing wellbeing initiatives
- Research connection between electronic systems and staff wellbeing to assist safe and appropriate workload allocation

In order to meet the growing demand for pharmacist services and continue to deliver safe care to Australian patients, SHPA recommends that hospitals adopt the pharmacist-to-bed ratios as detailed in the *SHPA Standards of Practice for Clinical Pharmacy Services*, which recommends one clinical hospital pharmacist to every 30 patients (1:30).[42] This includes providing inpatients pharmacy services such as:

- Taking a medication history and ensuring medications are charted correctly and available at admission to be administered in a timely manner
- Regular review of the safety, quality, storage and supply of medications during hospital stay

- Review of discharge prescriptions, dispensing a sufficient supply of medications to take home
- Counselling patients on their medications and communicating changes to primary healthcare providers
- Ensuring appropriate follow-up and monitoring of medications post-discharge including in specialised clinics and outpatient services and checking for adverse reactions to medications.

Adhering to the *SHPA Standards of Practice Series*[9] will guide institutions to implement safe bed ratios and overall safe working environment for both the pharmacists and patients, enabling support of pharmacists' wellbeing. Workplace innovations such as implementation of PPMC and utilisation of data to prioritise workload can assist pharmacists to achieve efficiencies in their workplace, thereby supporting their workplace wellbeing.

It is also important to recognise wellbeing as a WHS issue, as often there is stigma and judgement associated with seeking help for mental health and wellbeing. Failure to do so implies episodes of staff mental health are not recorded and thus not recognised in WHS incident management systems. It is important that through recognition and recording of these episodes, staff wellbeing can be prioritised and provide a basis for implementation of wellbeing programmes and training.

Question 18 and 19: What information which is currently recorded can be better used to evaluate the value of health services pharmacists deliver?; What information which is not currently recorded or reported is needed to evaluate the value of health services pharmacists deliver?

SHPA recommends that in order to inform policies and investments to achieve the objectives of the NMP, consistent and high-quality data on medicines use, medicines-related outcomes and pharmacy services should be collected systematically. As outlined in the recently updated suite of three Guiding Principles for Medication Management documents[43], continuous quality improvement must utilise data analysis to inform decisions on system improvement. Currently, there is no mandatory mechanisms to measure or collect data on what extent hospitals are delivering the clinical services described by the *SHPA Standards of Practice for Clinical Pharmacy Services*[42], to ensure medicines safety and quality use of medicines.

Data collection and benchmarking on service provision would allow health policymakers to further understand where service gaps exist and make strong links between how service provision impacts on the quality use of medicines and medicines access around Australia. SHPA believes that at a minimum, the following data points relating to medicines use in hospitals should be collected at the individual hospital level:

- Rate of medication reconciliation undertaken within 24 hours of admission
- Rate of daily medication chart review for inpatients
- Incidence of adverse drug events
- Rate of updated medication list/chart provided to patients, carers, and community care providers upon discharge
- Rate of discharge medicine counselling being provided to patients and/or carers.

It is important to note that data collection should not create additional administrative burden for the pharmacy workforce, and this can be achieved through automation as well as improved integration and interoperability of existing systems. Hospitals which have implemented electronic medication management systems have access to real time electronic medication records, which can be utilised to extract some of the recommended datasets above for collection and analysis to inform health service design.

Question 20: How do we further empower pharmacists to implement and monitor the delivery of professional services in their areas of practice?

SHPA's Standards of Practice series[9] is widely utilised and well-referenced by pharmacists and health professionals seeking guidance on the delivery of clinical, operational and specialty hospital pharmacy services. SHPA publishes *Standards of Practice* in 19 clinical specialities including one for pharmacy technicians, with four new Standards currently in development.[9] Publication of these Standards of Practice help empower and guide practicing pharmacists to strive for best practice within their clinical specialties and provide reference for the monitoring of their practice standards.

Question 21: How can this be done without creating an unreasonable administration burden for pharmacists and their teams?

As iterated throughout this submission, the expansion of scope of the allied health assistant workforce is key to allowing pharmacists to practice at their highest level of clinical practice and improve the workforce sustainability to allow safe implementation of valuable professional services.

Improving the interoperability between multiple electronic systems is also a key consideration in supporting pharmacists to implement and monitor the delivery of professional services in various clinical areas. Although many Australian hospitals have been digitally transformed, they utilise varying electronic health and medical records, each serving different purposes, or designed for use in specific specialties (e.g. oncology, pharmacy dispensing systems, critical care). Some of these systems do not "speak" to each other making it difficult to obtain standardised real-time data.

As previously discussed on poor clinical information management within hospitals as a key medicine safety issue, SHPA members estimate a patient's medicines information is transcribed four times during a typical admission. Transcription of clinical information is susceptible to human error, placing patients at risk of medication-related harm.

Enhanced interoperability of these systems can significantly reduce administration time for pharmacists, allowing them to invest more time in direct patient-facing roles, and reduce the need for transcription of clinical information across multiple electronic systems, reducing opportunities for errors and subsequent potential medication-related harm. Technology providers must develop digital medication management solutions that empower hospitals to streamline workflows, enhance accuracy, and optimise resource allocation.

Question 22: How might advancements in AI technologies enhance and transform the responsibilities and impact of pharmacists in Australia?

The availability of electronic medical records and the increase in personal data captured through devices, sensors, imaging or genomics along with increase in computing power is enabling the development of new artificial intelligence (AI) solutions in healthcare. Some key AI technologies are already being applied in early detection of health conditions, and predictive tools to help identify high risk patients. In hospitals where there are multiple barriers to efficient workflow, AI can help optimise operations and predict events to improve healthcare delivery.[44] SHPA's *Pharmacy Forecast Australia 2023* states, "AI-enabled analytics also offer new opportunities to improve clinical diagnosis, treatment and hospital workflows", however these cannot be achieved without a suitably skilled and supported healthcare professional workforce, including pharmacists.

Question 23: How does pharmacy as a profession improve its environmental sustainability?

SHPA strongly supports the Australian Government's commitment to achieve net zero carbon emissions in Australia by 2050.[45] The healthcare sector contributes around 7% of Australia's carbon emissions footprint, with public hospitals, private hospitals and pharmaceuticals contributing to over 60% of these healthcare sector related emissions. [16] Hospital pharmacists are critical in minimising unnecessary wastage of medicines as they promote the optimisation of pharmacotherapy and are key stakeholders in medicines use and governance. *SHPA's Pharmacy Forecast Australia 2022* report recommends several ways the pharmacy profession can achieve environmental stewardship of medicines[16]:

- Ensuring pharmacological therapies consider the environmental impact and have this information incorporated into clinical decision support tools to allow clinicians to make informed decisions,
- Educating future pharmacists on environmental sustainability through delivery in pharmacy curriculum,
- Continuing advancements in electronic systems to achieve paper-free pharmacy departments,
- Consider environmental impact in pharmaceutical contracts for procurement and supply,
- Electing environmental sustainability champions within departments to drive positive change,
- Implementing comprehensive pharmaceutical waste programs in hospitals to deliver medicine that is environmental conscious as well as legal, ethical, and practical,
- Analysing available data on wastage (e.g. from automated dispensing cabinets and dispensing robots) to reduce medication wastage, and using those savings to re-invest into improving inventory related technology.

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