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Committee Secretary
HCDSDFVPC
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11/7/2018

**Re: Inquiry into the establishment of a pharmacy council and pharmacy ownership
in Queensland**

Thank-you for the opportunity to provide feedback to the pharmacy inquiry. The Queensland University of Technology (QUT) School of Clinical Sciences is home to the second largest Pharmacy Student training program in Queensland and so has a strong interest in the successful progress of the pharmacy profession not only within Queensland but also Nationally and Internationally. We currently offer a 4-year Bachelor of Pharmacy (Honors) AQF8 program, targeting Real-World outcomes and work ready practitioner development. Our staff are actively engaged with the pharmacy profession and wider health sector, focusing on research which will improve health service delivery and clinical practice for pharmacy, while improving the Quality Use of Medicines in the community.

Medications are by far the major health intervention used in the health system today, and foreseeably into the future. The complexity of the management of these medications and the understanding of their integration into healthcare is accelerating at a rate that requires the input of medicines experts like pharmacists, the costs alone of the PBS to the Commonwealth Government and ancillary costs to jurisdictional governments of medicines will rapidly consume health budgets in the future. However, to view pharmacists purely in a lens of procurement, supply and retail / commercial offerings will be at the system and the professions peril.

Our focus on training patient-centered clinical care gives ensures graduates are critical thinkers who can adapt to the ever-evolving role pharmacist will play in the future workforce. Our undergraduate courses prepare graduates for the complexity of healthcare in the real world, creating a holistic understanding of the varying factors that can contribute to a patient's overall health and care plan. They are trained in an environment with a strong foundation in research giving them the advanced skills needed to become leaders in an



evolving profession where the scope of practice is expanding and evidence-based practice is a key priority. The foundation of their skill development is curiosity, agility, resilience, broad perspectives and evidence-based decision making, ethical and sustainable practice, interdisciplinary collaboration and communication, digitally nimble and globally and culturally aware. These are all skills that the health system requires to address the complexity of care in the community.

Regarding the questions in the inquiry paper specifically about Pharmacy ownership. As a training and research institution, the QUT Pharmacy Discipline supports and believes that safe, accessible, timely and effective pharmacy services should be available to patients regardless of their location (e.g. regional, metro, rural, hospital, aged care or primary care). Having appropriate governance and quality assurances in place to ensure safe medicines practice can occur should be made. The role of the pharmacist in this pharmacy service provision should be acknowledged and governed by a practitioner regulatory agency (e.g. AHPRA). The discipline strongly believes that pharmacists, like other health professionals, need to be recognized and utilized in the health system for the skills, knowledge and ability they possess **as individuals** – not as the building they occupy. Allocation / designation of our profession to a “place” e.g. hospital / retail (Community) pharmacy doesn’t acknowledge the contributions to healthcare **Pharmacists** make. It is the contribution to care that is critical to the benefits and outcomes for the system, pharmacists should be **wherever** someone is using a medicine.

As a training and research institution we feel that our primary contribution to the inquiry rests with the area around scope of practice and training requirements for both Pharmacists and Pharmacy Assistants / Technicians. We have extensive experience of not only Australian (and Queensland) in implementation of practice models and training programs in these areas, but also established research links and collaborations with the peak groups internationally working on these areas in cognate countries, e.g. UK, USA, Canada and NZ.

My work personally in research and education is nationally and internationally recognized in the particular area of vaccination for pharmacists (having led the implementation of QPIP – QLD Pharmacists Immunization Pilot, which drove the change in practice nationally) and prescribing (having lead the development and implementation of the Health Professional Prescribing Pathway through the National Health Workforce Taskforce and then Health Workforce Australia). This included specific work as an expert clinical advisor for the development of the National Prescribing Service Prescribing Competency Framework, and a role on the AHPRA Scheduled Medicines Expert Committee which oversees the development of prescribing amongst the registered professions.



I currently oversee a QUT team providing the training for and evaluation of the Queensland Pharmacy and Physiotherapy Prescribing Pilots in partnership with the Allied Health Professionals Office of Queensland (AHPOQ), and provide post-graduate prescribing training for podiatry students, amongst other groups. We are the peak group nationally for prescribing knowledge and skill working with various jurisdictional nursing groups, the Commonwealth Chief Nurse, the NMBA, ANMAC, podiatry board, physiotherapy associations and board, speech therapy board, psychology association and board, pharmacy board and sonography association to name a few.

Our research themes and interests are focused on extended and expanded scopes of practice for pharmacists (and assistants / technicians) and other allied health professionals. Particularly as they related to safe prescribing and quality use of medicines. This includes the review and optimization of professional roles utilizing the skill base and training of individuals and groups, acknowledging that professional practice boundaries and legislation can impact the ability of health professionals to undertake their full scope of practice. Where extension of practice to areas such as prescribing may, for some professions require additional training to that which they were originally prepared.

Should the scope of practice of pharmacists and pharmacy assistants in Queensland be extended? If so, in what areas of practice?

What additional training for pharmacists/pharmacy assistants, or other risk reduction measures, should be implemented to ensure patient safety?

We would like to respond to this section in two parts, pharmacists and then assistant / technicians. However, acknowledging that without the development of a skilled and competent assistant / technician workforce the future roles and opportunities for pharmacists will be limited.

Pharmacists Scope of Practice and Training

The expansion (full scope) and extension (beyond current training) of scope for pharmacists in Queensland would be fully supported by the QUT Pharmacy Discipline. The premise that pharmacists play a critical role wherever there is a medicine used is testament to this. However, many of the potential models of practice where these key impacts could be felt are not so much issues of competency / training – but more professional boundaries and legislation. As such, it is not that we cannot do it – more the system won't allow it. And often this is on a state-by-state basis. It is clear that the accessibility and skill that pharmacists bring to the health sector is valuable and should be optimized to improve the overall function of the health system.



Therefore, because of the regulatory frameworks, much of this debate about “roles / scope” for pharmacists in these medication management areas lands in the area of “pharmacist prescribing” models (Bessell et al, Pharmacy Guild Report 2005, Nissen L et al, Pharmacy Board Report 2017). Some of the key elements that draw pharmacists, as professionals who deal with Scheduled Medicines on a day to day basis in many and varied complex ways, into this nexus is the means by which regulatory mechanisms in Health Drugs and Poisons Regulations treat “prescribing” as a communication of an order. Where in practice, prescribing has a much broader definition which is: ***“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”.* (HPPP)**

A large piece of work recently led by QUT, The ASPRINH Project (Cardiff L et al, 2017) was a Commonwealth-funded initiative that aimed to promote a consistent approach to the development and assessment of student prescribing competence in a range of health professions. Pharmacy – as an emerging prescribing profession that already works with S2 / S3 medicines was included in the work. As part of the broad work for the project, a content analysis of the elements of curriculum for the 10 health professions (e.g. medicine, nursing, podiatry etc.) was undertaken to identify elements of prescribing (as described by the Prescribing Competency Framework) that are currently taught and assessed. A review of the national practice standards / competencies for all 10 professions was also mapped to determine whether prescribing skills are an expected component of practice for each profession. The results of the work indicate that pharmacists are well aligned to the National Prescribing Competencies and indeed universities prepare students well for our roles in medicines management and for models of prescribing practice with our existing training curriculum.

While very small “gaps” in our underlying competencies may exist for “autonomous / independent” prescribing roles these are actually artefacts of our current scope and practice (Nissen L et al, Pharmacy Board Report 2017). If we are given the ability to operate in some autonomous role pharmacists can be easily “upskilled” through training - as we have done so for the current AHPOQ pharmacy trials, and as was demonstrated in Hale et al’s Surgical Pre-admission prescribing trial and HIV trial (Hale et al, 2014 and 2015). This upskilling for pharmacy has required some course content but is primarily focused on a period of learning in practice – aligned to the prescribing competencies and similar to that which is offered in the UK. Prospective adaption of the undergraduate programs of study to incorporate these skills and competencies would be easily managed, and we have in fact begun this process with our own curriculum at QUT but including a final year unit on Pharmacy Prescribing in the course.



Of course, this is a case of chicken and the egg. The results of the ASPRIHN work show us that prescribing confidence and competence develops with practice, exposure and experience. Role development and opportunity not only for practitioners with **existing competency** for many expanded scope roles (which have been limited by legislation) should be available but also for extended scope of practice as it emerges.

A perfect example of this was the QLD Pharmacist Immunization Pilot (Nissen L et al, QPIP 2014). The QLD legislative process prevented pharmacists from “administering” a medicine and being S4’s immunizations were “prescription only”. Both of these legally provided a barrier to pharmacists being able to participate in a valuable primary and preventative care activity which is well within our ability and competency to do. Under the trial framework a short accreditation was put in place for the physical “administration” skill and the existing professional knowledge and skill in vaccination and clinical practice was used to underpin the implementation of a “drug therapy protocol” approach to managing a profession wide practice change. Consequently, over two seasons (2014/2015), over 30,000 people were able to receive an influenza vaccination through a community pharmacy. While the absolute QLD number this season is still to be determined conservatively over 200,000 would have received one last year in QLD alone. The process and platform was put in place, and pharmacists are competent and capable developing increasing skill and experience.

Extension of emergency supply is an example where legislation, professional boundaries and costs prevent practice. Currently Pharmacists can only make an appropriate clinical decision to provide a 3-day supply of a medicine but not a standard pack or month supply in the case of a chronic disease therapy. The cost of the treatment and the inconvenience to the patient is often significant and the 3 days may not solve the immediate issue. Often leaving the pharmacist to supply a pack and seek an owing script for example. Given the training and knowledge of the pharmacists there would be other possible models of practice, including an expansion of the continuity of supply model – in collaboration with the medical prescriber for these patients. Renewal and extension are teams used overseas for this type of practice. (Bessell et al, Pharmacy Guild Report 2005, Nissen L et al, Pharmacy Board Report 2017).

Another opportunity for pharmacists to optimize the use of their existing training would be in the areas of script adaption. In these cases, in collaboration with the medical prescriber, the pharmacist would be able to make a therapeutic substitution (e.g. patient originally on pantoprazole, discharged on omeprazole (hospital formula only PPI), put them back on their original ongoing treatment), Change /adapt drug dosage, formulation, regimen, etc. (e.g. swap a tablet for a capsule, adjust the dose where appropriate for optimal delivery). These models exist in Canada and the USA for example already as roles for pharmacists for general practice. This would save the requirement to seek a new prescription / owing



script from the prescriber and facilitate utilization of the pharmacists' knowledge and optimize the patient care experience. (Nissen L et al, Pharmacy Board Report 2017, Adams, 2018)

Dose adjustment and monitoring of medications (e.g. with narrow therapeutic windows) would be a role pharmacists are well trained for. This has been evidence in NZ where the Community Pharmacy Anticoagulation Monitoring Service has been implemented (and evaluated) (Shaw J et al, 2014, Harper P, 2014) demonstrating improved clinical outcomes for patients, including great time in therapeutic range and adverse outcomes. However, the ability to implement this service here currently would be potentially impaired by the mechanisms to ensure continuity of supply if pharmacists were unable to "prescribe" or "adapt a dose or provide a "prescription" or an ongoing supply of a different strength tablet. This is clearly a collaborative practice model and a great benefit to patients in the community.

More recently, roles for pharmacists in managing ongoing care for patients with chronic conditions in the community (in collaboration with their medical provider) have emerged particularly in the UK where access to care, pressure on emergency departments and an emerging recognition of the value proposition for pharmacist within the wider health sector have occurred. The NHS New Medicine Service (NMS) is a nationally commissioned service aimed at providing support for patients within the first month of starting a new medication. It has been delivered in >90% of community pharmacies since its introduction in 2011, and covers four therapeutic areas: hypertension, NIDDM, COPD, and anticoagulation and antiplatelet therapy. The NMS aims to improve patient adherence to long-term medications by encouraging engagement with their new medication. Evaluation of the NMS has shown that pharmacists can play an important role in improving outcomes for patients in this area of care, however it requires the ability to positively intervene in therapy where appropriate (Albasri A et al, 2018).

In the acute care environment, pharmacists working in Pre-admission or emergency departments would be able to chart medications for patient admissions. Data from a large randomized controlled trial at the PAH of such a model demonstrated significantly improved accuracy and safety for patients using a pharmacist in this role, including the ability of the pharmacists to prescribe DVT prophylaxis (Hale A et al). While in a collaborative specialist-pharmacist prescribing model in an outpatient HIV clinic also demonstrated great value to the health service, patient care and outcomes utilizing the skills and training of the pharmacist in a complex care setting (Hale et al, 2015).

These are only the tip of an iceberg of possibility if the **core principle** is that pharmacist have significant skill and expertise already to add to all parts of the system where medicines exist, with much of that role currently inhibited by professional boundaries and



legislation, more than competency. The ability to include minor ailments management to assist / minimize admissions to emergency departments and utilization of general practice, pharmacists providing continuity of practice and decreasing medication risk and error in aged care – the list goes on. Existing training provides a significant platform for almost all of these opportunities and the extension to more autonomous practice can be easily managed within the curriculum prospectively and provided as a top-up as required for existing practitioners (Nissen L et al, Pharmacy Board Report 2017).

Assistant / Technician Scope of Practice and Training

The existing technician / assistant workforce in pharmacy is not homogenous. The training process varies with packages existing in the vocational sector, both health and retail. A Cert 4 is currently the highest level of training available to the technician workforce in Australia, where other countries – including Canada and the UK, have moved to provide more consistent and higher-level training (e.g. Cert / Dip) and consequent regulation of their workforce. The Australian practice environment has been exposed to these practitioners, particularly from the UK – with many working in our Hospital Sector or through exposure of our pharmacists to them while working overseas. The primary difference between the overseas trained technicians and the Australian current level is in roles and responsibilities, which is leveraged from the nature and intent of their base learning.

There have been a number of project conducted in Queensland public hospital sector to examine the assistant and technician workforce. A major piece of work by Medication Safety Queensland (MSQ) examined the development of an Assistant / Technician Level Competency Framework for professional and skill development, similar to the General and Advanced Level Framework used in Pharmacists. This work has been followed up by a project led through the RBWH examining the advanced roles currently undertaken by assistants and technicians (i.e. where they are operating at a level beyond their core training). The results of both these pieces of work indicate that there is already high quality, very skilled pharmacy assistants in the workforce without a career development or education pathway to support them.

The ability to advance the skill and training development of assistants / technicians to a level which would be comparable to our UK or Canadian colleagues is sometimes seen as a threat to the pharmacist workforce here - “what will we do?” if delegation of roles and responsibilities is made for technical and other duties to such a group. This is where the need to offer more scope for pharmacist to participate in the system becomes necessary and the removal of legislative and professional boundaries to make it possible to advance both roles becomes imperative.



For example, the role of the “Tech-check” strikes fear into pharmacists. However, the UK, Canada and NZ (Napier P et al, Adams A et al) have successfully implemented this role with the sole purpose of allowing pharmacists greater ability to invest in clinical activities. In Australia, including work undertaken by QUT in collaboration with the RBWH (Hickman et al, Snoswell et al), pilots of this role have demonstrated that utilization of a Tech check in combination with a clinical pharmacist check is more accurate than a pharmacist only process. In both cases UK trained technicians were available to participate in the pilots, however we identified in our work that the ability to even upskill the existing assistant / technician workforce for the “tech-check” role would require minimal work.

The boarder piece around enabling optimization of pharmacist’s clinical skill to roles as described above (in pharmacists scope) could be achieved by improving the current level of training for the technician / assistant workforce. The increased accountability and responsibility that may come with scope expansion to their role in clinical settings where task delegations / autonomy can exist will certainly raise the question of the need to regulate them as part of the broader pharmacy board cohort. Offering more advanced programs would provide this opportunity as the evidence nationally (emerging) and internationally supports the development of this important part of the pharmacy workforce.

In conclusion, we look forward to the outcomes of the inquiry and hope that the pharmacists and pharmacy assistant / technician workforce of Queensland have a great opportunity to contribute to patient care.

I would be happy to assist further, including making myself available to provide any other direct feedback or clarifications as necessary.

Thank-you for this opportunity,

Sincerely,

A handwritten signature in blue ink, appearing to read 'L. Nissen'.

Lisa Nissen
Dr Lisa Nissen (BPharm, PhD)
AdvPracPharm, FPS, FHKAPh, FSHP

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