



10 December 2021

The Hon Peter Gutwein MP
Premier and Treasurer
Government of Tasmania
Level 9, 15 Murray Street
Hobart TAS 7001

Dear Premier Gutwein,

RE: Tasmanian Budget 2022-2023

The Society of Hospital Pharmacists of Australia (SHPA) is the national professional organisation representing over 5,200 leading hospital pharmacists and pharmacy technicians across Australia's healthcare system, advocating the pivotal role hospital pharmacy has in improving the safety and quality use of medicines. The vast majority of Australian Hospital Pharmacy Directors and Chief Pharmacists are SHPA members. SHPA's current President, Mr Peter Fowler is also the first Tasmanian to lead our organisation.

During the COVID-19 pandemic hospital pharmacists have been a critical resource in the strategic management of pandemic supply chains and in the ongoing delivery of clinical services to patients. SHPA commends the Tasmanian Government on its swift response to the COVID-19 pandemic and its securement of a state-based emergency supply of critical medicines in preparedness. Hospitals were presented with many challenges which created opportunities to improve hospital readiness in the event of ongoing and future adversities including enhanced critical care training within the hospital pharmacy workforce, and new models of healthcare delivery to better utilise existing expertise and skills for a more sustainable healthcare system as outlined in the *Health Workforce 2040* strategic plans.

SHPA applauds the Tasmanian Government's ongoing commitment to the *Our Healthcare Future* reform which included investment in medication safety strategies recommended in SHPA's 2020-21 Tasmanian Budget submission including the implementation of a Partnered Pharmacist Medication Charting (PPMC) model in all acute public hospitals in Tasmania and the replacement of standard intravenous infusion pumps with smart pumps in Tasmania's public hospitals. SHPA also recognises the government's continued commitment to implementing the suite of immediate actions contained within the *Our Healthcare Future* plan.

Welcoming the opportunity to provide input in the 2022-2023 Tasmanian Government Budget Consultation SHPA's attached submission addresses ways in which the Tasmanian Government can close the loop on medication safety and address ongoing issues which pose ongoing risks to patient safety and health outcomes. Five specific areas for investment are highlighted which will ultimately support the Tasmanian Government in achieving its strategic plans. SHPA's submission recommends:

- 1. Utilisation of ward-based pharmacy technicians in the implementation of a Bedside Medication Management (BMM) model in all acute public hospitals in Tasmania.** This aligns with Domains 5 and 7 of the Strategic Workforce Framework and will allow nurses to spend less time undertaking administrative tasks, and spend more time on clinical activities, reduce delays in recovery and prolonged hospitalisation.

Rationale for proposed policy: To increase the capacity of the Tasmanian Health Workforce by utilising pharmacy technicians and relieving nursing resources to increase their patient-facing care capacity.



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- 2. Implement clinical Informatics pharmacists as electronic medicines management experts in all stages of planning, development and roll-out of the Tasmanian Health ICT plan which encompasses electronic medical records to ensure the viability, quality, safety and governance of electronic medicines management across the state.** Tasmania's *Our Healthcare Future* plan prioritises technology to improve the quality, safety and effectiveness of the health care system and a dedicated specialist pharmacist as a medicines management expert is necessary to achieve this. The SHPA submission recommends **implementing a 'closed loop' electronic medication record system across Tasmania's hospitals** to ensure medications are used safely and cost effectively through enhanced Electronic Medication Management.

Rationale for proposed policy: To ensure the development and implementation of the Tasmanian Health ICT plan is safe and effective to manage medicines and reduce the incidence of medication-related errors.

- 3. Pharmacist-led Opioid Stewardship service to be implemented at all Tasmanian principal referral hospitals.** This is a new model of care utilising the expertise of the pharmacy workforce in tackling the looming opioid crisis trialled in other states with significant success in reducing inappropriate opioid use. This recommendation addresses Domain 5 of Tasmania's Strategic Workforce Framework, Build Capability and Capacity to Work in New Ways.

Rationale for proposed policy: To reduce incidence of long-term and/or inappropriate use of high-risk opioid medicines causing severe harm initiated in the Tasmanian public health system.

- 4. Expansion of Antimicrobial Stewardship services (AMS) to include a pharmacist-supported program in the North-West Health Service.**

Rationale for proposed policy: To reduce incidence of antimicrobial resistance in Tasmanian public hospitals and harms associated with inappropriate antimicrobial use.

- 5. Investment in hospital pharmacy workforce recruitment and retention strategies including increasing Pharmacist Educators and expanding the Pharmacy Residency Training Accreditation program to all four Tasmanian Public Hospitals,** a means to build the hospital pharmacy workforce capacity to deliver care as outlined in the Tasmanian Role Delineation Framework and ultimately provide patients with better health outcomes in an acute setting.

Rationale for proposed policy: To ensure a sustainable hospital pharmacy workforce for Tasmanian Health Service into the future with a requisite workforce pipeline and strategy.

If you would like any further information about hospital pharmacy, or this submission, please do not hesitate to contact Jerry Yik, Head of Policy and Advocacy on jyik@shpa.org.au and we can arrange a meeting with myself and SHPA President Peter Fowler to discuss medicines management in Tasmania.

Yours sincerely,



Kelly Beswick
SHPA Tasmanian Branch Chair

CC: The Hon Jeremy Rockliff MP, Deputy Premier, Minister for Health, Mental Health and Wellbeing



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Submission to Tasmanian Budget 2022-2023 consultation

1. Implementation of a ward-based pharmacy technician-led 'Bedside Medication Management' system across Tasmanian public hospitals to improve medication supply and nursing time productivity.

Rationale for proposed policy: To increase the capacity of the Tasmanian Health Workforce by utilising pharmacy technicians and relieving nursing resources to increase their patient-facing care capacity.

Tasmania's existing system of medication distribution and storage is no longer contemporary, and imposes considerable inefficiencies upon the already-stretched nursing workforce. KPMG has evaluated the existing medication distribution system in Tasmania and concluded that THS nurses 'waste' over 1,526 hours *each week* as a result of this inefficiency.

To bring Tasmanian hospitals in line with other Australian states, it is recommended that there be the implementation of a technician-led bedside medication management (BMM) supply system which will result in safer and cost-saving outcomes by decreasing nursing workforce burdens throughout the Tasmanian Health Service whilst providing a dedicated quality use of medicines supply focus.

This contemporary model of medication management improves overall workforce capacity by reducing burdens upon nursing time, allowing the nursing workforce to focus on more clinical activities; improving patient care and health system efficiencies. The role of ward-based pharmacy technicians in the BMM model is to co-ordinate and streamline timely supply of medications, coordinate and maintain appropriate storage of medications, as well as to remove ceased and unwanted medications from patient care areas. This ensures cost-saving medication stock management at ward level, cost-savings by the return of unused medicines, timely supply of newly initiated medications, and reduces the risk of administration of expired or incorrect medications. In accordance with Tasmanian strategic plans to better utilise the current health workforce, pharmacy technicians are suitably qualified and trained to provide a range of pharmacy services such as bedside medication supply.

Evaluations of limited BMM programs by pharmacy ward technicians in Tasmanian hospitals demonstrated a 75% reduction in inpatients missing out on doses of prescribed medications, and a 44% reduction in inpatients experiencing delayed treatment. Omissions of prescribed medications can delay recovery, prolong hospital admissions and place patients at higher risk of potentially serious healthcare events such as venous thromboembolisms or cardiac arrest. The implementation of pharmacy ward technicians also demonstrated improved nursing productivity, less medication administration errors by nurses and achieved hospital efficiencies and savings that can contribute to reducing length of stay.

An independent evaluation of productivity gains undertaken by the Tasmanian Health Service utilising local data obtained from a BMM pilot at Royal Hobart Hospital identified the adoption of BMM across Tasmania's acute hospitals reduces nursing time spent on administrative tasks associated with medication supply by 1,526 hours each week (predicted to be higher after additional beds in K block are accounted for). Given ongoing workforce pressures and nursing shortages, it is inappropriate that such a significant amount of nursing time is spent undertaking tasks easily performed by pharmacy technicians.

The use of a pharmacy technician workforce also creates career and employment opportunities for Tasmanians. Currently, a nurse with an undergraduate qualification must perform these administrative medication tasks. A pharmacy technician holds a TAFE-level qualification (Cert III or Diploma), creating a career pathway for Tasmanians who wish to be involved in medication management, but not undertake an undergraduate pharmacy or nursing degree. Aligning with the Tasmanian Premier's PESRAC report, the THS could partner with TasTAFE or the University of Tasmania to offer local training pathways for pharmacy technicians.

Cost of investment: \$2.8 million per annum (additional 29 pharmacy technicians and associated training to support provision of bedside medication management and supply in all four Tasmanian major hospitals) estimated to be recoverable in costs to nursing time.



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2. Inclusion of dedicated Clinical Informatics Pharmacists as electronic medicines management experts in the planning and development of the Tasmanian Health ICT plan which encompasses electronic medical records to ensure the viability, quality, safety and governance.

Rationale for proposed policy: To ensure the development and implementation of the Tasmanian Health ICT plan is safe and effective to manage medicines and reduce the incidence of medication-related errors.

Early and dedicated funding should be provided to enable dedicated Clinical Informatics Pharmacists to be involved in the planning, development and roll-out of the Tasmanian Health ICT plan. Pharmacists as medicines management experts are skilled to ensure that the electronic flow and whole systems approach to electronic medicines management and records are properly integrated and standardised across the healthcare system in a manner that is consistent with national and international safety standards and recommendations.

Failure to include pharmacy in advance of implementation will be extremely challenging for the state's healthcare system, and will likely delay progress and negatively impact projected state government costings. Clinical Informatic Pharmacists are skilled in the design and implementation of these systems and are suitably trained to implement closed-loop Electronic Medical Records (EMRs) ensuring medication safety. To highlight the importance for the early inclusion of pharmacists as medication safety experts in the planning of Health ICT and electronic medical records implementation, can be seen in the failure of electronic medical records to adequately detect and alert staff to the incorrect prescribing, administration and monitoring of a Sydney patient who died from multi-drug toxicity after being inappropriately prescribed the wrong medication on their EMR.¹ Pharmacists are necessary to ensure that in the planning stages electronic management of medicines are adequate, safe and interoperable across Tasmanian hospitals.

Closed-loop EMRs means an integrated and interoperable electronic medication management system which includes hospital-wide medicines stock management and clinical medicines management systems where medication orders are electronically tracked and linked from the time of prescribing through to dispensing, supply, administration and discharge and embedded throughout patient electronic medical records. Closed-loop EMRs have the potential to reduce medication errors, other clinical errors, and improve medication safety by eradicating the need for transcription. International reviews found that a change from paper-based medicines ordering to electronic ordering of medicines in intensive care units resulted in an 85% reduction in error rates.² This is timely given that changes to activity-based funding mean that hospitals will receive negative funding adjustments from sentinel events arising from medication administration error and the incidence of medication-acquired complications.

Closed-loop EMRs are in the process of being implemented across Australian jurisdictions and include Clinical Informatics Pharmacists. Tasmania should effectively plan to ensure this system and the expertise of specialised informatics pharmacists are included in Health ICT strategic planning. Closed-loop EMRs improve safety, efficiency and quality of care by enhancing transparency, clinical decision support and medicines management at all stages of the medical records process both within and beyond the acute hospital setting into primary care. Electronic medical records need to be fully integrated including from a medication safety and viability perspective at all stages of the ICT plan.

Cost of investment: \$480,000 per annum (4 x EFT Level 4 Allied Health Professional Clinical Pharmacists)



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3. Implement a Pharmacist-Led Opioid Stewardship Program at all Tasmanian principal referral hospitals to reduce opioid harms for Tasmanians post-surgery

Rationale for proposed policy: To reduce incidence of long-term and/or inappropriate use of high-risk opioid medicines causing severe harm initiated in the Tasmanian public health system.

With the increasing trend of misuse of prescription opioids in Tasmania and Australia overall³, opioid stewardship programs in hospitals show great potential for reducing harm when supported by adequate funding and management. Opioid analgesic prescribing in Tasmania has increased almost seven-fold from around 19,300 scripts in 1999 to around 127,400 scripts in 2010, despite Tasmania's population remaining relatively static during this period. Evidence indicates that one-third of adults receiving long-term opioid therapy have had their first opioid prescription from a surgeon, indicating that postsurgical prescribing in hospitals is an important point of intervention. Investment in opioid stewardship programs can reduce the incidence of opioid-related harm stemming from opioid initiation in hospitals.

Opioid stewardship involves coordinated interventions to improve, monitor and evaluate the use of opioids in patients for acute, chronic or acute on chronic pain. Hospital pharmacists are experts in medicines management and utilise their knowledge to recommend appropriate pain medicines selection and dosing to inform appropriate and safe prescribing by doctors.

Tasmania's Department of Health document *A review of Opioid Prescribing in Tasmania: A Blueprint for the Future* outlines several recommendations to address the harms caused by opioids. A pharmacist-led Opioid Stewardship service in an acute setting aligns with several of these recommendations this includes; education of health practitioners in pain and opioid management, support of appropriate acute pain management and opioid risk management strategies and ensures that a non-opioid prescribing specialist pharmacist is a central member of a multidisciplinary pain management team in a hospital.

The service would see 1 FTE Opioid Stewardship pharmacist and 0.2 FTE nurse working collaboratively with prescribers, pharmacists, nurses and patients in each acute hospital region (South, North, and North West). Similar to the well-established antimicrobial Stewardship model, opioid stewardship is backed by strong research showing effective risk mitigation for patients at risk of opioid harm. This approach is also supported by PainAustralia, the national peak body working to improve the quality of life of people living with pain, their families and carers, and to minimise the social and economic burden of pain.

The pharmacist-led program has been trialled in Victorian and Queensland hospitals with successful outcomes obtained. An audit after two years of implementation in Victoria demonstrated lower quantities of oxycodone dispensed to patients and increased analgesic weaning in hospital and inclusion in medical discharge summaries. Pharmacist-led opioid de-escalation in orthopaedic patients was shown to reduce opioid requirements by 25%. The Opioid Prescribing Toolkit developed in Queensland further highlights the success of an opioid stewardship where the average number of oxycodone tablets supplied on discharge decreased from 19.9 to 11 tablets. This was matched with an increase in the proportion of patients having a de-escalation plan handed over to their general practitioner.

Cost of investment: \$450,000 per annum (covering 3.0 EFT x Allied Health Professional Level 4 Hospital Pharmacist plus nursing and operational support)



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4. Implement a pharmacist-supported Antimicrobial Stewardship service in North-West Tasmanian Hospitals.

Rationale for proposed policy: To reduce incidence of antimicrobial resistance in Tasmanian public hospitals and harms associated with inappropriate antimicrobial use.

Antimicrobial resistance and the limited number of viable antimicrobials in development is recognised as a public health concern in Australia and internationally. A major contributor to the increasing rates of antimicrobial resistance is the inappropriate use of antibiotics. Effective antimicrobial stewardship (AMS) programs have been shown to reduce inappropriate use of antimicrobials, reduce infections, reduce patient morbidity and mortality, help the slow the pace of antimicrobial resistance and reduce healthcare costs.

The Australian Commission on Safety and Quality in Health Care (ACSQHC) requires that all health service organisations assessed against National Safety and Quality Health Service Standards implement systems for the safe and appropriate prescribing of antimicrobials as part of an AMS program. AMS programs can decrease antimicrobial use in the order of 22-36% which translates to significant cost-savings, the ACSQHC specifically reported on an approximate \$85,000 estimated saving within the first 6 months of implementing an AMS service in an 800-bed metropolitan hospital upon review of 273 patients in 2005 and referred to a study by LaRocco which showed in a 120-bed nonteaching hospital, an ID physician (8–12 hours per week) and a clinical pharmacist performing reviews and feedback effected a 19% reduction in antimicrobial costs.

There is a current need for an AMS program in North West Tasmanian hospitals which is pharmacist-led or AMS pharmacist supported. Currently Launceston and Hobart provide and have the benefit of a pharmacist supported AMS service but Northwest Hospitals do not. Importantly, there should be a clinician or pharmacist identified as a leader for AMS activities in North West hospitals and as per the NSQHS standards, who is responsible for and who is designated to have time to support the requirements of ongoing AMS activities in North West hospitals.

SHPA recommends the establishment of an AMS program which can be pharmacist-led. An AMS pharmacist-led program would ensure strategies in line with national standards which include implementing clinical guidelines consistent with Therapeutic Guidelines: Antibiotics accounting for local antimicrobial susceptibility, establishing formulary restrictions and approval system for antimicrobials, review of antimicrobial prescribing and monitoring performance of antimicrobial data including QUM indicators, ensuring selective susceptibility reporting within hospital antimicrobial treatment guidelines that are suitably established in the hospital. Further, the AMS program would also ensure continuing education of prescribers, nurses, and pharmacists about good antimicrobial prescribing practice and resistance and use point-of-care interventions including de-escalation prescribing to optimise antimicrobial usage. SHPA recommends the support and collaboration of the hospital executives with clear lines of accountability within the AMS team to ensure an effective and sustained change in clinical practices for effective quality improvements.

Cost of investment: 130K per annum (1 EFT x Allied Health Professional Level 3 Hospital Pharmacist operational support)



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5. Investment in hospital pharmacist workforce recruitment and retention strategies including increasing Pharmacist Educators and expanding the pharmacy Residency Training Accreditation program to all four Tasmanian Public Hospitals.

Rationale for proposed policy: To ensure a sustainable hospital pharmacy workforce for Tasmanian Health Service into the future with a requisite workforce pipeline and strategy.

SHPA welcomes the *Health Workforce 2040* strategies proposed by the government. SHPA recommends the ongoing investment in hospital pharmacy workforce recruitment and retention strategies, to build capacity to deliver care. This can be potentially achieved by partnering with TasTAFE to develop a local training pathway for Pharmacy Technicians and undergraduate and postgraduate pharmacist professional development to improve workforce recruitment and retention within pharmacy.

SHPA recommends extending the Foundation Residency programs for early career Tasmanian hospital pharmacists to all four Tasmanian public hospitals to ensure young pharmacists trained by the Tasmanian public hospital system remain in this pipeline. SHPA commends the Tasmanian Government for implementing Foundation Residency programs at the RHH and LGH, and believes that extending this to the North West will establish an important workforce development and retention strategy in the NWRH and MCH.

SHPA also recommends extending the Advanced Training Residency programs to additional specialties at the Royal Hobart Hospital where there is specialist capacity. SHPA commends the Tasmanian Government for being an 'early adopter' of Advanced Training Residencies in Pharmacy Leadership, and believes that extending this training opportunity to disciplines such as Critical Care, Oncology, and Paediatrics will improve workforce development and patient care. The rise in chronic diseases combined with an ageing population with complex medication regimens places a growing burden on the Australian health system. The increased demand and service pressure is particularly acute in north-western Tasmania, where recruitment is chronically difficult. The SHPA Standards of Practice for Clinical Pharmacy Services⁴ recommends one hospital pharmacist to every 20 to 30 patients to ensure safe high-quality medicines management. This includes providing inpatients with medication reconciliation on admission and discharge, daily medication chart review and patient counselling. The value of clinical pharmacy services is well documented in literature, with an Australian economic analysis indicating a \$23 return for every \$1 spent on clinical pharmacy services.⁵

SHPA recommends the Tasmanian government undertake a service gap analysis with the four Tasmanian hospital pharmacy departments to inform and devise workforce recruitment and retention strategies to ensure the sickest Tasmanians are able to receive appropriate care. SHPA has developed the Foundation Residency program and Advanced Training Residency program to support pharmacy workforce development.

To capitalise on the current investment of eighteen hospital pharmacy interns annually, the Tasmanian government should invest in SHPA Residency programs to ensure young pharmacists trained by the Tasmanian public hospital system remain in this pipeline and fund pharmacy educators to oversee and continue the ongoing development of the workforce. The Foundation Residency program can be extended to all four Tasmanian hospitals, whilst the Advanced Training Residency program can be provided by the Royal Hobart Hospital, or via structured training at mainland hospitals if there is a skills shortage. There is also a need for retention strategies for pharmacists to achieve parity in pay when benchmarked with other Australian states. Currently Tasmania falls significantly behind in equivalent pay scale by being one of the lowest paid pharmacists for equivalent professional year and grading after the first year of registration.

Cost of investment: \$150,000 one-off to engage a consultant to develop a Tasmanian Hospital Pharmacy Workforce Strategy and to enter into partnerships with TasTAFE and UTAS where appropriate. \$200,000 ongoing to extend Pharmacy Residency training to the North West and to extend the range of advanced pharmacy training opportunities in Tasmania.



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References

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- ⁵ Dooley, M. J., Allen, K. M., Doecke, C. J., Galbraith, K. J., Taylor, G. R., Bright, J., & Carey, D. L. (2004). A prospective multicentre study of pharmacist-initiated changes to drug therapy and patient management in acute care government funded hospitals. *British Journal of Clinical Pharmacology*, 57(4), 513-521. doi:10.1046/j.1365-2125.2003.02029.

