Standard of Practice for Pharmacy Technicians to support Clinical Pharmacy Services

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Preface

This Standard should be read in conjunction with others in the Society of Hospital Pharmacists of Australia's Standard of Practice series depending on the relevant area of practice and where more specific roles and activities for pharmacy assistants and pharmacy technicians are discussed. Additionally, the Pharmacy Board of Australia Guidelines for Dispensing Medicines¹ should be utilised to understand the responsibilities of pharmacists when working with pharmacy assistants and pharmacy technicians. Pharmacists must ensure they comply with the legislative requirements applicable to their jurisdiction. This Standard supersedes the Clinical Pharmacy Standards, Chapter 12: Pharmacy Assistants and Technicians Supporting Clinical Pharmacy Services (2013). This Standard is for professional practice and is not prepared or endorsed by Standards Australia. It is not legally binding.

INTRODUCTION

As pharmacists' roles have evolved to allow more time for clinical activities and direct patient care, pharmacy assistant and pharmacy technician roles have also expanded as they provide more support to pharmacists in core technical functions. The International Pharmaceutical Federation (FIP) published a report in 2017 describing the variety of roles and activities in current and emerging global practice.² This report demonstrated that increased involvement of the pharmacy support workforce contributes to a higher level of pharmacists' patient-centred clinical activities, leading to better patient care and outcomes.

The Pharmacy Board of Australia Guidelines for Dispensing of Medicines¹ provides a description of the scope of duties that pharmacy assistants and pharmacy technicians are assigned by a pharmacist, based on consideration of an individual's qualifications, competence and experience. These guidelines state that 'pharmacists may be assisted in the preparation, dispensing and supply of medicines, and other activities in a pharmacy business or pharmacy department, by suitably trained dispensary assistants, dispensary technicians or hospital pharmacy technicians'.¹

Pharmacy support staff activities must occur under the supervision of a registered pharmacist, however pharmacists must ensure that pharmacy assistants and pharmacy technicians are appropriately trained and experienced. In addition, the scope of duties of pharmacy support staff is to be limited to activities concordant with their level of qualification, training and experience.

The terms pharmacy assistant and pharmacy technician are often used interchangeably and vary between jurisdictions. For the purposes of this Standard, and with a view toward standardisation, professionalisation and greater mobility within the pharmacy support workforce, the following descriptions will be used to identify roles and scope in the hospital pharmacy context:

Pharmacy Assistant: Supports pharmacists and pharmacy technicians in the delivery of hospital pharmacy services through the provision of administrative and basic technical activities and may have the following qualifications, or equivalent training and experience:

- Certificate III in Community Pharmacy
- Certificate IV in Community Pharmacy

Pharmacy Technician: Supports pharmacists in the delivery of hospital pharmacy services through the provision of higher-level administrative, technical and leadership activities, and may have the following qualifications, or equivalent training and experience:

- Certificate III in Hospital/Health Services Pharmacy Support
- Certificate IV in Hospital/Health Services Pharmacy Support

Advanced Pharmacy Technician: A pharmacy technician with a minimum qualification at Certificate IV in Hospital/Health Services Pharmacy Support, who has successfully completed a structured competency assessment in order to undertake extended scope of practice activities (refer to Training and Education section of this Standard).

The extended scope of practice roles in clinical services that are appropriate to be undertaken by an Advanced Pharmacy Technician in clinical support roles are detailed in Table 1.

OBJECTIVES OF THE SERVICE

Pharmacists and pharmacy technicians working as a team in the delivery of clinical pharmacy services may increase the capacity of pharmacists to deliver clinical services to individual patients. With appropriate education, training and competency assessment, pharmacy technicians can undertake a range of ward-based administrative, supply, technical and cognitive activities under the supervision of a pharmacist. The pharmacist remains legally and ethically accountable for clinical pharmacy services delivered to individual patients. Thus, any implementation of pharmacy technician services in a clinical pharmacy setting must have appropriate

governance systems and reporting structures in place to ensure pharmacists are able to exercise these legal and ethical responsibilities and aspects of activities requiring clinical judgment are restricted to and/or supervised by the pharmacist.

SCOPE OF THE SERVICE

Pharmacy technicians can support pharmacists in many care settings, depending on their qualifications and training. In addition to dispensing, compounding, inventory management and medicine distribution, pharmacy technicians can provide supervised clinical support on wards, outpatient clinics and outreach services. SHPA Standards of Practice for specialty practice areas may make reference to pharmacy technicians. The relevant Standards should be consulted for a technician's practice area for further specific guidance'. Recommendations regarding activities suitable for pharmacy technicians in clinical support roles are summarised in Table 1.

Importantly, currently available qualifications are unlikely to address many of these advanced roles. Organisations employing pharmacy technicians in these activities must ensure they are appropriately qualified and experienced to be assigned activities, and that these activities lay within legislative and local institutional guidelines. The organisation should have policies clearly defining the extent of the pharmacy technicians' scope and the supervisory responsibilities of the pharmacist. Advanced pharmacy technicians must have successfully completed a structured competency assessment in order to undertake extended scope of practice roles (refer to Training and Education section of this Standard).

Table 1: Activities for pharmacy technicians working in clinical support roles under the supervision of a pharmacist

Clinical activity	Activities suitable for Pharmacy Technicians (with appropriate training, well-defined protocols and supervision)	Activities suitable for Advanced Pharmacy Technicians (with appropriate training, well-defined protocols, supervision and competency assessment)
Medication reconciliation	Communicate with patients, carers or community health professionals to obtain information for a pharmacist to take a best possible medication history (BPMH)*	Initiate and document a best possible medication history (BPMH) for pharmacist review and reconciliation*
Adverse drug reactions	Identify patients who have not had their history of medicine allergies or adverse drug reactions documented and refer to a pharmacist	Document medicine allergies or adverse drug reactions that have been confirmed by a pharmacist
Medication review	Assist the pharmacist with clinical prioritisation by using the National Medication Management Plan to identify patients who are at high risk of medicine-related problems	Assist the pharmacist with clinical prioritisation by using guidelines to identify patients who are at high risk of medicine-related problems

i Refer to SHPA Standards of Practice in relevant specialty

Clinical activity	Activities suitable for Pharmacy Technicians (with appropriate training, well-defined protocols and supervision)	Activities suitable for Advanced Pharmacy Technicians (with appropriate training, well-defined protocols, supervision and competency assessment)
Medication review (cont'd)	Identify patients that would benefit from a Home Medicines Review (HMR) referral or another follow- up by using the National Medication Management Plan or similar checklist and refer to a pharmacist	
	Screen patient information for medicine-related information (e.g. weight, height, smoking status) for pharmacist review if required information is incomplete	Document patient physical parameters such as height and weight.
		Screen patient-specific clinical information (e.g. blood pressure, weight, SaO2) by comparing the result with a defined reference range or other parameters for pharmacist review to facilitate clinical prioritisation
	Screen medicine orders for compliance with legal and local requirements for pharmacist review of non-compliant orders	Annotate medicine orders with clinical information regarding administration and timing of doses
		Screen transcribed non-automated orders for transcription accuracy for pharmacist review of inaccurate orders
	Access and record patient-specific laboratory data for pharmacist review	Screen laboratory data for abnormal or unexpected results by comparing the result with a defined reference range or other parameters for pharmacist review
	Identify patients requiring medication counselling or adherence aids for pharmacist review	Screen patients for their ability to self-medicate, including their general understanding and adherence to medicines for pharmacist review
		Assess patients on their technique to administer their medicines or operate medical devices (e.g. inhalers, eye drops, blood glucose monitors)
		Identify patient factors such as culture, language, demographic and physical characteristics that may impact the patient's care
		Screen medicine orders and patient information to identify potential issues for pharmacist review (e.g. allergies, dosage forms, administration timing, method of administration)
		Screen patient medicines against endorsed protocols or clinical pathways (e.g. Venous thromboembolism prophylaxis) to identify potential medication-related problems for pharmacist review

Clinical activity	Activities suitable for Pharmacy Technicians (with appropriate training, well-defined protocols and supervision)	Activities suitable for Advanced Pharmacy Technicians (with appropriate training, well-defined protocols, supervision and competency assessment)
Medicines information for patients and ongoing care (cont'd)	Identify patients requiring a supply of medicines on discharge and identify if the patient consents to accessing Pharmaceutical Benefits Scheme (PBS) medicines from a community pharmacy where appropriate	Provide basic medicine discharge information and medical device technique instruction to patients, and refer enquiries outside of scope to the pharmacist
		Identify patients requiring communication with community health professionals and assist in preparing and communicating information after pharmacist review
		Provide basic medicines and supply information to community health providers (e.g. doctors, community pharmacists)
	Gather and distribute consumer medicines information (CMI) leaflets to patients prior to counselling by a pharmacist	Participate in individualised, group or community-based health promotion activities
	Prepare a current medicines list for a patient with the reasons for any changes for pharmacist review	
	Prepare information for uploading by a pharmacist to a patients My Health record	
Medicines information for health professionals	Provide medicines supply information to health professionals, e.g. medical, nursing and pharmacy staff	Attend multidisciplinary meetings, nursing handover or discharge planning meetings to contribute to and coordinate medicines supply for inpatients and on discharge
	Answer basic enquiries related to medicine availability and dosage forms	Provide education sessions for medical, nursing staff on pharmacy-related administrative topics (e.g. PBS, Special Access Scheme [SAS])
	Receive medicine information queries for pharmacist review	Provide education sessions for pharmacy staff on topics within the scope of practice
Safe and secure storage and distribution of medicines	Assist in managing the storage and retrieval of patients' own medicines	Assist in the screening of patients' own medicines for suitability for use
	Identify if all required medicines are available in the patient care area and order medication for confirmed orders when required	
	Assess patients-own medicines and product as suitable for inpatient or discharge use, if deemed clinically appropriate by the pharmacist	

Clinical activity	Activities suitable for Pharmacy Technicians (with appropriate training, well-defined protocols and supervision)	Activities suitable for Advanced Pharmacy Technicians (with appropriate training, well-defined protocols, supervision and competency assessment)
Safe and secure storage and distribution of medicines (Cont'd)	Annotate medicine order with information on the supply and storage of the medicine (e.g. imprest medicine, fridge)	
Therapeutic drug monitoring	Identify patients' prescribed medicines requiring therapeutic drug monitoring for pharmacist review	
	Access and record patient medicine levels for pharmacist review	Screen patient medicine levels against the defined reference range for pharmacist review if outside of the defined range to facilitate clinical prioritisation
Quality improvement systems	Assist in identifying, reporting and reviewing near miss or medication errors	Assist in quality improvement activities regarding the clinical pharmacy service including collection and response to feedback, implementation and assessment of improvement activities and their outcomes
	Participate in medication safety and usage audits	Provide administrative support for stewardship activities (e.g. antimicrobial, analgesic, anticoagulant)
	Participate in accreditation activities	

*The National Safety and Quality Health Service Standards (NSQHS) Standard 4 Medication Safety states 'a BPMH should be completed, or the process supervised, by a clinician with the required skills and expertise'.³

The standard states that the BPMH be completed as early as possible on admission and that at least two sources of information are needed to obtain and then confirm the patient's BPMH. The standard states 'it is vital that the patient (or carer) is actively involved and that the health service organisation has a formal, systematic process in place for obtaining a BPMH'.³ An organisation involving pharmacy technicians in this process requires clear policies and procedures to allocate these activities. As stated in Standard 4, policies, procedures and guidelines for obtaining a BPMH should include:

- a structured interview process
- the key steps of the process
- documentation requirements
- roles and responsibilities of clinicians
- training requirements of clinicians
- involvement of patients and carers.³

This process is also supported by the National Prescribing Service. Policies and procedures developed must specify how the pharmacist is able to execute their responsibility for BPMH.

OPERATION

The provision of pharmacy technician support for clinical pharmacy services is dependent on the availability of appropriately trained pharmacy technicians and supervising pharmacists and the presence of well-defined protocols to guide activities and scope.

POLICIES AND PROCEDURES

The pharmacist remains legally and ethically responsible for the delivery of clinical pharmacy services delivered to the individual patient. Current versions of professional standards and guidelines that should be followed include:

- Pharmacy Board of Australia Guidelines for dispensing of medicines¹
- Society of Hospital Pharmacists of Australia (SHPA) Standards of Practice for Clinical Pharmacy Services⁴ (and those for specialty areas)
- NSQHS Standard 4 Medication Safety³

Well-defined national, institutional or local protocols should be referenced or developed, to ensure pharmacists and pharmacy technicians are aware of the scope in which the clinical support pharmacy technician can practice. Governance procedures should ensure pharmacists are able to meet their obligations under relevant laws and professional standards when working with pharmacy technicians.

RECOMMENDED STAFFING

Pharmacy technicians and pharmacists should work as a team to ensure clinical, supply and administrative functions are met, within the scope of each role.

Pharmacist to pharmacy technician ratios should ensure appropriate supervision of pharmacy technicians is available while a pharmacist is undertaking their own workload and responsibilities. Managers should consider pharmacist to patient ratios described in specific Standardsⁱ and additional supervisory requirements of the pharmacist (e.g. interns and pharmacy students) during the allocation of pharmacy technicians. The Pharmacy Board of Australia suggests that an individual pharmacist does not supervise more than two pharmacy technicians at a time when engaging in dispensing or compounding.¹

TRAINING AND EDUCATION

Pharmacy technicians providing support for clinical pharmacy services should hold a Certificate III or IV in Hospital/Health Services Pharmacy Support or equivalent qualifications and experience as a minimum requirement. Advanced Pharmacy Technicians require a minimum of Certificate IV Hospital and Health Services Pharmacy Support and must have successfully completed a structured competency assessment to undertake any extended scope of practice roles. Assessment of competence, validation or credentialing to undertake activities may also be required to comply with institutional or jurisdictional legislative requirements. Training and assessment may be provided through nationally recognised education courses, SHPA or workplace training, competency and validation activities.

A suitable structured competency assessment to enable an Advanced Pharmacy Technician to undertake extended scope of practice activities should include the following features:

- pre-activity education, to ensure a solid understanding of legal, ethical, and technical aspects of the extendedscope activity
- observation of each extended-scope activity to be undertaken
- supervised performance of each extended-scope activity to be undertaken
- observation-based or simulation-based assessment of each extended-scope activity to be undertaken
- regular re-validation of competence.

The scope of activities and roles must align with an individual's documented qualifications, experience and credentialing.

QUALITY IMPROVEMENT

The provision of pharmacy technician support for clinical pharmacy services should be monitored in line with organisational quality improvement or assurance mechanisms.

Australian literature has shown the implementation of clinical support pharmacy technicians increases the time pharmacists have available to spend on clinical activities from 58% to 73.9%.⁵ Ongoing measures of this nature would support the role of clinical support pharmacy technicians.

A system to record pharmacy technician support service errors, near misses and complaints must be implemented.

RESEARCH

Research demonstrating the benefit of pharmacy technicians supporting clinical pharmacy services is well documented and summarised in a number of key reports, including:

- Society of Hospital Pharmacists of Australia: Exploring the role of hospital pharmacy technicians and assistants to enhance the delivery of patient centred care⁶
- 2. International Pharmaceutical Federation (FIP): Technicians and pharmacy support workforce cadres working with pharmacists An introductory global descriptive study²

Ongoing research into the outcomes of pharmacy technician support in clinical pharmacy services is required and encouraged.

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Phase II Pharmacy Technician Role Redesign Steering Committee

SHPA National Pharmacy Technician Network

SHPA Technician/Assistant Focus groups, June 2018

SHPA Standards of Practice Chapter 12: Pharmacy Assistants and Technicians Supporting Clinical Pharmacy Services. *Journal of Pharmacy Practice and Research* Vol 43 No.2 (suppl), 2013.

ⁱ Refer to SHPA Standards of Practice in relevant specialty

REFERENCES

- Pharmacy Board of Australia. Guidelines for dispensing of medicines. Pharmacy Board of Australia; 2015.
- International Pharmaceutical Federation (FIP). Technicians and pharmacy support workforce cadres working with pharmacists: An introductory global descriptive study. The Hague, The Netherlands: International Pharmaceutical Federation (FIP), 2017.
- Australian Commission on Safety and Quality in Health Care. NSQHS Standards. Standard 4 Medication Safety Safety and Quality Improvement Guide. Sydney; 2012.
- SHPA Committee of Specialty Practice in Clinical Pharmacy. SHPA Standards of Practice for Clinical Pharmacy Services. Journal of Pharmacy Practice and Research 2013; 43(No. 2 Supplement): S1-69.
- Elliott RA, Perera D, Mouchaileh N, et al. Impact of an expanded ward pharmacy technician role on service-delivery and workforce outcomes in a subacute aged care service. *Journal of Pharmacy Practice and Research* 2014; 44(3): 95-104.
- The Society of Hospital Pharmacists of Australia. Exploring the role of hospital pharmacy technicians and assistants to enhance the delivery of patient centred care.
- White Paper on the findings and outcomes of the 'Pharmacy Technician and Assistant Role Redesign within Australian Hospitals (Redesign) Project'.
 Melbourne, Australia: The Society of Hospital Pharmacists Australia, 2016.

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