Chapter 14: Improving the Quality of Clinical Pharmacy Services

INTRODUCTION

This chapter describes establishing a management system for generic approaches to assess the quality of the clinical pharmacy services described in previous chapters. The *Australian Safety and Quality Framework for Health Care* specifies three core principles of safe and high-quality care: the care is patient centred, driven by information and organised for safety.[1]

A number of quality assurance frameworks and standards are available and SHPA recommends their use in conjunction with this document. These include:

- shpaclinCAT[2]
- *National Competency Standards Framework for Pharmacists in Australia*[3]
- *National Safety and Quality Health Service Standards: Standard 4 Medication Safety*[4]
- *Hospital Accreditation Workbook*[5]
- *Indicators for Quality Use of Medicines in Australian Hospitals.*[6]

These frameworks may not be the most appropriate measures by which to evaluate the quality of clinical pharmacy services in all practice settings and practice-specific indicators will need to be identified.

The quality of a clinical pharmacy service can be difficult to assess using specific outcomes in many circumstances. In these instances, a set of processes of care indicators can be identified that have evidence of benefit to patients when these processes are completed.[1] Because indicators assume that processes lead to better health outcomes there are limitations and many aspects of clinical pharmacy services cannot be isolated or specifically measured.

Wherever possible, the quality of a clinical pharmacy service should be assessed by providing evidence to support improved patient outcomes. This is possible in selected circumstances where the clinical pharmacist has direct responsibility for an aspect of patient care, e.g. anticoagulation, pain management. In these cases the pharmacist's responsibility and desired patient outcomes must be clearly defined and documented.

OBJECTIVE AND DEFINITION

Objective

The main goals of a quality management system for clinical pharmacy services are to:

- ensure the provision of an appropriate service to patients (and those involved in patient care)
- ensure patients' medicine needs are addressed
- monitor and evaluate the services including the standard of services provided
- identify and minimise risks associated with service delivery
- identify areas for improvement, including staff development programs
- motivate pharmacists by involving them in assessing and evaluating these services
- provide a mechanism through which action is taken to implement and sustain these improvements.

Definition

The purpose of a quality management system for clinical pharmacy services is to monitor, evaluate or improve the quality of health care delivered by the service. Quality improvement should be an integral part of all healthcare delivery.

EXTENT AND OPERATION

Pharmacy services should have a clearly defined quality management system that outlines the goals for the service and individual pharmacists along with the expected range and quality of service delivery. This program should be in accordance with the larger framework of the health service organisation.[1,2]

A quality management system for a clinical pharmacy service should include consideration of the range of clinical pharmacy activities delivered, any service agreements and overall day-to-day prioritising of these activities.

Quality management systems enable pharmacists to meet ethical obligations to their patients, maintain professional competence and endeavour at all times to provide a pharmacy service to the highest possible standards.[7] The ethical principles of integrity, respect, beneficence and justice apply to all quality improvement activities.

Methods for assuring and improving the quality of practice of individual pharmacists, such as structured performance reviews, peer review and continuing professional development opportunities, should also be incorporated into a pharmacy's quality management system. See *Chapter 10: Training and education*.

POLICY AND PROCEDURE

Quality Management Systems

A quality management system for clinical pharmacy services should include:

- developing and documenting clear objectives for each of the services provided by pharmacists. These should be in a format easy to reference for everyday use
- developing clear and effective strategies and supporting plans to achieve objectives. Strategies should be explained, detailed and understood. If strategies have not been developed, it will be useful to involve all the staff in quality program planning
- encouraging effective employee participation in developing and implementing quality plans. This is likely to lead to the plan being better received and adopted by the participants
- staffing mix and structure prioritised for clinical pharmacy services in line with the organisation's objectives. This should include the level of pharmacist competency and resources required to deliver services and commentary on services to be prioritised when there are staff shortages, outside usual business hours and patient care areas that do not receive routine clinical pharmacy services.[7] See *Chapter 8: Prioritising clinical pharmacy services*
- ensuring a process of review of pharmacy staff competency, preferably using a structured assessment tool, e.g. peer review, shpaclinCAT

- identifying quality indicators that are patient-centred with evidence of positive health outcomes[5]
- using published standards and indicators, e.g. *National Safety and Quality Health Service Standards, EQuIP5*.[4,8]

Key Performance Indicators and Workload Statistics

Indicators are measures of processes and outcomes or health care that can be used to guide and monitor the quality and appropriateness of healthcare delivery with the aim of continuous improvement.[5] The *National Safety and Quality Health Service Standards*, *EQuIP5* and *Indicators for Quality Use of Medicines in Australian Hospitals* provide a clear guide to many indicators and the processes to measure.[4,6,8] The National Inpatient Medication Chart (NIMC) Audit provides a useful tool to evaluate the use of the NIMC and compliance with its safety features. The audit tool can be used to measure specific clinical pharmacy activities, such as pharmacy annotations and review.[9] Table 14.1 contains some further suggestions for indicators that may be used to indicate the performance of clinical pharmacy services.

Documenting workload data, in particular clinical interventions, can provide evidence of the impact of clinical pharmacy services on patient care. Workload data is also valuable in performance appraisal and as a means of reporting clinical pharmacy activities to a Drug and Therapeutics Committee, Medicines Advisory Committee and other health service organisation forums. Workload data can also be used to justify staffing levels, make staffing projections, underpin service agreements and evaluate efficiency of services provided.[10]

Local factors will determine the need for documenting clinical workload and in some circumstances periodic recording may be more appropriate than continuous recording. In some organisations, clinical interventions documented in the patient's health record may not be recorded as part of the organisation-based coding process on discharge therefore a more reliable method of recording workload statistics may be required.

Ideally, activities should be recorded in a standardised way that links to patient details or to the pharmacy dispensing software. Uniform terminology should be used. Barcoding may be used to record activities.

See *SHPA Standards of Practice for Medication Safety*.[11]

Quality Improvement of a Pharmacist's Practice

Review and assessment of an individual's performance is an essential component of personal continuing professional development and improvement of clinical pharmacy services. Ideally, a pharmacist's ability to perform clinical pharmacy activities is assessed using a structured assessment tool in the workplace or simulated environment.

Most of the important aspects of professional practice, such as communication, teamwork and some technical skills, can only be assessed by qualitative methods involving observation and judgement. Assessors can provide feedback and support based on direct observation of agreed targeted competencies.

Performance assessment also includes the extent of a pharmacist's involvement in education, departmental activities, research and projects and incorporates feedback from key stakeholders. It may require direct observation and discussion with the pharmacist and other staff, including nurse unit mangers, medical and pharmacy staff.

Table 14.1 Some suggested performance indicators for clinical pharmacy services

Clinical activity	Performance indicator
Accurate medication history	Percentage of patients with completed medication history by a pharmacist within 24 hours of admission or presentation
Medication reconciliation	Percentage of patients with completed medication reconciliation by a pharmacist within 24 hours of admission or presentation
	Percentage of patients with a correctly completed record of prior adverse drug reactions and allergies documented within 24 hours of admission
	Percentage of patients with current medications reconciled (on presentation, transfer or discharge)
Assessment of current medication management	Number of assessments of current medication managements by a pharmacist per total patient bed days
	Percentage of patients that receive an assessment of current medication management by a pharmacist
	Quality of clinical pharmacy interventions: percentage of interventions rated > moderate (collected periodically over 2 days)
Therapeutic drug monitoring	Percentage of patients with an INR > 4 that have had their dosage adjusted or reviewed prior to the next warfarin dose
	Percentage of patients with toxic or subtherapeutic aminoglycoside concentrations that have had their dosage adjusted or reviewed prior to the next aminoglycoside dose
Medication management plan	Percentage of patients with a documented initial medication management plan within 24 hours of admission or presentation
	Percentage of patients prescribed salbutamol on discharge that are given a written action plan for acute exacerbations of respiratory disease with a copy communicated to the primary care physician
Provision of medicines information to patients	Percentage of patients that received appropriate verbal counselling and/or written information about their medicines prior to discharge
	Percentage of patients receiving discharge medicines who also receive medicines information
Information for ongoing care on discharge or transfer	Percentage of discharge summaries that document an accurate medicines list and the reasons for all medication therapy changes from medications taken prior to admission
	Satisfaction of key stakeholders

shpaclinCAT can be used for workplace review as well as self assessment. This provides a platform for identifying professional development requirements, planning career progression and supporting documentation for re-registration.

Regular review of individual pharmacists will identify areas that need improvement for both the pharmacist and the service.

Table 14.2 lists the competencies and accreditation frameworks that are relevant to this chapter.

References

1. Australian Commission on Safety and Quality in Health Care. Australian safety and quality framework for health care. Sydney: The Commission; 2010.

2. Society of Hospital Pharmacists of Australia. Clinical competency assessment tool (shpaclinCAT version 2). In: SHPA standards of practice for clinical pharmacy services. J Pharm Pract Res 2013; 43 (suppl): S50-S67.
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9. Australian Commission on Safety and Quality in Health Care. National inpatient medication chart national audit. Sydney: The Commission; 2012.
10. Jones AN, Capes DF, Swan GT. Clinical pharmacy workload: a standard unit of measure. Aust J Hosp Pharm 1984: 14; 90-2.
11. Society of Hospital Pharmacists of Australia. Committee of Speciality Practice in Medication Safety. SHPA standards of practice for medication safety. J Pharm Pract Res 2012; 42: 299-303.

Table 14.2 Competencies and accreditation frameworks
Relevant national competencies and accreditation standards and shpaclinCAT competencies
shpaclinCAT[2]
Competency unit 1.3 Identification, prioritisation and resolution of medicines-related problems 1.3.6 Assessment of outcomes of contributions
National competency standards framework for pharmacists[3]
Standard 3.4 Manage quality service delivery 1 Facilitate service delivery 2 Maintain and enhance service quality 3 Ensure continuity of service
National safety and quality health service standards[4]
Standard 1 Governance for safety and quality in health service organisations: performance and skills management 1.10 Regular reviews for the clinical workforce 1.11 Performance development and improvement 1.12 Ongoing safety and quality education and training
Standard 1 Governance for safety and quality in health service organisations: incident and complaints management 1.14 Incident management and investigation system 1.15 Complaints management and investigation system
Standard 1 Governance for safety and quality in health service organisations: patient rights and engagement 1.20 Patient experience feedback mechanisms