



Guiding principles to achieve continuity in medication management

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Introduction

Evidence from research into medication safety indicates that significant patient harm and sub-optimal use of medicines frequently result from the discontinuity that occurs when consumers move between different health care settings and health care providers. There is also good evidence that continuity in medication management can improve with a systems approach.

These Guiding Principles have been developed to address this problem by achieving the continuity of quality use of medicines in medication management as consumers move from one episode of health care to another.

They are a revision of the 1998 *National guidelines to achieve the continuum of quality use of medicines between hospital and community*¹, developed by the Australian Pharmaceutical Advisory Council (APAC), a national body composed of the peak organisations involved in medicines policy.

Quality Use of Medicines (QUM) means ‘selecting management options wisely, choosing suitable medicines if a medicine is considered necessary and using medicines safely and effectively’². QUM is one of four central objectives of Australia’s National Medicines Policy³. The policy also advocates a partnership approach to QUM and recognises that governments, health care professionals and providers, consumers and/or their carers and others have accepted a shared responsibility in this endeavour.

Figure 1 illustrates this partnership approach, in which expertise and responsibility is shared among health care providers and consumers, for the consumer’s wellbeing.

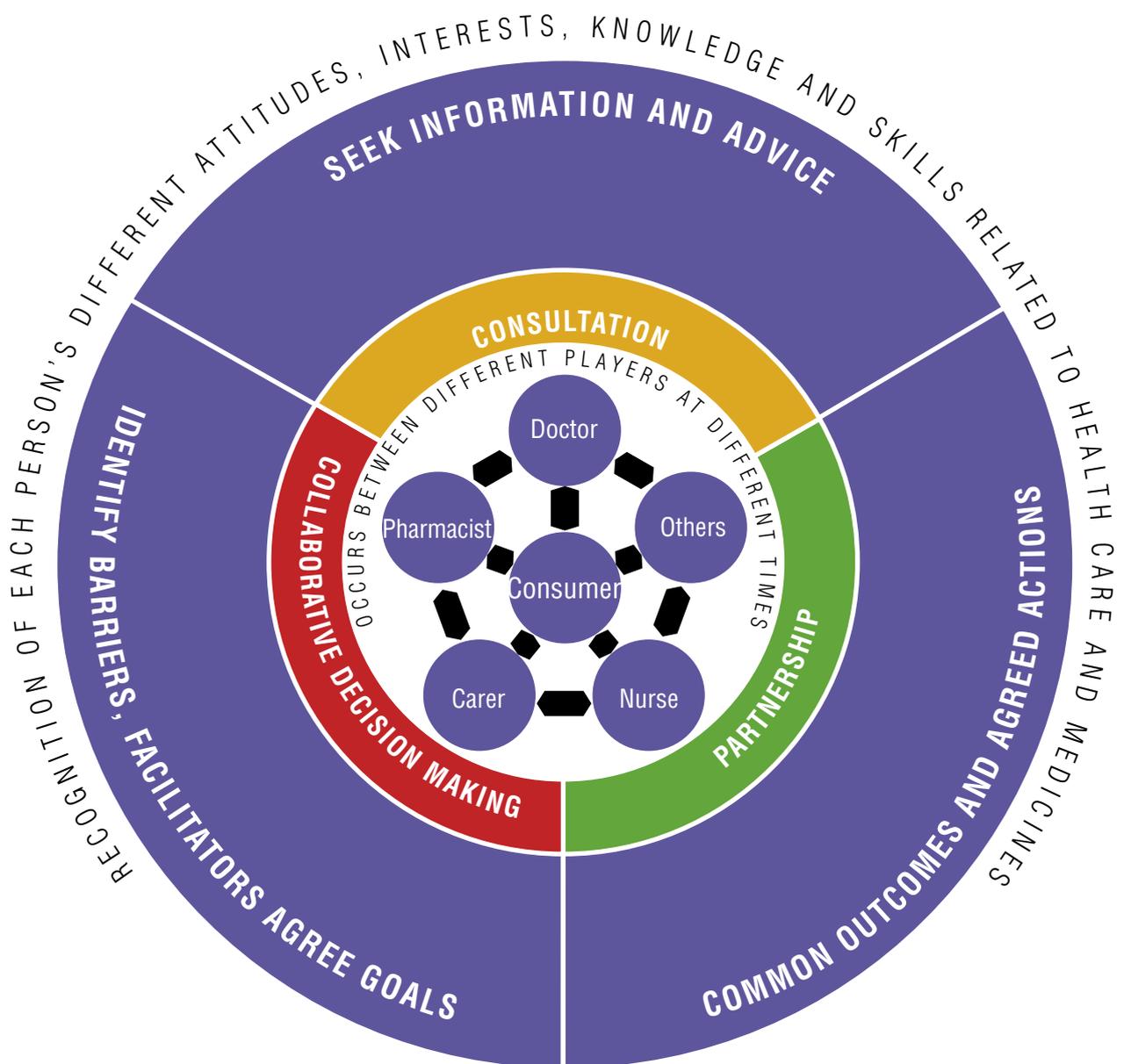


Figure 1: A partnership approach [adapted from 4]

Evidence for action

There is evidence of discontinuity between episodes of care as well as evidence that this leads to significant harm, such as:

- on admission to hospital, up to one in two patients had an incomplete medicine list provided, resulting in a medicine not being administered during the hospital stay⁵
- 1.6 per cent of hospital admissions are associated with the occurrence of an adverse medicines event, and medicines are considered to be the causal agent of 10 per cent of all adverse events experienced in hospitals⁶
- 78 per cent of general practitioners were not directly informed that their patient had been admitted to hospital^{7,8,9}
- 14.5 per cent of consumers were on four or more medicines¹⁰
- for veterans and war widows, approximately 67 per cent of the total treatment population use six or more medicines dispensed on the Repatriation Pharmaceutical Benefits Scheme (RPBS) in a calendar year¹¹
- 73 per cent of general practitioners did not directly receive discharge summary information^{7,8,9}
- 12 per cent of patients had an error in their discharge prescription¹²
- omission of medicine from the discharge summary list sent to community health care professionals was associated with an increased risk (by a factor of 2.3) of hospital readmission or adverse medicine event^{13,14}
- 9 per cent of patients were discharged from hospital with insufficient medicine supplies to enable continuum of therapy^{7,8,9}.

Since the APAC guidelines were developed in 1998, the evidence base for action in this area has increased significantly^{15,16,17}. There is now more evidence from trials, including two well-conducted, randomised controlled trials about the effectiveness of interventions to improve continuity of medicine use. In both trials, the interventions were provided from within the hospital and used the model of medication liaison services^{13,14,18,19}.

Positive results included fewer problems related to medicines, fewer visits to health care professionals, improvements in functional health status, and a trend to reduced readmission rates^{13,14,18,19}. Both trials involved both provision of good pharmaceutical care by trained clinical pharmacists and teamwork in medication management. Thus, there is encouraging evidence that benefits will be achieved by continuing to implement the Guiding Principles.

To assist consumers in moving safely and effectively among multiple health care providers and settings, the quality use of medicines must be realised across the health care continuum. Achieving continuity in medication management depends on commitment, cooperation and coordination among all partners in QUM.

Background to Guiding Principles

The key to safe and appropriate management of medicines is a coordinated approach that supports and encourages continuity in all areas of the community and health care sector (while observing relevant state and territory legislation).

These Guiding Principles are to be applied by all health care providers, partners and settings across the health care continuum. There is an expectation that all stakeholders involved in the continuity of medication management between episodes of care will work towards implementing the Guiding Principles by aligning standard operating procedures and assigning responsibilities as appropriate and according to ability, skills and competence.

There are two essential components for ensuring the quality use of medicine across the health care continuum. The first is to establish standards of practice that define standard operating procedures (Guiding Principle 1). The second is to identify the positions or persons, working within the accepted limits of their roles, who are responsible for implementing each step of the process (Guiding Principles 2 and 3).

The ten Guiding Principles retain the intent and much of the content of the 1998 guidelines. Principles have been added to clarify where needed, to make it easier to implement, and to emphasise the place of leadership and the importance of clearly articulating responsibility and accountability when implementing. A principle about quality assurance has been added to emphasise that evaluation is essential.

A review⁹ of the original guidelines showed they were focused on hospitals, rather than other types of health providers. Since then, health care has evolved. There is now a greater variety of services provided in community (non-hospital) settings and the boundaries are blurring. Therefore these Guiding Principles have been broadened to apply across all health care settings.

As the risk of discontinuity at the interface between hospital and other settings remains a particular concern, the Guiding Principles continue to concentrate on this area. However, to reflect their broader use, we have used terms such as 'transfer' instead of 'discharge' or 'admission' and 'consumer' in preference to 'patient'. Other important terms are included in the glossary. The greater emphasis on including consumers and recognising their place at the centre of medication management is reflected in the 'plain English' approach throughout the document.

It is expected that the more general nature of the Guiding Principles will facilitate their wider uptake and implementation across the health care system, including community practice.

Medication management cycle

The health care continuum can be viewed as a series of cycles. Each cycle relates to an episode of care. For each episode of care, there is a corresponding medication management cycle, which comprises the nine key components listed below. The characteristics of each component depend on the health care setting involved and the nature of the episode of care. This document focuses on those components of the medication management cycle that are critical to achieving continuity in the medication management continuum.

The key components of the medication management cycle (see figure 2) are:

Decision on appropriate treatment and decision to prescribe medicine

The prescriber needs access to accurate, comprehensive, complete and up-to-date consumer-specific information, and consumer input, to assess the most suitable treatment option in light of the best available evidence and the consumer's treatment goals. If that option is the use of a medicine, then the choice should be the most appropriate, safe and cost-effective medicine for that person. The decision could be influenced by treatment protocols, cost effectiveness and acceptability to the consumer, as well as the funding source.

Record of medicine order/prescription

The prescriber's intention needs to be conveyed to others involved in the medication management cycle. The medicine order (or prescription) needs to be legible, unambiguous and contain enough information to support the use of the medicine as intended. Therefore, communication involves the prescriber, the consumer, the person issuing the medicine (often a pharmacist), the person administering the medicine (the consumer, carer, or nurse) and finally, the person(s) assessing the effect of using the medicine.

Review of medicine order/prescription

The review of the medicine order at this point is a valuable safeguard for consumers and prescribers. Orders may be reviewed:

- to ensure they comply with legislative requirements or funding by a third party (e.g. the Pharmaceutical Benefits Scheme)
- to optimise the use of the medicine prescribed
- to verify and confirm the prescribing intention and expected outcomes
- to consider clinical appropriateness (in particular safety) before dispensing or administering the medicine, according to the information available to the health care provider.

For example, when dispensing the medicine, the pharmacist may consider its interactions with other medicines ordered by another prescriber; a nurse may assess blood pressure readings and other clinical signs before administering it; it may be decided to withhold the medicine. If any questions arise, clarification is sought with the prescriber and the consumer, and any proposed changes discussed and documented.

Issue of medicine

Issuing medicines, including the processes of manufacturing, dispensing or supply of medicines is usually done by pharmacists or other authorised providers (e.g. endorsed rural nurses). The correct medicine should be manufactured or selected, then labelled fully and clearly, in line with legislative requirements. Where required, consumer-specific instructions are included to help the person administering the medicine understand the prescriber's intent. A record is made that the medicine has been issued.

Provision of medicine information

Appropriate consumer information about medicines, including how to store and use them correctly, improves medication safety and the quality use of medicines. In addition, information about the appropriate preparation and administration of the medicine should be provided to persons involved in administering it.

Distribution and storage

Once issued, medicines are distributed to the care delivery areas (e.g. the ward) within a residential or health care facility, or for local storage by the consumer or carer (at home or wherever the consumer resides). The method of storing medicines (e.g. using an imprest system, bedside locker, or medicine cabinet) will depend on the needs of the consumer and financial, physical, regulatory and safety constraints.

Administration of medicine

The need for a medicine might be re-assessed before it is administered, for example, for pain relief, symptom control. Therefore, this step encompasses re-assessment of need for the medicine, the selection of the correct medicine (dosage, dosage form, route and time) and appropriate preparation and administration of the medicine in a suitable environment, by a suitably educated and skilled person (consumer, carer, nurse), to the correct consumer on each occasion. A record of the administration of the medicine is made where required.

Monitor for response

Consumers often monitor their response to medicines, particularly when self-medicating. Prescribers and other health professionals seek the consumer's opinion about his/her response or, where the response is not self evident, investigate the

consumer's response to the medicine according to symptom control or investigative tests. Responses to medicines can be both positive and negative (e.g. an adverse drug reaction or event).

Transfer of verified information

Information about the actual use of the medicine is crucial in assessing the impact of the medicine, in assisting in future decisions about care, and in enabling safe transfer of care, especially when another health care provider is involved in continuing care.

This includes information about:

- the medicine that was issued at transfer and intended source for further supply
- the current treatment regimen (complete and accurate list of ALL medicines), including the medicine, route, dosage, dose form, reason for use and intended duration of therapy
- a description of changes to the therapy during the episode of care.

Transfer of information should occur only with the consumer's consent.

Transfer of verified information is crucial when the consumer's care is shared between health care workers and across the continuum of care. It is important that suitable quality assurance steps are in place to ensure the accuracy, completeness and timeliness of the information provided, and that it is in a format that is useful for the next health care provider.

The consumer is central to medication management and is involved in all components, but could have greater responsibility for some steps. It is expected that activities related to the supply, distribution and administration of medicines require significant consumer input, as do activities related to the supply of supporting information.

Figure 2 outlines the relationship between the components of the medication management cycle. The consumer is central. Starting with the decision to prescribe a medicine, the diagram shows the links between the nine steps listed above, ending at the point at which information is transferred to inform the next therapeutic decision.

The consumer's right to privacy and informed consent, which is implicit throughout the cycle, requires particular attention when information is transferred to the next episode of care.

In some circumstances, steps occur in parallel rather than in sequence. For example, an electronic prescribing system with decision support could simultaneously review the medicine order (Step 3) at the record of medicine order step (Step 2). On occasions, the steps may not occur in sequence, for example, when medicine information is provided as the medicine is ordered. The same person could be responsible for consecutive

steps. Generally, each step will be taken when medicines are used, although how they are taken could differ depending on the setting.

The consumer is the focus of the pathway, with direct involvement in some or all of the steps (e.g. when self medicating).

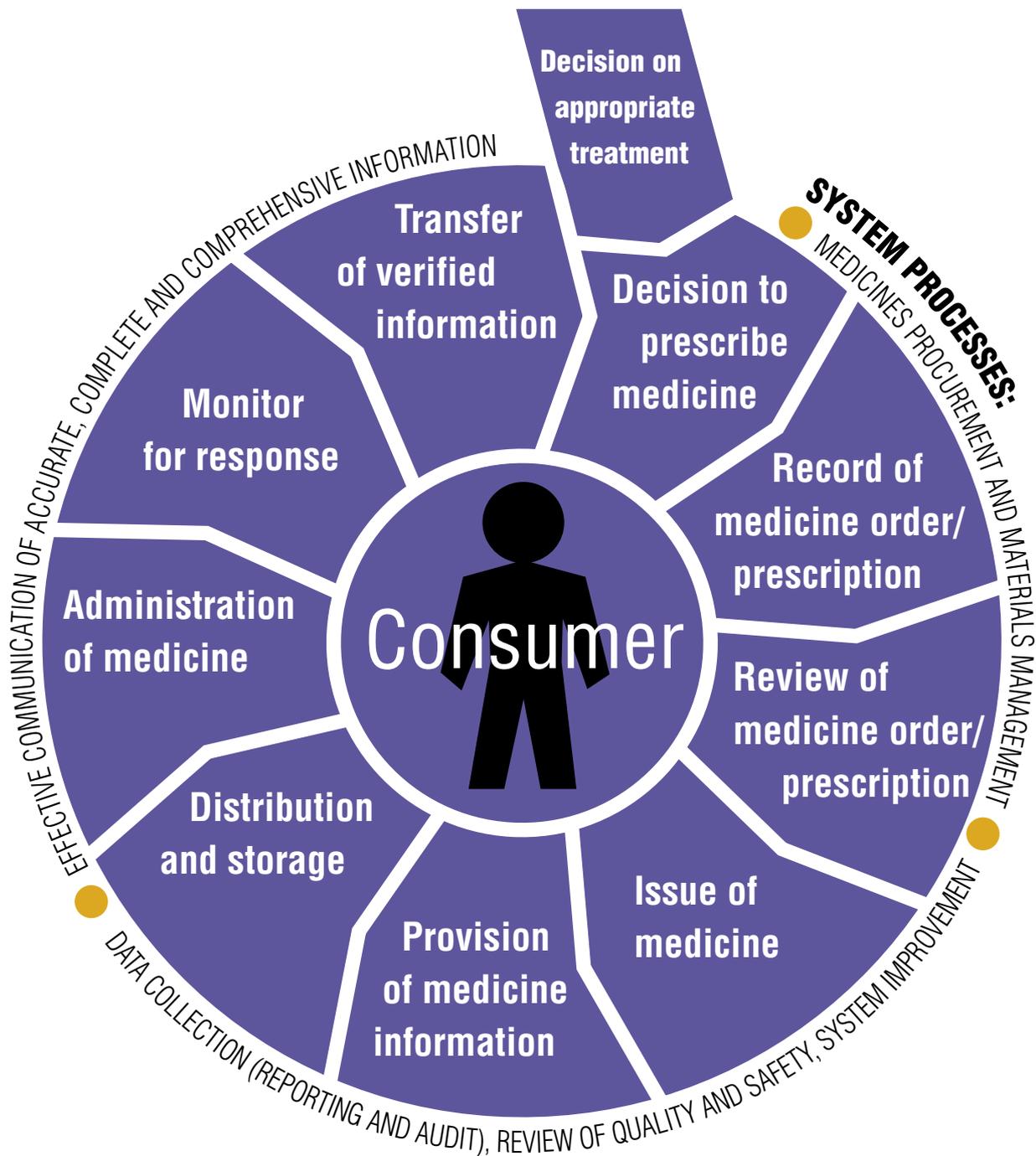


Figure 2: Medication Management Cycle [adapted from ^{15,16,22}]

System processes

The background processes usually occur on a system-wide basis rather than on the basis of individual consumers, although their ultimate aim is to ensure the quality use of the medicine for each consumer. These processes are:

- medicines procurement (according to formulary) and materials management
- data collection (reporting and audit), review of quality and safety, system improvement
- effective communication of accurate, complete and comprehensive information.

The pathway is a closed loop, as feedback on the effect of the medicine and transfer of information about the previous steps influences future decisions about treatment in the next cycle.

The continuity of medication management will be achieved when a series of medication management cycles, each of which corresponds to an episode of care, is linked so that information is transferred between cycles. This concept is presented in Figure 3.

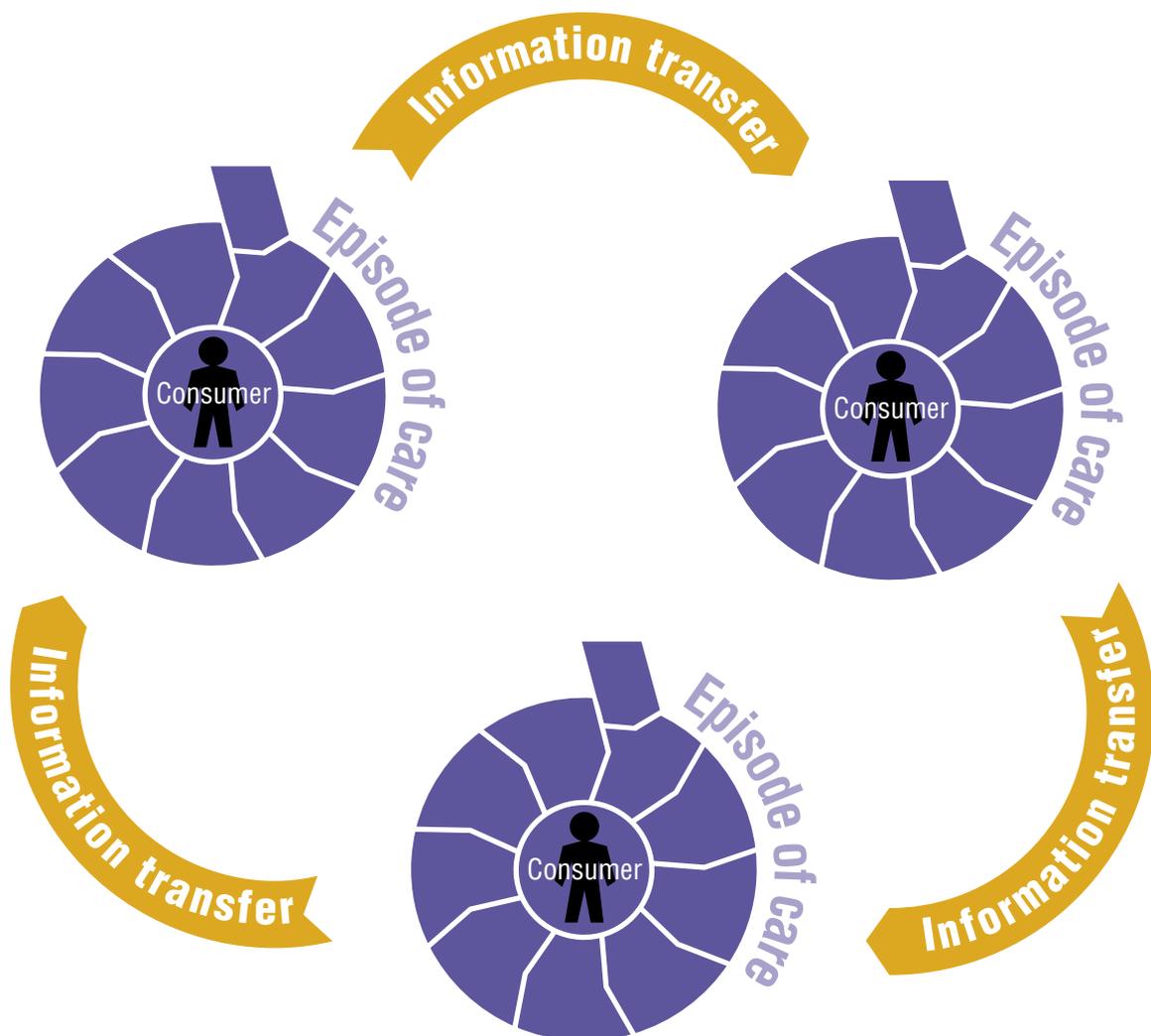


Figure 3: Continuity in medication management

Achieving continuity in medication management

Purpose

The Guiding Principles are intended to guide partners in the quality use of medicines in achieving continuity in medication management. They offer a systems approach to medication management, that is, they advocate a consistent and standard approach across all health care settings and health care providers. The audience for the Guiding Principles is the QUM partners, including government, health care professionals and providers, consumers and/or their carers, and others.

The Guiding Principles will:

- provide health care providers with a benchmark for developing operational standards of practice
- form a basis for acceptable standards of practice when:
 - formulating statements of consumers' rights and responsibilities
 - defining performance standards for all medication management initiatives
- assist consumers in understanding their responsibilities in the continuum of their health care, as well as the responsibilities of their health care providers.

Each setting will be responsible for identifying and developing suitable resources over time to implement the Guiding Principles, taking into account factors such as needs of the consumer base and the size and location of the service.

To ensure medication management across the continuum of health care, it is essential that each health care provider has policies and mechanisms in place to collect and maintain full and accurate information about consumers' medicines, and that the information is available at the point of care. Each health care provider should be able to demonstrate who is responsible for collecting and maintaining this information.

It is expected that implementation of the Guiding Principles will vary across settings. Each setting should therefore establish guidelines for managing medicines that are consistent with, and complementary to, these Guiding Principles. Guidelines are available for medication management in residential aged care facilities²⁰ and in the community care setting²¹. It is recommended that each state and territory health department and private health organisation adopt these Guiding Principles for medication management in its acute care facilities. The Guiding Principles apply to transfers of care within a facility as well as transfers from an acute care facility to the next provider.

Implementation of the Guiding Principles must fall within the framework of relevant (national and state or territory) privacy legislation that addresses the collection, use, storage and sharing of personal health information. Agreement on consent and privacy

considerations is inherent in the Guiding Principles and must include consent from consumers and/or their carers and health care providers to the use and transfer of information related to an episode of care, and recognition of the right to privacy.

How to use the Guiding Principles

Each of the ten Guiding Principles has:

- a heading
- a statement of the principle (in bold)
- an explanatory note

Guiding Principles 1–3 address the organisational requirements for achieving the medication management continuum; 4–9 outline the specific activities needed. Guiding Principle 10 is concerned with quality assurance, that is, implementing processes to ensure that continuity of medication management is achieved for sampled or selected episodes of care, thus ‘closing the quality loop’.

Each Guiding Principle should be read in conjunction with corresponding information in the Implementation Guide, which includes further explanation of each principle and information to support its implementation, such as examples and references to practice settings.

Future directions

The Guiding Principles have been written to facilitate continuity in medication management in keeping with current health care models, environments and resources. Given the enormous change and innovation in health care delivery over recent years, and the rapid growth in technology solutions, all methods for implementing the Guiding Principles cannot be captured in this static document. For example, it is expected that as Australia’s electronic health programs are implemented, they will incorporate these Guiding Principles. The underlying intention of the Guiding Principles will remain constant, as they have from the first edition, although channels to deliver them could change.

Guiding Principles

Guiding Principle 1 Leadership for medication management

Health service managers should provide leadership to ensure that the systems exist and resources are provided to enable medication management across the continuum of care.

This involves providing leadership at management level and undertaking and promoting implementation strategies to ensure that these Guiding Principles are acted upon at the clinical level in all health services.

Guiding Principle 2 Responsibility for medication management

Health service managers and health care professionals have a responsibility to participate in all aspects of medication management in partnership with consumers and/or their carers.

This responsibility includes ensuring that all components of medication management are completed in a timely way and that established goals are met.

As early as possible in an episode of care, the various responsibilities should be recognised and assigned to determine and achieve the medication management goals.

Guiding Principle 3 Accountability for medication management

Health service managers and health care professionals are jointly and individually accountable for making sure that activities to support the continuity of medication management are implemented.

At each step in the medication management continuum, procedures and related work practices should be developed, implemented, monitored and evaluated.

Guiding Principle 4

Accurate medication history

An accurate and complete medication history should be obtained and documented at the time of presentation or admission, or as early as possible in the episode of care.

Sufficient information should be sought to inform decisions for the safe, effective and timely care and treatment of consumers (this includes information about prescription and non-prescription medicines, including complementary health care products).

This information will form a basis for future decisions about therapy and should be confirmed with the consumer and where appropriate his/her health care professionals.

Guiding Principle 5

Assessment of current medication management

From the early stages and throughout each episode of care, current medicines and other therapies should be assessed to ensure the quality use of medicines, which means selecting management options wisely, choosing suitable medicines if a medicine is considered necessary, and using medicines safely and effectively.

During the episode of care, assessment should:

- be documented
- be ongoing (continually re-evaluated)
- contribute to the overall care plan
- inform the Medication Action Plan.

Guiding Principle 6

Medication Action Plan

A Medication Action Plan should:

- **be developed with the consumer and relevant health care professionals as early as possible in the episode of care**
- **form an integral part of care planning for the consumer**
- **be reviewed during the episode of care and before transfer.**

Consumers and/or their carers should be provided with suitable education and information about the plan, including advice about matters such as the affordability

and accessibility of medicines, so that they are equipped to collaborate on the development of the plan and reach agreement about:

- the treatment goals
- changes to medication management
- the overall care plan.

This should be a continuing process, with further collaboration and agreement when changes to the plan are proposed. The plan should be fully documented and communicated, with the consent of the consumer, to all relevant health care professionals.

Guiding Principle 7

Supply of medicines information to consumers

Before consumers transfer to another health care provider, they and/or their carers will receive sufficient information, in a form they can use and understand, to enable them to safely and effectively use all medicines in accordance with the agreed Medication Action Plan.

Consumers and/or their carers will be provided with written material (e.g. Consumer Medicine Information), discharge/transfer medication record, information on the availability and future supply of medicines), medication counselling and any other information or medication aids considered necessary to support them in accessing and managing their medicines.

Guiding Principle 8

Ongoing access to medicines

Consumers and/or their carers should receive sufficient supplies of appropriately labelled medicines (with the active ingredient name and brand name displayed) and information about how to obtain further supply of medicines to support their Medication Action Plan.

To make sure that quality of care is not compromised, the health service should ensure that, before the consumer is transferred to another episode of care, sufficient medicines are supplied to, or arranged for, the consumer in a planned and timely fashion. This means enough medicine to carry the consumer through to the next appointment (such as doctor or outpatient clinic, for example), or to complete the course of treatment.

Health services and health care professionals should give consumers and/or their carers sufficient instructions about how to obtain supply of continuing medicines. This may include health services or health care professionals organising an appointment with another health care provider for the next episode of care.

Guiding Principle 9 Communicating medicines information

When a consumer is transferred to another episode of care, the transferring health care provider(s) should supply comprehensive, complete and accurate information to the health care provider(s) responsible for continuing the consumer's medication management in accordance with their Medication Action Plan.

The method of delivery of information should be timely, mutually agreed among health care providers, have the consumer's consent, and be consistent with privacy and confidentiality regulations.

Guiding Principle 10 Evaluation of medication management

The transferring health care provider is responsible for evaluating the extent to which continuity of consumers' medication management has been achieved.

It is the responsibility of the transferring health care provider to evaluate the medication management components of sampled or selected episodes of care to ensure that continuity of the consumer's medication management has been achieved.

This part of the document provides some of the underlying rationale to the Guiding Principles and some specific strategies for their implementation. It does not describe the resources required for implementation. Each setting will be responsible for identifying and developing appropriate resources over time, taking into account factors such as needs of its consumer base and the size and the location of the service.

In general terms, implementation will be achieved when health care providers:

- develop and implement **policies** to address the Guiding Principles
- develop and implement **procedures** to support the policies
- identify **people responsible** for undertaking procedures
- define **core data sets** outlining minimum standards of information required
- provide **templates** for documentation of components of medication management
- provide **training** to ensure all activities are undertaken in accord with the Guiding Principles
- **monitor performance** indicators and implement system improvements.

The Guiding Principles are phrased in broad terms so that they can be applied in a range of settings. It is expected that each setting will need to develop suitable strategies to reflect individual needs, resources and constraints. Implementation plans will vary from setting to setting and within settings, depending on the needs of individual consumers and the nature of the episode of care.

Guiding Principle 1

Leadership for medication management

Health service managers should provide leadership to ensure that the systems exist and resources are provided to enable medication management across the continuum of care.

Leaders of health services and senior health care professionals should ensure that there is an overarching policy to direct and resource medication management in their service. The policy should address all aspects of the medication management cycle relevant to their service. It should also address the obligation to provide other services with sufficient information to complete their parts of the medication management cycle. Each setting will be responsible for identifying and developing appropriate resources over time. Funding bodies and providers need to show leadership to ensure that sufficient resources are available to support implementation.

This Guiding Principle is concerned with establishing an environment, in all health care settings, that facilitates medication management across the continuum of care.

Examples of application in different settings

In most hospital settings, it is expected that all steps of the medication management cycle would need to be addressed when developing policies and procedures. However, in a community setting where different providers contribute to the medication management cycle, it is reasonable that each provider's policies address those parts of the medication management cycle for which the provider is responsible, and also consider requirements for the next episode of care.

Some examples are:

- policies for a hospital to address the roles of doctors, nurses, pharmacists, consumers and any other health care professionals in all steps of the medication management cycle
- policies for a nursing service to address review of medicine order, issue of medicines, monitoring of response and transfer of information
- policies for a general practice to address decision to prescribe, monitoring of response and transfer of information
- policies for a community pharmacy to address review of prescription, supply of medicine, supply of information, distribution, and transfer of information.

'Transfer of information' in each of these examples should consider the nature and content of information required for the next episode of care and the method and timing of transfer.

For example, requirements might be:

- Nurses should record information about administration and response to medicines, and transfer this to another health care provider, such as a hospital or doctor.
 - Pharmacists should provide appropriate medicine information to consumers to encourage safe and effective use of medicines. They should also have a role in ensuring the accuracy and completeness of the record transferred to the next health care provider.
 - Doctors should record comprehensive information about medication management and forward a written summary at the same time they refer a consumer for admission to hospital.
 - Hospitals should ensure that the responsibility for recording comprehensive information about medication management is delegated, and that relevant aspects of this information are transferred verbally, in hardcopy and/or electronically, depending on the recipient. For example, hospital managers should ensure that there is a policy for providing verbal and written information to consumers before they are discharged or transferred, or that there is a policy for faxing information to doctors, using a standard template.
-

Once policies have been endorsed at management level, health care providers should ensure that policies are implemented at the level of consumer care. This can be achieved by developing procedures and related work practices suited to the type of care provided.

Procedures for managing medicines for consumers undergoing elective surgery in a day surgery unit could include provision for order and supply of selected medicines. For example, it is not expected that a provider of eye surgery services would take responsibility (e.g. order, supply, administer, monitor, etc.) for medicines that the consumer uses for other conditions. However, there would be a responsibility to obtain information about other medicines in case they affect the current episode of care (e.g. aspirin increases the risk of bleeding), and to ensure that any new, relevant or additional information is transferred to the next provider/episode of care in the continuum.

Example of application in different types of care

Health care providers might want to adopt a three-tier framework for developing policies, procedures and related work practices to support medication management. The framework includes:

Policies	Policies outline what the service will provide and why. Policies are for both internal and external audiences because they assist management, staff and consumers in understanding how the organisation will achieve its mission and goals.
Procedures	Procedures explain how to implement the policies or provide the services. Procedures are for internal audiences because they assist a range of staff by providing an agreed set of actions and responsibilities in order to achieve a consistent and coordinated approach to service delivery.
Workplace instructions	Workplace instructions explain to frontline workers the processes involved in delivering the service. They provide detailed assistance to the specific staff working in the area and have no, or limited, relevance outside that work area.

Guiding Principle 2

Responsibility for medication management

Health service managers and health care professionals have a responsibility to participate in all aspects of medication management in partnership with consumers and/or their carers.

Every person involved in the medication management cycle should be aware of his/her own role in the cycle. They should accept responsibility for their role and for enabling their step to be integrated with other steps in the cycle.

Each health care provider should have procedures or other work practice documentation that enables all staff members to have a clear understanding of their respective responsibilities.

It is particularly important to state how responsibilities are assigned for those steps that are not clearly aligned with one health care profession, such as:

- collection and transfer of complete and accurate medicines-related information (e.g. medication history, discharge/transfer medication record)
- medicines review and monitoring of response
- managing medicines during specific circumstances.

Responsibilities can be delegated. Delegation can be at the discretion of health service managers, who are usually responsible for all services provided in their jurisdiction, or it can depend on when and where services are provided, for example, normal business hours versus after-hours arrangements; emergency department versus outpatient settings.

Where responsibility is shared, it might be necessary to articulate how this will work.

In a hospital setting, procedures for managing medication will be needed for all steps in the medication management cycle. Following is an example of how responsibilities might be assigned:

- Responsibility for **decision to prescribe** and medicine order assigned to doctors
- Responsibility for **medication review** shared between doctors, nurses and pharmacists
- Responsibility for **supply** of medicines and **supporting information** and **distribution** assigned to pharmacy department/pharmacist
- Responsibility for **administration** assigned to nurses
- Responsibility for **monitoring of response** and **transfer of information** shared among doctors, nurses and pharmacists, depending on type of location and care. For example, for elective admissions, the responsibility for obtaining and transferring information in order to inform the decision to prescribe (the medication history) could be assigned to the pharmacist or nurse, whereas for an emergency admission, this responsibility could be assigned to the doctor or pharmacist
- Responsibility for **active participation** in all aspects of medication management assigned to consumer.

Examples of responsibilities that should be specifically assigned or delegated according to each situation and available resources

In a community setting, a doctor might delegate responsibilities as follows:

- Responsibility for **medication history** assigned to accredited pharmacist via Home Medicines Review
 - Responsibility for **medication review** shared with accredited pharmacist, with input from community nurse
 - Responsibility for **monitoring of response** shared with a nurse
 - Responsibility for **transfer of information** shared with general practice office manager.
-

Each health care provider should also provide information for consumers and/or their carers, advising them about their responsibilities.

Example of information for consumers and/or their carers

A general message to consumers and/or their carers should be that they maintain a current list of all their medicines (prescription and non-prescription, including complementary health care products), bring the list with them to all their health care appointments (including if they need to go into hospital), and request that it is updated and reviewed as necessary.

Consumers have a critical role in reporting any effects/side effects their medicines could be having and/or difficulties (if any) that could reduce their ability to follow the medication regimen.

Hospitals should promote the additional message to consumers and/or their carers that they should bring all their medicines to hospital with them.

Guiding Principle 3

Accountability for medication management

Health service managers and health care professionals are jointly and individually accountable for making sure that activities that support the continuity of medication management are implemented.

Each health care provider is individually accountable for his or her assigned responsibilities. This accountability cannot be delegated. The health care provider is also jointly accountable, with other team members, for ensuring that all aspects of medication management in the continuum are undertaken, monitored and evaluated.

This accountability is not limited to the episode of care in which health care providers are directly involved, since there is an implicit requirement to ensure that each consumer is transferred smoothly to the next episode of care.

Accountability should be included in staff duty statements, supported with staff training, and evaluated through performance indicators and other performance assessment.

Responsibility and accountability for documenting a comprehensive and accurate medication history for each consumer may be assigned to the leader of the admitting medical or surgical team (doctors). The leader (e.g. consultant) of the medical/surgical team may delegate this responsibility to a pharmacist(s), such as the pharmacist in the pre-admission clinic for elective surgery consumers or in the emergency department. For medical consumers, it may be the ward pharmacist at certain times (e.g. normal business hours) and the resident medical officer at other times (e.g. after-hours). However, the consultant remains accountable for documentation of the medication history. If the documentation is not completed for some reason (e.g. the pharmacist is not available), then the consultant should have a contingency arrangement in place. The consultant is accountable for ensuring the medication history is documented and used as a basis for ongoing care provided by the team.

Responsibility and accountability for supply of medicines may be assigned to the director of pharmacy (or the designated manager of the pharmacy service). The director of pharmacy may assign various responsibilities related to supply of medicines, such as contingency arrangements for out-of-hours supply (e.g. an 'emergency cupboard'). However, the director of pharmacy continues to be accountable for this part of the medication continuum, despite the delegation of responsibilities to pharmacy staff and other non-pharmacy staff. In this scenario, the director of pharmacy is also accountable for ensuring that other staff (e.g. nurses) are suitably trained to undertake their responsibilities (e.g. trained in use of the 'emergency cupboard')

Examples showing how accountability is demonstrated in a hospital setting

Responsibility and accountability for administering medicines to each consumer may be assigned to a nurse (in accordance with state/territory legislation). The nurse is accountable for ensuring that medicines are either administered or that if they need to be withheld, or are refused, this is documented, and the treating doctor is informed where applicable.

Responsibility and accountability for self-administration of medicines may be assigned to consumers following consultation with health care professionals. Consumers are accountable for administering their medicines or for informing health care professionals where they choose not to take their medicines.

All health care providers, together with the consumer and/or their carers, share joint responsibility and accountability for the continuing process of monitoring and documenting the consumer's response to medicines.

Where the designated health care professional, such as the ones in these examples, is not on staff or on duty in a health service, an alternate health care professional should be assigned.

Guiding Principle 4

Accurate medication history

An accurate and complete medication history should be obtained and documented at the time of presentation or admission, or as early as possible in the episode of care.

Obtaining the medication history—the interview

The intention of this Guiding Principle is to document an accurate and complete medication history that can be used throughout the episode of care to avoid duplication of recording and potential discrepancies between information sources.

A medication history is a record of all the medicines actually taken by the consumer in the period before admission or presentation for the episode of care. Complete and accurate documentation is needed to establish a basis for all decisions about medication management. Ideally, the medication history will be captured in a setting that gives the consumer the opportunity to recall the name and purpose of each of their medicines in response to prompting questions from the interviewer/health care professional. This is during the medication history interview. Consumers and/or their carers and health care professionals need to be aware of the need to have relevant medicine information available at the start of each episode of care. The medication history interview is the opportunity to focus on optimising medication management during the episode of care.

For elective admissions, a medication history should be documented as part of the pre-admission process. Some facilities involve the consumer's usual doctor in this process. Consumers and/or their carers should be encouraged to bring with them to the pre-admission clinic: all their medicines (prescription and non-prescription medicines, including complementary health care products), lists of medicines, repeat prescriptions, and any other information that could help accurately record what they have been taking (e.g. warfarin book). If the pre-admission assessment is conducted off-site (e.g. by telephone), consumers and/or their carers should be encouraged to have these items with them for reference. The person recording the history should use open-ended questions and, as far as possible and with the consumer's assistance, document the consumer's understanding of dose, directions and indication, checked against the label, medicines list or prescription. Except for medicines that must be withheld before surgery, or unless a serious contraindication or dangerous treatment regimen is detected, consumers and/or their carers should be advised to continue their current medication regimen until after their procedure. However, medication issues should be flagged for attention after the procedure/during the admission (refer Guiding Principle 5).

For unplanned admissions, a medication history should be documented as early as possible in the episode of care. However, because of the consumer's acute condition and the probable absence of the various prompts (such as medicines, repeat prescriptions), it could take longer to document the medication history.

Example of
obtaining the
medication
history

It is likely that information would be gathered over several interviews as the consumer and/or their carer recall their medicines and/or the prompts become available. This means it is important for the medication history to be documented in a way that allows it to be readily accessed and, amended or updated as necessary when new information becomes available. For inpatients, it is appropriate that medication issues identified when the medication history is taken are addressed as soon as possible (refer Guiding Principle 5).

On admission to a facility or provision of a service, the consumer should be given the opportunity to consent to the exchange of relevant health information between their nominated health care professionals. Consumers could receive medical services from a number of doctors and there could be confusion about an accurate medication history. Where consumers have the majority of their prescriptions dispensed at a single community pharmacy, the consumer could identify that pharmacy at the time of admission. A consent form can be faxed to the pharmacy and an accurate medication dispensing record faxed back to the facility. Hospital protocols should cover emergencies where consumer consent cannot be obtained directly.

Consumers and/or their carers should:

- be asked to give consent for health services and health care professionals to access and provide (to other health care providers) their medicine information to enable them to provide optimal care
- maintain a list of all their current medicines, noting those recently ceased or not being taken (this should be promoted as a positive health habit)
- bring this list and any other information, including their current medicines, to the episode of care
- actively assist health care professionals in collating a complete and accurate medication history.

Health services should:

- develop mechanisms for the early transfer of information, which could be via pre-admission activities or information provided or obtained at the start of the episode of care. It is recognised that many admissions are through emergency departments, and are therefore made without a referral, but sufficient information should be provided or obtained to inform decisions about immediate, safe and effective care or treatment, via contact and engagement with community providers early in the episode of care
- provide access to effective education strategies within health services to facilitate this Guiding Principle
- facilitate documentation of the medication history by allocating resources (e.g. funding a medication history service in the pre-admission clinic and emergency department, using a pre-printed standard template for a medication history)
- implement procedures to support the early transfer of information (e.g. ambulance transfer procedures should include bringing the consumer's medicines to hospital with the consumer).

Health care professionals should:

- be skilled in obtaining a medication history, and know how to access comprehensive information about medicines, including medicine names
- consider all information sources and determine the accurate and complete list where discrepancies exist (this may include contacting other health care professionals in another setting)
- actively encourage and where necessary assist all consumers and/or their carers in keeping an up-to-date record of all their current medicines—prescription and non-prescription, including complementary health care products. This record should be available to all involved in the consumer’s care, so that it can be easily produced when needed for reference by other health care providers, for example, in an emergency
- record details of medicines prescribed, any adverse reactions, and other relevant information on the consumer’s medication record
- adopt a team approach that involves the consumer and other health care professionals and consult them about:
 - the appropriateness and effectiveness of current medicines, and rationalising them if indicated (including ceasing the use of some medicines)
 - problems associated with current medicines, including any possible adverse medicine events associated with the episode of care
 - allergies and any previous adverse medicine events.

The quality of the information obtained from consumers and/or their carers depends on the quality of the reviewer’s interviewing and reviewing techniques, knowledge and skills. Staff training should include skills development and assessment to ensure the quality of the data obtained. An interview should cover the elements listed below.

Minimum data set for the medication history

As a **minimum**, a medication history should include:

- consumer details
- date of documentation
- name of person that recorded the history
- a list of medicines (see below) and the source of the information
- information about previous adverse medicine events and allergies
- a checklist of the questions asked in the medication history interview.

As a **minimum**, for each item on the medication list, the following information should be recorded:

- medicine, clearly identified (active ingredient name, brand name, strength, dose form)
- dose, route and administration schedule (as actually taken by the consumer)
- when started/duration of therapy
- action/indication (as reported by the consumer).

It helps to ask specifically about current prescription and non-prescription medicines, including complementary health care products, social drug use (such as cigarettes, alcohol, and marijuana), recently ceased medicines and medicines used intermittently.

A training and support package for obtaining and documenting a medication history is included in the Queensland Health Medication Management Manual²².

More information is available in The Society of Hospital Pharmacists of Australia (2004), Standards of practice for clinical pharmacy, Appendix A – Accurate medication history.

Guiding Principle 10 provides an evaluation framework for assessing an accurate medication history.

Guiding Principle 5

Assessment of current medication management

From the early stages and throughout each episode of care, current medicines and other therapies should be assessed to ensure the quality use of medicines, which means selecting management options wisely, choosing suitable medicines if a medicine is considered necessary, and using medicines safely and effectively.

Assessment of all current medicines and how they are currently managed should involve the consumer and/or their carer as well as health care professionals.

A health care professional (a pharmacist is ideal) will review each medicine in consultation with the consumer and/or their carer and, where appropriate, with their doctor and/or nurse, to determine whether:

- there is a clear indication for continuing therapy with each medicine
- the dose and frequency appear to be appropriate for that indication
- the dose form is appropriate for that consumer
- there are contraindications (due to previous allergies/adverse medicine events or clinical conditions)
- the consumer has been taking the medicine as prescribed or directed (see 'assessing adherence' below)
- the medicine has been achieving the goals of therapy
- there are any medicines that have been inadvertently omitted
- there has been appropriate monitoring of the medicine (e.g. serum levels/biochemistry, intolerable side effects)
- there are detrimental interactions with other medicines or food
- there is duplication of medicines
- polypharmacy is an issue.

Example of assessment of current medication management

Assessing adherence

The assessment should consider the potential for accidental or deliberate misuse of medicines by consumers in a community/independent living setting. Assessing adherence can be done in partnership with the consumer. For example, in cases of dementia or head injury, the prescription/dispensing record can be checked to determine the frequency of repeat prescriptions, and compared with the recommended dosage schedule.

The assessment should consider the way consumers currently manage their medicines. This will help to determine whether consumers will require help in managing medicines (including administration of medicines) after their transfer from an episode of care. When consumers and/or their carers are from culturally and linguistically diverse backgrounds, the need for an interpreter should be assessed immediately. Appropriate consultation should occur with Indigenous consumers and/or their carers. The needs of consumers who are visually impaired, hearing impaired or have other disabilities should also be addressed. When appropriate, a carer should be involved in the consultation.

Example of identifying barriers to adherence

Health care professionals should consult a consumer and/or their carer to determine whether:

- there are matters related to the consumer's ability to consume/administer the medicines as ordered, for example, the consumer has swallowing difficulties, is refusing medicines, or medicines are being crushed/mixed with food or fluids
- there are factors preventing adherence to the intended treatment regimen, such as insufficient knowledge about the regimen, confusion between medicine names, cost issues, personal beliefs, cultural attitudes and behaviours
- the consumer is experiencing unintended effects on daily activities, or side effects
- the consumer has any disabilities that could limit them in managing and administering their medicines, such as the ability to read labels, open containers, or use administration devices such as inhalers
- the consumer self-administers medicines or receives assistance from a carer or other individual.

The assessment should begin early in the episode of care and continue throughout it.

Example of ongoing assessment

Assessment should be a collaborative process during an episode of care and include observations by health care professionals and feedback from consumers and/or their carers to determine whether:

- there are any new adverse medicine events (especially intolerable side effects)
- the expected response is achieved, or medicine(s) should be discontinued due to lack of response
- clinical factors such as other diagnoses/nutritional status are affecting response
- lifestyle factors such as diet/smoking are affecting response
- the dose, frequency or duration of treatment should be modified
- the consumer is persistently refusing medicines.

The assessment of medicines and medication management should be fully documented, as the information will provide a basis for the Medication Action Plan, which will outline how to address identified issues (refer to Guiding Principle 6).

Activities involved in assessing current medicines and medication management will vary according to the health care setting and the knowledge and experience of the primary assessor, who may be a doctor, pharmacist or nurse, or the consumer and/or their carer.

Following are examples of resources to assist in assessment:

- the National Prescribing Service (NPS) guidelines for medication review, which primarily target doctors but are applicable to a wider audience at <www.nps.org.au/resources/patient_materials/medication_review_pad.pdf>
 - the NPS has also published Medimate, which is intended to assist consumers and/or their carers in managing their medicines at <www.nps.org.au>
 - the Society of Hospital Pharmacists of Australia Standards of Practice for Clinical Pharmacy (2004), Appendix B—Assessment of current medication management, Appendix C—Clinical review, Appendix D—Decision to prescribe, Appendix E—Therapeutic drug monitoring, Appendix J—Adverse drug reaction management, at <www.shpa.org.au>
 - the Pharmaceutical Society of Australia has published Medication Review: A Process Guide for Pharmacists at <www.psa.org.au>
 - the Australian Government has provided material on Home Medicines Review at <www.health.gov.au/epc/dmmr.htm> and <www.hic.gov.au/providers/incentives_allowances/pharmacy_agreement/about_hmr.htm>
 - information on Home Medicines Review can also be obtained from the Australian Association of Consultant Pharmacy at <www.aacp.com.au>
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Assessment
resources

Guiding Principle 6 Medication Action Plan

A Medication Action Plan should:

- be developed with the consumer and relevant health care professionals as early as possible in the episode of care
- form an integral part of care planning for the consumer
- be reviewed during the episode of care and before transfer.

The Medication Action Plan is a continuing plan for the use/management of medicines that is developed in collaboration with the consumer and/or their carer. It is intended to support health care professionals and consumers and/or their carers in developing suitable strategies to manage medicines. Initially, it will usually be based on information gathered from the medication history (Guiding Principle 4) and assessment (Guiding Principle 5), and should include the following key elements:

- actual and potential medication management issues (problems and needs, including risk assessment) identified during assessment (Guiding Principle 5)
- medication management goals
- actions/strategies in line with best evidence that are required to address the issues and achieve the medication management goals.

This Medication Action Plan is intended for use by, and sharing among, all health care providers and the consumer and/or their carer. The plan should be considered in the context of the overall management plan developed for each consumer and could form part of other health service documentation and/or be incorporated in other processes. Health care providers should have policies and procedures in place to address questions such as who creates the Medication Action Plan, who is authorised to modify the plan and at what stage or frequency the plan is formally reviewed.

Although a Medication Action Plan is a living document which travels with the consumer and is reviewed and updated during each episode of care, health care providers should retain a copy in the medical record which is current at the time of transfer/discharge.

Figure 4 highlights the importance of a Medication Action Plan in achieving continuity in medication management. The Medication Action Plan is within the medical record and is an ongoing plan for the use/management of medicines.

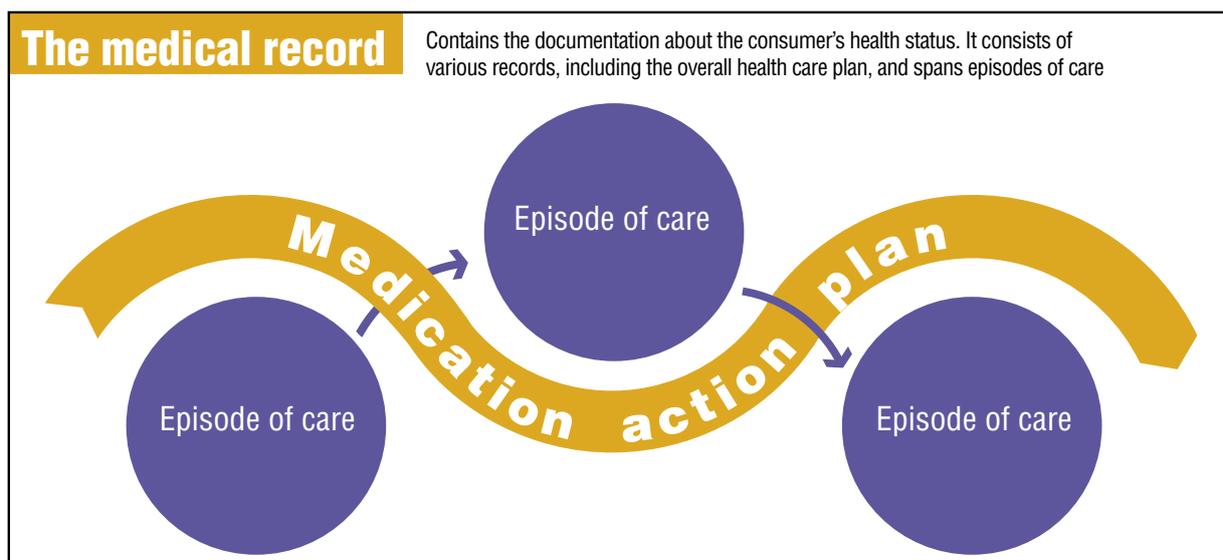


Figure 4: The relationship between a medical record and a Medication Action Plan

Some medication plans are funded separately and it is not intended that Guiding Principle 6 be limited to those funded items, for example, a Medicare Schedule Item 900 (Enhanced Primary Care item for Medication Management Review). Other items could apply, for example, Medicare Schedule Items 746, 749 and 757 (Enhanced Primary Care items for discharge case conferencing).

If the assessment reveals that a consumer:

- cannot self-administer medicines following transfer from the episode of care, then this should be documented in the Medication Action Plan together with alternatives, such as identifying who will administer medicine, and/or ensuring that support services are organised in a good time
- cannot swallow whole tablets or capsules, then the Medication Action Plan can outline strategies such as supplying all medicines as liquids or dispersible tablets
- has had an adverse medicine event, then this should be noted in the Medication Action Plan
- has not achieved adherence, then this should be noted in the Medication Action Plan.

Examples of how assessment informs development of the Medication Action Plan

Information that could be included in a consumer's Medication Action Plan

A Medication Action Plan could include:

- consumer identification and general information
- a list of all current medicines, noting those recently ceased or not being taken
- risk assessment (e.g. adverse medicine events, allergies, visual impairment and administration aids)
- action plan (e.g. description of the problem (issues), goals of therapy, action to be taken to achieve goals, person responsible for action, date for completion)
- documentation of the concordance discussion with the consumer and relevant discussions with other health care providers
- communication details (e.g. who and where the Medication Action Plan was sent to and whether referral was recommended).

Useful resources

An example template for a Medication Action Plan is available at Queensland Health <<http://www.health.qld.gov.au/quality/publications.asp>>

Further information on clinical pharmacy activities and how these assist to develop the components of the clinical pharmacist's Medication Action Plan and finally the shared Medication Action Plan are available in The Society of Hospital Pharmacists of Australia (2004). Standards of practice for clinical pharmacy, Section 4.1 Procedures—Medication Action Plan, Section 10.2 Documentation—Medication Action Plan.

Example comparing the Medication Action Plan with an Asthma Action Plan

The health care community is generally familiar with the concept of an Asthma Action Plan (<www.health.gov.au/pq/asthma/pubs.htm>) and the manner in which it is developed, monitored and routinely reviewed in consultation with the consumer. The same principles apply to a Medication Action Plan, but the focus is on overall medication management, rather than just one diagnosis or disease. Just as consumers are encouraged to carry their Asthma Action Plan with them, they should be encouraged to carry their Medication Action Plan and share it with health care providers as necessary.

Guiding Principle 7

Supply of medicines information to consumers

Before consumers transfer to another health care provider, they and/or their carers will receive sufficient information, in a form they can use and understand, to enable them to safely and effectively use all medicines in accordance with the agreed Medication Action Plan.

This should take place in a well-timed way during an episode of care so that by the end of the episode, consumers and/or their carers will have received both (verbal) counselling and written information to support them in managing their medicines. This includes information about medicines at home that are to be discontinued. Strategies to achieve this include consumers and/or their carers:

- receiving verbal information about medicines that they have stopped taking during the episode of care and how these relate to current medicines and any new medicines commenced during the episode of care. This should address any potential confusion about changes in medicines and brands that can occur during an episode of care
- being provided with a package containing relevant medicine information, such as Consumer Medicine Information, a discharge/transfer medication record, a Medication Action Plan, the active ingredient name, the brand name and possible alternative brand names for the same medicine, and information on the availability and future supply of medicines. Where appropriate, consumers and/or their carers will also be provided with information on medicine reviews (e.g. Home Medicines Review)
- having training and practice in the self-administration of any new medicines. This may include establishing medication self-administration programs in health services. Examples of self-administration guidelines and protocols should be made available to consumers and/or their carers.

Before a consumer transfers from an episode of care, health care providers, residential-aged care facilities and other services should ensure that the consumer clearly understands the rationale and consequences of any change in their medicines as a result of the episode of care.

The verbal and written information provided should be dated and cover areas such as:

- active ingredient and brand names
- purpose and action
- dose, route and administration schedule
- special instructions about missed doses
- special directions and precautions

Verbal and
written
information

- common side effects, potential interactions and how to manage these
 - storage requirements
 - safe ways to dispose of medicines
 - relevant contact details for health care professionals and health services for any follow-up information.
-

Information given to consumers and/or their carers should be user-friendly and where possible, provided in one clear and concise package. The needs of consumers who are visually or cognitively impaired or are from culturally and linguistically diverse backgrounds should be addressed. Some of the topics that should be addressed where relevant are:

- **Brand names**

Multiple brand names for medicines can cause significant confusion for consumers and/or their carers and some health care professionals. Health service staff should be aware that the medicines they use and provide might not be familiar to community health providers and might not be readily available outside the health service.

Consumers and/or their carers can be confused by multiple brands of the same active ingredient. To minimise the potential for errors caused by confusion about brand names, health care professionals should confirm that consumers understand and recognise the active ingredient name of all their medicines.

Before the current episode of care, consumers and/or their carers could have received brand-specific Consumer Medicine Information (CMI) for the medicines that they are taking. Health care professionals should ensure that the consumer is aware that as CMIs are brand specific, previous supplies of medicines information for different brands of medicines with the same active ingredient could have been presented in a different format. If not addressed, this could cause confusion.

At all stages of an episode of care, careful attention should be given to educating health care providers and consumers and/or their carers, and providing information about the name of the active ingredient, brand names, alternative brand names and look-alike/sound-alike names, in order to avoid confusion.

- **Entitlements**

Consumers and/or their carers should be given specific information about entitlements and an explanation of the safety net under the Medicare Benefits Scheme (MBS), Pharmaceutical Benefits Scheme (PBS) and the Repatriation Pharmaceutical Benefits Scheme (RPBS), together with an indication of costs of any medicines not covered by such schemes.

- **Tests**

When consumers need to take tests to monitor medication management (e.g. anticoagulant tests), health care providers should provide information about the tests and discuss the details. The information should include the reason for the

test(s) and instructions about how to get them done. The consumer should be given the information before being transferred from the episode of care.

- **Medication management reviews**

Consumers and/or their carers should be provided with verbal and written information about medication management reviews, including how to arrange a routine medication management review.

Open communication between health care providers and consumers and/or their carers is needed to ensure that a consumer's medicine list is current, accurate and used by all parties. If various health care providers prepare medication histories without reference to one another, the consumer could have multiple medication histories that are not identical. The various health care providers should communicate about a consumer's medication history to ensure that an accurate, current history is compiled and used by all parties, with the consumer's consent.

Up-to-date resources need to be easy to access in clinical practice areas in hospitals, in resource libraries in general practices and nursing services, and in community libraries for consumers and/or their carers. Useful resources include:

- Australian Medicines Handbook (<www.amh.net.au>)
- Therapeutic Guidelines (<www.tg.com.au>)
- Therapeutic Advisory Information Service (1300 138 677)
- Medicines Line (1300 888 763)
- Poisons Information Centre (131 126)

Example of health professional practice standards:

- The Society of Hospital Pharmacists of Australia. Standards of practice for the provision of consumer medicines information by pharmacists in hospitals September 1999. *Australian Journal of Hospital Pharmacy* 2000; 30 (5): 225–8
- The Society of Hospital Pharmacists of Australia. Guidelines for counselling patients receiving drugs used in the treatment of neoplastic disease: a pharmacist's guide to advisory labels and patient information October 2000. *Australian Journal of Hospital Pharmacy* 2001; 31 (1): 51–5.
- The Society of Hospital Pharmacists of Australia. (2004). Standards of practice for clinical pharmacy, Appendix H— Provision of medicines information to patients.

When a consumer starts a new medicine it should be accompanied by appropriate education programs, which might include:

- individual consumer counselling with CMI or other written information
- use of audio and video tapes
- dose administration aids
- instructions for certain forms of administration, such as eye drops.

Needs-based continuing education programs should be in place in hospitals, general practices, nursing services, and in the community.

Examples of application

Minimum information provided to a consumer on transfer

At time of transfer, each consumer should be provided with a package of relevant information about their medicines and ongoing access to medicines. As a minimum, a consumer should be provided with:

- important consumer-specific medicine information (e.g. documentation about adverse medicine events, allergies and medicines that have been ceased)
- a Medication Action Plan (which includes a list of all medicines expected to be taken by the consumer at discharge/transfer)
- information about intended duration of therapy and instructions on reducing/ceasing therapy where appropriate
- written medicines information (e.g. Consumer Medicine Information)
- prescriptions/repeat prescriptions (supplied where appropriate)
- information about medicine costs (information leaflets outlining the cost of subsidised/non-subsidised medicines should be available to the consumer where appropriate)
- instructions for monitoring medicine (e.g. if applicable, information about a Home Medicine Review, or monitoring information such as the need for specific tests and how to get them done)
- information on types of monitoring aids (e.g. diabetes sugar level record)
- other helpful information (useful consumer resources e.g. Medimate).

Guiding Principle 8

Ongoing access to medicines

Consumers and/or their carers should receive sufficient supplies of appropriately labelled medicines (with the active ingredient name and brand name displayed) and information about how to obtain further supply of medicines to support their Medication Action Plan.

Sufficient supply

Health care professionals should ensure that a consumer receives a sufficient supply of medicines in a planned and timely way. This means enough medicine to carry the consumer through to the next appointment or visit (e.g. doctor, outpatient clinic), or to complete the course of treatment, according to the therapeutic goals. Supply could be by hospital or community pharmacies.

Before the transfer occurs, the medicines to be taken after transfer should be reviewed. In addition to clinical review, other relevant issues should be considered, including the cost of the medicines, and the ongoing availability and supply of clinical trial medicines and non-PBS items. Health care providers should not commence clinical trial or compassionate use medicines unless the consumer is informed and consents to the fact that the continuing subsidy and/or supply of such medicines cannot be guaranteed once they leave that episode of care. In terms of the RPBS, the Department of Veterans' Affairs will need to approve a clinical trial, including design and exit strategy, before any veteran is considered for ongoing supply of medicine involved in such a trial.

Discharge prescriptions should be written in time to ensure that a pharmacist has an opportunity to review and dispense the required medicines, prepare written support material (e.g. Consumer Medicine Information, discharge/transfer medication record) and provide appropriate verbal counselling without significantly delaying the consumer's departure from the health service.

To avoid specific supply difficulties, it might be necessary for there to be communication among health care providers before a consumer is transferred.

Hospital pharmacists should alert hospital medical staff when a medicine for an individual consumer, which is not available under the PBS, RPBS or other arrangements such as private health insurance, has been recommended as a discharge/transfer medicine. This is particularly important when prescribing for consumers who are on health care benefits and who might not be able to afford to continue using unsubsidised medicines.

Example of ensuring ongoing access to medicines

Appropriately labelled medicines

Careful attention should also be paid to supplying medicines in packing that is easily distinguishable, clearly labelled (including visibility of batch number, expiry date and storage conditions), and suited to the consumer's vision, dexterity, literacy and other characteristics.

Dispensing labels should be amended, where necessary, to reflect current dosage instructions. This must be done by an authorised health care professional in accordance with relevant state and territory legislation.

Consumer's own medicines/documentation

Policies and procedures should be developed and implemented regarding the use of a consumer's own medicines or documentation and, where appropriate, their return to the consumer on transfer or discharge. Medicines/documents should not be disposed of without reference to the consumer. Disposal must comply with state and territory legislation.

Examples of application

Although designed primarily for residential aged care, the example of assessment of a resident's ability to self-administer (Guidelines for Medication Management in Residential Aged Care Facilities, 3rd Edition, November 2002, p. 41–43) provides guidance for determining a consumer's capacity to self-administer medicines (<www.health.gov.au>).

The Society of Hospital Pharmacists of Australia. Guidelines for self-administration of medication in hospitals and residential care facilities. (August 2002) *Journal of Pharmacy Practice and Research* 2002; 32: 324–5

Information provided

To lend support to consumers and/or their carers who have ongoing medicines, health care professionals should promote the need for, and importance of, periodic medicines review by a doctor and/or pharmacist. Where appropriate, health care professionals should recommend a medicines review in order to meet their responsibilities in fulfilling the Medication Action Plan.

Health care providers should provide consumers and/or their carers with sufficient advice and information about obtaining ongoing medicines. This could include the health care provider organising an appointment with another provider for the next episode of care.

Health care providers should pay special attention to the supply options for consumers and/or their carers who come from rural and remote areas.

Guiding Principle 9

Communicating medicines information

When a consumer is transferred to another episode of care, the transferring health care provider(s) should supply comprehensive, complete and accurate information to the health care provider(s) responsible for continuing the consumer's medication management in accordance with their Medication Action Plan.

Information to be transferred

Information to community health care providers (in particular General Practitioners and Community Pharmacists), residential aged-care facilities or other services should include a detailed rationale explaining any changes in medication management during the episode of care. The support of these providers is essential for continuing the Medication Action Plan. Information provided to community health care providers should be verified and highlight suggestions about specific processes for monitoring the post-discharge management of medicines. Providers operating in community settings should consult the APAC Guiding Principles for Medication Management in the Community²¹.

The information provided should include a verified list of all the consumer's medicines at the beginning of the episode of care and changes made during the episode of care. It should include details of medication management during the episode, including any reported adverse medicine events, any specific needs regarding medication management, and information about assistance required, including any risk of medicine misadventure. Information should also include any post-discharge services provided by a health service, such as post-acute care follow-up, hospital in the home, or immediate post-discharge medicine liaison services for consumers at high risk. Discharge/transfer planning may vary according to jurisdiction and this needs to be taken into account.

With the consumer's consent, the information can be transferred through various routes in a secure way, for example, hard copy, electronic transfer, e-mail and facsimile. In the future, it could include other methods such as electronic health programs. The method of delivery of information must take into account privacy and confidentiality issues and be in accordance with any privacy guidelines/legislation. If the initial contact is by telephone, a printed or electronic copy of the information should be sent to the consumer and to the health care provider responsible for the next episode of care.

When a consumer requires the assistance of any home or residential care provider, every health care provider responsible for a stage in the continuum of care is responsible for ensuring that this assistance has been organised, and that the consumer and/or their carer is given information about it at the time the episode of care is completed.

Consumers considered to be at high risk of medicine misadventure should be identified and appropriate follow up organised for the immediate post-transfer period.

If there is a recommendation for future Home Medicines Review or Residential Medication Management Review this should be communicated to the consumer and other relevant health care providers.

Example of information exchange

A hospital pharmacy might communicate with the consumer's 'regular' community pharmacy about the medicines that the consumer will be continuing after transfer, to ensure there are no problems with ongoing supply. Details of medicines that have been discontinued during the episode of care should also be communicated to avoid confusing either the consumer or their health care professional.

Further information is available in The Society of Hospital Pharmacists of Australia (2004). Standards of practice for clinical pharmacy, Appendix I—Information for ongoing care via community liaison.

Verification of information

Discrepancies may occur between discharge prescriptions and discharge summaries. Therefore the health care provider should ensure that medicines information is verified and has been reconciled (for example by a pharmacist and doctor) prior to transfer. Any changed information needs to be incorporated into the discharge summary and prescription to ensure the medicines information is accurate, complete and comprehensive.

Guiding Principle 10

Evaluation of medication management

The transferring health care provider is responsible for evaluating the extent to which continuity of consumers' medication management has been achieved.

The purpose of this Guiding Principle is to evaluate the medication management components of an episode of care, focussing on the steps that are critical to achieving continuity in medication management (i.e. Guiding Principles 1–9).

The way in which the evaluation is conducted will vary, depending on the health care setting and the medication management processes, policies and procedures in place. Some health services might want to incorporate evidence of this evaluation into their accreditation processes.

It is the responsibility of the transferring health care provider to evaluate the medication management components of sampled or selected episodes of care to ensure that the continuity of consumers' medication management has been achieved. This should be assessed from the perspectives of both the consumer and the health care provider, and lead to further system improvement.

Evaluation from consumer perspective

Evaluation from the consumer's perspective should focus on consumer engagement. This engagement should be consistent with the purpose of this document.

Table 1 presents an example of a framework for evaluating the medication management components of an episode of care. Many health care providers are already collecting sampled or other data to measure consumer satisfaction and some of these measures might be easy to incorporate rather than requiring a new data collection process. It is important that health care providers involve consumers when developing new evaluation measures.

Table 1: Evaluation of continuity in medication management—consumer perspective

Consumer outcomes	Indicator (examples)	Measurement (examples)	When to be measured (examples)
No Adverse Medicine Events (AMEs) experienced	Number of AMEs	<ul style="list-style-type: none"> • Phone survey of consumer • HMR • Information from consumer AME reporting mechanisms 	<ul style="list-style-type: none"> • Within 24 hours of transfer • 7 days post transfer
Therapy is safe, appropriate and effective	Number of treatment goals (in Medication Action Plan—MAP) that are met	<ul style="list-style-type: none"> • Self evaluation by consumer • Evaluation by doctor • Review of documentation in medical record 	<ul style="list-style-type: none"> • As per goals • Within 14 days of transfer
Sufficient supply of medicines is provided	Number of consumers who have run out of medicines before follow-up visit with doctor	<ul style="list-style-type: none"> • Audit • Survey of consumer 	Within hospital discharge supply times (e.g. if 3 day's supply on transfer, audit at 4 days)
Sufficient information is given to the consumer and their health care providers	Number of consumers satisfied with information	<ul style="list-style-type: none"> • Survey of consumer • Survey of doctor • Survey of pharmacist • Survey of nurse 	Within 7 days of transfer
Continuity of therapy (in accordance with the MAP) is achieved. Consider: concordance, adherence and compliance (see glossary)	Number of deviations from MAP at defined time point	Audit of MAP at transfer against MAP at defined time point (using HMR)	Within 14 days of transfer
Post transfer follow-up is undertaken	Number of consumers meeting planned follow-up requirements (e.g. seen by doctor within two weeks of transfer, post-transfer HMR)	Audit of consumer visits to doctor/pharmacist within 14 days	Within 14 days of transfer

Evaluation from perspective of health care provider

Evaluation from the perspective of the health care provider should focus on creating an environment and providing the tools to support each step in the medication management cycle. A possible framework for evaluating the cycle from the health care provider's perspective is based on addressing each Guiding Principle.

The table below demonstrates how this evaluation framework might be applied to Guiding Principle 4: Accurate medication history. Other Guiding Principles will also require a specific evaluation framework, given the inter-relationship between them. If a problem is identified through the evaluation process (e.g. gaps in procedure) health care providers should have a mechanism for addressing it.

Table 2: Evaluation of continuity in medication management—health care provider perspective

Guiding Principle	Requirements	Examples
1: Leadership	A policy exists	<p>An accurate medication history must be taken and recorded [Insert 'how' e.g. as part of an interview process] in the [Insert 'where' e.g. medical notes or medication chart] for [Insert 'who' e.g. every consumer, high-risk consumers] at [Insert 'when' e.g. at admission, within 24 hours of admission].</p> <p>The medication history is to be confirmed with the consumer and (where applicable) their carers and any relevant community health care providers [Insert 'timeframe' e.g. within 24 hours of admission].</p> <p>The medication history is to be reviewed by the prescribing officer before any decision to change medication therapy.</p>
	A procedure exists	Refer to Society of Hospital Pharmacists of Australia best practice guidelines for taking a medication history. The Society of Hospital Pharmacists of Australia (2004). Standards of practice for clinical pharmacy, Appendix A—Accurate medication history.
	Training is available	Health care providers ensure availability of medication history training materials and accessible to responsible officers.
2: Responsibility	Responsibility has been assigned	<p>The responsibility for taking and documenting an accurate medication history in the [Insert 'department/area' e.g. Emergency Department] resides with the [Insert 'responsible team/individual' e.g. admitting medical team, Director of Emergency].</p> <p>The responsibility for ensuring the quality of the medication history resides with [Insert 'responsible individual' e.g. pharmacist].</p> <p>Any person prescribing or influencing a decision to prescribe must review the information recorded.</p>
		<p>The accountable officer for taking and recording the medication history at [Insert 'TIME' e.g. Monday to Friday 9am–5pm, Monday to Friday 5pm–9am, weekends] is [Insert 'accountable individual' e.g. pharmacist, ED RMO, on-call RMO].</p> <p>The accountable officer for confirming the medication history with the consumer is [Insert 'accountable individual' e.g. pharmacist].</p> <p>The accountable officer for confirming the medication history with the doctor is [Insert 'accountable individual' e.g. pharmacist].</p>
		<p>The consumer's doctor is the accountable officer for confirming the history of medicines prescribed in the community.</p> <p>The consumer's community pharmacist is responsible for confirming the history of medicines dispensed in the community.</p>
4: Accurate medication history	A minimum data set is available	Refer to data set in Guiding Principle 4.
10: Evaluating medication management	Performance Indicators are established for documentation of medication history	Percentage of medication histories documented within [Insert 'timeframe']. Example benchmark = 100% for ED admissions.
	Performance Indicators are established for confirmation of medication history	Percentage of medication histories confirmed with doctor. Example benchmark = 100% for elective admissions.

Examples of guidelines for documentation of the clinical pharmacy components of various guiding principles are available in The Society of Hospital Pharmacists of Australia (2004). Standards of practice for clinical pharmacy, Table 5—Guidelines for the documentation of clinical activities.

Accountability	Being answerable for one's actions, and the roles and responsibilities inherent in one's job or position. Accountability cannot be delegated.
Active ingredient	The part of the product that actually does what the product is designed to do. In the case of medicines, the ingredient responsible for a medicine's therapeutic value. 'Active ingredient' is the current global term that replaces the previous convention, 'approved name', which in turn replaced the then commonly-used term 'generic'.
Adherence	A qualitative measure of the extent to which a consumer's behaviour corresponds with the recommendations agreed with a health care professional, ideally through a concordant approach. This can include accidental non-compliance (e.g. forgetting, misunderstanding directions).
Adverse Medicine Events (or Adverse Drug Events)	An incident in which harm resulted to a person receiving health care.
Bioequivalent	Two brands of the same active ingredient are said to be bioequivalent if the average rate and extent to which the active ingredient is absorbed into the blood stream are sufficiently similar that clinical safety and efficacy of the products will be the same.
Brand name	'Brand name' is the product name used by the manufacturer or the manufacturer's trademark.
Care plan	Overall multi-disciplinary and consumer plan for management during a consumer's episode of care. This is not limited to a Medicare Schedule Item 720.
Carer	Anyone responsible for, or taking part in, the provision of care for another person (including parents, guardians or care workers). Carers may be formal or informal. A care worker is a paid worker with a title such as carer, aboriginal health worker, assistant in nursing, personal care assistant, HACC (Home and Community Care) worker.
Collaboration	In the context of medication management, collaboration is a process whereby consumers and health care providers share their expertise and take responsibility for decision making. Accomplishing collaboration requires that individuals understand and appreciate what it is that they, and others, contribute to the 'whole'.
Complementary health care products	Includes vitamin, mineral, herbal, aromatherapy and homeopathic products. Also known as 'traditional' or 'alternative'.
Compliance	A quantitative measure of how closely a consumer follows the intentions and recommendations of a prescribed course of treatment, regardless of their personal beliefs and capabilities. Failure to comply generally has a negative connotation despite the fact that deliberate non-compliance may be a positive expression of the consumer's primacy.

Concordance	A process of negotiation to achieve agreement between a consumer and a health care professional about whether, when and how medicines will be taken. Consumers and health care professionals practise concordance when they work together to make well-informed decisions about diagnosis, treatment, benefits and risks.
Consultation	Consultation occurs when people seek information or advice and take into consideration the feelings and interests of other members of the medication management team.
Consumer	A person who uses or is a potential user of health services, including their family and carers. Can include patients, clients and carers.
Consumer Medicine Information (CMI)	Brand-specific leaflets produced by a pharmaceutical company, in accordance with the Therapeutic Goods Regulations, to inform consumers about prescription and Pharmacist Only medicines. Available as an enclosure in the medicine package or a leaflet or computer printout from a pharmacist, and from other sources such as a doctor, nurse, hospital or the pharmaceutical manufacturer.
Data set	Fields ['elements'] of information, grouped together, to inform medication management activities. Useful when designing/redesigning templates/forms, including the development of electronic information systems.
Doctor	A registered medical practitioner, such as a general practitioner, medical specialist, consultant medical practitioner or hospital medical officer.
Episode of care	An instance where a consumer comes into contact with, or seeks the services of, a health care professional or health service, whether within the home, community-based service, facility or hospital. A new episode of care commences each time a consumer moves to a new health care setting or provider.
Health care professionals	Doctors, pharmacists, nurses and allied health professionals.
Health care providers	Health services and health care professionals.
Health services	Organisations/facilities that provide health care.
Health service managers	Managers at the various levels within a health service, including chief executive officers (CEOs) of hospitals and other health/residential facilities or individual health care practices, and professional organisations and consumer bodies.
Leadership	The art of influencing the behaviour of others toward a pre-determined goal. Occurs when leaders focus on building organisations or areas of responsibility where people can continually expand their capabilities to understand complexity, clarify direction, and improve shared mental models that can enhance and sustain quality outcomes.

Medication Action Plan (MAP)	<p>A continuing plan for the use of medicines, developed by the health care professional in collaboration with the consumer, to identify and document (in a working document):</p> <ul style="list-style-type: none">● actual and potential medication management issues (problems and needs, including risk assessment) identified during the assessment process● medication management goals● actions or strategies needed to address the issues and achieve the medication management goals. <p>The Medication Action Plan is to be shared with and used by all members of the health care team (institutional and community) and the consumer. The plan could form part of other institution's documents or be incorporated in other processes. This is not limited to a Medicare Schedule Item 900.</p>
Medication list	<p>A complete and comprehensive list of medicines where there is sufficient information to fully identify all products. Key elements include the name(s), strength, and dose form and directions for use.</p>
Medicine	<p>A chemical substance given with the intention of preventing, diagnosing curing, controlling or alleviating disease or otherwise enhancing the physical or mental welfare of people. Includes prescription and non-prescription medicines, including complementary health care products, irrespective of the administered route.</p>
Non-prescription medicines	<p>Medicines available without prescription, for example, cough mixtures, simple analgesics and antacids. Some can be sold only by pharmacists or in a pharmacy, others can be sold through non-pharmacy outlets.</p>
Nurse	<p>A registered nurse (division 1 in Victoria), domiciliary nurse, community nurse, nurse practitioner and specialist nurse such as diabetes nurse educator and psychiatric nurse.</p>
Partnership	<p>A relationship where there is a sharing of expertise and responsibility among doctors, nurses, pharmacists and consumers for a person's wellbeing. Working in partnership involves consultation between individuals and collaborative decision making.</p>
Performance indicators	<p>Performance indicators provide a set of criteria by which the implementation, effect and outcomes of the medication management continuum can be monitored.</p>
Pharmacist	<p>A registered pharmacist practising in a variety of settings, including community, hospital, facilities.</p>
Responsibility	<p>To be entrusted with or assigned a duty or charge. In many instances, responsibility is assumed, appropriate with one's duties.</p> <p>Responsibility can be delegated as long as it is delegated to someone who has the ability to carry out the task or function. The person who delegated the responsibly remains accountable, along with the person accepting the task or function.</p> <p>Responsibility is about accepting the tasks/functions inherent in one's role.</p>

Short forms and abbreviations

AME	Adverse Medicine Events
APAC	Australian Pharmaceutical Advisory Council
CMI	Consumer Medicine Information
HMR	Home Medicines Review
MAP	Medication Action Plan
MBS	Medicare Benefits Schedule
PBS	Pharmaceutical Benefits Scheme
QUM	Quality Use of Medicines
RPBS	Repatriation Pharmaceutical Benefits Scheme

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