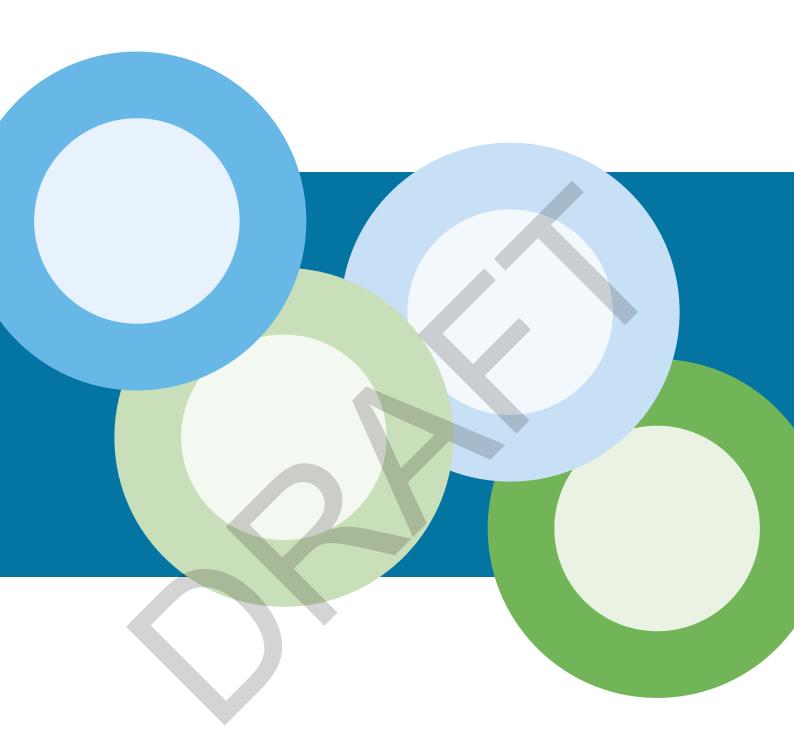
# AUSTRALIAN COMMISSION ON SAFETYAND QUALITY IN HEALTH CARE



# Medication Management at Transitions of Care Stewardship Framework

Published by the Australian Commission on Safety and Quality in Health Care

Level 5, 255 Elizabeth Street, Sydney NSW 2000

Phone: (02) 9126 3600

Email: mail@safetyandquality.gov.au Website: www.safetyandquality.gov.au

ISBN: TBC TBC TBC

© Australian Commission on Safety and Quality in Health Care 2024

All material and work produced by the Australian Commission on Safety and Quality in Health Care (the Commission) is protected by copyright. The Commission reserves the right to set out the terms and conditions for the use of such material.

As far as practicable, material for which the copyright is owned by a third party will be clearly labelled. The Commission has made all reasonable efforts to ensure that this material has been reproduced in this publication with the full consent of the copyright owners.

With the exception of any material protected by a trademark, any content provided by third parties and where otherwise noted, all material presented in this publication is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International licence.



Enquiries about the licence and any use of this publication are welcome and can be sent to communications@safetyandquality.gov.au.

The Commission's preference is that you attribute this publication (and any material sourced from it) using the following citation:

Australian Commission on Safety and Quality in Health Care. Medication Management at Transitions of Care Stewardship Framework. Sydney: ACSQHC; 2024.

#### Disclaimer

The content of this document is published in good faith by the Commission for information purposes. The document is not intended to provide guidance on particular healthcare choices. You should contact your health care provider for information or advice on particular healthcare choices.

The Commission does not accept any legal liability for any injury, loss or damage incurred by the use of, or reliance on, this document.

# **Contents**

Stewardship matters	ii
The Framework: general outline	2
Medication Management at Transitions of Care Stewardship Framework guidance	4
How can digital health be leveraged to optimise local Medication Management at Transitions of Care Stewardship implementation?	6
Element 1: Structure and governance	9
Element 2: Multidisciplinary Stewardship team	14
Element 3: Activities to support safer Medication Management at Transitions of Care	20
Element 4: Ongoing monitoring, evaluation and reporting	38
Appendix A: Preamble	42
Appendix B: Case for change	44
References	45

# Why Medication Management at Transitions of Care **Stewardship matters**

Transitions of care occur when all or part of an individual's\* healthcare is transferred between care providers or care settings. Medication Management at Transitions of Care (MM at TOC) is a period of high risk for medication errors and miscommunication, which can lead to patient harm (see Figure 1).<sup>2</sup>

Figure 1: Reports of key statistics demonstrating why MM at TOC Stewardship matters.<sup>7-11</sup>

Many transitions are associated with poor communication and information sharing between healthcare professionals and organisations

More than of medication errors occur at TOC

Between

of medication histories have at least one error, and up to of these errors

have the potential

to cause

patient harm

Less than

of medication changes are explained in electronic discharge summaries, and

of patients are prescribed at least one potentially inappropriate medicine at discharge, as defined by the Beers Criteria

Involving the individual, their carer and/or family in decision making, resulted in the detection of

medication errors out of a total of

11,540 medication errors reported

Individuals with one or more medicines missing from their discharge information are

times more likely to be readmitted to hospital than those with correct information at discharge

The complete absence of a discharge summary at TOC was associated with a

increase in the risk of readmission within seven days and a

increased risk of readmission within 28 days

<sup>\*</sup> For the purpose of the Framework, the word 'Individual' refers to patients, their family, and/or carer.

A TOC stewardship approach provides opportunities to focus organisational resources, to foster multi or inter-disciplinary collaboration, and improve coordinated care when individuals transfer to/from different settings.3

In Australia, over 250,000 hospital admissions are attributed to medication-related errors, costing an estimated \$1.4 billion each year.4,5 A Cochrane review of 20 studies identified that 559 out of every 1000 patients are at risk of one or more medication discrepancies at TOC.6

The Australian Commission on Safety and Quality in Health Care (the Commission) published Australia's response to the third World Health Organisation Global Patient Safety Challenge -Medication without harm in 2020. This response describes that establishing and implementing medication documentation and communication standards across all TOC can lead to reductions in medication errors and adverse drug events.8 Studies have promoted a TOC stewardship approach to address this priority area and reduce medicine related readmissions and harm.12

# Principles of safe and high-quality TOC

The Commission's **Principles of safe and** high-quality TOC<sup>13</sup> highlight the need for multidisciplinary collaboration and coordination that relies on shared responsibility and accountability. These TOC principles should be considered in the local implementation of MM at TOC Stewardship (see Figure 2).

A literature review and environmental scan identified that, globally, there are no published studies or existing frameworks that describe a stewardship program in its entirety, specifically addressing MM at TOC.3 Yet, MM at TOC continues to pose safety risks, particularly for vulnerable populations.3

Thus, the MM at TOC Stewardship Framework illustrated in Figure 3 was developed based on evidence from other medicines stewardship programs, including strategies designed to reduce medication errors at TOC.

Figure 2: Principles of safe and high-quality transitions of care

# **Principles** of safe and high-quality transitions of care





#### Person-centred

Transitions of care are based on shared decision-making, informed consent and goals of care

#### Multidisciplinary collaboration

There are established systems for collaboration and communication amongst the multidisciplinary team, including the person's regular general practitioner to support them in the coordination of their care.





#### **Documenting and** accessing information

There is an enduring comprehensive and secure record system to document and access information about the person's previous and ongoing care, at transitions.

#### **Ongoing continuity** of care

There is coordination and continuity of care, that relies on responsibility and accountability between the treating team the person, their family/carer, and the receiving service.

# The Framework: general outline

The Medication Management at Transitions of Care (MM at TOC) Stewardship Framework presented in Figure 3 is a systematic approach by a health service organisation encompassing coordinated activities and interventions to optimise medicines use at care transitions.3

The Framework aims to:

- Support coordinated governance of MM at TOC
- Promote and optimise appropriate MM at TOC
- Reduce hospital re-admission rates due to medication errors that occur at discharge
- Improve hospital referral pathways to primary and community healthcare providers for safer MM at TOC.

Health service organisations may use the Framework to build, implement and/or improve local MM at TOC Stewardship. This Framework is person-centred and is composed of four elements:

- 1. Structure and governance
- 2. Multidisciplinary Stewardship team
- 3. Activities to support safer MM at TOC
- 4. Ongoing monitoring, evaluation and reporting.

Digital Health is highlighted as a key enabler to achieve interoperable, accurate, and timely communication between clinicians in the acute and primary care settings. Implementation of local MM at TOC Stewardship requires cultural change and thus should use proven methodologies in behavioural and implementation science to embed clinical practice improvement in local MM at TOC policies and procedures.3,14-16

Figure 3: MM at TOC Stewardship Framework

# Medication Management at Transitions of Care Stewardship Framework



Element 1: Structure and governance



Element 2: Multidisciplinary Stewardship team



Element 3: **Activities to support** safer Medication Management at **Transition of Care** 



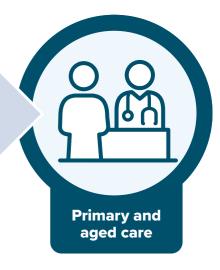
Element 4: Ongoing monitoring, evaluation and reporting



# **Communicating for safety**



Digital health is key to interoperability, accuracy, timeliness and accountability



# **Medication Management** at Transitions of Care Stewardship Framework guidance

Early and ongoing collaboration and communication between clinicians and the individual underpin the success of safe and high-quality TOC.

Elements are person-centred and should actively involve the individual in decision-making about their care. Primary care clinicians are key coordinators of individuals' care. Bidirectional communication is essential to timely and effective documentation and transfer of health information. Effective communication can be realised through connected digital health systems, supplemented by verbal information exchange between clinicians.

Guidance on each element of the MM at TOC Stewardship Framework is described in Figure 4.

Figure 4: MM at TOC Stewardship Framework: guidance on framework elements<sup>3</sup>



**Communicating for safety** 

- Reliable clinician directories
- Secure message delivery
- Nationally standardised information templates
- Electronic medical record
- Risk based clinical decision support
- Electronic health record
- Data interoperability
- Standardised electronic discharge summaries
- Telehealth and virtual care services





**Primary and** aged care



**Medication Management at Transitions of Care Stewardship Framework** 



Element 1: **Structure** and governance



**Element 2:** Multidisciplinary Stewardship team



Element 3: **Activities to support** safer Medication Management at **Transition of Care** 



**Element 4:** 

Ongoing monitoring, evaluation and reporting

- To continuously review, evaluate and measure the delivery of health care against MM at TOC related quality indicators.
- To implement quality improvement initiatives that optimise care provision

- To ensure effective leadership and clearly defined structures, accountability, roles and responsibilities
- To ensure institutional support that prioritises MM at TOC stewardship and facilitates availability of necessary human, financial, and technology resources
- To establish a Stewardship committee within a health service organisation's existing governance structure
- To develop local policies and procedures that provide direction and guidance on the implementation of activities to support safer MM at TOC
- To coordinate and implement local MM at TOC Stewardship and support clinicians and, where appropriate families and carers, to engage individuals and empower them at transitions of care
- To lead internal and external stakeholder engagement to improve effective individual management during care transitions and facilitate collaborative planning
- To implement stewardship activities on admission, during admission, at discharge and when transitioning into primary and aged care that support safer MM at TOC
- To adopt a system for selecting individuals who are at a higher risk of medication-related harm at care transitions and/or higher risk of medication-related hospital readmission

# How can digital health be leveraged to optimise local Medication **Management at Transitions of Care** Stewardship implementation?

The safe implementation and use of digitally enabled care has been shown to support healthcare professionals to make informed decisions and actively manage various health conditions.3 Whilst implementation of the Medication Management at Transitions of Care (MM at TOC) Stewardship Framework is not dependent on the availability of digital solutions, digital health maturity is considered a key success factor for benefits realisation of the Framework's implementation.

The Framework has been developed to align with the National Digital Health Strategy 2023–2028<sup>17</sup> and the Strategy Delivery Roadmap.<sup>18</sup> Several digital foundational initiatives that are to be delivered or enhanced in the near term (2024–28) are significant to safety and quality in healthcare, and specifically to medication management.<sup>17,18</sup> Health facilities are encouraged to embed digitally enabled care to strengthen effective multidisciplinary communication and improve safe and high-quality MM at TOC.

It is recognised that variability in digital health maturity exists nationally and that organisations implementing MM at TOC Stewardship will need to assess whether existing digital capability will best support the Framework or if digital health adoption needs to be prioritised and/or enhanced. A mature digital health environment will support local implementation of MM at TOC Stewardship and support desired clinical outcomes. Digital health priority initiatives that enable seamless information exchange via mature digital health solutions, as outlined in the National Digital Health Strategy 2023–2028 Delivery Roadmap<sup>18</sup>, and Figure 5, include:

- 1.1.01 concerning secure messaging capability to support exchange of clinical documents.
- 1.1.02 that speaks to the importance of enabling the ability to find healthcare providers including digital endpoints, to ensure message delivery.
- 1.1.05 calling for the maturity of electronic referrals, transfers of care and discharge summaries such that it is the norm across different healthcare settings.
- 2.2.10 that recognises the importance of connecting allied health providers to My Health Record, including community pharmacy.

Health facilities and primary care settings should adopt an enduring, comprehensive, and secure record system to document, communicate and access information about an individual's current and ongoing care.13 When implementing digitally enabled care, consideration should be given to the on-screen design and usability of clinical information systems which can have significant effect on the safety and use of the system.

Digital enablement of MM at TOC Stewardship efforts should focus on creating high quality encoded and structured medicines information at the point of care to support safe medicines management. See Table 1 for additional examples.

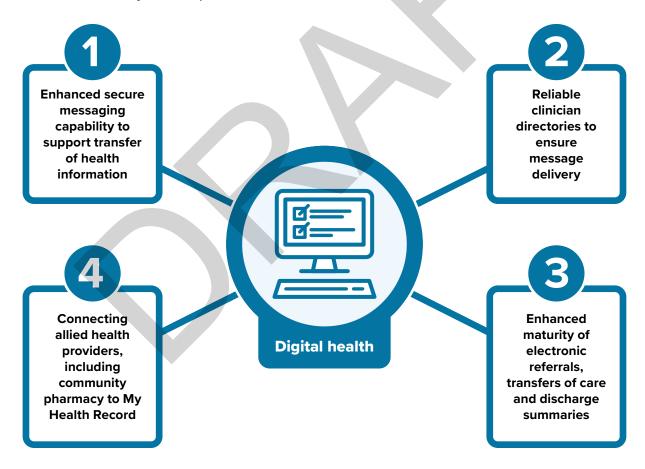
Communication modes should encompass a combination of direct verbal and electronic information transfer methods.3 Directly messaging discharge summary data securely to a primary care clinician or setting (leveraging secure message delivery), accompanied by verbal communication, is the recommended communication method for MM at TOC Stewardship.

Clinical documentation, such as discharge summaries, should be available at the point of care transition and to enable ongoing. That is,

the transfer of health information at TOC should be in real time. This will ensure effective communication and accountability between care providers about individuals' care plans during and after TOC.

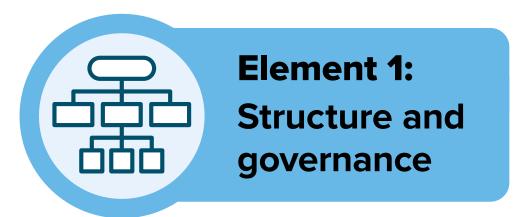
Adoption of national healthcare identifiers (such as healthcare provider identifiers individual, healthcare provider identifiers - organisation and individual health care identifiers) is a key success factor for MM at TOC Stewardship. Organisational level identifiers form an important aspect of the trust model underpinning secure messaging technology, while healthcare provider identifiers provide identification of clinicians irrespective of where they may be practising, facilitating the ability to route messages to specific providers within organisations in machine reliable ways.

Figure 5: Key digital health priority initiatives as outlined in the National Digital Health Strategy 2023–2028 Delivery Roadmap



**Table 1:** Suggested digital tools that support local MM at TOC Stewardship implementation

Digital Tool	What do they offer?	What can be enhanced when digital tool maturity is reached?	Examples of how digital tool can be leveraged and applied in practice
Electronic Medical Records (EMR)	EMRs provide a platform to facilitate standardisation, consistency, transparency and ease of sharing of health information amongst clinicians. <sup>3</sup>	EMRs that can be accessed by all stakeholders involved in an individual's care can be used to optimise the consistent documentation and communication of health information amongst the healthcare team.	Availability of nationally standardised templates for documenting discharge summaries, best possible medication histories, individuals' medication management plans and GP letters which may streamline the discharge reconciliation process. <sup>3</sup>
Electronic medication management (EMM) systems	EMM systems can reduce the number of preventable adverse medication events, including prescribing and dispensing errors. <sup>3</sup>	It is recommended that health service organisations embed EMM systems to improve the accuracy, visibility and legibility of medical information, thereby enhancing the communication amongst clinicians. <sup>19</sup>	Guidance on the safe implementation of EMM systems can be found <b>here</b> . <sup>19</sup>
Electronic Health Records (EHRs), such as the My Health Record	EHRs are online electronic repositories through which individuals can easily access, manage and share their health information securely. <sup>20</sup>	An individual's EHR should be accessible by all treating clinicians, providing one avenue for improving timely access to current and clinically relevant information. <sup>20</sup>	To optimise medication safety at TOC, EHRs should be maintained and updated by all appropriate stakeholders involved in an individual's care to reflect an individual's accurate medication usage across care transitions.



Good health outcomes rely on effective governance processes and systems that involve stakeholders across an individual's care continuum.21 Governance in health service organisations requires both executive and clinical leadership.<sup>22</sup>

# **Clinical Governance and** Safety and Quality

The National Safety and Quality Health Service (NSQHS) Clinical Governance Standard<sup>23</sup> describes governance as the set of relationships and responsibilities established by a health service organisation between its governing body, executive, clinicians, individuals receiving care and consumers to deliver safe and high-quality health care. The Medication Safety Standard<sup>24</sup> outlines that a health service's governing body should:

- Ensure there are systems for effectively managing medication safety, and that resources are allocated to implement these systems
- Ensure there are processes for the regular review of current and future medication safety risks, and for reporting and acting on incidents involving medication errors
- Review reports on the effectiveness of the medication safety system.

Medication Management at Transitions of Care (MM at TOC) Stewardship is most effective and best supported when it is incorporated in a health service organisation's local safety and quality frameworks, and reports through the organisation's governance structure. Prioritising safe and high-quality patient care at TOC will help ensure ongoing accountability for stewardship objectives with the executive team and Clinical Governance Unit.22

MM at TOC Stewardship should have clearly defined operational and reporting lines to the health service organisation's executives, the peak safety and quality committee, and the drug and therapeutics committee (or equivalent). It is important to consider the specific governance arrangements for a health service organisation and their effect on local MM at TOC Stewardship, as different governance arrangements may be required depending on local committee structures and resources.

# **Engaging leadership**

The success and sustainability of MM at TOC Stewardship depends on the support and leadership of the executive, senior management and the senior clinical workforce.<sup>22</sup> Engaging these senior staff to champion and support Stewardship implementation is a key success factor (see Box 1).

## Box 1: Examples of how senior leaders may show leadership and support for MM at TOC Stewardship<sup>22</sup>

#### **Executive or governing body**

- Prioritising and promoting MM at TOC Stewardship as a strategic safety and quality goal of the organisation
- Ensuring that the clinical governance framework, and quality improvement systems and processes relating to MM at TOC Stewardship within the organisation are robust, and that the Framework is incorporated into the organisation's safety and quality strategic and operational plans and organisational priorities
- Supporting MM at TOC Stewardship and communicating to the workforce and other leaders why it is a priority
- Providing appropriate resources for the governing MM at TOC committee and team and supporting them to operate within the clinical governance framework
- Supporting the governing MM at TOC committee and team in promoting accountable clinical practice across the organisation
- Ensuring that clinicians (medical professionals, pharmacists, nurses) receive appropriate orientation on MM at TOC Stewardship at the start of their employment in the organisation, and ongoing education and training regarding MM at TOC
- Issuing formal statements that the facility supports efforts to improve MM at TOC Stewardship
- Including MM at TOC Stewardship related duties in job descriptions and annual performance reviews at all levels
- Ensuring that workforce members from relevant departments can prioritise some of their time to contribute to MM at TOC activities
- Supporting training and education
- Ensuring participation from clinical groups that can support MM at TOC activities
- Facilitating the availability of necessary human, financial, and technology resources
- Institutional support that provides appropriate resources to optimise effectiveness, build capability and capacity, and ensure the sustainability of improvement strategies<sup>3,15</sup>

#### Clinical leadership

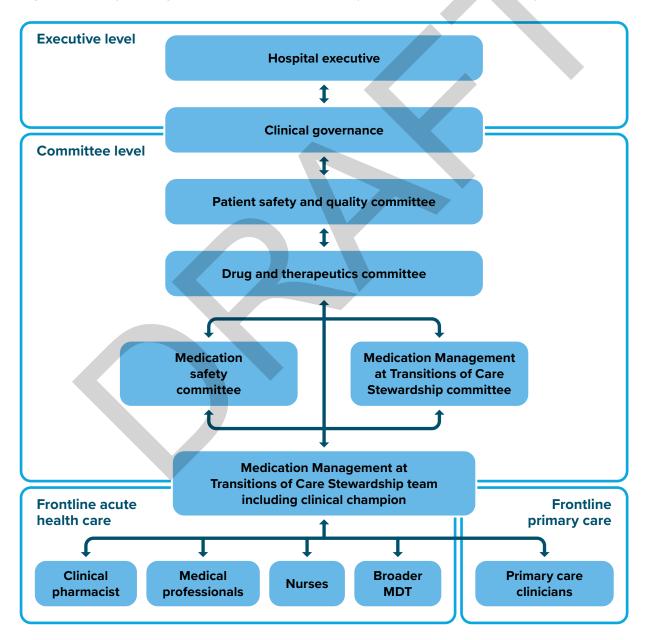
- Identifying a suitable senior medical lead to be the Director in MM at TOC Stewardship
- Identifying a suitable clinical champion(s) (ideally a senior pharmacist) to be the leader(s) of MM at TOC Stewardship implementation
- In hospitals without an on-site pharmacist, such as in rural or regional settings, this role may be performed by a network pharmacist, a dedicated senior nurse or a junior medical officer (JMO) with suitable experience
- Alternatively, a nurse specialising in medication management or TOC, with necessary support and training, could be appointed to coordinate MM at TOC activities
- Enabling the Director and Clinical Champion(s) to work with the executive to ensure that the executive understands the rationale and goals of MM at TOC Stewardship, in order to provide sufficient executive support
- Using other champions to enhance communication and collaboration for improving MM at TOC, including:
  - Specialist senior medical professionals (for example, aged care, cardiology)
  - Junior medical professionals
  - Pharmacists
  - Pharmacy assistants
  - Nurses
  - Other allied health staff as appropriate
- Networked stewardship often requires designated leadership and resources to support rural and remote facilities. A review of workflows and processes should be used to identify which experts are available and best placed to lead and manage MM at TOC Stewardship

## **Stewardship committee**

The responsibility for implementing MM at TOC Stewardship and effectively and efficiently managing available resources and potential risks should rest with a dedicated multidisciplinary stewardship committee and local team.3

Governance of MM at TOC Stewardship should lie within a health service organisation's existing clinical governance structure, such as local drug and therapeutics and medication safety committees (or either or for smaller sites). Where possible, a dedicated MM at TOC committee should be established. This is a multidisciplinary committee whose primary role is to direct and support MM at TOC Stewardship within the health service organisation and to oversee its effective implementation and ongoing function.<sup>3</sup> This should be tailored to the local context as the Executive and Committee structures will vary across organisations. See Figure 6 for an example of where a MM at TOC Stewardship committee may reside within a health service organisation's committee structure.

Figure 6: Example of a governance structure for a hospital's MM at TOC Stewardship



# Roles and responsibilities of the Stewardship committee

In general, the MM at TOC Stewardship governing committee is responsible for:3,22

- Developing, designing and updating the organisation's MM at TOC Stewardship
- Overseeing the ongoing development and implementation of MM at TOC Stewardship
- Reviewing local datasets regularly to identify trends, improvements, and opportunities for change
- Reviewing and developing MM at TOC Stewardship related policies and guidelines
- Establishing appropriate communication and engagement channels with primary care
- Evaluating and reporting on the progress and effectiveness of MM at TOC Stewardship implementation, including achieving defined outcomes. This should be designed against the committee's terms of reference
- Monitoring and managing medication-related incidents and potential risks.

# **Stewardship committee** membership

Committee membership should be multidisciplinary and include those with professional expertise related to MM at TOC. Membership should include different professions with diverse perspectives, skills, and responsibilities for MM at TOC, and this will vary depending on the resources available and the practice setting. In instances where health service organisations can establish a dedicated MM at TOC Stewardship committee, cross membership with existing governing committees, such as local drug and therapeutics committees, or medication safety committees is recommended (see Table 2 for suggested examples of committee arrangements and memberships). It is important to note that MM at TOC Stewardship committee membership may overlap with membership of a dedicated MM at TOC multidisciplinary stewardship team (described in Element 2).

# Local policies and procedures

Health facilities should have locally approved policies and procedures that provide clinicians guidance on the implementation of stewardship to support safe medication management activities at TOC.3 These should be adapted for local health facilities following internal and external stakeholder engagement and according to key stakeholder priorities.3

These institutional policies and procedures should clearly define the:

- Structure and composition of the stewardship team
- Accountabilities, roles, and responsibilities of the stewardship team
- Processes or protocols to screen, risk assess and prioritise individuals according to risk
- Quality measures to evaluate MM at TOC Stewardship implementation
- Strategies to support medication management at TOC.3

Policies and procedures should be regularly reviewed and updated to ensure relevance and recency of guidance. Additionally, they should highlight nuances in different clinical requirements depending on the source and destination of TOC.3

**Table 2:** Suggested examples of MM at TOC committee arrangements and memberships

Suggested committee arrangements	Suggested MM at TOC Stewardship committee membership
Health Service Organisation (e.g. local hospital network, local health district, private hospital group)	<ul> <li>A suitable senior medical lead to be the director for MM at TOC Stewardship</li> <li>A member of the executive to sponsor MM at TOC Stewardship</li> <li>A Clinical Governance Unit Representative (e.g. patient safety manager or quality manager who may have behavioural change and implementation science skill set)</li> <li>Senior pharmacist(s)</li> <li>Medical specialists</li> <li>Senior nurse(s)</li> <li>Representatives from network or district facilities</li> <li>Information systems expert</li> <li>A consumer representative</li> <li>Aboriginal Liaison Officer</li> <li>Culturally and Linguistically Diverse (CALD) community representative</li> <li>Other external affiliated stakeholders as appropriate (e.g. GP liaison, Primary Health Network representative)</li> </ul>
Hospital level (public or private)	<ul> <li>A suitable senior medical lead to be the director for MM at TOC Stewardship</li> <li>A member of the executive to sponsor MM at TOC Stewardship</li> <li>A Clinical Governance Unit Representative (e.g. patient safety manager or quality manager who may have behavioural change and implementation science skill set)</li> <li>A dedicated MM at TOC Stewardship pharmacist</li> <li>Senior nurse(s)</li> <li>Prescribing clinicians from key departments, including aged care</li> <li>Other representatives from various clinical areas, particularly specialty areas the local stewardship team is targeting based on individual complexity and hospital readmission rates.</li> <li>Possibly pharmacy manager(s), information systems expert, other relevant representatives from MM at TOC Stewardship team</li> <li>A consumer representative</li> <li>Aboriginal Liaison Officer</li> <li>CALD community representative</li> <li>Other external affiliated stakeholders as appropriate (e.g. GP liaison, Primary Health Network representative)</li> <li>* Note that this suggested membership may include membership of a dedicated MM at TOC multidisciplinary Stewardship team, as described in Element 2.</li> </ul>



# Element 2: Multidisciplinary Stewardship team

The formation of a team of clinicians to lead stewardship activities is broadly recognised as a core element of stewardship implementation. The multidisciplinary stewardship team serves as the intermediary between hospital governance structures and individual clinicians within a health service organisation. The team is responsible for supporting clinicians and, where appropriate families and carers, to engage individuals and involve them in their medication management at transitions of care.3

# Stewardship team membership

The Medication Management at Transitions of Care (MM at TOC) Stewardship team should be led by an appointed team leader with professional accountability for the outcomes of stewardship implementation and expertise in MM at TOC.3

- This may be a senior medical clinician (Director) with suitable clinical experience, who might be supported by a JMO
- There should be a dedicated MM at TOC Clinical Champion (ideally a senior pharmacist) who can lead and partake in stewardship implementation. In the absence of a dedicated pharmacist, the Clinical Champion may be a JMO (with suitable experience such as a resident medical officer) or a senior nurse.
- Heads of Department relevant to the cohort identified as priority for MM at TOC Stewardship implementation should be involved, for example, aged care.

Table 3 suggests stewardship team arrangements and membership for health service organisations. This membership may overlap with membership of the MM at TOC stewardship committee. This approach will vary depending on local context and can be adapted to different healthcare settings based on resourcing.

Table 3: Suggested MM at TOC Stewardship team arrangements for health service organisations

Suggested Stewardship team arrangements	Suggested multidisciplinary Stewardship team membership
Hospital level (public	Senior Medical Clinician (Director)
or private)	A senior pharmacist with allocated time for MM at TOC (Clinical Champion)
	Prescribing clinicians from key departments, including aged care
	Nurse(s) with allocated time for MM at TOC
	Other Allied health staff as appropriate
	Pharmacy assistant(s)
	Other internal stakeholders as appropriate
	Other external stakeholders as appropriate (e.g. GP liaison, Primary Health Network representative, community pharmacist representative)

# Roles and responsibilities of the Stewardship team

Suggested responsibilities of the MM at TOC stewardship team may include3:

- To develop, maintain, monitor, and report on key performance indicators for quality and safety related to MM at TOC Stewardship
- To inform and educate clinicians, pharmacists, nursing staff and other healthcare professionals, including primary care clinicians if appropriate, involved in MM at TOC
- To actively advocate for MM at TOC Stewardship and promote it as 'everyone's responsibility'
- To identify target areas and priority actions where MM at TOC Stewardship activities could be enhanced
- To support the development of MM at TOC related policies, procedures and guidelines, including systems and workflows for out of hours/weekends
- To advise on the design and implementation of information technology (IT) systems that support MM at TOC
- To review the management of individuals who have been identified as 'high' risk based on local contexts of MM at TOC Stewardship as part of ongoing monitoring

- To provide direct feedback to clinical areas on relevant MM at TOC activities and support local improvement
- To regularly monitor and maintain appropriate risk stratification processes related to MM at TOC stewardship implementation.

Roles, responsibilities, and accountabilities of members within the stewardship team should be clearly defined and may extend in scope beyond the local organisation.

# Stakeholder engagement

There should be regular engagement with internal and external stakeholders and representatives from other care settings, as part of establishing local MM at TOC Stewardship.3 This enables a coordinated approach for medication management during TOC that is tailored to health facilities' local context. It also aims to improve effective management during TOC, as well as internal and external advocacy for activities to support MM at TOC.3

- Engagement may occur with internal stakeholders, such as clinicians, executives and administrative support. Engagement with external stakeholders, such as consumer representatives, is also essential to establish local stewardship that is personcentred and meets stakeholders' needs. External stakeholders may also include GP representatives or GP liaison officers, other clinicians from primary care settings (such as community pharmacists, GP pharmacists), and representatives who hold relevant authority and expertise from other care settings (such as aged care facilities) or health system sectors (government entities). Regular, effective engagement with these external stakeholders will facilitate multidisciplinary input and buy in. For example, engaging a GP liaison as part of local MM at TOC Stewardship committee and/or team will act as a conduit to engage GP colleagues and disseminate information to them about TOC initiatives. These stakeholders will advocate for MM at TOC Stewardship in the primary care setting and should be involved in collaborative planning and decision making.3
- Health facilities should engage existing Primary Health Networks when establishing MM at TOC Stewardship to provide governing oversight that facilitates coordinated TOC across the health care continuum. This should be led by the MM at TOC stewardship committee and team, with the support of the clinical governance unit. Stakeholder roles and responsibilities should also be clearly documented in local policies and procedures.3 Health service organisations are encouraged to refer to the Australian Medical Association (AMA)'s General Practice/Hospitals Transfer of Care Arrangements position statement that outlines requirements of local hospital and primary health networks that support best practice clinical handover and transfer of care arrangements.10

## Planning for MM at TOC Stewardship

MM at TOC Stewardship activities will differ according to the healthcare setting and available resources. When planning for local implementation of stewardship activities, it is important to recognise that a 'one size fits all' approach is not appropriate.<sup>22</sup> Rather, an individualised approach, based on a local risk assessment ensures that existing local medication management processes are considered, any associated risks are mitigated and eliminates service disruption to existing processes. Understanding organisational context, culture, and workplace practices, including local medication management processes, is therefore critical to successfully establish or improve MM at TOC Stewardship.<sup>22</sup> In addition, it is necessary to address any perceived barriers or resistance to staff engagement and implementation of MM at TOC Stewardship early. This will facilitate overcoming any obstacles that may arise during implementation.<sup>22</sup> For example, adopting a top-down approach may assist in enacting a change in medical practice culture to restore the appreciation that medicines are a crucial element of any stage of an individual's care.

#### Assessing readiness to implement **MM** at TOC Stewardship

To ensure success when implementing MM at TOC Stewardship, health service organisations should assess their readiness for change by considering:

- Structures and processes required for MM at TOC Stewardship
- Resources required to support MM at TOC Stewardship
- Organisational culture.22

### Structures and processes required for the MM at TOC program

When establishing MM at TOC Stewardship, health service organisations and primary care services should ensure the principles of safe and high-quality TOC13 and key elements outlined above have been considered to facilitate its successful implementation and sustainability.

Prior to implementing MM at TOC Stewardship, health service organisations' stewardship team and/or governing committee should undertake a selfassessment and a gap analysis of the key structures and processes required

to establish and maintain MM at TOC Stewardship.<sup>22</sup> Similarly, primary care clinicians and/or liaison officers involved in MM at TOC should undertake a gap analysis to assess their stewardship readiness. Strong consideration should be given to local digital maturity and capability to implement safe and high-quality digitally enabled care. Engaging primary health networks to provide tools and resources for primary care services to undertake this step is pertinent. Implementation of MM at TOC Stewardship should enable safe processes in a paper-based environment, irrespective of local digital health maturity or capability.

- Health service organisations are also encouraged to consider local data on hospital readmission rates due to medication misadventure and other identified MM at TOC risk factors, such as medication related incidents. The review of this data may also assist in identifying priority specialties, wards or any other cohort a health service organisation deems to be at high-risk to focus MM at TOC activities on.3,22
- This self-assessment should be conducted to determine baseline performance and any associated gaps.<sup>22</sup> Self-assessments should also occur at regular intervals after implementation to assist MM at TOC Stewardship teams and primary care clinicians to monitor their progress and trend improvements. In addition, the selfassessment will clarify the level of executive support or commitment required to the program within a health service organisation, and available human, financial and information technology (IT) resources.<sup>22</sup>

#### Resources to support the program

Resources required and currently available or accessible to implement and promote MM at TOC Stewardship within the organisation and in primary care, should be assessed. These include the capacity of the workforce to partake in MM at TOC Stewardship activities, supporting policies and guidelines, current audits and data collection processes (that may help support medication management) and required IT infrastructure.<sup>22</sup> This is to ensure that strategies are delivered effectively without adversely impacting existing services.

Establishing and sustaining MM at TOC Stewardship in smaller facilities, in private hospitals and in rural or remote organisations, where resources may be limited, may require varied approaches to address gaps.<sup>22</sup> In these cases, having formalised networked arrangements in place, especially with primary care networks and clinicians, can assist in sustainable access to MM at TOC services.

#### Organisational culture

Different cultural factors, encompassing how the organisation operates and communicates, may influence organisational readiness to implement MM at TOC Stewardship and its success.<sup>22</sup> Cultural factors that may be supportive include:

- Endorsement and executive sponsorship, leading to appropriate leadership and resourcing of MM at TOC Stewardship
- Engagement of internal and external clinical leaders/stakeholders, contributing to institutional buy-in
- Staff awareness of various TOC services available for individual referral following discharge
- Communication with accountability through a systems-based approach to facilitate timely and effective transfer of information about promoting and implementing MM at TOC Stewardship (e.g. communication of policies, stewardship priorities, and results of ongoing monitoring)3
- Clear documentation and effective communication with clinicians in the broader primary care setting, supported by nationally standardised information templates and system interoperability<sup>3</sup>

- Conflict management through leadership support and effective change management strategies
- Organisational culture that focuses on clinical safety and continuous improvement in identifying and managing risk.23

## **Determining priority areas for MM** at TOC Stewardship

MM at TOC Stewardship should be tailored to the local context based on a priority needs basis. Health service organisations should apply a risk management approach, in accordance with their local risk management frameworks and risk matrices, to assist in the development of local stewardship. This aligns with the requirements of Action 1.10 of the NSQHS Clinical Governance Standard which specifies that health service organisations should identify and manage risks effectively.23 Key clinical risk assessment principles to consider should be informed by the systematic risk management process outlined in the Australian/New Zealand Standard AS/NZS ISO 31000:2018 Risk Management.<sup>28</sup>

A risk assessment of the information gathered from the self-assessment and gap analysis described above, as well as the review and update of local policies and procedures will help the MM at TOC Stewardship team identify:

- Elements of the MM at TOC Stewardship Framework that are missing
- Elements that should be improved
- Priorities for action.<sup>22</sup>

Stratifying interventions in terms of local importance and priorities will demonstrate a realistic understanding of what local systems are able to deliver versus what is aspirational for health services to work towards.

Although the focus of MM at TOC Stewardship will differ between settings, it will be important to establish clear, high-level objectives of local MM at TOC Stewardship. In addition to the Framework's aims, objectives for local stewardships may include:

- Promoting quality use of medicines at TOC
- Increasing appropriate medicine use at TOC
- Improving consumer understanding and involvement in medicine use at TOC
- Improving documentation and strengthening communication between healthcare providers.

Once the priority areas and objectives of MM at TOC Stewardship have been determined, it is important to develop and document the plan to implement priority stewardship activities (see Element 3 for more information). This will ensure transparency amongst all involved stakeholders, from senior executives to clinicians. It will also facilitate acquisition of executive agreement to establish and implement MM at TOC Stewardship within assigned resources.<sup>22</sup> Proposed practice changes should be reviewed and endorsed by the MM at TOC Stewardship governing committee.

## **Implementing** MM at TOC Stewardship

#### Implementation science principles

Successful implementation of medicines stewardship requires a multifaceted intervention strategy.3 MM at TOC Stewardship should adopt proven methodologies in behavioural change and implementation science to overcome resistance to change and achieve clinical practice improvement.14 This may include a sequential structured method of implementing focused stewardship activities and should be determined depending on the local context.

### **Developing a communication plan**

Developing a robust, clear communication plan that raises awareness of MM at TOC Stewardship is a key component of successfully implementing change in health service organisations. 14,22 The communication plan should consider promotion strategies to raise awareness and increase clinician understanding of MM at TOC Stewardship and its objectives. Suggested strategies include:

- Promoting stewardship activities and achievements as part of the existing Medication Safety Week promotion and awareness activities
- Utilising hospital wide communication channels, such as a newsletter, intranet and creating posters, lanyards and computer screensavers to further promote MM at TOC Stewardship
- Using local nursing, medical, pharmacy and other allied health champions to advocate for MM at TOC Stewardship and support its implementation
- Holding a launch or integrating MM at TOC Stewardship into existing local events such as medication safety forums and grand rounds.

#### **Educating the workforce**

The MM at TOC Stewardship team should be involved in holding regular training and education sessions to staff to increase their awareness and understanding of MM at TOC Stewardship such that processes are sustainable and can be maintained irrespective of stewardship team member availability; such as out of hours or on weekends.3,22

Identifying clinical knowledge gaps and developing guidelines to educate the workforce about stewardship activities and on the rates of medicine related errors at TOC, and potential associated hospital readmissions, are key. This may be integrated in medical staff orientation, regular continued education sessions, during grand rounds and may extend into the primary care setting etc. Smaller facilities, including rural and remote hospitals, private facilities and residential care homes, may need to draw on communication and education resources available in larger organisations.<sup>22</sup>

## Sustaining MM at TOC Stewardship

MM at TOC Stewardship is expected to evolve over time. This will depend on the results of ongoing monitoring, evaluation and reporting (refer to Element 4 for more information), changes to local contexts and emerging IT systems and advancements in digital health infrastructure.3 Once MM at TOC Stewardship activities are fully implemented and refined, efforts are needed to sustain and embed approved processes into usual clinical practice. Health service organisations are encouraged to refer to the resources provided below for examples of ways to help sustain MM at TOC Stewardship:

- The Commission's Antimicrobial Stewardship in Australian Health Care<sup>16</sup>
- The Council of Australian Therapeutics Advisory Groups (CATAG) Guiding Principles for Medicine Stewardship Programs<sup>15</sup>
- CATAG's Medicines Stewardship Toolkit<sup>26</sup>
- CATAG's Cardiology Medicines Stewardship **Program**<sup>27</sup> (a worked example of preparing, implementing and sustaining a local stewardship program).



# **Element 3:**

# **Activities to support** safer Medication Management at **Transitions of Care**

Studies demonstrate that multifaceted interventions incorporating multiple strategies are associated with the greatest effectiveness on clinical outcomes.3 This section proposes high level stewardship activities that may be implemented as part of local Medication Management at Transitions of Care (MM at TOC) Stewardship, on admission, during hospital stay, at discharge and following discharge (see Figure 8). These key interventions have been identified from a dedicated literature review and environmental scan<sup>3</sup>, and are based on existing stewardship frameworks and programs. 15,16 They have been developed to support health care professionals and individuals, both in the acute and primary care settings, with medication management at TOC.

Care provision, especially at transitions of care, should be as seamless as possible. Collaboration and bidirectional communication amongst the multidisciplinary team in the acute and primary care settings, and with the individual, their family and/or carer, underpin the success of safe and high-quality TOC.3 This is further enabled by digitally mature health infrastructure and systems that support good communication between all involved clinicians.<sup>10</sup> It is fundamental that all activities outlined below are personcentred and actively involve the individual, their family and/or carer where appropriate. Through direct clinician and carer support and education to improve health literacy, individuals will feel empowered to play a proactive role in the management of their healthcare, including their medication management at transitions of care.3

MM at TOC shares many objectives and success factors with efforts to coordinate care and support shared models of care. It should not be considered a substitute however for these initiatives nor constrained to medication management alone.

## Did you know?

Figure 7: Key MM at TOC Stewardship related findings from a dedicated literature review and environmental scan<sup>3</sup>

**Pharmacist-led** medication charting within a partnered model demonstrates lower errors and reduced length of hospital stay

**Medication discrepancies** not only occur due to lack of information, but suboptimal coordination and collaboration between healthcare settings and limited individual involvement

A noticeable gap exists during clinical handover and communication of information in the period leading up to and during transitions of care

Collaborative pharmacist-medical practitioner preparation of discharge summary medicines information reduces risk of transmission of incorrect information

Did you know?

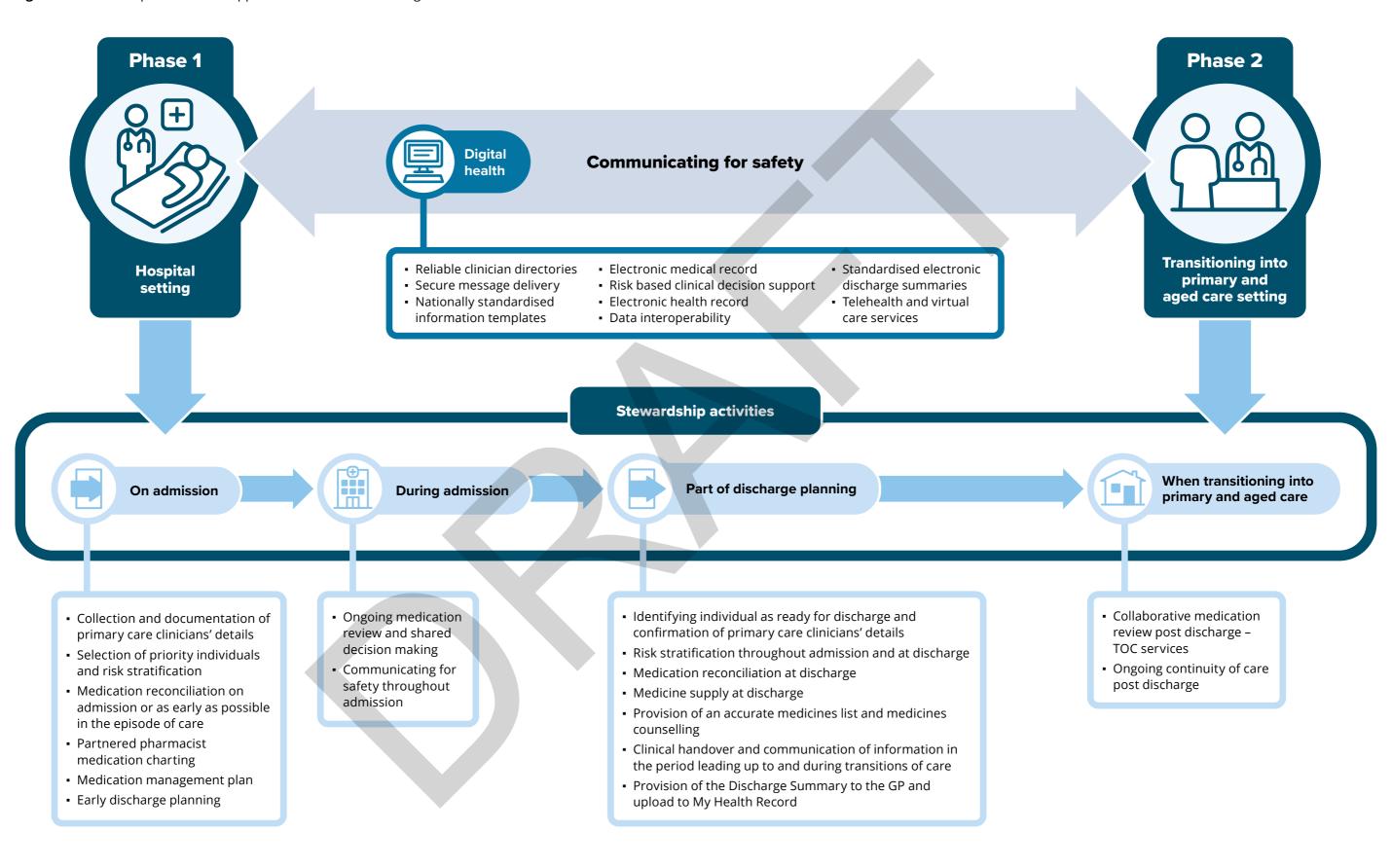
Communication of information between clinicians upon transitions of care requires a combination of direct and electronic information transfer methods

Evidence supports a system for patient identification approaching care transitions, to facilitate a targeted approach to stewardship activities, particularly for those at high risk of medication-related harm at care transitions or high risk of medication-related hospital readmission

Medication discrepancies can occur at multiple stages in an individual's hospital journey

Australian research highlights concerns about lack of awareness of post-discharge home medicines reviews and residential medication management reviews, lack of risk assessment tools to prioritise individuals for referral and supports the need for TOC Stewardship roles in hospitals and primary care settings

Figure 8: Stewardship activities to support safer medication management at transitions of care



# **Phase 1: Hospital setting**

### Stewardship activities on admission

### Collection and documentation of primary care clinicians' details

Primary care clinicians, such as General Practitioners (GP), community pharmacists and residential aged care or community nurses, play a crucial role in ongoing care provision and the continuity of medication management for individuals, particularly at TOC.3 Health service organisations should have processes to confirm an individual's current and accurate GP details, and where relevant, other health professional details, including community pharmacy details, upon admission to hospital or as early as possible in their episode of care.

For individuals who do not have a regular GP or community pharmacy, every effort should be made to encourage such individuals to attend a regular GP and to nominate both a GP and community pharmacy for ongoing care. 10,28 For individuals who see multiple GPs or specialists, and those who obtain their medicines from multiple community pharmacies, this should also be noted in their medical record as it may increase their risk of potential miscommunication and medication misadventure.

#### Selection of priority individuals and risk stratification

Potentially avoidable hospital readmissions due to medication misadventure are a serious burden for individuals and health services. The clear identification of factors predictive of early readmission may enable targeted interventions to obtain significant reductions in readmission rates, particularly for more vulnerable populations.3 Evidence shows that older individuals, who have low literacy, those with complex medicine regimens, mental health problems, and Aboriginal and Torres Strait Islander and migrant populations are at greatest risk of medicine discrepancies at TOC.<sup>29</sup> The Society of Hospital Pharmacists of Australia (SHPA)'s Standards of Practice for Clinical Pharmacy Services identify similar groups of individuals that may be at a higher risk of medicine related problems (see **Box 2**).<sup>30</sup> SHPA's Standard of Practice for pharmacy services specialising in transitions of care also identify patient groups who are more likely to have a poor TOC experience (see **Box 3**).31 These may be useful guides to health service organisations when developing their local risk stratification approach or tool.

## Box 2: Patients most at risk of medicines-related problems per SHPA's Standards of Practice for Clinical Pharmacy Services<sup>30</sup>

Patients most at risk of medicines-related problems include those who:

- Have medication misadventure as the known or suspected reason for their presentation or admission to the health service organisation
- Are aged 65 years or older
- Take 5 or more medicines
- Take more than 12 doses of medicines per day
- Take a medicine that requires therapeutic monitoring or is a high-risk medicine
- Have clinically significant changes to their medicines or treatment plan within the last 3 months
- Have suboptimal response to treatment with medicines
- Have difficulty managing their medicines because of literacy or language difficulties, dexterity problems, impaired sight, confusion/dementia or other cognitive difficulties
- Have impaired renal or hepatic function
- Have problems using medication delivery devices or require an adherence aid
- Are suspected or known to be non-adherent with their medicines
- Have multiple prescribers for their medicines
- Have been discharged within the last 4 weeks from or have had multiple admissions to a health service organisation.

## Box 3: Patient groups who are more likely to have a poor TOC experience per SHPA's Standard of Practice for pharmacy services specialising in transitions of care<sup>31</sup>

The following groups of patients may be more likely to have a poor transition of care experience and adverse medication outcomes:

- People affected by polypharmacy
- People with chronic and complex conditions
- People with serious mental health conditions
- People with dementia or other forms of cognitive impairment
- Culturally and linguistically diverse groups
- **Aboriginal and Torres Strait Islander Peoples**
- People who access medicines through the Closing the Gap PBS Co-Payment Program or the Remote Area Aboriginal Health Services Program
- People who live in rural and remote areas
- People who are socially isolated
- People who are transient, have unstable housing or no fixed address
- People without a regular general practitioner
- People with multiple specialists/prescribers
- People with a disability (especially intellectual disability)
- People living in residential care/nursing home
- People with previous hospital presentations or admissions (especially if medication-related)
- People transitioning out of prison/incarceration
- Young people who are transitioning from paediatric to adult care
- People discharged from hospital without pharmacist input.

Health service organisations should adopt a prioritisation approach to identify cohorts at higher risk of medication-related harm during TOC and medication related hospital readmission. This systematic selection of individuals facilitates a targeted approach to stewardship activities that addresses the specific needs of individuals promptly and maximises the efficiency of available resources.3 Prioritising cohorts may improve the safety and quality of care provision, by focusing on individuals requiring immediate attention or individuals with heightened complexities in their medication management. It also facilitates planning of health care in advance, such as commencing medication management plans and booking health care services post-discharge, thereby facilitating smoother transitions between and within health services.3

The MM at TOC Stewardship team and governing committee should determine the risk stratification approach and, if applicable, the risk stratification tool that will be implemented locally. This prioritisation however should not mean that individuals not deemed as 'high' risk are omitted from relevant stewardship activities or services. Instead, regardless of the approach, it will be necessary for clinicians to always exercise clinical judgment when risk assessing. Clinical judgement is a key component of clinical decision-making and clinicians are expected to apply professional clinical judgement when performing clinical interventions and in managing associated risks.32 The MM at TOC Stewardship team and/or committee should determine:

- 1. Who will be responsible for completing the assessment (such as Emergency Department [ED] pharmacist or ward pharmacist or medical team)
- 2. A standardised process, with pre-defined criteria, that provides guidance and direction to clinicians to make an informed assessment and enable the subsequent categorisation of the individual as 'high' risk.

This may include:

- Targeting specific wards/specialties based on local readmission rates and/or that are deemed as at high risk by the health service organisation. If a health service organisation chooses to focus on a select cohort they deem to be at high risk, for example, heart failure individuals, it may be more appropriate for an established heart failure service, rather than the MM at TOC Stewardship team, to undertake medication management throughout admission and following discharge, as part of their existing service provision. This should be considered and determined within the local context.
- Screening and risk assessing all individuals in ED due for admission
- Targeting individual groups based on high-risk populations as identified by the literature.<sup>3,29-31</sup>

Once the approach is determined, an allocated responsible clinician should document the 'high' risk status in the health record of all individuals assessed as 'high' risk. This should also verbally communicate to the responsible pharmacist and broader treating team, to alert them and facilitate their prioritisation of these 'high' risk individuals' clinical review. Typically, this would be the responsibility of the ED or ward pharmacist, although any other suitably qualified clinician, such as medical or nursing staff, may take on this role, especially in the absence of a pharmacist - for example, during afterhours or in rural or remote hospitals with scarcer staffing.

Health service organisations are encouraged to use or adopt a standardised tool to document risk status, either electronically or on paper. Consideration may be given to incorporating the risk stratification tool into EMR systems.3 Approved processes should be documented in local policies and procedures and monitored.

## Box 4: Examples of a risk stratification tools

Multiple risk stratification tools have been identified in the literature that alert clinicians to individuals who are at high risk of hospital readmission or ED visit. However, no high-quality studies have demonstrated if these risks are reversible and if readmissions could have been prevented. Most of these tools do not focus on medications or include any medication-related variables in the risk prediction tool.3

#### Validated risk prediction tool: PHarmacie-R tool

The PHarmacie-R tool shows the most promise in Australia as it has been developed and validated in an Australian adult patient cohort to predict unplanned readmissions.<sup>3,33</sup> The PHarmacie-R tool is built into a smart phone app and is designed to identify patients who may benefit from a timely medication management service following discharge.<sup>33</sup> It captures the following measures:

- P Polypharmacy
- H Provision of a high-risk medicine known to increase the risk of medication-related harm
- r Residing in a rural or remote location
- m Having a diagnosis of a mental health disorder or cognitive impairment
- a Living alone
- c Having the presence of multiple chronic comorbidities
- i Identifying as indigenous Australian or needing an interpreter
- e Patients requiring an extended hospital length of stay.

## Medication reconciliation on admission or as early as possible in the episode of care

All individuals, regardless of their risk category, should have their medicines, including any complementary and/or traditional medicines, reconciled on admission. If this is not possible, depending on local processes, individuals who have been assessed as 'high' risk by the allocated responsible clinician should be prioritised for medication reconciliation by the ward pharmacist and/or treating team (or other suitably qualified clinician). Best Possible Mediation Histories (BPMH) and medication reconciliation are key strategies to support safe and high-quality medication management at TOC and should occur at all points of transition between episodes of care.<sup>3,34</sup> They are associated with significant reductions in medication discrepancies, particularly when led by clinical pharmacists.3 Nevertheless, medication reconciliation requires an interdisciplinary approach that also includes doctors, nurses, and the individual receiving care.34 There needs to be a shift in clinical practice from perceiving medication reconciliation as a 'chore' to an essential component of an individual's clinical assessment as part of comprehensive care provision.35

In health service organisations where electronic tools and systems have been integrated into workflows, these should be used to obtain and document medication histories and to reconcile medicines. Evidence shows that such electronic tools are associated with significant improvements in the documentation of

medication-related information and significant reductions in medication discrepancies across various care transitions.3 The Guiding Principles to Achieve Continuity in Medication Management<sup>36</sup> (the Guiding Principles) outline the key steps required for a comprehensive medication reconciliation, as shown in Figure 9. It also highlights other medication reconciliation related resources on page 53. The reconciled medication list can be used as a baseline or point of reference throughout the episode of care to avoid duplication of recording and potential discrepancies between information sources.36

Following medication reconciliation, the ward pharmacist and/or treating team should collaboratively identify, document and resolve any discrepancies between the medicines taken by the individual prior to hospital admission and charted medicines.<sup>36</sup> This aims to:

- Identify and address medicinesrelated problems
- Identify and address potential medicinesrelated discrepancies
- Inform the decision-making process
- Ensure continuity of medication management
- Optimise the safe and quality use of medicines, including complementary medicines.

Health service organisations' MM at TOC Stewardship governing committee should determine the most appropriate model to embed for the completion of BPMHs, based on the availability of local resources.

**Figure 9:** Key steps in medication reconciliation described in the *Guiding Principles to Achieve* Continuity in Medication Management<sup>36</sup>

**Obtain and** document the best possible medication history (BPMH) from the individual/carer and/or family

Confirm the accuracy of the **BPMH** with at least two sources

Compare the medication history with the prescribed medicines and follow-up discrepancies

**Share verified** information for ongoing care

#### Partnered pharmacist medication charting

Partnered pharmacist medication charting (PPMC) on admission has been implemented in some parts of Australia. PPMC involves appropriately credentialed pharmacists working closely with medical practitioners to undertake a medication review and chart medicines for nursing staff to administer.<sup>37</sup> PPMC on hospital admission and discharge has been shown to reduce medicines errors and lengths of hospital stay (LOS).3 An RCT showed PPMC within 24 hours of admission significantly reduced medication errors in patients with polypharmacy  $(79\% \text{ versus } 4\%, p < 0.001).^{38} \text{ A before and after}$ study by inpatients admitted to general medical units at seven hospitals (n = 8,648 patients) showed PPMC within 24 hours of admission was associated with a significant reduction in the median LOS (4.7 versus 4.2 days; p < 0.001) and reduction in the patients with at least one medication error (from 66% to 3.6%; p < 0.001). $^{39}$ 

Health service organisations should consider integrating partnered pharmacist medication charting into their local policies and procedures, and in accordance with their local state and territory legislation. Where relevant and applicable, following medication reconciliation, the ward pharmacist should liaise with the treating team to chart the individual's reconciled medicines onto their medication charts, whether paper based or electronic.

#### **Medication management plan**

A medication management plan (MMP) is a continuing plan developed and used by healthcare professionals, in collaboration with the individual, to develop strategies to manage the use of medicines.<sup>36</sup> The multidisciplinary team, in collaboration with the individual should develop and document an MMP as early as possible in the episode of care. The MMP should be tailored to each individual and should list issues identified during the assessment of their current medication management and goals of medication management. It should combine information, such as medication reconciliation, assessment of current medication management, including consideration for any complementary medicines the individual may be taking, clinical review, and therapeutic drug monitoring.36

The MMP should be regularly reviewed during the episode of care and before care transitions as it is an integral part of care planning for the individual. The MMP is intended for use by, and sharing amongst, all healthcare providers

and the individual receiving care, their family and/or carer. Although an MMP is a 'living document' which travels with the individual and is reviewed and updated during each episode of care, providers of healthcare services need to retain a copy in the medical record which is current at the time of a transition of care. Health service organisations should document processes of completing MMPs in their policies and procedures.36

#### Early discharge planning

As soon as an individual is cared for by a health service organisation, planning for their transfer of care arrangements should commence<sup>40</sup>, especially for individuals assessed as 'high' risk. Individuals are key participants in transition communication processes, and their preferences and choices should be known and respected. The responsible clinician in the treating team should openly discuss discharge planning with individuals, as part of comprehensive care provision.

Health service organisations should implement systems to engage individuals early in their admission and support them to participate in clinical handover and transition of care processes. Participation should be tailored to the individual's wishes and should include careful consideration of the individual's health literacy level, language barriers and culture. 41 This aligns with the requirements of the National Safety and Quality Health Service (NSQHS) Standard 2 (Partnering with Consumers) that call for establishing communication mechanisms that support effective partnerships with individuals and are tailored to their needs.<sup>42</sup> This will allow for better shared decision making between the healthcare team and the individual receiving care. Discussion of any post-discharge TOC services with the individual should also include consent from the individual. All agreed plans should be documented in the individual's medical record and discharge summary.

Potential planned post-discharge TOC services should also be discussed and communicated with the broader multidisciplinary team, the hospital pharmacist involved in their care and where necessary, the individual's regular GP.10 This aims to facilitate the early establishment of links with the individual's primary care clinicians and support effective communication when transitioning from the acute to the primary care setting.3,10,40

## Stewardship activities during admission

## Ongoing medication review and shared decision making

The ongoing review of individuals' medication management plans throughout their episode of care are key to optimising medication management processes and aligns with the requirements of the NSQHS Medication Safety Standard.<sup>43</sup> A well-structured medication review process will minimise medicine-related problems and optimise the intended therapeutic outcomes for individuals.<sup>43</sup> Health service organisations should determine the best suited medication review model for their local context and document this in local policies and procedures.

Treating teams should discuss with all individuals their medicine options and any medicine changes, including medicines that have been added or ceased. This includes suggesting evidence-based recommendations, where appropriate, to enhance the quality use of medicines, including complementary medicines, and the provision of safe care. Individuals who are assessed as 'high' risk should be prioritised for ongoing medication review. All individuals should have the opportunity to ask questions and seek further clarification from the treating team and the wider multidisciplinary team about their medicines and medicine related choices and decisions. Where appropriate, interpreter services should be employed to ensure effective communication.

Multidisciplinary case conferences to discuss medicines have been shown to improve medication appropriateness in aged care facilities, though the generalisation of this strategy to acute care settings at TOC requires further research.<sup>3</sup> Having a focussed discussion on an individual's medicines is integral to consolidating all relevant medicines information, especially if an individual has had multiple medical and/or surgical team consults that may not be as well communicated amongst teams. Health service organisations are encouraged to consider incorporating a focussed discussion on medication management in their existing multidisciplinary case conference schedules, especially for individuals assessed as 'high' risk. Alternatively, and where appropriate, the hospital team may collaborate with the individual's GP to organise billable case conferences (once individual consent has been obtained). This aims to optimise the quality of information handover and communication

amongst clinicians during intrahospital transfers. Where possible, the pharmacist involved in the individual's care should participate in these stewardship rounds/case conferences. This may include the individual's community pharmacist as supported by the recently launched **Pharmacists** in 203044 which includes Medicines Stewardship as a key action to support pharmacists to actively lead and influence effective and judicious medicine use. One system change is to amend the Medicare Benefits Schedule to enable the participation of pharmacists in collaborative case conferencing.

Where appropriate, for 'high' risk individuals, it is recommended that the responsible clinician from the treating team contacts the individual's GP and informs them of the individual's status early in their admission. Depending on local MM at TOC Stewardship, this includes discussing with their GPs recommendations of TOC services the individual may benefit from, as part of their discharge planning, to facilitate GP coordination and follow up post-discharge. This is to promote early communication during an individual's hospital stay between the treating team and their GP, whilst also providing GPs the opportunity to 'flag' individuals in their systems for urgent review and follow up post-discharge. It will also allow GPs to clarify any gueries they may have regarding the individual's clinical condition and update their records accordingly such that they are better prepared and informed of the individual's status and expected TOC services to coordinate on discharge. All communication from the hospital to GPs should be streamlined and embodied in local policies. This is supported by AMA's position statement that highlights that the discharge care planning processes for individuals with complex needs require greater collaboration and planning between the hospital and an individual's GP.10

For individuals admitted to hospital from residential aged care homes (RACHs) (or vice versa), direct communication with the individual's GP or GP practice prior to, or on the day of, discharge is considered best practice, in addition to providing discharge summaries at the point of discharge.<sup>10</sup> It is also recommended that the treating team contacts a responsible clinician (for example, the responsible nurse or the relevant Aged Care On-site Pharmacist<sup>45</sup>) in the RACH and informs them of individuals' clinical situation and expected TOC services post-discharge.

## **Communicating for Safety** throughout Admission

The NSQHS Communicating for Safety Standard<sup>46</sup>, particularly Actions 6.07 and 6.08, emphasise the importance of structured clinical handover processes to ensure the effective communication of health information amongst clinicians. Structured clinical handover is associated with reduced communication errors within and between health service organisations and is especially important at transitions of care, where communication errors are more likely. This includes when:

- An individual is transferred from the intensive care unit to a general inpatient ward. This transition of care period is particularly important to consider throughout an individual's episode of care. Health service organisations often use different electronic systems that are not interoperable in intensive care and inpatient wards which may increase the risk of inaccurate transfer of health information.
- An individual's care, including their medicines, is discussed during multidisciplinary rounds, case conferences or consults conducted by multiple treating teams
- There is a change in clinician (for example, shift change)
- An individual is discharged from hospital to the primary care setting
- An individual is discharged from hospital to respite or a mental health facility.

Moreover, Action 6.09-6.11 in the Communicating for Safety Standard<sup>46</sup>, highlight the requirements for health service organisations to have embedded systems to effectively communicate and document critical information to ensure patient safety.

Health service organisations are encouraged to consider using structured information templates to facilitate clear and comprehensive documentation before and during TOC. These include but are not limited to templates for documenting BPMHs, medication reconciliation, MMPs, clinical handover notes and discharge summaries.3

It is recognised that streamlining this approach remains a challenge due to differences in local hospital practices and clinician preferences.3 Further consideration should be given to facilitate standardised communication for MM at TOC. The Commission's *Electronic* Medication Management Systems – A guide to safe implementation and the National Medication Management Plan are examples of resources that provide guidance on a nationally standardised approach to medication management.

## Stewardship activities as part of discharge planning

## Identifying individual as ready for discharge and confirmation of primary care clinicians' details

When the individual is assessed as ready for discharge, this should be clearly documented in the individual's medical record to effectively communicate with the remainder of the treating team. The medical team should also verbally communicate this information about 'high' risk individuals to the responsible pharmacist to facilitate discharge preparations, including medicine supply on discharge.

Consideration needs to be given to the setting into which the individual is discharged to ensure the appropriate handover of their health information. Where an individual's regular GP and community pharmacy (and other relevant primary care clinicians) were not confirmed/ obtained on admission, the nominated staff member should obtain these details and record them in the individual's medical record. Every effort should be made to support the individual, whilst an inpatient, to select a GP and community pharmacy for the hospital team to liaise with for their admission. 10,28

Similarly, details of residential aged care homes or respite facilities that individuals are newly transferred to, should be documented in their medical record. Capturing the details of associated community pharmacies for interim or ongoing medicine supply, where relevant, is also important as this may differ from the individual's original community pharmacy.

## Risk stratification throughout admission and at discharge

Depending on local MM at TOC Stewardship implementation, the responsible pharmacist may consider conducting a reassessment of risk status for select individuals throughout their admission and/or at the point of discharge. This may be guided by professional judgment and/ or the potential for certain individuals' risk status to have significantly changed throughout their admission, based on their clinical status and medical condition. If applicable, any changes to the individual's risk status should be documented in their medical record and communicated to the remainder of the treating team.

#### Medication reconciliation at discharge

Medication reconciliation at discharge is effective in identifying, resolving and preventing medicine related problems. Studies suggest that combining medication reconciliation at discharge with more comprehensive interventions such as follow-up and home visits, may enhance clinical effectiveness, including reductions in hospital readmissions and ED visits.3 Collaborative pharmacist-medical practitioner preparation of discharge summary medicines information has also been shown to reduce the risk of transmission of incorrect information.3 An Australian RCT evaluated the impact of pharmacists completing the medication management plan in the medical discharge summary on the rate of medicines errors in these summaries. The RCT reported an absolute risk reduction of 46.5% in having at least one medicine error in the intervention arm compared with the control arm.<sup>47</sup> These interventions should be considered as part of local MM at TOC Stewardship implementation.

All individuals, regardless of risk status, should have their medicines reconciled at discharge. The ward pharmacist in collaboration with the medical team should reconcile the individual's planned discharge medicines list against admission medicines (as listed in the BPMH), most current medicine administration record, and new medicines planned to start upon hospital discharge. The ward pharmacist and medical team should address any unintentional variation, including any clinical, legal or ongoing supply issues. A clear explanation of any medicine changes that have occurred, such as dose increase or decrease or medicine omissions should also be clearly listed.3 Discharge reconciliation can be supported by implementing electronic tools such as medication reconciliation

and clinical decision support tools in EMR systems. Health service organisations must establish robust and transparent processes for the development, utilisation, review, and update of these tools.3

#### Medicine supply at discharge

To ensure individuals have timely and ongoing access to their medicines following discharge, medicine supply should be planned early and logistically coordinated between both the hospital team and the individual's communitybased health professionals. In all care settings, there should be minimal interruptions to individuals' ongoing medicine regimen by ensuring the provision of an adequate supply of medicines upon TOC. Consideration should be given to the duration it will take the individual to see their GP and/or obtain continued medicines access in the primary care setting post-discharge. The hospital Pharmacy Department or the responsible pharmacist's contact details should be provided for primary care clinicians to contact in case of any queries.

## For individuals discharging home

The ward pharmacist should discuss with the individual their ability to access timely medicine supply post-discharge and should consider if individuals' own admission medicines (if available) need to be re-labelled. Ongoing medicine supply should align with the health services' local policies and procedures. Where applicable, reconciled valid prescriptions (ideally by a pharmacist), should be provided to either the Pharmacy Department to facilitate timely supply of discharge medicines, or to the individual to obtain a continued supply of their medicines from their community pharmacy.

Additional requirements, such as organising a dose administration aid (DAA), may be required for some individuals. This should be led by the ward pharmacist in collaboration with the Pharmacy Department and the individual's nominated community pharmacy or aged care home. The community pharmacy or aged care home should also follow up with these individuals to ensure that the DAA has been collected and provide appropriate counselling, as required.

#### Additional considerations for 'high' risk individuals discharging home

If ongoing supply of medicines post-discharge is required for 'high' risk individuals, the ward pharmacist should contact and liaise with the nominated community pharmacy to arrange this. Where identified as necessary, the ward pharmacist may arrange for a dose administration aid to be prepared by the community pharmacy on discharge.

The risk assessment approach to determine medicine supply at the time of discharge should be locally endorsed and documented in local policies and procedures. The medicine supply options should be openly discussed and collaboratively decided with the individual, before documenting in their medical record.

### For individuals discharging to residential care or community aged care

Where legislated, hospital-supplied interim residential care medication administration charts (IRCMACs) and medicines are an effective strategy for the facilitation of continuity of medication administration during hospital to RACH transitions.3 IRCMACs have resulted in a significantly lower proportion of individuals with missed or delayed doses in 24 hours post-discharge, and fewer individuals requiring locum GP attendance to write medication orders.3Health service organisations should have local policies and procedures outlining the requirements and accountability for the provision of IRCMACs in their local context.

In instances where the supply of IRCMACs has not yet been legislated, health service organisations should consider embedding robust processes for timely and effective communication and handover between hospital teams and aged care settings. These should outline expectations of medicine supply by the hospital at discharge to prevent any interruptions to medicine administration. The hospital team should also confirm the correct community pharmacy details they will liaise with regarding the ongoing supply of medicines for individuals who are newly admitted to RACH, as this may differ from the original community pharmacy details provided by the individual on admission. This will facilitate ongoing, coordinated, and uninterrupted medicine supply post-discharge. Details should be clearly documented in the individual's medical record.

#### Additional considerations for Aboriginal and/or Torres Strait Islander individuals

Closing the Gap in Aboriginal and Torres Strait Islander disadvantage is a national priority that the Australian Government and all state and territory governments are committed to addressing.48 It is the responsibility of all health service organisations to consider and action their part in closing the gap in health disparities experienced by Aboriginal and Torres Strait Islander people.48 The NSQHS Standards includes key actions that health service organisations must abide by to improve the quality of care and health outcomes for Aboriginal and Torres Strait Islander individuals. Pharmacists working in a hospital setting should actively collaborate with Indigenous hospital liaison officers and Aboriginal and Torres Strait Islander health workers (and other Aboriginal health services) to enable decision making about an individual's care and their medicines management. This may require consultation with nominated family members.49

Hospital pharmacists should also be aware of funding programs to enable better access to medicines that may be available to individuals in the community (for example, Closing the Gap Pharmaceutical Benefits Scheme Co-payment Program).49 More information can be found in the Pharmaceutical Society of Australia's Guidelines for pharmacists supporting Aboriginal and Torres Strait Islander peoples with Medicines Management.49 Hospital pharmacists should work with the individual to ensure any plans during discharge do not cause avoidable financial or other barriers to medicine access and should supply medicines in accordance with local policies and procedures.

### Provision of an accurate medicines list and medicines counselling

## All individuals regardless of their risk status

 An accurate, reconciled medicines list should be included in all individuals' discharge summary. This should be completed after the responsible pharmacist has reconciled discharge prescriptions and addressed any discrepancies or required changes. Where necessary, an additional verbal explanation of the medicines list should be considered

Medicine counselling should:

- Be person-centred to empower them to actively partake in their own care
- Be culturally appropriate, in the preferred language (such as the use of translated written documents and/or with an interpreter) and presented at an appropriate health literacy level with the use of supporting materials and resources to facilitate the discussion3
- Involve the individual's family and/or carer as appropriate
- Incorporate teach-back techniques to assess individuals' beliefs and understanding of the information provided
- Provide opportunity for individuals to seek clarification if required. Teach-back should be employed to confirm understanding
- Be documented in the individual's medical records.

As a minimum, all individuals, regardless of their risk status, should be provided a patientfriendly medication list, either enclosed within or to accompany their discharge summary, per Action 4.12 of the NSQHS Medication Safety Standard.<sup>24</sup> This may include creating a patient friendly pharmacist shared medicines list, providing it to individuals and uploading it to their My Health Record.

The responsible pharmacist and medical team should coordinate the preparation of this list after reconciling it against the medication list recorded in the discharge summary to ensure consistency. The Guiding Principles lists tools to support individuals manage their medicines and obtain medicines lists (page 54).36

## Clinical handover and communication of information in the period leading up to and during transitions of care

Although the proposed stewardship framework is intended for implementation in a hospitalbased setting, dynamic, bidirectional interactions and effective handover between all components of the framework and the broader primary care context are necessary to facilitate high quality and safe medication management at TOC.3

Clear, timely and accurate communication between healthcare providers and the individual receiving care is fundamental for the effective coordination of care before and during acute care and when transitioning to the next care setting.<sup>50</sup> Good communication depends on openness, transparency, collaboration

and willingness to work together. Effective communication is also underpinned by structured clinical handover processes at transitions of care that clinicians in the acute and primary care setting actively contribute to. This determines the quality of care received by individuals during the transition from hospital to primary care settings.<sup>51</sup> Under an effective standardised and structured clinical handover process, all relevant participants must know the minimum information that needs to be communicated when handovers take place, the purpose of the handover, the structured format to aid communication, and how responsibility and accountability are transferred.41

The transfer of health information at TOC should be in real time and relevant to the circumstances of the change in an individual's situation. Communication modes at transitions of care should encompass a combination of direct verbal and electronic information transfer methods.3 Hospitals should have secure and reliable electronic systems to send and receive information to and from the health service and GP/GP practice and other treating doctor(s). As described in the Framework, digital health maturity, including the capability to transfer health information electronically, enabled by secure messaging, is recognised as a key success factor for its benefits realisation and supports desired clinical outcomes. Interoperability standards that enable real time transfer of information pertaining to an individual's care must be introduced with appropriate compliance measures.10

#### Provision of the discharge summary to the GP and upload to My Health Record

#### All individuals regardless of risk status

For all individuals regardless of their risk status, a discharge summary that includes a MMP should be provided to healthcare providers in the next care setting (for example, GPs, community pharmacists, aged care home) and the individual receiving care, to facilitate continuity of care and information sharing.

The discharge summary should provide an overview of the individual's hospital journey and post-discharge plan. Please see the Commission's National Guidelines for On-Screen Presentation of Discharge Summaries<sup>52</sup> (the Guidelines) for a comprehensive list of all the components, including medicines on discharge, that should be included in the discharge summary. The Guidelines provide recommendations to

ensure that the necessary information about an individual's hospital encounter, and immediate next steps and follow-up, are provided in a clear and unambiguous manner.52 This includes outlining any newly commenced medicines and their indication, any medication dosing changes and reasons, as well as clear communication of ceased medicines and the reasons for ceasing. The Guiding Principles also contain guidelines to support health professionals collaborate and communicate medicines-related information particularly at care transitions (page 55).36

In addition, relevant contact details should be displayed in all discharge summaries in case the primary care clinician needs to contact the author for clarification.<sup>52</sup> The discharge summary should be provided to the individual receiving care, distributed via secure messaging to the GP and uploaded to the individual's My Health Record (if they have one).<sup>10</sup> This aims to streamline individuals' transfer of care and should be reflected in organisational policies. This also aligns with the NSQHS Standards' requirements for health service organisations to work towards implementing systems that provide clinical information to the My Health Record system.<sup>23</sup> The availability of the discharge summary in an individual's My Health Record may empower them to be active partners in their care and facilitates effective communication between clinicians during TOC, especially at discharge.3 It is also a means to ensure community pharmacies routinely receive a copy of the discharge medication list with clear documentation of medication changes so they can support individuals in the community. However, it is crucial that My Health Record does not replace direct communication with an individual's usual GP or other primary care clinicians known as 'point-to-point' communication.3,10

Communication problems and poor integration of services at different levels of care (such as between acute care and community settings) have been acknowledged as among important challenges hindering the implementation of effective and seamless discharge processes. This may be addressed by using well-designed electronic systems that facilitate the transfer of relevant health information, including discharge summaries, to enable effective care during and post-transition. Digital health systems which are interoperable, and which connect the various silos of healthcare can improve communication

between doctors and health providers caring for individuals transitioning across the health system. 10,53

#### Timeliness of the discharge summary

Delayed or inaccurate communication between clinicians in the acute care and primary care settings during transfer of care may negatively affect continuity of care and contributes to adverse events.<sup>10</sup> Timely completion of discharge summaries facilitates prompt intervention and ensures smoother transitions of care.

Generally, all individuals, regardless of their risk status, should receive a complete discharge summary at the time of discharge. Timeliness of discharge summaries in health service organisations should align with state policy and requirements. This will empower individuals to actively contribute to their care and directly share their discharge summaries with their GP, community pharmacist, responsible nurse in RACHs and/or other relevant primary care clinicians. This may mitigate risks associated with the absence of electronic or embedded secure messaging systems that may impede on accurately transacting discharge summaries to primary care clinicians.

All individuals should be advised to follow-up with their regular GP, and other appropriate primary care clinicians, as per their care plan following discharge. Efforts should be made by the hospital team prior to discharge to ensure individuals have a clear, follow up plan and to book a timely follow up appointment with the individual's GP (or other primary care clinicians as appropriate), where relevant.10 In addition, it is expected that the receiving clinician reviews completed discharge summaries in a timely manner such that they are better prepared to receive the individual for ongoing management and care provision post-discharge.

## Phase 2: Transitioning into primary and aged care settings

Stewardship activities when transitioning into primary and aged care

### Collaborative medication review post-discharge – TOC Services

Health service organisations are encouraged to employ a range of practical TOC initiatives to support individuals' medication management following discharge, as part of their local stewardship implementation. In addition to the provision of medicines list and information to all individuals (as described above), the responsible pharmacist and/or medical team should discuss with 'high' risk individuals the availability and suitability of post-discharge follow up services. This includes arranging and, where necessary, booking relevant post-discharge follow up appointments and/or TOC services for individuals prior to their discharge, to facilitate their discharge process and TOC. Clinicians involved in the discharge of an individual from a hospital setting should be aware of the individual's situation and plans post-discharge. This includes considering the setting into which the individual

is discharged and the availability of follow-up primary care services.54 Individual consent to the agreed TOC services post-discharge should also be clearly documented in their medical record.

Early referral and intervention may prevent individuals' risk status from worsening. Therefore, it is essential that clinical judgment is exercised by hospital clinicians when determining which individuals, irrespective of their risk status, may derive the most benefit from referral to locally embedded TOC services.

Current Australian Government funded programs that support medication safety following hospital discharge should be considered when implementing local MM at TOC Stewardship. Table 4 includes a list of hospital based and primary care-based TOC services that may be considered when developing local MM at TOC Stewardship.<sup>3,55</sup> It should be noted that this list of services is not exhaustive and includes some examples of available TOC services health facilities may consider as part of local stewardship implementation. These are intended to expand access to medicine management services for individuals postdischarge, and not replace existing hospital services which provide specialised outreach medication management services or targeted interventions to individuals, including very complex high-risk individuals.

Table 4: Examples of hospital based and primary care based TOC services

#### **Hospital-based TOC services**

- Post-discharge follow up care and services (such as via telehealth)
- **Hospital Outreach Medication Review** (HOMRs) services55
- Outpatient clinic review

## **Primary care based TOC services**

- Post-discharge GP consultation
- Comprehensive Medication Management review such as Home Medicines Review<sup>56</sup> (HMR)/Residential Medication Management Review<sup>57</sup> (RMMR) or Aged care on-site pharmacist<sup>45</sup> review
- Review by embedded pharmacist roles within the aged care, primary care (e.g. General practice pharmacist<sup>61</sup>), and disability care settings3
- Community pharmacists providing MedsCheck or Diabetes MedsCheck.<sup>59</sup> This may result in a recommendation to conduct a HMR

It is important for health service organisations to consider the availability of resources within the local acute and primary care contexts to determine the most appropriate and sustainable stewardship approach. When developing or enhancing MM at TOC Stewardship, clear responsibility and accountability for all involved clinicians should be allocated to optimise the communication and documentation of individual health information and follow up at care transitions.

Implementation of local MM at TOC Stewardship should be specifically tailored to the local context and should be dynamic and adaptable to future novel strategies, programs and advancements that may arise in this space. Consideration should also be given to the financial, cultural, and geographical accessibility of care services, including the availability of interpreter services in primary care settings. For example, rural and remote health services may need to leverage expertise that can be shared across sites and consider employing TOC services virtually or via telehealth depending on the availability of resources. This will help identify which available TOC services may be considered for local implementation.

It is noteworthy that whilst this framework is focussed on optimising MM at TOC, care provision should involve a holistic review of the individual, their medical conditions and other associated physical and psychosocial risks and complexities that impact the medicines they are is taking. Evidence suggests that medication interventions should be integrated into a multicomponent management approach, as part of a multidisciplinary team, for optimal success.3 Enlisting the help of family, carers and social and community supports is an important adjunct to medical care and should be considered when planning and implementing local stewardship. Advanced care planning that may commence in the hospital or outpatient setting and include engaging hospice services (if appropriate) is another key component of a transition of care to consider.54

### Additional guidance on example TOC services

#### Post-discharge follow up care by the Hospital team (such as via telehealth)

In preparation for discharge, the responsible pharmacist (or other suitably qualified clinician) is encouraged to undertake a follow up consultation, with all 'high' risk individuals at a minimum, within the immediate post-discharge period.

As a minimum, post-discharge follow up consultations, such as via telehealth, led by the hospital team should include3:

- Collaborative post-discharge medicines review with the individual, focusing on priority issues for follow up as outlined in the discharge summary
- Answering any medicine related queries
- Resolving any medicine related issues, including liaising with the community pharmacy for any issues related to medicine supply
- Provision of medication adherence support
- Provision of non-pharmacological advice (such as symptom monitoring, lifestyle, diet and exercise plan, as well as wellbeing and self-care advice).

The ward pharmacist and medical team should discuss with the individual prior to discharge what the follow up consultation will focus on, including who the most appropriate person is to conduct the consultation with (i.e. the individual receiving care (depending on capacity), their family and/or carer or the nurse responsible for their care if they are discharging to an aged care home).

Findings and recommendations from the consultation should be documented in a dedicated standardised form in the individuals' health record and sent to the individual's GP via secure messaging. If possible, this should also be uploaded to My Health Record.

Based on findings, the responsible pharmacist should liaise with and escalate any concerns to relevant primary care health clinicians, such as GPs, community pharmacists and nursing staff caring for individuals residing in RACHs, to address ongoing management.

#### Comprehensive medication management review

The responsible pharmacist and medical team are encouraged to discuss with the individual additional post discharge TOC medication management services they may benefit from. Evidence suggests post-discharge pharmacist-led medication review services are well-received by clinicians and are effective in reducing medicine related problems.3 Yet, Australian data suggests that some of these services (for example the timely provision of HMRs and RMMRs) remain severely underutilised.3

Table 4 suggests some examples of TOC services that may be considered. Health service organisations may also refer to SHPA's Hospital-initiated medication review – Hospital Pharmacy Practice Update<sup>55</sup> for detailed information about possible pathways for referrals to HMRs, RMMRs and HOMRs. SHPA's Standard of Practice for pharmacy services specialising in transitions of care<sup>31</sup> also describes current best practice for the provision of pharmacy services at transitions of care. It may be helpful for health service organisations to use these resources as guidance when establishing referral pathways for post-discharge TOC services that are tailored to their local context, as part of stewardship implementation.

Any recommendations for post-discharge TOC services should be outlined by the hospital team in the discharge summary. Additionally, for 'high' risk individuals being discharged, it will be necessary for the hospital team to verbally relay this information to GPs. This will ensure effective communication between care providers about individuals' care plans during and after TOC and allow hospital clinicians to verbally confirm receipt of the discharge summary by the GP.

Moreover, this provides GPs the opportunity to 'flag' the priority review of these 'high' risk individuals post-discharge in their systems. This will assist them to promptly refer these individuals to the recommended TOC services post-discharge and provide appropriate and timely follow up care. This is supported by AMA's position statement that outlines that when an individual's condition is complex or follow up needs to be provided urgently, a phone call should be made to the individual's general practice to notify of the impending transfer of care and ensure that a postdischarge appointment with the GP is made and communicated to the individual at the time of transfer.<sup>10</sup> Box 5 provides additional information on post-discharge follow up care by the primary care team.

#### Ongoing continuity of care post-discharge

Individuals' general practitioners remain the key coordinators of their clinical management, including the management of their medicines, in the primary care context.<sup>3</sup> There should be ongoing coordination and continuity of care for all individuals, through regular outpatient follow ups with their primary care team, after the undertaking of TOC services and initial consultations post-discharge. This will ensure that all issues are managed through appropriate pathways post-discharge. It also provides GPs the opportunity to regularly update individuals' medicines list in their systems, including in individuals' My Health Record, such that accurate medicines lists are transferred with individuals who present to ED through a GP referral letter (for individuals living in the community) or via aged care transfer summaries (for aged care home residents). MyMedicare is a new voluntary patient registration model that aims to formalise the relationship between individuals, their general practice, GP and primary care teams, and may be a helpful initiative to consider.

Ongoing continuity of care post-discharge relies on shared responsibility and accountability between the treating teams in the acute, primary, and aged care settings and the individual, their family and/or carer. Timeliness and frequency of outpatient follow up will depend on the level of risk and complexity of the individual's condition and/or medicines.3 Appointments should be prompt and held with clinicians who have a longitudinal relationship with individuals and are therefore familiar with their care.54

### Box 5: Post-discharge follow up care by the Primacy Care team

It should be noted that the Primary Care team and their roles described below are not exhaustive and may include other relevant primary care clinicians (for example, specialists, community nurses, allied health staff, etc.) who are involved in individuals' care provision and medication management following discharge.

#### **General practitioners**

- GPs remain central coordinators of individuals' care in the community that facilitate safe and high-quality transitions of care. 13 Post-discharge GP consultations are therefore a key component of continuity of care.
- Depending on the level of risk and complexity of individuals' conditions and medicines, GPs should determine timeliness and frequency of follow up to ensure continuity of care.3
- GPs should systematically prioritise individuals and review findings and recommendations during post-discharge consultation appointments. This includes reviewing recommendation reports from the hospital team about post-discharge follow up consultations for ongoing medication management. This also involves making appropriate evidence-based recommendations about the management of individuals' medical conditions, including updating or developing a medication management plan (if the individual does not already have one from the hospital), in collaboration with the individual and updating their health records accordingly.
- Additional correspondence received from the hospital, including the individual's discharge summary, should be reviewed in a timely manner by the receiving clinician to inform ongoing care provision.
- GPs should contact the hospital pharmacist to clarify any queries and liaise with the individual's community pharmacy as required for ongoing medicine supply.
- GPs should collaborate with responsible nurses looking after individuals in RACHs or respite care, as required.

#### **Primary care-based pharmacists**

- Following discharge, the community pharmacist looking after the individual should review their discharge summary, reconcile the medicines list and update their records accordingly.
- It will be important to facilitate ongoing medicine supply, including the provision of a DAA if appropriate. The community pharmacist may liaise with the GP and nursing staff in RACHs, or respite care after the completion of follow up consultations by the hospital team to clarify
- Similarly, and based on recommendations in the individual's discharge summary, the community pharmacist may also conduct a Medscheck and/or a Diabetes Medscheck. The pharmacist should communicate findings and recommendations, which may include referral to a HMR, to the GP. If appropriate, the pharmacist may consider uploading a reconciled pharmacist shared medicines list for consenting individuals in their My Health Record.
- Other primary care-based pharmacists, such as HMR/RMMR credentialled pharmacists, GP pharmacists or Aged Care on-site pharmacists, should liaise with the individual, their family and/or carer to arrange and conduct a comprehensive medication management review service such as a HMR/RMMR, once a GP referral is received.
- Primary care-based pharmacists should communicate their findings and recommendations report from these services to the GP. If possible and practical, associated findings and recommendations report should be uploaded to the individual's My Health Record to ensure effective communication between all clinicians involved. Consideration should be given to support the sharing of findings and recommendations to an individual's My Health Record utilising existing document types such as event summaries or future alternatives.

#### Nursing staff in RACHs or respite care

- Depending on the individual's capacity, nursing staff looking after individuals in RACHs, or respite care may support follow up consultations by the hospital team, post-discharge.
- Following GP review of the findings and recommendations report from post-discharge TOC services, a responsible clinician should ensure that individuals' medication charts reflect recommended changes.



# Element 4: Ongoing monitoring, evaluation and reporting

It is essential for health service organisations to routinely monitor, evaluate and report on the performance of their local Medication Management at Transitions of Care (MM at TOC) Stewardship implementation. Performance should be measured against pre-determined quality indicators. Results should be regularly reported to the local governing committee and fed back to clinicians. 3,22,26

The following two feedback pathways that support effective communication are recommended:22

- Regular reporting to executives, stewardship sponsors and governing committee (such as the TOC stewardship committee, and/or the local drugs and therapeutics committee) on MM at TOC Stewardship performance against key quality indicators and outcomes. This should be done at least quarterly, along with publishing an annual report that summarises stewardship performance and QI initiatives that address areas for improvement
- Direct feedback to individual clinicians and clinician leads on stewardship implementation outcomes should be regularly provided. This can occur via various modes, such as, presentation to staff during grand rounds, or through the dissemination of formal reports.

This is to ensure the objectives of local MM at TOC Stewardship are met and to facilitate continuous quality improvement that supports stewardship sustainability. Areas requiring further attention and improvement should guide topics for clinician education and training. Once a stewardship activity has become established practice or behaviour change has occurred, this should be incorporated into local policies and procedures to embed as part of usual practice.<sup>3,26</sup>

## **Quality indicators for** MM at TOC Stewardship

As safety cannot be measured directly, measures are used as indicators of safety. 63 Data collection for key indicators of the performance of MM at TOC Stewardship should be planned as an integral component from the outset. In the acute setting, the measures can be built into general reporting in the health service organisation's performance framework, against the NSQHS Medication Safety and Communicating for Safety Standards criteria.

Known as the Donabedian model, measures used to assess and compare the quality of health care across organisations are classified as structure, process or outcome measures,64 or balancing measures. Examples of suggested quality measures are summarised in Table 5. These outline existing quality indicators that may be relevant to safe medication management at TOC, summarised based on the literature.3 These measures are only foundational for evaluation of MM at TOC Stewardship. Health service organisations should assess these measures for appropriateness and relevance when designing their context specific evaluation approach of local MM at TOC Stewardship.

**Table 5:** Suggested list of quality indicators relevant to safe and high-quality MM at TOC<sup>3</sup>

Type of measure	Questions answered by the measure	Subgroup	Suggested measures
Structural measures assess the effectiveness of a health service organisation's systems and processes to provide high-quality care. Structure measures	Are the right elements in place? Are the resources, lines of reporting and policies available?	Governance	<ul> <li>The hospital has an established governing committee that is responsible for overseeing, monitoring and reviewing local MM at TOC Stewardship</li> <li>MM at TOC Stewardship has local support from member(s) of the executive team in a health service organisation</li> <li>The health service organisation provides adequate access to necessary human, financial, and technology resources to facilitate timely and safe transitions of care</li> </ul>
		Local policy and protocols	■ The health service organisation has a policy to support the transfer of care of individuals who separate from the hospital setting, including directions on the roles, responsibilities, and accountabilities of clinicians, systems and procedures to support MM at TOC
			<ul> <li>The health service organisation has a policy to support appropriate risk stratification and prioritisation protocols of individuals identified as at higher risk of poor transitions (for example, individuals identified as having a higher risk of hospital readmission or those who are using complex or high-risk medicine regimens)</li> </ul>
			<ul> <li>The health service organisation provides information to clinicians involved in individual referrals on available services to support safe MM at TOC</li> </ul>
		Multidisciplinary Stewardship Team	<ul> <li>Evidence of a multidisciplinary stewardship team where each member is aware of their roles, responsibilities, and accountabilities</li> </ul>
			■ Evidence of leadership of the multidisciplinary stewardship team with professional accountability for the outcomes of the program and expertise in MM at TOC
			■ The MM at TOC Stewardship team has appropriate senior and executive sponsorship.
		Systems for patient identification	<ul> <li>The health service organisation has processes in place to identify and prioritise care for individuals at risk of poor transitions, such as individuals at high risk for medication-related harm or hospital readmission</li> </ul>
		Documentation and communication	■ The health service organisation has structured information templates to support clear and consistent documentation and clinical handover before and during TOC
			<ul> <li>The health service organisation has processes in place to ensure the timely transfer of essential transition of care information to key stakeholders</li> </ul>
		Appropriate broader connections	■ Evidence of local arrangements that facilitate effective connections between the health service organisation and its network of primacy care clinicians
			<ul> <li>Evidence of systems that support the provision of outpatient follow up and TOC services post-discharge</li> </ul>
		Monitoring, evaluation and feedback	<ul> <li>The health service organisation routinely collects and analyses data on the processes and outcomes of transitions of care, to evaluate impact and identify areas needing change</li> </ul>
			<ul> <li>The health service organisation shares feedback on MM at TOC Stewardship outcomes with affected clinicians and provides educational resources and training to improve the safe management of medicines at TOC</li> </ul>

Type of measure	Questions answered by the measure	Subgroup	Suggested measures
Process measures may be used regularly:  As part of a quality improvement (OI) cycle	Are our systems performing as planned? Are they effective?	Medication reconciliation at hospital admission	<ul> <li>Proportion of individuals who have a best possible medication history and medication reconciliation completed and documented within 24 hours of admission</li> <li>Accuracy of medication reconciliation at admission and discharge</li> <li>Evidence of interdisciplinary collaboration in medication admission processes</li> <li>Proportion of individuals who have a documented medication management plan commenced during admission and finalised prior to care transition</li> <li>Selected measures from the National Quality Use of Medicines Indicators for Australian Hospitals according to the specific context of local MM at TOC Stewardship</li> </ul>
		Medication reconciliation at hospital discharge	<ul> <li>Proportion of individuals who have a medication reconciliation upon hospital discharge completed and documented in the medical record using the correct tool for documentation</li> <li>Evidence of review of discharge prescriptions for appropriateness and accuracy</li> <li>Evidence of reconciliation of verified discharge prescriptions against discharge medication lists (discharge summaries, patient lists and interim medication charts) to ensure consistency</li> <li>Evidence of a clear plan and justification for all medications on discharge plan (including to continue, discontinue, or hold)</li> <li>Accuracy of medication lists in discharge summaries</li> <li>Proportion of individuals with medication discrepancies or problems resolved prior to discharge</li> <li>Evidence of interdisciplinary collaboration in medication discharge processes</li> </ul>
		Documentation and communication	<ul> <li>There are structured clinical handover processes for intra- and inter-hospital individual transfers that support continuity of medication management</li> <li>Proportion of discharge summaries with clear documentation of the clinician(s) responsible for ongoing care provision following discharge</li> <li>Proportion of discharges where critical information is transmitted at the time of discharge to the next care setting or clinician continuing care</li> <li>Proportion of individuals discharged to residential care homes who were provided with an interim medication administration chart(s) (if applicable)</li> <li>Evidence of local arrangements to ensure that people discharged have a reconciled list of their medicines in their GP record within one week of the GP practice receiving the information (collected by audit)</li> <li>Percentage of letters to GPs after telehealth consultation within seven days of discharge (if applicable)</li> <li>Percentage of letters sent to GPs after conducting TOC services following discharge (if applicable)</li> <li>Percentage of individuals' hospital records accurately listing their usual GP/general practice</li> <li>Percentage of individuals' hospital records accurately listing their usual community pharmacy</li> <li>Percentage of individuals where the usual GP/general practice details is included in discharge planning</li> </ul>
		Patient and carer education and discharge planning  Clinician education	<ul> <li>Evidence of local systems that engage the individual, their family and/or carer in discharge planning before hospital discharge</li> <li>Proportion of individuals who receive individualised verbal counselling and a discharge medication management plan in patient-friendly language at the time of discharge</li> <li>Proportion of individuals discharged with an adequate supply of medications until follow-up with the next health care provider, as appropriate</li> <li>Process to measure individuals' understanding of their medicines</li> <li>Evidence of processes to enable staff to establish and maintain their competencies or recency of practice in supporting MM at TOC</li> </ul>
		Medication management after hospital discharge	<ul> <li>Percentage completion of mandatory training courses, related to MM at TOC, by staff</li> <li>Percentage of individuals who have a scheduled follow-up MM at TOC related service or appointment at the time of discharge as clinically appropriate</li> <li>Proportion of individuals who receive a telehealth consultation within seven days of discharge as clinically appropriate</li> <li>Proportion of individuals who receive TOC services within allocated timeframes post-discharge as clinically appropriate</li> </ul>

Type of measure	Questions answered by the measure	Subgroup	Suggested measures
Outcome measures  Outcome measures reflect the impact of an intervention on the health status of the target group. Whilst outcome measures may seem to represent the 'gold standard' in measuring quality, they may be the result of numerous factors beyond a health service organisation's control which need to be accounted for. Although reduction in hospital re-admissions due to medication misadventure would be the most easily measured outcome, in isolation, it may not indicate improvements in individual outcomes as a range of safety and quality outcome measures also need to be monitored. MM at TOC stewardship should consider improved patient outcomes, patient safety, and costs.	What is the result?	Clinical outcomes	<ul> <li>Risk-adjusted mortality following transition of care</li> <li>Unplanned hospital readmissions within 30 days of hospital discharge</li> <li>Unplanned hospital readmissions within 30 days of hospital discharge due to a medication related error</li> <li>Unplanning ED readmissions or representations within 30 days due to a medication related error</li> <li>Proportion of individuals revisiting ED following hospital discharge</li> <li>Length of hospital stay</li> <li>Proportion of individuals with medication discrepancies or errors identified after transition of care</li> <li>Proportion of individuals experiencing a medication-related adverse event following hospital discharge</li> <li>Percentage change in medication related error incident reporting before and after implementation of local MM at TOC Stewardship</li> </ul>
Balancing measures As well as measuring improvements in patient safety, consideration should be given to potential unintended consequences of MM at TOC Stewardship implementation. Balancing measures provide insight into the question of whether changes might cause new problems.	Are there any unintended consequences?	Patient and carer satisfaction  Clinician satisfaction  Health-related costs	<ul> <li>Proportion of individual satisfaction with their experience and care provision during transitions of care and their understanding of the care plan, including the management of their medicines</li> <li>Proportion of clinician satisfaction with the standard of information provided in transfer of care summaries and related clinical outcomes</li> <li>Healthcare costs</li> </ul>

## **Appendix A: Preamble**

## What is this document about?

The Medication Management at Transitions of Care (MM at TOC) Stewardship Framework (the Framework) has been developed for health managers and clinicians working in acute private and public health service organisations to build and implement local MM at TOC Stewardship. The Framework outlines a systematic approach that provide health managers and clinicians the evidence, expert guidance, and tools they need to establish, implement, sustain and improve MM at TOC Stewardship within their health settings. It describes how prescribers, pharmacists, nurses, the wider multidisciplinary team, and primary care clinicians can contribute to stewardship success by incorporating TOC principles and key elements within their clinical practice. Guidance provided in this publication has been developed for information purposes only and does not override the individual responsibility of healthcare professionals and health services to make decisions appropriate to the circumstances of the individual, in consultation with them, their family and/or carer.

The Framework describes the key essential elements that underpin MM at TOC Stewardship and that should be considered when establishing, maintaining and/or improving local MM at TOC Stewardship.

## Who is the Framework applicable to?

This Framework applies to health service organisations and clinicians from all disciplines. health managers and health service executives, whether they are local, district/network, private, regional or state/territory organisations, involved in the development, enhancement, or implementation of MM at TOC Stewardship.

It is acknowledged that transitions of care are everyone's responsibility. Although the framework has been designed with a particular focus on implementation in a hospitalbased setting, key elements described in the Framework are relevant to primary care clinicians looking after individuals and their medicines following hospital discharge.

For those organisations that are developing or have developed MM at TOC Stewardship, this publication provides a framework against which to review their processes and guide improvements and changes as necessary.

This framework considers an individual's entire hospital; from presentation to the Emergency Department (ED), admission to inpatient wards and when transitioning across other care settings within the hospital, and into the primary care or aged care setting following discharge.

## Out of scope

Individuals discharged from ED, short stay units, and day surgery are excluded from this proposed MM at TOC Stewardship Framework. Given the typically shorter length of hospital stay for this cohort, the proposed activities for medication management described in this Framework may not all be applicable. Transitions of care that occur within the primary and community care sector, and the disability sector are also excluded from this Framework.

## What do I need to consider before applying this Framework in my local health service?

Safe and quality TOC are are complex but achievable and require sustained effort. No single approach will deliver optimal MM at TOC in every context. The application of the MM at TOC Stewardship Framework and its key elements may vary depending on the structure, capability, digital maturity and available resources of the health service organisation and the primary care sector. Stewardship should be adapted for the individual health service. Using local information and data, through a risk management approach to better understand organisational needs, culture, and readiness to implement or improve MM at TOC Stewardship will maximise its safety and quality benefits. This should be within the context of the overall management of individuals, their medical conditions and other associated physical and psychosocial factors that affect how individuals take their medicines.

## Appendix B: Case for change

Medication Management at Transitions of Care is supported by national standards and guidelines, including the:

- National Safety and Quality Health Service Standards<sup>63</sup>
- **Guiding Principles to Achieve Continuity in** Mediation Management<sup>36</sup>
- National Medicines Policy 2022.64

## **National Safety and Quality Health Service Standards**

The NSQHS Standards provide a quality assurance mechanism that tests whether relevant systems are in place to ensure that expected standards of safety and quality are met.63 The Communicating for Safety **Standard** recognises the need for leaders of a health service organisation to set up and maintain systems and processes to support effective communication with patients, carers and families; between multidisciplinary teams and clinicians; and across health service organisations. This Standard aims to ensure timely, purpose-driven and effective communication and documentation that support continuous, coordinated and safe care for patients.46

This is supported by criteria and actions of the Clinical Governance Standard<sup>23</sup>, the Partnering with Consumers Standard,42 the Medication Safety Standard<sup>24</sup> and the Comprehensive Care Standard. 65 The Clinical Governance Standard aims to ensure that there are systems in place within health service organisations to maintain and improve the reliability, safety, and quality of health care. It recognises the importance of governance, leadership, culture, patient safety systems, clinical performance, and the healthcare environment in delivering high quality care.23 In relation to MM at TOC, the Clinical Governance Standard ensures that everyone - from frontline clinicians to managers and

members of governing bodies, such as boards is accountable to individuals receiving care and the community for assuring effective MM at TOC.

## **Guiding Principles to Achieve Continuity in Medication Management**

The Guiding Principles are underpinned by Australia's National Medicines Policy 2022 (NMP). The Guiding Principles offer a systems approach to the medication management pathway that is, they advocate consistent and standard practice across all providers of healthcare services. The principles of the systematic approach underpin the MM at TOC Stewardship Framework.36,64

## **National Medicines** Policy 2022

One of the four central pillars of the NMP is quality use of medicines (QUM) and medicines safety. In 2019, 'QUM and Medicines Safety' was declared Australia's 10th National Health Priority. The NMP also advocates a partnership approach to QUM and recognises that governments, healthcare providers, the individual receiving care, their carer and/or family have a shared responsibility in this endeavour. It outlines that 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 healthcare sector, while observing relevant state and territory legislation. In addition, the NMP seeks to ensure medicines are used optimally and judiciously and focuses on informed choice and well-coordinated person-centred care.64

## References

- Australian Commission on Safety and Quality in Heath Care. Transitions of Care. [Internet] Sydney: ACSQHC; 2024 Available from: www. safetyandquality.gov.au/our-work/transitionscare.
- World Health Organization. Medication Safety in Transitions of Care. Technical Report. Geneva: WHO; 2019.
- Emadi F, Liu S, Yiu CH, Baysari M, Budgeon C, Carter S, et al. Medication Management at Transitions of Care Stewardship Framework. Rapid Literature Review and Environmental Scan - Final Report. Sydney: Faculty of Medicine and Health, School of Pharmacy, University of Sydney; 2023. p. 112.
- Pharmaceutical Society of Australia. Medicine 4. Safety: Take Care. Canberra: PSA; 2019. p. 32.
- Roughead L, Semple S, Rosenfeld E. Literature 5. Review: Medication Safety in Australia. Sydney: Australian Commission on Safety and Quality in Health Care; 2013. p. 126.
- Redmond P, Grimes TC, McDonnell R, Boland F, Hughes C, Fahey T. Impact of medication reconciliation for improving transitions of care. Cochrane Database of Systematic Reviews. 2018 (8).
- Australian Commission on Safety and Quality in Heath Care. Medication reconciliation. [Internet] Sydney: ACSQHC; Available from: www. safetyandquality.gov.au/our-work/medicationsafety/medication-reconciliation.
- Australian Commission on Safety and Quality in Health Care. Medication without harm - WHO Global Patient Safety Challenge. Australia's response. Sydney: ACSQHC; 2020. p. 56.
- Duke Clinical Research Institute. Beers Criteria Medication List: Potentially Inappropriate Medications for the Elderly According to the Revised Beers Criteria. [Internet] Durham NC: Duke University; [cited April 2022] Available from: dcri.org/beers-criteria-medication-list.
- 10. Australian Medical Association, AMA Position Statement: General Practice/Hospitals Transfer of Care Arrangements 2023. AMA; 2023. p. 8.
- 11. Manias E, Street M, Lowe G, Low JK, Gray K, Botti M. Associations of person-related, environment-related and communication-related factors on medication errors in public and private hospitals: a retrospective clinical audit. BMC Health Services Research. 2021;21(1):1025.
- 12. Angley M, Criddle D, Rigby D, Elliott RA, Phillips K, Penm J, et al. Hospital-initiated post-discharge medication reviews in Australia: expert opinion on the barriers and enablers to implementation. Journal of Pharmacy Practice and Research. 2022;52(6):446-53.

- 13. Australian Commission on Safety and Quality in Heath Care. Principles of safe and high-quality transitions of care (factsheet). Sydney: ACSQHC; 2024. p. 2.
- 14. Su E, Liew DFL, Donnelly J, Elliott RA. Medicines stewardship. Australian Prescriber. 2023;46(2).
- 15. Council of Australian Therapeutic Advisory Groups. Getting it Right: Guiding Principles for Medicines Stewardship Programs. CATAG; 2022. p. 30.
- 16. Australian Commission on Safety and Quality in Health Care. Antimicrobial Stewardship in Australian Health Care. Sydney: ACSQHC; 2023.
- 17. Australian Digital Health Agency. National Digital Health Strategy 2023-2028. Sydney: Australian Digital Health Agency, 2023 licensed under CC BY-NC 4.0; 2023. p. 62.
- 18. Australian Digital Health Agency. National Digital Health Strategy Delivery Roadmap 2023-2028. Sydney: Australian Digital Health Agency, 2023 licensed under CC BY-NC 4.0; 2023. p. 36.
- 19. Australian Commission on Safety and Quality in Heath Care. Electronic medication management. [Internet] Sydney: ACSQHC; Available from: www. safetyandquality.gov.au/our-work/medicationsafety/electronic-medication-management.
- 20. Australian Commission on Safety and Quality in Health Care. My Health Record in emergency departments: final report and adoption model Sydney: ACSQHC; 2021. p. 140.
- 21. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards user guide for governing bodies. Sydney: ACSHQC; 2019. p. 67.
- 22. Australian Commission on Safety and Quality in Health Care. 2 Establishing and sustaining an antimicrobial stewardship program. Antimicrobial Stewardship in Australian Health Care. Sydney: ACSQHC; 2023. p. 35-74.
- 23. Australian Commission on Safety and Quality in Health Care. Clinical Governance Standard. [Internet] Sydney: ACSQHC; Available from: www.safetyandquality.gov.au/standards/ nsqhs-standards/clinical-governance/clinicalgovernance-standard.
- 24. Australian Commission on Safety and Quality in Health Care. Medication Safety Standard. [Internet] Sydney: ACSQHC; Available from: www. safetyandquality.gov.au/standards/nsqhsstandards/medication-safety-standard.
- 25. Standards Australia & Standards New Zealand. Risk management - Guidelines (AS/NZS 1SO 31000:2018). SAI Global; 2018.

- 26. Council of Australian Therapeutic Advisory Groups. Getting it right: Medicines Stewardship Toolkit. CATAG; 2022. p. 16.
- 27. Council of Australian Therapeutic Advisory Groups. Cardiology Medicines Stewardship Program. CATAG; 2023. p. 2.
- 28. Queensland Health. Transition of Care Pharmacy Project (ToCPP). [Internet] Queensland: The State of Queensland; 2023 [updated 4 January 2024] Available from: www.health.qld.gov.au/ahwac/ html/tocpp/info.
- 29. Wheeler AJ, Scahill S, Hopcroft D, Stapleton H. Reducing medication errors at transitions of care is everyone's business. Australian Prescriber. 2018;41(3):73-7.
- 30. Society of Hospital Pharmacists Australia. Standards of Practice for Clinical Pharmacy Services. [Internet] Melbourne: SHPA; Available from: shpa.org.au/publications-resources/ standards-of-practice.
- 31. Society of Hospital Pharmacists Australia. Standard of Practice for pharmacy sevices specilaising in transitions of care. 2024.
- 32. Pharmaceutical Society of Australia. Guidelines for pharmacists performing clinical interventions. Canberra: PSA; 2019. p. 32.
- 33. Criddle DT, Devine B, Murray K, Budgeon CA, Sanfilippo FM, Gupta S, et al. Developing PHarmacie-R: A bedside risk prediction tool with a medicines management focus to identify risk of hospital readmission. Research in Social and Administrative Pharmacy. 2022;18(7):3137-48.
- 34. SHPA Committee of Speciality Practice in Clinical Pharmacy. Chapter 1: Medication Reconciliation. Journal of Pharmacy Practice and Research. 2013;43(S2):S6-S12.
- 35. Australian Commission on Safety and Quality in Health Care. Implementing the Comprehensive Care Standard: Clinical assessment and diagnosis. Sydney: ACSQHC; 2020.
- 36. Department of Health and Aged Care. Guiding Principles to Achieve Continuity in Medication Management. Canberra: DOHAC; 2022. p. 70.
- 37. Safer Care Victoria. Partnered pharmacist medication charting (PPMC) scaling project. [Internet] Melbourne: SCV; Available from: www.safercare.vic.gov.au/best-practiceimprovement/improvement-projects/ medications-treatment-infection-prevention/
- 38. Tong EY, Roman C, Mitra B, Yip G, Gibbs H, Newnham H, et al. Partnered pharmacist charting on admission in the General Medical and Emergency Short-stay Unit - a cluster-randomised controlled trial in patients with complex medication regimens. Journal of Clinical Pharmacy and Therapeutics. 2016;41(4):414-8.
- 39. Tong EY, Mitra B, Yip G, Galbraith K, Dooley MJ, PPMC Research Group. Multi-site evaluation of partnered pharmacist medication charting and in-hospital length of stay. British Journal of Clinical Pharmacology. 2020;86(2):285-290.
- 40. Agency for Clinicial Innovation. Principle 2 Early preparation. Key principles for transition care. [Internet] Sydney: ACI; Available from: aci.health. nsw.gov.au/networks/transition-care/resources/ key-principles/early-preparation.

- 41. Australian Commission on Safety and Quality in Health Care. Communication at clinical handover. [Internet] Sydney: ACSQHC; Available from: www. safetyandquality.gov.au/standards/nsqhsstandards/communicating-safety-standard/ communication-clinical-handover.
- 42. Australian Commission on Safety and Quality in Health Care. Partnering with Consumers Standard. [Internet] Sydney: ACSQHC; Available from: www.safetyandquality.gov.au/standards/ nsqhs-standards/partnering-consumersstandard.
- Australian Commission on Safety and Quality 43. in Health Care. Continuity of medication management. [Internet] Sydney: ACSQHC; [cited 21 June 2024] Available from: www. safetyandquality.gov.au/standards/nsqhsstandards/medication-safety-standard/ continuity-medication-management.
- 44. Pharmaceutical Society of Australia. Pharmacists in 2030. [Internet] Canberra: PSA; 2024 Available from: www.psa.org.au/advocacy/working-forour-profession/pharmacists\_in\_2030/.
- 45. Department of Health and Aged Care. Aged care on-site pharmacist. [Internet] [updated 21 June 2024] Available from: www.health.gov.au/ourwork/aged-care-on-site-pharmacist.
- Australian Commission on Safety and Quality in Health Care. Communicating for Safety Standard. [Internet] Sydney: ACSQHC; Available from: www. safetyandquality.gov.au/standards/nsqhsstandards/communicating-safety-standard.
- Tong EY, Roman CP, Mitra B, Yip GS, Gibbs H, Newnham HH, et al. Reducing medication errors in hospital discharge summaries: a randomised controlled trial. Medical Journal of Australia. 2017;206(1):36-9.
- 48. The Wardliparingga Aboriginal Research Unit of the South Australian Health and Medical Research Institute. National Safety and Quality Health Service Standards user guide for Aboriginal and Torres Strait Islander health. Sydney: Australian Commission on Safety and Quality in Health Care; 2017. p. 86.
- 49. Pharmaceutical Society of Australia. Guideline for pharmacists supporting Aboriginal and Torres Strait Islander peoples with medicines management. Canberra: PSA; 2022. p. 60.
- 50. Agency for Clinicial Innovation. Principle 5 Good communication and shared responsibility. Key principles for transition care. [Internet] Sydney: ACI; Available from: aci.health.nsw.gov. au/networks/transition-care/resources/keyprinciples/good-communication-and-sharedresponsibility.
- 51. Wubshet Tesfaye MJ PA, Timothy F Chen, Ronald L Castelino, Kamal Sud. Literature review and environmental scan: Review and update the National Guidelines for On-Screen Presentation of Discharge Summaries. 2022.
- 52. Australian Commission on Safety and Quality in Health Care. National guidelines for on-screen presentation of discharge summaries. Sydney: ACSQHC; 2017. p. 58.
- 53. Australian Medical Association. AMA Guidelines: 10 Minimum Standards for Advancing Digital Health in General Practice. AMA 2022. p. 3.

- 54. Burke RE, Kripalani S, Vasilevskis EE, Schnipper JL. Moving beyond readmission penalties: Creating an ideal process to improve transitional care. Journal of Hospital Medicine. 2013;8(2):102-109.
- 55. Society of Hospital Pharmacists Australia. Hospital-initiated medication reviews. Hospital Pharmacy Practice Update. Melboourne: SHPA. p. 8.
- 56. Pharmacy Programs Administrator. Home Medicines Review. [Internet] Melbourne: Pharmacy Programs Administrator: Available from: www.ppaonline.com.au/programs/ medication-management-programs/homemedicines-review.
- 57. Pharmacy Programs Administrator. Residential Medication Management Review and Quality Use of Medicines. [Internet] Melbourne: Pharmacy Programs Administrator; Available from: www. ppaonline.com.au/programs/medicationmanagement-programs/residential-medicationmanagement-review-and-quality-use-ofmedicines.
- 58. Pharmaceutical Society of Australia. General Practice Pharmacist. PSA.
- 59. Pharmacy Programs Administrator. MedsCheck and Diabetes Medscheck. [Internet] Melbourne: Pharmacy Programs Administrator; Available from: www.ppaonline.com.au/programs/ medication-management-programs/medscheckand-diabetes-medscheck.
- 60. Leon C, Hogan H, Jani YH. Identifying and mapping measures of medication safety during transfer of care in a digital era: a scoping literature review. BMJ Quality & Safety. 2024;33(3):173-86.
- 61. Agency for Healthcare Research and Quality. Types of Health Care Quality Measures. [Internet] Rockville MD: AHRQ; 2015 Available from: www. ahrq.gov/talkingquality/measures/types.html.
- 62. Australian Commission on Safety and Quality in Health Care, and NSW Therapeutic Advisory Group Inc. National Quality Use of Medicines Indicators for Australian Hospitals. Sydney: ACSQHC; 2014. p. 156.
- 63. Australian Commission on Safety and Quality in Health Care. The National Safety and Quality Health Service (NSQHS) Standards. [Internet] Sydney: ACSQHC; 2021 Available from: www. safetyandquality.gov.au/standards/nsqhsstandards.
- Department of Health and Aged Care. National Medicines Policy 2022. Canberra: DOHAC; 2022. p. 27.
- Australian Commission on Safety and Heath Care. Comprehensive Care Standard. [Internet] Sydney: ACSQHC; 2024 Available from: www. safetyandquality.gov.au/standards/nsqhsstandards/comprehensive-care-standard.



# AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

Level 5, 255 Elizabeth Street, Sydney NSW 2000 GPO Box 5480, Sydney NSW 2001

**PHONE:** (02) 9126 3600



safetyandquality.gov.au