Submission to the Quality Use of Medicines and Medicines Safety (10th National Health Priority) – Phase 1: Aged Care

The Society of Hospital Pharmacists of Australia is the national professional organisation for more than 5,000 pharmacists, pharmacists in training, pharmacy technicians and associates working across Australia's health system. SHPA is committed to facilitating the safe and effective use of medications, which is the core business of pharmacists, especially in hospitals. SHPA has more than 700 pharmacists engaged in our Geriatric Medicine Specialty Pharmacy stream, working in hospitals and health service facilities nationally.

Clinical pharmacists are experts in complex medication management for people living in aged care facilities. These highly skilled health care professionals may be employed by hospitals, by residential aged care facilities, by community pharmacies or work as independent contractors. They work in collaboration with doctors and nurses to provide direct patient care as well as supporting high-quality clinical governance. However current healthcare structures do not incentivise or promote the provision of medication management services by clinical pharmacists to older people.

SHPA's *Standard of Practice for Geriatric Medicine Pharmacy Services*[1] represents the expert consensus of pharmacists regarding the level of staffing and services necessary to decrease the risk of medication-related harm in older people. It makes clear the knowledge and understanding clinical pharmacists have of the complex medication needs of older people.

At the core of this care is the need for a consistent and collaborative approach throughout the patient journey, regardless of setting. As older Australians, who make up 15% of the population, are over-represented in hospital admissions, (42% of the 11.3 million episodes of admitted patient care in 2017/18)[2] careful attention must be paid to the pivotal role of hospitals in optimising medication management. Hospital admission often involves additional medications being prescribed, thus increases the risk of polypharmacy for an older patient. Medication management during an episode of care and at discharge is crucial for reducing problems which may emerge post-discharge. In addition, hospital admission can trigger initiation of antipsychotic medications and other medications that are intended to be utilised short-term, but which may be continued unnecessarily when the patient is returned home or to a residential aged care facility. Discharge from hospital to aged care is associated with high risk of missed, delayed or incorrectly administered medications in the 72 hours post-discharge.[3] Current processes for clinical handover during transitions of care to and from hospitals are inadequate, leading to poor continuity of care and medication errors. Therefore, effective solutions to medication safety in aged care must include the hospital setting, rather than focusing solely on the aged care.

In this submission SHPA makes a range of recommendations regarding the quality use of medications and medication safety for aged care facilities. The key aspect is a re-orientation of residential aged care facility and hospital governance to the importance of the work of clinical pharmacists to ensure medication safety for older Australians in these settings and during transitions of care. Whether it is the engagement of clinical pharmacists to perform medication reviews, the employment of specialist Geriatric Medicine Pharmacists within aged care services, the expansion of Psychotropic Stewardship services in hospitals and aged care settings, the greater use of hospital-provided Interim Medication Charts or the inclusion of on-site pharmacists in Medication Advisory Committees, all our recommendations link to a fundamental change of culture in aged care and a prioritisation of medication management. A holistic approach is necessary to reduce medication-related harm highlighted in the discussion paper and address the ways in which the factors listed below are interlinked and cumulative in the harm caused to this vulnerable patient cohort. Of additional value during this period of innovation would be a committed and coordinated approach to identifying successful practices systematically for wider implementation.

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The recommendations represent a profound change, but one justified by the findings of the Royal Commission into Aged Care Quality and Safety, whose recommendations were predated for many years by reports from pharmacists, among other healthcare professionals.

SHPA recommendations:

Topic 1: Polypharmacy
Recommendation 1: Medication reviews by clinical pharmacists should be delivered for all aged care patients prior to discharge from hospital, to address polypharmacy, medication changes and medication-related issues arising during their hospital admission.
Recommendation 2: Medication reviews, and other clinical pharmacy services, should be provided by Geriatric Medicine Pharmacists employed by residential and community aged care services, to reduce harms associated with polypharmacy for all residents, and especially whenever medical treatment has been revised.

Topic 2: Inappropriate use of antipsychotics
Recommendation 3: Pharmacist-led Psychotropic Stewardship programs should operate in all hospitals and RACFs, to ensure safe and appropriate use of antipsychotics.
Recommendation 4: All Medication Advisory Committee (MAC) in RACFs should include an on-site clinical pharmacist employed by the facility, to support the safe and effective use of medications, including antipsychotics.

Topic 3: Transitions of care
Recommendation 5: Use of Interim Medication Administration Charts (IMAC) for patients discharged from hospitals to residential and community aged care services should be mandated, to address challenges of medication administration in the immediate post-discharge phase of transitioning and to prevent harms associated with dose administration delays and errors.
Recommendation 6: The risk of harm caused by gaps associated with supply of PBS subsidised medications in the immediate post-discharge phase for patients transitioning to residential aged care facilities should be addressed.
Recommendation 7: Pharmacists should be widely integrated into hospital medical teams to ensure they verify medication management plans communicated in discharge summaries prior to hospital discharge.
Recommendation 8: Hospital-led outreach pharmacist services that support high-risk older Australians should be scaled up to meet demand for services nationally, during the immediate post-discharge and extended discharge period.

Topic 1: Polypharmacy

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Best practice in addressing polypharmacy

1. **Embedding clinical pharmacists as part of multidisciplinary teams in hospitals**

   Embedding clinical pharmacists into hospital medical care teams supports best practice high-quality medication management for older people before they enter the high-risk transition of care. Through accurate medication reconciliation and support for deprescribing, hospital pharmacists prevent future polypharmacy problems from emerging.

   While hospitalisation of an older person should provide an opportunity to review medication use and reduce polypharmacy, studies have found that additional medications outweigh those deprescribed under current practice.[4] The incorporation of a clinical pharmacist into multidisciplinary activities such as ward rounds provides regular opportunities for the clinical pharmacist to have conversations about polypharmacy and make recommendations to the consultant/registrar doctor. Evidence shows junior doctors do not feel empowered to deprescribe, particularly for medications not initiated in the hospital setting[5,6], even when it aligns with evidence-based best-practice. An embedded clinical pharmacist increases the delivery of comprehensive high-quality medication management for older patients. Evidence also highlights that with improved communication between hospital and GPs on how and why deprescribing occurred during a patient's hospital admission, these decisions were more likely to be sustained post-discharge.[6]

   Partnered Pharmacist Medication Charting (PPMC) trials nationally

   The Partnered Pharmacist Medication Charting (PPMC) model is best practice for contemporary hospital pharmacy. It has been proven to reduce the proportion of inpatients with at least one medication error on their chart by 62.4% compared with the traditional medication charting method, while also reducing the length of inpatient stay by 10.6%.[7] Whilst trials are operating nationally, they have been primarily focused on general medical and surgical wards, therefore greater expansion of PPMC to all wards and sub-acute areas, including those treating geriatric patients would be beneficial for patient care.

   AusTAPER study in seven major Western Australian public hospitals

   The current Australian Team Approach to Polypharmacy Evaluation and Reduction (AusTAPER) study for older hospital inpatients[8] funded by WA Health is proving to be an example of successful integration in hospital care between hospital pharmacists, the patient, their treating multi-disciplinary team and their primary care providers. It highlights the opportunity to assess polypharmacy and address a deprescribing plan, initiated during a hospital admission and implemented in the primary care setting.

2. **Establishing specialist geriatric medical and pharmacy teams in acute and sub-acute settings**
   Best practice in addressing polypharmacy for older people involves dedicated teams comprised of specialised geriatric medicine doctors and pharmacists who provide targeted care in both the acute and sub-acute settings. Clinical pharmacy services improve medication management and safety for older people in inpatient care settings.[9,10,11] Benefits include the prevention, identification and resolution of

adverse drug events, medication errors and other medication-related problems[12] which, if not accurately identified and managed, can lead to further polypharmacy. Pharmacists also improve the quality of prescribing and medication adherence[11]. Pharmacists practicing in geriatric medicine have specialised knowledge and expertise in this space relating to common conditions and frequently prescribed medications, since the medication management for older people differs significantly for that of younger adults.[1] It is therefore clear that geriatric multi-disciplinary teams that incorporate Geriatric Medicine Pharmacists, are well equipped to make deprescribing decisions that improve the quality use of medications for older people who cannot readily access clinical pharmacy services.

Dedicated geriatric medicine pharmacy services are embedded in acute and sub-acute care settings is considered best practice in many major metropolitan hospitals (i.e. Austin Health, Alfred Health, Sir Charles Gairdner Hospital, Gosford Hospital) however they are not yet the 'norm'. Geriatric Medicine Pharmacist integration into geriatric medical teams should be more widely adopted across all acute and sub-acute settings. Geriatric Medicine Pharmacists are not commonly seen in smaller, regional or private hospitals which treat many older people with chronic and complex conditions.

Geriatric medicine doctors and pharmacists on geriatric wards

South Australia have a state-wide Acute Care of the Elderly (ACE) unit which is the acute inpatient component of an Area Geriatric Service. This unit is designed, staffed and managed to meet the acute health needs of the most vulnerable older people and older people at risk of functional decline and poor outcomes as a result of hospitalisation, including dementia and delirium. The ACE unit is staffed by a geriatrician-led interdisciplinary team that includes pharmacists who conduct medication reviews.[13]

Geriatric Evaluation and Management (GEM) services

GEM services are provided in the sub-acute setting across Australia and are funded through Activity Based Funding (ABF). They provide care to improve the functioning of people with multidimensional needs associated with medical conditions related to ageing. Best practice includes the involvement of clinical pharmacists to ensure the safe and quality use of medications in this population. This is the case in a few major metropolitan hospitals such as Alfred Health in Victoria. South Australia have pharmacists included as part of the GEM interdisciplinary team, in their state-based GEM Unit Model of Care document.[14] Pharmacist involvement should be encouraged through all state-based guidelines on GEM services.

3. Employing and embedding specialist Geriatric Medicine Pharmacists to provide clinical pharmacy services in residential aged care facilities (RACF)

SHPA recommends a 1:200 full-time equivalent pharmacist-to-person ratio to deliver a best-practice clinical pharmacy service for older people living in residential aged care.[1] An integrated, onsite Geriatric Medicine Pharmacist improves the safe and quality use of medications in aged care settings and provides equity of access to clinical pharmacist services including medication reconciliation on admission, regular medication reviews and medication optimisation for aged care residents. This means that older people who are taking multiple medicines and are likely to have frequent changes to their medication regimens are reviewed whenever it is likely medicine mismanagement has occurred reducing the likelihood of harm. The responsibilities of the embedded Geriatric Medicine Pharmacist also include involvement in clinical governance and quality use of medication activities. The ratio specified in SHPA' Standard of Practice assumes the Geriatric Medicine Pharmacist is primarily involved with providing clinical services and has limited or no direct involvement in medication supply (this would be the responsibility of the dispensing pharmacy service). If dispensing roles are included, increased pharmacist resource would be required. This approach is a reversal of current pharmacy services in RACF which are

primarily concerned with medication supply and rarely provide the clinical pharmacy services necessary for effective medication management.

Embedded Geriatric Medicine Pharmacists (Goodwin Aged Care, ACT)

A University of Canberra trial found that pharmacists in RACFs can improve medication administration practices[15], and that including antimicrobial and psychotropic stewardship has a positive impact on medication safety and quality use of medications. Goodwin Aged Care Service in Canberra now employs an on-site pharmacist who conducts medication reviews and provides ongoing clinical interventions.

System-wide challenges for addressing polypharmacy

Separate and disconnected medical and pharmacy workforces, with independent funding models across the various healthcare settings, have led to fragmentation of care and impeded clinicians from effectively collaborating to ensure safe and quality use of medications for older Australians.

Many RACFs outsource supply of medications for their residents to community pharmacy, relying on community pharmacy remuneration through the PBS to fund the delivery of medications for this vulnerable patient group. This effectively leaves older Australians without access to regular comprehensive medication management services, and with limited access to federally funded medication programs such as the Residential Medication Management Review (RMMR) and Home Medicines Review (HMR), as coordinated by their GP. Evidence shows that many triggers for deprescribing can only be identified by a medication review.[16] However studies of Home Medicine Review (HMR) uptake have found that only 5-10% of older people discharged from hospitals or referred to an Aged Care Assessment Service (ACAS) or a community nursing service or who reside in supported accommodation, receive an HMR.[8]

This community pharmacy contractual medication supply model does not foster a culture of medication safety in residential aged care facilities. Without access and visibility to the resident's medication chart or current medication profile, it is difficult for the community pharmacy service providers to detect and address medication-related issues such as polypharmacy, as they arise, and to collaborate with medical practitioners to implement recommendations.

The inadequacy of the current system is further compounded by arbitrary RMMR service limits imposed through the Community Pharmacy Agreement which entails that most aged care residents can only access one RMMR every two years rather than being re-assessed whenever medical treatment is revised or their health status changes. In addition, requiring patient or next of kin consent prior to every RMMR also reduced the timeliness of this essential service increasing the risk of harm, including adverse drug events or hospitalisation.

Gaps in current processes that inhibit positive patient outcomes related to polypharmacy

Fragmentation of care between hospital and community healthcare providers means there is no oversight and review of an older person's medication from a whole of patient perspective. Given the inability to provide post-discharge care and competing priorities during the inpatient stay, SHPA members advise that hospital prescribers in acute care are sometimes reluctant to cease long-term medications initiated in the community. In addition, poor handover of clinical information post-discharge often results in GPs continuing to prescribe medications initiated in hospital even if they were intended for short-term use, such as opioid analgesics or benzodiazepines. Comprehensive post-discharge medication reviews undertaken by an accredited pharmacist is a solution to bridging this gap.

Monitor progress and measuring outcomes of quality and safe use of medicines in residents taking five or more medicines per day, in aged care facilities by:

- Measuring the number of unnecessary medications that have been ceased in hospital prior to discharge to an aged care facility and quantify the amount of medication-related harm that was prevented.
- Measuring the number of medications deprescribed in hospital that are re-initiated by primary care providers post-discharge.
- Monitoring the impact of an integrated, on-site Geriatric Medicine Pharmacist on rates of deprescribing and unnecessary prescribing in a RACF through measuring the rates of adverse drug events and medication-induced hospital admissions.

Topic 2: Inappropriate use of antipsychotics

Recommendation 3: Pharmacist-led Psychotropic Stewardship programs should operate in all hospitals and RACFs, to ensure safe and appropriate use of antipsychotics.

Recommendation 4: All Medication Advisory Committee (MAC) in RACFs should include an on-site clinical pharmacist employed by the facility, to support the safe and effective use of medications, including antipsychotics.

Best practice in addressing inappropriate use of antipsychotics

1. **Establishing pharmacist-led Psychotropic Stewardship programs in both the hospital and RACF settings.**

   Psychotropic Stewardship programs are an effective strategy for supporting older people at risk of harms associated with the inappropriate use of antipsychotics. Psychotropic stewardship programs are led by Geriatric Medicine Pharmacists under the governance of Geriatricians and involve coordinated interventions to improve, monitor and evaluate the use of antipsychotics in older patients.[17] Hospital pharmacists are experts in medication management and utilise their knowledge to review, audit and recommend safe and appropriate prescribing of antipsychotics in older people. SHPA recommends these services should be implemented more broadly in hospitals and expanded to RACFs.

   Established hospital stewardship programs:

   While pharmacist-led Psychotropic Stewardship programs are relatively new interventions, they are based on other well-established, best practice stewardship models such as, Antimicrobial Stewardship and Opioid Stewardship programs. ACSQHC's *Antimicrobial Stewardship in Australian Hospitals* describes this model as an effective approach to reducing risks associated with antimicrobial use in hospitals, through a combination of clinical activities and governance.[18] Hospital stewardship programs like these are backed by strong research showing effective risk mitigation for patients at risk of medication harms, and are in the process of being adapted for a wide range of medications such as anticoagulant, opioid, antimicrobial and antipsychotic medications.

2. **Incorporating embedded pharmacists in the governance structures of RACFs.**

   When pharmacists are also involved in the governance structures of an organisation, as well as providing clinical care, they focus the attention of the facility on quality and process measures rather than only outputs. Pharmacists are increasingly involved in clinical governance roles in hospitals and assist in ensuring that hospital settings are able to meet national accreditation standards, as well as advise on local clinical activities such as Medication Advisory Committees (MACs).

   MACs play a key role in the governance of medication management in RACFs and bring significant benefits through improved multidisciplinary communication, collaboration and understanding of the medication management process, to ensure that the highest quality of clinical care is provided. MACs have regular meetings that discuss topics such as clinical incidents and policies, medication-related developments, and advice on legislative, regulatory, and professional standards. Having clinical pharmacists as members of the RACF's MAC will ensure that all RACFs are in line with the Commonwealth's Guiding principles for medication management in residential aged care facilities.[19]

   Pharmacist-led Medication Safety Programs

   Pharmacist-led Medication Safety Programs in hospitals drive organisation-wide system changes that place the safe and judicious use of medications central to consumer healthcare. With limited resourcing required, Medication Safety Pharmacists are an effective investment in commencing medication safety activities.[20] Fundamentally, these programs embed systems that:

- Lead the governance of medication safety committees.
- Lead the development and implementation of improvement initiatives using change management techniques.
- Promote a 'just culture' and 'open disclosure' in developing safety systems for medication use.
- Share knowledge with other health professionals.
- Lead the development and review of policies to enhance medication use.
- Report and review errors, near misses and adverse medications events.
- Report and monitor adverse reactions to medications.
- Monitor trends and review work practices and systems to identify risks or gaps in practice e.g., medications use review, chart audit.
- Introduce evidence-based medication safety initiatives and programs that can be monitored against accreditation standards.
- Educate healthcare staff about medication safety.

System-wide challenges related to inappropriate use of antipsychotics

The lack of regulation around ratios of healthcare professionals – nurses and pharmacists – to residents in aged care facilities, is a major barrier to improving care in the RACF setting. As alluded to in the consultation paper, limited resources and staffing is a barrier to implementing non-pharmacological interventions for people with dementia living in residential aged care facilities, as well as ensuring access to clinical pharmacy services. Without clear expectations on acceptable ratios, there is a lack of incentive for facilities to employ additional staff and improve health outcomes for their residents. The aged care sector would benefit from a stronger regulatory framework comparable to ACSQHC's National Safety and Quality Health Service Standards Guide for Hospitals which provides the hospital sector with appropriate care standards[21].

Gaps in current processes that inhibit achieving positive patient outcomes related to inappropriate use if antipsychotics

Current processes around poor transfer and documentation of medication management plans, which document the indication and reason for why an antipsychotic is prescribed, inhibits positive patient outcomes in this area. Particularly at the transitions of care, the prescribing of antipsychotics in older Australians should be coupled with the intended duration of treatment and/or cessation date. This is consistent with SHPA's Choosing Wisely recommendation 'Don't initiate and continue antipsychotic medicines for behavioural and psychological symptoms of dementia for more than 3 months.' Current prescribing practice by hospital doctors and General Practitioners frequently do not include a cessation date for antipsychotic medications. Pharmacists embedded in multidisciplinary teams in RACF are able to play a key role in supporting doctors to manage appropriate cessation.

Monitor progress and measuring outcomes towards the exchange of quality use of medicines in older people with behavioural and psychological symptoms of dementia

- Establish a surveillance and monitoring program similar to the Antimicrobial Use and Resistance in Australia Surveillance System (AURA) by the Australian Commission for Safety and Quality in Health Care would provide high level insight and data into RACFs residents being treated with antipsychotics, enabling the identification of trends and areas for intervention.
- Measure the proportion patients prescribed antipsychotics who have the indication and intended duration of treatment documented on discharge summaries, medication management plans and medication lists.

Topic 3: Transitions of Care

The transition of care between hospital and aged care can be divided into two phases: the immediately post-discharge period (first 72 hours), and the days-to-weeks that follow. For ease of discussion in this submission we will respectively refer to these periods as 'immediate post-discharge' and 'extended post-discharge'. Whilst both periods are important, SHPA members believe there are systemic challenges in Australia's current healthcare system that make it extremely difficult for aged care nurses, GPs and pharmacists (both hospital and community) to provide continuity of care to aged care recipients in the immediate post-discharge period. These include:

The challenges frequently result in medication administration delays and errors when patients transition between health services. These disruptions occur for a range of reasons relating to medical and pharmacy practice and workforce limitations, they include:

- Reliance on off-site GPs (and, less frequently, nurse practitioners) for charting of medications in aged care
- Reliance on a predominately non-nursing workforce in aged care, with limited medication knowledge and inability to administer medications from original packs
- Reliance on off-site pharmacies to dispense medications, pack them in Dose Administration Aids and deliver them to the aged care recipient
- Short time between hospital discharge and requirement for medication administration (average 3 hours)
- Need for community pharmacy to obtain consent from new aged care residents prior to supply
- Limited access to medical and medication supply services after hours and on weekends
- Use of the Pharmaceutical Benefits Scheme for discharge medication supply in some states
- Barriers to safe administration of hospital-dispensed medications to newly arrived patients, due to lack of access to an up-to-date medication administration chart and/or access to medications packed in the provider's preferred Dose Administration Aid format
- Poor discharge documentation from hospitals to RACFs and GPs
- Capped access to medication reviews provided by pharmacists, also restricted by need for GP referral (resulting in low probability of a timely post-discharge medication review)
- Low access to clinical pharmacists onsite to provide a safeguard by performing medication reconciliation, medication chart review and assisting with managing the transition of care to avoid medication mismanagement.

Consequently, medication safety is heavily compromised. Given the complexity of the multiple systems which need to cooperate, GPs and community pharmacies are often unable to meet patients' transition of care needs in the immediate post-discharge phase. Thus, interventions to combat the challenges presented during this period must be hospital-led strategies. SHPA recommends greater support for hospitals treating older patients to ensure the best possible start to the immediate post-discharge period. This would utilise clinical governance standards in hospitals, as well as access to a specialist staff and electronic medical records, to support a higher quality transition into the aged care settings.

Recommendation five and six (below) target the immediate post-discharge phase of the transition of care process, whilst recommendations six and seven addresses the extended post-discharge phase.

Recommendation 5: Use of Interim Medication Administration Charts (IMAC) for patients discharged from hospitals to residential and community aged care services should be mandated, to address challenges of medication administration in the immediate post-discharge phase of transitioning and to prevent harms associated with dose administration delays and errors.

Recommendation 6: The risk of harm caused by gaps associated with supply of PBS subsidised medications in the immediate post-discharge phase for patients transitioning to residential aged care facilities should be addressed.

Recommendation 7: Pharmacists should be widely integrated into hospital medical teams to ensure they verify medication management plans communicated in discharge summaries prior to hospital discharge.

Recommendation 8: Hospital-led outreach pharmacist services that support high-risk older Australians should be scaled up to meet demand for services nationally, during the immediate post-discharge and extended discharge period.

Best practice in addressing transitions of care

1. **Use of an Interim Medication Administration Chart (IMAC) for older people in the immediate post-discharge phase when transitioning between care settings.**

   Best practice support for patients transitioning from hospital to aged care involves the provision of an IMAC to ensure aged care staff can administer medications safely and without undue delay while waiting for a GP or nurse practitioner to prepare a long-term medication chart. Building on the success of the National Residential Medication Chart (NRMC) to improve medication safety since 2013, an IMAC is a complementary document to the NRMC, to be used when the patient is transferred to the aged care service. This chart enables medications to be safely administered for five to seven days after arrival at the aged care facility without the need to wait for GP or locum attendance. The IMAC is populated with the patient's details, allergy/adverse drug event information, discharge medication list and the date of time of the last doses administered in hospital. It has space for aged care staff to sign-off when they administer medications for up to seven days. Ideally it should also include a list of medications ceased in hospital. IMACs can be completed by hospital medical officers or hospital pharmacists. The evidence most strongly supports hospital pharmacist-prepared charts, ensuring that the chart matches the pharmacist-reviewed discharge prescription(s) and medications by undertaking the medication reconciliation process. The IMAC is sent as a physical copy with the patient to the aged care provider at the time of transition.

   An Australian study reported that patients discharged to residential aged care facilities were prescribed an average of 11 medications of which seven were new or had been modified during hospitalisation.[3] The same study also reports that up to 23% of patients experience delays or errors in medication administration after discharge from hospital to a RACF.[3] Unplanned hospital readmissions have been reported as a result of failure to receive prescribed medications after transfer to an RACF.[22] The use of an IMAC aimed at achieving safe, effective and timely medication management services for people transitioning from hospital to aged care facilitates, is one of the priorities identified in SHPA's Medication Safety Position Statement.[20, 23]

   State-wide implementation of IMACs

   Given that national use of IMACs has been ad-hoc, SA Health and QLD Health have implemented a standard interim medication administration chart for use by SA Health and QLD Health hospitals and health services when transferring patients to residential care facilities. Hospitals in Queensland have also been using IMACs for several years.

   The MedGap Study tested the impact of a hospital pharmacist-prepared interim residential care medication administration chart for patients discharged to 128 RACFs in Victoria, and found that the intervention reduced missed or delayed doses by 15.6% (from 18.3% to 2.7%), with 83.6% of RACF staff

reporting improved continuity of care.[23] The IMAC also reduced locum GP callouts from 32.7% to 11.1%.[17] Similar results have been reported at other hospitals.[24]

2. **Clinical pharmacist involvement in hospital medical discharge summaries.**

   As medication experts, clinical pharmacists produce the most accurate and informative medication discharge summaries and medication management plans that best support the transition of care process. The discharge summary developed by the hospital medical team, usually does not clearly convey the changes that were made to their medications during their hospital stay and the reasons for these changes. Incorporating the pharmacist's verified discharge medication list and medication management plan in the medical discharge summary ensures aged care providers and GPs receive an accurate and current list of the patient's medications and information about changes that have been made. This will include clear instructions on the medications that have been ceased, those that have been started or changed, and those that will need to be weaned or ceased over time.

   Major Victorian hospital studies of pharmacist-physician collaboration on medical discharge summaries:

   A study in a major hospital in Victoria evaluated the effectiveness and sustainability of an intervention in which ward-based hospital pharmacists reviewed, contributed, and verified medication information in electronic discharge summaries (EDSs) in collaboration with physicians. The study found that a pharmacist-physician collaborative model for preparing and verifying medication information in EDSs led to significantly fewer medication list discrepancies and a significant improvement in the communication of medication changes across care settings.[25]

   Another study in a major Victorian hospital found that pharmacists completing the medication management plan in the medical discharge summary significantly reduced the rate of medication errors (including errors of high and extreme risk) in these summaries for general medical patients.[26]

3. **Hospital-led outreach pharmacist services supporting high-risk older Australians with chronic and complex health conditions and medication regimens.**

   Hospital-led outreach medication review services provided to patients in the post-discharge setting to reduce their readmission risk are more accessible and able to meet the patient's needs than the federally funded Home Medicines Review (HMR) program. These services aim to provide specialised care for high-risk aged care patients to prevent re-hospitalisation and are frequently managed from outside the pharmacy department. Clinical pharmacists embedded in outreach roles support the transition of care process by ensuring patients are correctly and safely taking or receiving their medications post-discharge, and that the intended weaning or cessation of medications post-discharge, has occurred. These clinical pharmacists also have an opportunity to conduct comprehensive medication reviews to ensure safe and quality use of all medications prescribed and, where possible, achieve medication regimen simplification.

   Several hospital-led outreach programs provide an admitted substitution model of care to prevent hospitalisation. Similar to the GEM programs discussed in topic 1, there is an emergence of GEM@Home services that aim to provide care for older people who would otherwise be admitted to hospital and to people who are transitioning home after a hospital presentation. The GEM@Home program is delivered by an interdisciplinary team led by a consultant geriatrician.[27] Some hospitals include a clinical pharmacist on these services however, this should be standard practice to ensure medication safety and quality use of medications is a priority.

   Whilst the need for additional support for people transitioning out of hospital would appear clear, funding for transition of care services has often been difficult to secure. The Australian federal government funded Transition Care Programme aimed at supporting older Australians in the 12 weeks post-discharge

from hospital as they transition back to the community or a RACF, does not currently include clinical pharmacy services. Since medication-related errors account for 20-30% of hospital admissions in this population group[28], it is essential to offer clinical pharmacy services as a part of this programme. The Hospital Admission Risk Program (HARP) approach, which is well developed in many Victorian hospitals is multi-disciplinary program including physiotherapy, nursing and clinical diabetes educators, which reduces its reliance on pharmacy funding for staff. Members report that funding for outreach medicines management (such as HARP) managed by hospitals are often uncertain.

Hospital outreach medication review (HOMR) services

Hospital-led outreach medication review services are currently provided by some major metropolitan public hospitals in Victoria (i.e. Monash Health, Austin Health, Alfred Health and Western Health through the Community Outreach component of their Immediate Response Service). Certain hospitals in Western Australia also run a HOMR program known as Complex Needs Coordination Team (CoNeCT) Pharmacy, which provides a metropolitan-wide post-discharge service on referral for complex patients considered at high-risk of medication misadventure and who are unable to access timely community pharmacy services.[29] A study at a major hospital in Victoria has found that the provision of HOMR services has a valuable role in a clearly identified population that is at high risk of medication misadventure. The study showed a 25% reduction in hospital admissions in patients aged 51-65 years.[30] However, dedicated funding is required to implement this model in all hospital networks.

Better at Home (Alfred Health, Vic)

Better at Home[31] is a home-based rehabilitation program modelled on an inpatient subacute ward. It offers an alternative approach to delivering inpatient care and treatment to people within their own homes. A wide range of clinical services are provided through this program including medication reviews and management.

Mobile Assessment and Treatment Service (MATS) geriatric care team model (Alfred Health, Vic)

At Alfred Health in Victoria, clinical input from pharmacists have been acknowledged with a pharmacist embedded into the MATS expanded team structure. MATS operates within the Hospital Admission Risk Program and provides care for frail, elderly people living in nursing homes and in the community. The service operates seven days a week and takes referrals from GPs, inpatient treating teams, the ambulance service, and directly from nursing home staff. In addition to addressing acute medical needs, the multi-disciplinary team that includes a clinical pharmacist, works to reduce the polypharmacy burden on older people in their care and optimise medication safety, particularly on transitions of care.

Community aged care clinical pharmacy services

The Visiting Pharmacist (ViP) study[32] conducted in Victoria, developed a collaborative, person-centred model of clinical pharmacy support for an Australian home nursing service. Approximately 50% of home nursing visits for older people are for medication management. As medication experts, pharmacists have the potential to significantly reduce the risk of adverse medication events that often lead to hospitalisation. The study indicated a return on investment of $1.54 for every $1 spent on the ViP clinical pharmacy model. A cost-effective model of care that supports better patient outcomes for older Australians.

Queensland Residential Aged Care Facility Support Services (RaSS)

The Queensland Health funded RaSS are a partnership between GPs, RACFs, hospital and health services, and community service providers. RaSS provide acute care services to residents of RACFs, in the most appropriate location[33]. SHPA members report that a recent and significantly beneficial addition to this team, is the RaSS Pharmacist. This role should be replicated across the country to support the

safe and quality use of medications in the most acutely unwell or deteriorating residents of aged care facilities.

System-wide challenges related to transitions of care

The responsibility to manage transitions of care has been lost in a vacuum of fragmented funding streams which do not put the patient at the centre of care. For example, the federally funded HMR program has for the last two decades, prohibited hospitals from referring for HMR services, despite it being well known that the phase post-discharge has a high-risk of readmission for older patients. Despite very recent changes to the HMR program to allow hospital doctors to refer, the new program guidelines do not include information about how hospitals can do so, and there is no funding under the program to remunerate hospital clinicians for their involvement in the program. In response SHPA has developed a series of pathways to support hospital to refer patients for HMR, RMMR and HOMR services.

As mentioned earlier, the immediate post-discharge challenges in transitioning between care settings can best be addressed by hospital-led interventions. As large institutions with comprehensive clinical governance frameworks these institutions are well placed to lead systemic improvements for medication management for patients transitioning in and out of aged care. Any additional capacity would however require greater resourcing for public hospitals in order to achieve downstream savings for aged and primary care settings.

Better uptake of health technology including, Electronic Medical Records (EMR) and My Health Record (MHR), should be expected of residential aged care facilities. Whilst they will never replace the integral role of a clinical pharmacist in the transfer of accurate medication information, these systems work to streamline processes and improve transparency of information across all healthcare professionals.

Gaps in current processes that inhibit positive patient outcomes related to transition of care

The largest gap in the transition of care process is the misalignment of hospital and community services immediately post-discharge (the first 24 to 72 hours). This is the time when community practitioners are often unable to support aged care patients within typical business operations, yet hospital practitioners are not funded to do so. This leaves a gap for patients at a critical time leaving them at risk of medication error or mismanagement and a delay in medication supply. In contrast patients leaving hospital after childbirth are immediately linked to their local Maternal and Child Health Centre.

Older Australians transitioning from hospitals to RACFs risk missing doses of their medications in the immediate post-discharge period for reasons outlined previously. This population group have complex health needs and medication regimens, and are sometimes receiving palliative care, so missed doses place them at risk of serious complications, lack of symptom relief and re-hospitalisation.

Hospital pharmacy departments may supply the patient's discharge medications in original packaging (hospitals do not have capacity to prepare DAA on the various different formats requested by RACFs). However, many RACFs will not administer medications to patients from original packages and await new supply in DAAs from the community pharmacy. This invariably involves a delay as well as wasting dispensed medications and costing the federal government unnecessary prescriptions for PBS subsidised medications.

Monitor progress and measuring outcomes towards the exchange of quality use of medicines and medication safety information at transitions of care

- Measure the number of missed doses of medications in the first 72 hours post-discharge from hospital.
- Measure the frequency of errors in medications prescribed at the RACF post-discharge from hospital.
- Monitor the rate of re-hospitalisation of older people in the months post-discharge from hospital due to incorrect medication regimens being administered to RACF patients post-discharge

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