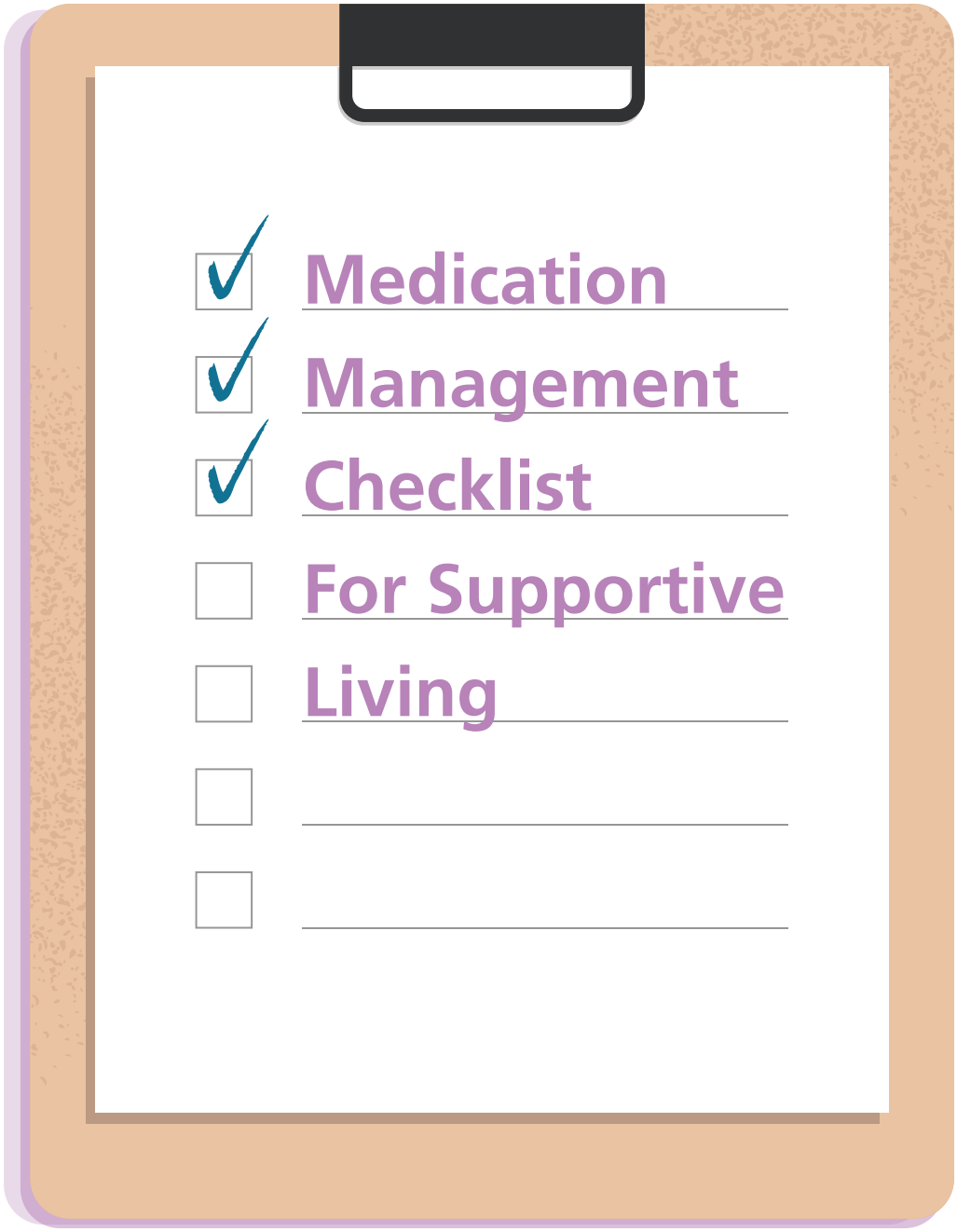
HQCA
Health Quality Council of Alberta

Improving Healthcare Together



Medication Management Checklist For Supportive Living

July 2023

ABOUT HQCA

The Health Quality Council of Alberta is a provincial agency that brings together patients, families, and our partners from across healthcare and academia to inspire improvement in patient safety, person-centred care, and health service quality. We assess and study the healthcare system, identify effective practices, and engage with Albertans to gather information about their experiences. Our responsibilities are outlined in the *Health Quality Council of Alberta Act*.

TABLE OF CONTENTS

OVERVIEW OF THE CHECKLIST

Purpose of the checklist

Ensuring safe and effective medication therapy for residents in supportive living requires the collaboration of many people within the site and the community. The Medication Management Checklist for Supportive Living was developed to help those who work with residents in supportive living to:

- Learn about the features of a safe medication system in supportive living and leading practices that help ensure safe and effective medication therapy for residents.
- Identify potential vulnerabilities in a site's medication system that could put residents at risk of medication adverse events, and that could be addressed through a quality and safety improvement program.

The checklist is not intended to be used as a compliance monitoring tool, as a means of comparing sites, nor for drawing conclusions about medication safety at a site by those outside the site. It is intended to be used within a quality and safety improvement program as a means of identifying ways to improve the medication system within the site.

Intended audience

The checklist is designed for ***supportive living*** settings where residents are receiving ***medication assistance.*** The checklist was developed for use in sites delivering healthcare services to residents under contract with Alberta Health Services (AHS) but could be used in any congregate setting where medication assistance is provided.

Checklist content

The checklist consists of 74 recommended leading practices (the checklist items) for medication safety in supportive living and are organized into eight major categories (the key elements), which represent different components of the medication system.

Key Element 1: Resident assessment and medication support needs

Key Element 2: Resident medication information

Key Element 3: Communication of medication orders

Key Element 4: Pharmacy services

Key Element 5: Medication storage

Key Element 6: Medication support activities

Key Element 7: Healthcare provider competence

Key Element 8: Medication system quality and safety improvement

The checklist items represent leading practices for medication safety within supportive living. Many go beyond standards that exist in policy documents (e.g., from the government or Alberta Health Services) reflecting leading practices for medication safety that may not be consistently implemented. These items are included in recognition of their value in improving medication safety and organizations can use the checklist to identify areas where they can continue to improve. Background information about the items is included to provide additional context about the associated practice.

Glossary of terms

An explanation of some of the terms used in the checklist is found in a glossary at the back of the document. Glossary terms are presented in ***bold italic*** font the first time they appear in the background information and in checklist items.

INSTRUCTIONS FOR USE

1. Create a team to complete the self-assessment process

Medication safety involves the collaborative efforts of site staff and community partners such as pharmacists, case managers, home care nurses, healthcare aides, and primary care physicians. At a minimum, include on the self-assessment team:

- Manager or administrator for the site.
- Healthcare provider(s) who interact with residents and their medications every day.
- Home care nurse and/or case manager.
- Pharmacist from each pharmacy that provides service to the site if possible.

2. Schedule a meeting time(s)

Information is best shared in a face-to-face team meeting where everyone discusses the checklist items together. This process is preferred because through the discussion each team member will learn from others, things they do not know about the medication system. Virtual meetings are an option for those unable to attend in person.

- A single meeting or a series of shorter (e.g., one hour) meetings can be scheduled. The self-assessment process typically takes about one and a half to two hours.

3. Provide each team member with a copy of the checklist document before the meeting

The goal of the self-assessment process is to discuss both 'what is', and 'what could be'. All team members should be encouraged to read through the checklist document (background information and checklist items) before the meeting and think about implications for their practice. During the meeting, team members should have a copy of the checklist with which to follow along.

4. Designate a facilitator

The facilitator typically will be someone in a position of authority at the site such as a manager or Director of Care or perhaps an educator. A facilitator guide is provided in Appendix 1.

5. Record a consensus response for each checklist item

The response for each checklist item should represent actual practice at the site, not simply whether there is a policy and/or process in place. Many of the checklist items have multiple components.

- **Y = Yes** – All components of the checklist item are in place at the site or in the service provided by a community partner.
- **P = Partly** – Some of the components of the checklist item are in place at the site or in the service provided by a community partner.
- **N = No** – Checklist item is applicable to residents or the medication system at the site but is not in place.
- **N/A = Not applicable** – Checklist item is not applicable to residents at the site. Avoid using N/A if possible. If the checklist item COULD apply but is currently not in place, N is the correct response. For example, items related to self-administration of medications are not applicable when no residents are self-administering medications.

If you are not sure what the response should be for an item, or if the team is not in full agreement, it is better to use a lower score (e.g., P or N). The purpose of the checklist is to identify vulnerabilities in your medication system that create potential safety risks for residents. It is better to err on the side of caution when the safety of residents is at stake.

KEY ELEMENT 1: Resident Assessment and Medication Support Needs

Care planning related to medication support (Items 1.1, 1.2):

- Accurate and current information regarding the ***resident's*** cognitive status, medical problems, and capability for self-administration of medication is required for decision-making regarding a resident's medication support needs. Medication support services are provided based on a resident's assessed unmet needs and are intended for those individuals whose independence is impacted by changes in physical and/or cognitive abilities. An interim ***care plan*** that includes the resident's medication support needs is developed before the resident moves in or within 24 to 48 hours after their move by the case manager in collaboration with the resident and site staff.
- An integrated care plan based on the ***interRAI*** assessment and other tools is developed within the first 21 days after move-in by the case manager in collaboration with direct care providers and resident.
- The interim and integrated care plan includes specific medication support activities for the resident and identifies what those providing medication support need to watch for and report to the nursing professional who is responsible for care of the resident.

Assessment and documentation of resident medication support needs (Items 1.3, 1.4):

Regular reassessment of a resident's medication support needs and capability for self-administration of medications is required. A resident's medication support needs may be affected by a change (decline or improvement) in health status, changes to their medications (frequency or route), or changes to their personal support system. For example, a new medication can make the medication routine more complex or cause problems for safe self-administration (e.g., topical creams or ointments, eye drops, inhalers).

- A ***healthcare professional*** working within their scope of practice, must determine both a resident's capability for self-administration and any medication support needs. It is strongly recommended that a standardized process and supporting tool be used to conduct and document this activity and that clear accountability for the completion of the process is established and communicated.
- Medication assistance by a healthcare aide/***unregulated healthcare provider*** is an assigned function. Documentation by a nursing professional of the assessment process, the specific medication support activities that are being assigned, and what those providing medication assistance need to watch for and report is required.
- Assessment of medication support for ***PRN or 'as needed' medications*** need to be explicitly included as part of the assessment process.
- Reassessment of a resident's medication support needs is completed and documented whenever there is a change in resident health status or significant changes in the medication regimen that may impact the resident's medication support needs.

Medication support activities at the site (Item 1.5):

Site ***policies*** describe how services to address medication support needs will be provided to residents for both regularly scheduled and PRN medications. Policies about ***medication administration*** and ***medication assistance*** reflect the scope of practice of healthcare providers involved in helping residents with their medications. Medication services may be provided by site staff or by a community partner (e.g., home care nurse or home care aide).

Medication support for PRN medications (Item 1.6):

Safe use of PRN medications when providing medication support, requires the clinical judgment of a healthcare professional working within their scope of practice to determine whether a medication is needed and to monitor resident response when the medication is administered. [1] Because healthcare aides/unregulated healthcare provider cannot make a clinical judgment about a resident's request for a PRN medication, their involvement in providing medication support for PRN medication is to be minimized. If it is determined that it is safe for a healthcare aide/unregulated provider to provide medication assistance to a specific resident for a specific PRN medication, explicit information is required in the care plan about how to safely manage and follow up on a request for that medication.

Informing staff of resident medication support needs (Item 1.7):

To prevent ***medication incidents*** related to omission of medications, information about a resident's medication support needs is readily available to direct care providers when they are interacting with the resident.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 1: Resident Assessment and Medication Support Needs

	Y	P	N	N/A

1.1. ***Resident*** assessment information relevant to medication therapy is:

- Collected using the ***interRAI***, and other tools as well as information from other care providers where available (e.g., acute care, home care).
- Used as part of a collaborative care planning process between the case manager, the site staff, and the resident.
- Reflected in the ***care plan*** at the site.

1.2. ***Medication support services to meet medication support*** needs for a resident are:

- Included in the interim care plan that is developed by a ***healthcare professional*** before the resident moves in or within 24 to 48 hours after their move, in collaboration with the resident and/or their ***support person***.
- Included in the integrated care plan for the resident developed in collaboration with site staff and resident.
- Specific to the assessed needs of the resident and include what direct care providers need to watch for and report to the nursing professional who is responsible for care of the resident.

1.3. Assessment and documentation of residents' ability to ***self-administer*** medications and their medication support needs is performed:

- On move-in.
- During transitions in care (e.g., return from acute care or move from another site).
- With each interRAI assessment.
- With a ***significant change in health status.***
- When there are significant changes to a resident's medication therapy (e.g., route, frequency, new medication) that may impact the resident's medication support needs.

1.4. A standardized process and decision support/documentation tool is used by the accountable healthcare professional to determine a resident's medication support needs for:

- Regularly scheduled medications.
- ***PRN "as needed' medications.***

1.5. Sites have documented ***policies*** that describe medication assistance provided to residents including:

- Categories of medication assistance.
- Associated activities for each category.
- Who can perform the activity (healthcare aide/unregulated provider or a healthcare professional).

1.6. For residents prescribed a PRN medication, where medication assistance is provided, the care plan includes explicit instructions related to:

- What the medication may be used for and how often it may be used.
- What the direct care provider needs to watch for, document, and follow up with another healthcare professional.

1.7. The resident's medication support needs are documented in a consistent, easily accessible location for direct care providers (e.g., daily care plan, Kardex, task list).

KEY ELEMENT 2: Resident Medication Information

Medication history (Item 2.1):

An accurate and complete list of all medications a resident is currently taking – which includes name, strength, dose, route, and frequency – is needed whenever a resident moves from one care environment to another. This helps ensure that the resident continues to receive the intended therapy and prevent potential ***medication adverse events.*** A structured ***best possible medication history (BPMH) process*** that uses multiple information sources will result in the most accurate list. [2] Documentation of the BPMH in the resident record will ensure that healthcare team members are able to access the information when needed.

Medication reconciliation (Item 2.2):

This involves comparing the move-in orders against the BPMH and taking steps to resolve any discrepancies that are noted. It reduces potential medication adverse events that can happen when incomplete information about medications is communicated as residents move from one care setting to another. [2] Timelines to complete reconciliation may vary based on the care setting however, reconciliation is most effective when done within one or two days of a transition in care.

Medication allergies/adverse reactions (Items 2.3, 2.4):

Residents should not receive medications to which they have had a documented allergy or harmful reaction in the past or where there are other contraindications. This information is best collected during the move-in assessment and documented in a way that all care providers are aware of the need to avoid these medications. At a minimum, the pharmacist, ***authorized prescriber***, case manager, and those providing medication support to the resident need to be informed about medications residents should not receive.

- A healthcare professional must decide if a change in a resident's health status is related to a ***medication adverse reaction*** and determine if it is safe for the resident to receive that medication in the future. Changes in a resident's condition need to be communicated to a healthcare professional so that an assessment can be done.
  New, suspected or confirmed medication adverse reactions for a resident must be shared with all healthcare team members including the most responsible practitioner.
- A list of medications a resident should not receive needs to be available to direct care providers at the time they are providing medication support (e.g., documented on the ***medication assistance/administration record/electronic medication administration record (MA/AR/EMAR)*** or daily care plan).

Medication review and monitoring (Items 2.5, 2.6, 2.7):

An early ***care conference*** (e.g., six to eight weeks after move-in) is recommended, particularly when resident health needs are complex. Medication needs should be reassessed after move-in when a resident has been on a stable medication regimen for a few weeks as well as annually and with significant change.

- Regular review of a resident's medication therapy by a healthcare professional as part of a comprehensive assessment is required. It includes an assessment of effectiveness, ongoing need for each medication, interactions, and adverse reactions. Medication reviews are most effective when the resident, the pharmacist and authorized prescriber collaborate.
- Completing a medication review when an interRAI assessment is done, when there is a significant change in health status or more frequently based on resident needs ensures the team is evaluating the effectiveness of medication therapies and medication support services on a regular basis.

Documentation and communication (Item 2.8, 2.9):

Suspected medication-related issues are documented in the resident record and communicated to the authorized prescriber and most responsible practitioner. The communication process will vary depending on the issue and the site and may involve an intermediary healthcare professional (e.g., pharmacist, home care nurse).

- Treatment provided by emergency medical services personnel while on site, including administration of medications, should be documented in the resident record.
- A resident's response to PRN medications, whether it is effective or ineffective as reported by the resident, provides important information about the resident's health status.
- A single resident record maintained at the site is recommended for optimal communication between all team members. Records may be paper, electronic or a combination of both.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 2: Resident Medication Information

	Y	P	N	N/A
2.1. An accurate and complete medication history ***(best possible medication history – BPMH)*** is prepared by a healthcare professional and documented in the resident record at the site: ▪ On move-in. ▪ At transitions in care (e.g., return from an acute care facility, move to a different level of care).	☐	☐	☐	☐
2.2. ***Medication reconciliation*** occurs as close as possible (ideally within 24 to 48 hours) to: ▪ Move in. ▪ Transition in care (e.g., return from an acute care facility, move to a different level of care).	☐	☐	☐	☐
2.3. Information about ***medication allergies, medication adverse reactions*** and other contraindications are: ▪ Documented in the resident record. ▪ Shared with other members of the healthcare team. ▪ Available to direct care providers at the time they are providing medication support (e.g., documented on the medication assistance/administration record/electronic medication administration record ***(MA/AR/EMAR)*** or daily care plan).	☐	☐	☐	☐
2.4. When a suspected medication adverse reaction occurs, a healthcare professional: ▪ Assesses the situation, consulting the resident as necessary. ▪ Documents the assessment and decision about future use of the medication in the resident record. ▪ Shares the information with other healthcare team members, including the most responsible practitioner.	☐	☐	☐	☐
2.5. Care and medication-related needs are reviewed with residents and their representatives at a meeting that is held: ▪ Upon move in (ideally within six to eight weeks). ▪ Annually. ▪ With significant change in the resident's health status.	☐	☐	☐	☐
2.6. A ***medication review*** is completed by a healthcare professional(s) with the input of the resident and documented in the resident record: ▪ Whenever an interRAI assessment is completed (or at least annually). ▪ More frequently based on resident needs. ▪ With a significant change in resident health status.	☐	☐	☐	☐
2.7. Documentation in the resident record and notification to the most responsible practitioner occurs when: ▪ Medication-related issues are identified during a medication review. ▪ Emergency medical services personnel provide treatment on site, including administration of medications.	☐	☐	☐	☐
2.8. The resident's response to a PRN medication is recorded (e.g., in the resident record, on a PRN record, on the MA/AR/EMAR).	☐	☐	☐	☐
2.9. A single resident record (paper or electronic) is maintained and kept at the site.	☐	☐	☐	☐

KEY ELEMENT 3: Communication of Medication Orders

Do not use list (Item 3.1):

The use of shorthand in communication about medications is a common cause of medication error and adverse events. They can lead to misinterpretation of instructions if they have multiple meanings or are not understood by all healthcare providers.[3] Establishing a list of abbreviations, symbols, and dose designations that should not be used and removing them from all medication-related communications is one strategy to mitigate this risk.

Direct communication between prescriber and pharmacist (Item 3.2):

To reduce the risk of medication incidents during the ordering process, direct communication between a prescriber and a pharmacist is preferred but is challenging in supportive living settings. The use of intermediaries (e.g., RN, LPN) to communicate medication orders which has been identified as a major contributing factor to medication errors[4] is common. To reduce the risk of error, written/signed prescriptions which can be faxed, hand delivered or electronically sent are the safest option. The transmission of medication orders through electronic systems is evolving and orders should only be transmitted electronically if the system aligns with legislative requirements and guidance from regulatory bodies.

Verbal and telephonic orders (Item 3.3):

Verbal (in-person) or telephonic orders increase the risk of medication errors and should be restricted to urgent situations where written or fax communication is not feasible, and a delay would impact care. [4]

- Verbal (in-person) medication orders shall only be accepted by a healthcare professional in an emergent or urgent situation where delay in treatment would place a resident at risk of serious harm, and it is not feasible for the authorized prescriber to document the medication order.
- Telephonic (conveyed by telephone, and/or telehealth) medication orders shall only be accepted by a healthcare professional where the authorized prescriber is not physically present to document the medication order and a delay in ordering, administering, or discontinuing the medication would compromise resident safety and care.
- Medication orders should not be accepted via email or voicemail.

A prescriber may give a verbal or telephonic prescription only to another healthcare professional. Accuracy of the prescription is confirmed using strategies such as read-back (spelling the resident and drug name, dose confirmation) and reviewing the indication for the medication. [4]

Verification by the prescriber that the order has been recorded as intended, preferably within 24 hours (e.g., using a fax-back), is strongly recommended.

Orders for PRN medications (Item 3.4):

Decisions guiding safe use of PRN medications can be made only when all healthcare providers are aware of the prescriber's intent. Ideally, orders for PRN medications will include the symptom for which the medication is to be used, dose, specific time interval between doses (time ranges should not be used), and maximum frequency of use. A healthcare professional needs to clarify incomplete PRN orders with the prescriber before medication support activities for these medications are assigned.

- Explicit instructions for the application of topical medications reduces the risk of inappropriate application – "apply to affected area" as an instruction should be avoided.
- Information about clarified PRN medication orders is communicated among all members of the healthcare team.

Communication between healthcare providers (Item 3.5):

Changes in the resident's medication therapy need to be communicated promptly to all healthcare providers. This includes the pharmacy service provider(s), nurses in the community (e.g., home care nurse, case manager, nurse practitioner), authorized prescribers and the most responsible practitioner. When medications are provided by another pharmacy for a specific situation (e.g., compassionate supply, cancer treatment) a transcription process that includes an independent double-check and communication to the primary pharmacy is recommended to prevent errors.

Communication to residents about changes in medication therapy (Item 3.6):

As an integral member of the care team, residents, and their ***support person(s)*** need to know about changes in their medication therapy. Different members of the healthcare team provide different types of information about medication changes. Where possible, a record of the exchange of information should be documented in the resident record at the site. For example, healthcare professionals in the community, such as the primary care physician, pharmacist, home care nurse, or case manager can be asked to communicate with the site when medication-related information is provided to residents.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 3: Communication of Medication Orders

	Y	P	N	N/A
3.1. The organization has developed and implemented a Do Not Use list of abbreviations, symbols, and dose designations that should not be used in medication-related communications and includes those identified by the Institute for Safe Medication Practices Canada (ISMP Canada).	☐	☐	☐	☐
3.2. Resident medication orders are received by the pharmacist as one of the following: ▪ An original signed prescription written by an ***authorized prescriber.*** ▪ A faxed copy from the authorized prescriber's office and/or site of an original prescription written by an authorized prescriber. ▪ A verbal prescription directly from an authorized prescriber. ▪ Transmitted through a secure electronic medication management system that meets regulatory requirements.	☐	☐	☐	☐
3.3. Verbal and telephonic orders, directly from an authorized prescriber to another healthcare professional are: ▪ Restricted to urgent situations where written communication is not feasible. ▪ Verified by the authorized prescriber in a timely manner (ideally 24 hours) that the order has been transcribed correctly. This should include read-back in the moment and fax-back of the order.	☐	☐	☐	☐
3.4. Medication orders include explicit instructions for use. ▪ PRN medications include the reason for use (e.g., symptom(s) for which it is to be used), dose specific time interval between doses, and how often it can be taken. ▪ Topical medications include the specific area where it is to be applied. ▪ Information about PRN medications is communicated to all members of the care team.	☐	☐	☐	☐
3.5. Changes in medication orders are consistently communicated among all those involved in the care of the resident, including site staff. ▪ A consistent medication order transcription process is established for medications dispensed by other pharmacies (e.g., compassionate supply, cancer treatment) to ensure those are communicated to the primary pharmacy to be documented on the MA/AR/eMAR.	☐	☐	☐	☐
3.6. Changes in medication therapy are communicated to residents and their ***support person(s)***.	☐	☐	☐	☐

KEY ELEMENT 4: Pharmacy Services

Standardization of services between pharmacy providers:

Safe and effective ***medication management*** in supportive living is improved by standardization of dispensing and distribution processes for residents receiving medication support. Standardization is most easily achieved with a single pharmacy provider model however that must be balanced with resident choice and autonomy. When it is necessary to work with more than one pharmacy provider, minimize the number of pharmacies involved and standardize dispensing and distribution processes between pharmacies as much as possible.

Pharmacy service agreements (Items 4.1, 4.2, 4.3):

Site owner/operators need to have clear, transparent processes in place to select a pharmacy(ies) that is (are) best able to meet the needs of the site and its residents. Sites are encouraged to work with their pharmacy provider(s) to negotiate services. A service agreement that addresses both dispensing/distribution processes and clinical services is recommended. Regular evaluation of the service agreement is recommended.

- Dispensing/distribution services may include preferences for packaging, labelling, medication delivery and disposal, MA/AR/eMARs and/or medication lists, and after-hours service.
- Clinical services are related to a pharmacist's obligation to assess residents, ensure appropriateness of drug therapy, and monitor their response. They may include medication histories, medication reconciliation, resident assessment for self-administration, medication reviews, participation in care conferences, review of medication incidents, and staff and resident education.
- Residents need to be informed by the site about why a preferred pharmacy provider(s) is recommended.

Medication packaging and labelling (Items 4.4, 4.5, 4.6, 4.7):

For optimal safety, medications must remain clearly identifiable to the point of use. Consistency of packaging and labelling by all pharmacy provider(s) reduces the potential for error. Controlled dosage systems are the safest type of packaging.

- Labelling features for medication safety include use of a black font on a white background; TALLman lettering; sentence case lettering; use of a sans serif font (e.g., Arial); and larger font sizes (e.g., 12 points or above). Standardizing presentation of the drug name (e.g., trade or generic names), drug dosage, and order of information on the label is recommended. [5]
- Narcotics/controlled medications are supplied in tamper-evident packaging (e.g., bubble package or strip package).
- If residents are allowed to use up an existing supply of medications when they move in or in emergency situations, processes should be established that identify under what circumstances this is allowed and the measures taken to ensure safety.
- Adjustments (adding, removing) to medications in prepackaged resident supplies at the site is a safety risk. If possible, a pharmacy professional should make the adjustment. Adjustments by another healthcare professional are done in defined and/or urgent situations in consultation with the pharmacist. A process is in place when staff are required to make adjustments to packaging at the site. This process may include secure labelling of package with initial and date, double check process, temporarily assigning medication support activities to the RN/LPN and communication of the change amongst the team.
- The pharmacy advises healthcare providers of any special instructions for use of a medication (e.g., crushing), contraindications, or handling precautions required to protect staff. This can be done by including information on the label, by adding special labels to the packaging, and/or by using alerts on the MA/AR/eMAR.

Medication list (Item 4.8):

For each resident receiving medication assistance, a current pharmacy-generated list of all medications, including prescription, non-prescription and natural health products, needs to be available on site to all healthcare providers. The list includes drug name, strength, number of dosage units, frequency, or medication times for each medication the resident is receiving. It is updated by the pharmacy when there is a medication change. The list may be the MA/AR/eMAR or a separate medication list. The list is useful when new therapy is being considered, when medication is reconciled at transitions in care, during emergency evacuation, or when a resident is transferred to a different care site.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 4: Pharmacy Services

	Y	P	N	N/A
4.1. The site owner/operator has a clear, transparent process in place that is used to select a preferred pharmacy provider(s).	☐	☐	☐	☐
4.2. The site owner/operator has a service agreement with its pharmacy service provider(s) that addresses standardization of dispensing/distribution processes and pharmacist clinical activities.	☐	☐	☐	☐
4.3. The site informs residents about why a preferred pharmacy provider(s) is recommended.	☐	☐	☐	☐
4.4. For residents who receive medication support, all pharmacies providing services to the site are encouraged to standardize their systems for: ▪ Packaging and labelling. ▪ Documentation of medication support (e.g., MA/AR/eMAR). ▪ Delivery processes to the site. ▪ Safe disposal of medications. ▪ Clinical pharmacy support.	☐	☐	☐	☐
4.5. Medication changes or other medication requests (e.g., prescription change or spilled/missing medications) are accommodated in a timely manner, depending on the urgency of need (e.g., next scheduled medication delivery, or sooner if required).	☐	☐	☐	☐
4.6. Processes are in place to support safe adjustments (adding, removing) to medications in prepackaged resident supplies at the site. ▪ Adjustments are only done by another healthcare professional in defined, and/or urgent situations in consultation with the pharmacist. ▪ Adjustments are never done by a healthcare aide/unregulated provider.	☐	☐	☐	☐
4.7. Pharmacy provides special instructions for use of a medication (e.g., crush), and/or special handling precautions to protect staff, in a consistent location and format that is highly visible at the time of medication support (e.g., included on medication labels or on the MA/AR/eMAR).	☐	☐	☐	☐
4.8. A pharmacy-produced list of all medications a resident receiving medication support services is taking (which can be the MA/AR/eMAR or a separate document) is provided to the site and accessible to all healthcare providers: ▪ On move-in. ▪ On a monthly basis.	☐	☐	☐	☐

Medication assistance/administration records (Items 4.9, 4.10):

For each resident receiving medication support services, there needs to be a method of recording medication support activities (MA/AR/eMAR) that is on site and available to all healthcare providers. A single record, maintained at the site, of all medications a resident receives is strongly recommended. Standardization across records reduces the potential for error. When a resident chooses a community pharmacist who has met the minimum comparable services, standardization may not be feasible. If this occurs, healthcare providers must be made aware of any differences.

- The process for updating the MA/AR/eMAR when there are changes to a resident's medications should be standardized between all pharmacy service providers. The safest system is sending a new list and/or MA/AR/EMAR. Transcribing (writing new orders onto an MA/AR/eMAR) or handwritten notes for a dose change are not safe ways to prepare or update a medication list or MA/AR/eMAR. If labels sent by the pharmacy are used to update the MA/AR/eMAR, a double-check process should be in place to ensure the label is placed in the correct location and that the label and previously transcribed order match.
- When all pharmacy service providers present medication information on the MA/AR/eMAR in a standardized way that is consistent with the way information is presented on the medication label and medication list, site staff can easily compare medication information during medication support activities, which helps prevent medication errors and improve efficiency. This includes:
    - Medication name (generic or trade name may be used depending on the product).
    - Order of presentation of information about a medication, e.g., medication name, followed by the strength and dosage amount (e.g., number of tablets/capsules/millilitres).
    - Order in which medications are listed, e.g., alphabetically by medication name or by time of administration.
    - Resident room number for use only as an added check for correct delivery and storage, not as a ***resident identifier.***

Medication deliveries and returns (Items 4.11 to 4.14):

Variable medication delivery times interrupt site staff at unpredictable times; interruptions during medication support activities increase the likelihood of errors. A standardized delivery day and time that occurs when medication support is not underway and when adequate staff are present to receive and store medications is recommended for all pharmacy service providers.

- A process is established for receiving medications from all pharmacy service providers to ensure medications are accounted for and not publicly accessible (e.g., to residents or visitors). Typically, pharmacy service providers deliver medications to a secure central location but may deliver directly to the resident room if appropriate for the site.
- The site needs a way to check that all expected items are received (e.g., shipping report). Staff can follow up with the pharmacy provider when it appears that medications are missing from the delivery.
- Disposal of discontinued, discarded, outdated, and contaminated (e.g., dropped) medications must be coordinated by the pharmacy service provider. Typically, medications for disposal are stored in a central location until they can be picked up by the pharmacy. As noted in checklist item 5.6, an accounting process needs to be in place for individually packaged narcotic/controlled medications awaiting return to the pharmacy.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 4: Pharmacy Services (continued – Items 4.9 to 4.15)

	Y	P	N	N/A
4.9. A method of recording medication support activities for a resident (MA/AR/eMAR) provided by any member of the care team and for all medications the resident receives is prepared by a healthcare professional working within their scope and is maintained at the site.	☐	☐	☐	☐
4.10. Presentation of information about a medication on the MA/AR/eMAR is: ▪ Standardized between all pharmacy providers to the extent possible. ▪ Consistent with the prescription label and the current resident medication list when the MA/AR/eMAR includes medication-specific information.	☐	☐	☐	☐
4.11. A consistent day and time is set for regular medication deliveries from each pharmacy service provider.	☐	☐	☐	☐
4.12. Medications are delivered from the pharmacy to a consistent, secure area in the site, such as, a medication room, locked storage room, locked cupboard, or a secure area in the resident room.	☐	☐	☐	☐
4.13. Healthcare providers at the site involved in receiving medications have a way to check that all items expected in the delivery from the pharmacy are received.	☐	☐	☐	☐
4.14. Pharmacy service providers collect and arrange for proper destruction of discontinued, discarded, outdated, and contaminated medications, including narcotics and controlled drugs.	☐	☐	☐	☐

KEY ELEMENT 5: Medication Storage

Storage location (Items 5.1, 5.2, 5.3, 5.4):

Medications need to be secure from access by other residents or visitors. When medications are stored in resident rooms, they should be stored in a consistent location in each room that can be secured to prevent unauthorized access, allow proper storage conditions for the medications, and permit staff to find the medications easily.

- Physical properties of medications can be altered when exposed to excessive heat, moisture, or light. Pharmacy providers will advise if medications require special storage, such as through use of special labels, notations on the medication list or MA/AR/eMAR, or discussion with the site.
- Medications requiring refrigeration must be stored at a temperature of 2° to 8°C (36° to 46°F). Storage of medications in the refrigerator door is not recommended as there is the potential for greater fluctuation in temperature. Refrigerators used to store medications are not used for any other purpose and must be checked regularly to ensure the proper temperature is maintained. A process is in place to address situations where the temperature is found to be out of range. Specific cold chain requirements are in place for the storage of vaccines. Vaccines stored at the site must be stored in a refrigerator that meets those requirements.
- To prevent medication errors, PRN medications need to be packaged or stored so they are easy to distinguish from regularly administered medications. Visually distinct packaging or storage in a place that is physically separated from routine medications are two options.
- Adequate lighting is important for areas where medications are stored and where medication support activities take place because small lettering on medication labels requires higher light levels for optimal viewing. This is particularly important for older residents and staff providing medication support because of age-related declining visual acuity and fatigue. Illumination levels should be approximately 100 foot-candles (lumens per square foot) in areas where medication related tasks are performed. [6]

Verifying correct storage location (Item 5.5):

Site staff need to verify that medications are distributed to the correct location for each resident after delivery (e.g., resident room or resident-specific area in a cart or central storage location). Options include a double-check during the initial storage process or during the first medication pass after the medication is received.

Accountability for narcotics/controlled medications (Item 5.6):

To prevent theft, pharmacy providers and site operators and their staff are jointly responsible for developing processes to receive and account for narcotic/controlled medication. Individually packaged narcotics/controlled medications must be supplied in tamper-evident packaging (e.g., bubble package or strip package) and require accounting processes. Controlled drugs in controlled dosage systems do not require accounting.

Medication disposal or return (Items 5.7, 5.8):

Medications that are no longer to be used (e.g., discontinued, contaminated, outdated) must be promptly removed from areas where in-use resident medications are stored.

Medications to be returned to the pharmacy are stored in a secure, central location.

- A process should be established for checking expiry dates of medications not included in controlled dosage systems (PRN, topical medications, drops) that identifies who is responsible and how often they are checked. Outdated stock must be removed for return and the pharmacy notified for a replacement supply.
- Medication can remain in discarded transdermal patches and may cause an adverse reaction if patches are inadvertently used. Secure disposal is required to prevent inadvertent reuse.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 5: Medication Storage

	Y	P	N	N/A
5.1. Medications are stored in a secure (e.g., inaccessible to other residents or visitors) space at the site that: ▪ Is in the same location in each resident room or in a centralized medication room, cupboard, cart, or fridge. ▪ Permits storage of medications according to manufacturers' recommendations for temperature, humidity, and light exposure.	☐	☐	☐	☐
5.2. Refrigerators used to store medications are designated for that purpose only (e.g., no food items or specimens). ▪ Temperatures are monitored to confirm it is maintained between 2° to 8°C (36° to 46°F). ▪ A process is in place for temperatures that are out of range. ▪ Vaccines are stored in a refrigerator that meets cold chain requirements. ▪ Medications are not stored in the door of the refrigerator.	☐	☐	☐	☐
5.3. PRN medications are easy to distinguish from regularly scheduled medications (e.g., physically separated or visually distinct packaging).	☐	☐	☐	☐
5.4. Lighting levels are adequate for reading small lettering on medication labels by: ▪ Residents self-administering their medications. ▪ Healthcare providers during medication storage and support activities.	☐	☐	☐	☐
5.5. Site staff verify that medications received from the pharmacy are distributed to the correct location for each resident after delivery.	☐	☐	☐	☐
5.6. To prevent theft, individually packaged narcotic/controlled medications are accounted for: ▪ When received from the pharmacy. ▪ When stored in centrally located areas within the site or in resident rooms. ▪ When returned to the pharmacy for disposal.	☐	☐	☐	☐
5.7. A process for identifying discontinued, contaminated (e.g., dropped), or outdated medications, including those not included in controlled dosage system, is established, and implemented. These medications are: ▪ Immediately and safely removed from areas where current resident medications are stored. ▪ Stored in a secure, central location while waiting for pick up by the pharmacy.	☐	☐	☐	☐
5.8. Used transdermal patches (e.g., fentanyl, nitroglycerin) are discarded securely so that they cannot be accidentally reused or used improperly.	☐	☐	☐	☐

KEY ELEMENT 6: Medication Support Activities

Medication support system (Items 6.1 to 6.7):

A system (processes and supporting tools) needs to be in place to help healthcare providers complete their medication support activities efficiently and safely.

- Medication support activities for each resident are documented and the information is accessible to staff when they provide medication support to help prevent errors of omission, which account for 32 to 49 per cent of medication administration errors in supportive living.
- Interruptions (e.g., phone calls or requests from other staff or healthcare providers, residents, or support persons) during medication support activities have been shown to contribute to medication errors[6]. Strategies to reduce interruptions include providing medication support to residents in their rooms, using 'Do Not Interrupt' signage, putting phones on call forward or to a machine during a medication pass, or assigning specific staff to medication support activities.
- Pre-pouring, in which there is a delay between when medication is prepared and when it is taken to the resident, or preparing medications for multiple residents at once, are safety risks and unacceptable practice. Medications must remain clearly identifiable to the point at which the resident takes the medication. Medication is best prepared as close as possible to where and when the resident takes it.
- Some medications can pose a risk to staff if they are handled improperly (e.g., transdermal patches, medications used to treat some cancers (cytotoxic medications)). Healthcare providers need to be able to readily identify which medications require personal protection and how to protect themselves when providing medication support. Appropriate personal protective equipment is stocked and accessible. Strategies to communicate this information to healthcare provides include:
  - Labelling of all hazardous drugs.
  - Posting warning signs in areas where hazardous drugs are present.
  - Maintaining a list of hazardous medications.
  - Education and training for healthcare providers on the precautions to be taken to protect themselves when providing medication support.
- Direct care providers need to be aware of any ***high-alert medications*** that residents receive and the special actions they need to take to prevent medication adverse events. Strategies to reduce the risk of errors may include:
  - Using auxiliary labels and automated alerts to clearly identify high-alert medications.
  - Standardizing the ordering, storage, preparation, and administration of these products.
  - Improving access to information about these drugs.
  - Limiting access to high-alert medications.
  - Implementing redundancies such as automated or independent double-checks, where possible.
- Where medication devices such as chamber inhalers or insulin pens are used in medication support activities, staff need to be educated in the safe use of those devices to ensure they are used appropriately, and the resident receives the medication as intended.
- When a medication is missing or is not usable (e.g., dropped), direct care providers should contact a healthcare professional for guidance on how best to ensure the resident receives the intended medication as soon as possible.

Resident verification (Items 6.8, 6.9, 6.10):

Resident verification during medication support involves matching resident identifiers between the MA/AR/EMAR, medication label, and resident. It is recommended to use two-person specific identifiers to confirm that residents receive the right medication.

A current resident photograph is a definitive means of identification and is appropriate for the supportive living environment. Self-identification can be used for cognitively intact residents, but this can pose a problem if the resident is temporarily confused (e.g., with an infection) or with new staff who don't know the resident. Dual staff identification with one healthcare provider who knows the resident well can be used, but ideally identifiers should not rely on the memory of a healthcare provider. Identifiers used in other healthcare settings are difficult to use in the home-like environment of supportive living (e.g., resident-specific identification number, resident identification card, resident barcode, resident wristband).

- When resident photographs are used as an identifier, the photograph must be sufficiently current and of high enough quality to enable confident recognition of the resident. Including a resident photograph with the MA/AR/eMAR and in the resident's medication storage area facilitates resident verification.
- The resident's direct care provider needs to be able to check the medication label against the MA/AR/eMAR and resident identifiers at the time of medication support. Storing these information sources at the point of medication support increases the likelihood that resident identifiers will be used.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 6: Medication Support Activities

	Y	P	N	N/A
6.1. Medication support activities are included on a tool (e.g., task list, care plan, Kardex) that is created to guide care of the resident each day.	☐	☐	☐	☐
6.2. Interruptions to healthcare providers while performing medication support activities are minimized.	☐	☐	☐	☐
6.3. There is no pre-pouring of medications. All medications remain in their packaging until the time at which the medication is provided to the resident for use.	☐	☐	☐	☐
6.4. Processes are in place to communicate hazardous medications that a resident is receiving (e.g., transdermal patches, cytotoxic medications, medicated creams) and any personal protective equipment or precautions needed to maintain safety during medication support activities.	☐	☐	☐	☐
6.5. Processes are in place to communicate high-alert medication the resident is receiving, and any special action needed to maintain resident safety.	☐	☐	☐	☐
6.6. Staff involved in medication support activities are educated on the safe use of medication devices that may be needed to meet resident's medication support needs (e.g., tablet splitters, pill crushers, chamber inhalers).	☐	☐	☐	☐
6.7. When a medication is missing or is not usable (e.g., dropped), direct care providers contact a healthcare professional for guidance on how to ensure the resident receives the intended medication as soon as possible.	☐	☐	☐	☐
6.8. Two unique resident identifiers are used by healthcare providers to verify the resident's identity when providing medication support.	☐	☐	☐	☐
6.9. When photographs are used as a resident identifier, photographs are: ▪ Updated regularly (e.g., annually, or when resident appearance changes significantly). ▪ Included next to the MA/AR/eMAR.	☐	☐	☐	☐
6.10. The MA/AR/eMAR, medication label, and resident identifiers are all available to the healthcare provider so they can be referenced for verification at the time at which the medication is provided to the resident.	☐	☐	☐	☐

Documentation of medication support (Items 6.11, 6.12, 6.13, 6.14):

All medication support provided to a resident at the site is documented in a record (e.g., MA/AR/eMAR or similar document) kept at the site. A single record is preferred. When both healthcare aides/unregulated healthcare provider and healthcare professionals are involved in medication support, two different MA/AR/eMARs tailored to the needs of the healthcare providers involved may be used. Where two records are in use, processes are in place to support the regular review of all medication support activities by the healthcare professional.

- Document medication support (e.g., signing or initialing an MA/AR/eMAR) at the time it is provided to a resident. Batch documentation for multiple residents is typically associated with pre-pouring and is not an acceptable practice.
- Document medications taken as well as medications ordered but not taken, including the reason it was not taken (e.g., refusal, dropped, missing, instructions to withhold).
- For residents receiving medication by a transdermal patch or injection, record the site of application (patch) or injection. This will prevent irritation from repeated application or injection to the same spot and inadvertent overdose of a medication from the application of a second patch. Document patch removal as well.

Use of 'resident's own' medications (Item 6.15):

The practice of residents bringing their own medication into a site for personal use is generally discouraged. Where residents choose to bring their own medication for personal use, they must be made aware of and respect policies and procedures that are in place to ensure resident safety. For example, residents may ask to finish medications dispensed before move-in as a cost-saving measure or residents may wish to use a natural product, therapeutic treatments or non-prescription medication purchased in a pharmacy. To ensure resident safety in these situations:

- The most responsible practitioner confirms the use of the medication is not contraindicated and preferably writes a prescription for it.
- The identity and expiry date of the medication must be confirmed by a healthcare professional.
- Any medications for which staff will be providing medication support need to be packaged and labelled appropriately by a pharmacy service provider.
- Site policies related to use of residents' own medications must be enforced consistently by all staff members and healthcare providers.

Resident confidentiality (Item 6.16):

To maintain resident confidentiality, a secure location or container is used to dispose of packaging and other materials that include resident information.

Resident education related to the medication system (Item 6.17):

In supportive living there is a balance between supporting residents' level of independence appropriate to their health status while ensuring resident safety. Processes to ensure medication safety within the site may conflict with a resident or support person's expectations of independence. At the time of move in, residents and their representatives need to be informed of medication safety-related processes in place at the site and of the expectation that they will respect those practices. Managed risk agreements are one way of addressing a situation where the resident or representative preference conflicts with the site's medication safety processes.

- This may include safe storage of medication, medication times, location(s) where medication support activities can take place (e.g., resident room or dining area), refill of medication supplies, medications for use when the resident is off site, use of PRN medications, medications brought into the site for personal use by a resident, and whom to contact if there are concerns about a resident's medications.

Resident Outings (item 6.18):

Residents are supported to remain engaged with the broader community which may result in them being away from the site during scheduled times for medication assistance. In those situations, the healthcare professional responsible for the supervision of medication support activities should determine the most appropriate option to safely support the resident. This may include assigning responsibility for the medication to the resident and/or support person or giving the medication earlier or later than the indicated time to avoid sending the medication with the resident.

If it is necessary to assign medication assistance to an unregulated healthcare provider (e.g., recreation therapist or aide), the medication must be packaged and labelled according to relevant standards and organizational policy. The unregulated healthcare provider must have access to information regarding the resident care needs, document the medication assistance provided and the appropriate level of supervision is provided by the healthcare professional.

KEY ELEMENT 6: Medication Support Activities (continued – Items 6.11 to 6.16)

	Y	P	N	N/A
6.11. A record (e.g., MA/AR/eMAR) on which all medication support is documented is maintained for each resident and kept in a secure location at the site that is accessible to all healthcare providers who provide medication support.	☐	☐	☐	☐
6.12. Medication support activities are documented for each resident at the time they occur by the person performing the activity. There is no batch documentation for multiple residents.	☐	☐	☐	☐
6.13. Documentation includes: ▪ Medications taken by the resident, including the time if it is different from that specified in the care plan. ▪ Medications ordered but not taken by the resident, as well as the reason a medication was not taken.	☐	☐	☐	☐
6.14. Documentation for transdermal patches and injections includes: ▪ Site of patch application or injection. ▪ Patch removal.	☐	☐	☐	☐
6.15. Site staff consistently reinforce with residents and families the site policy related to safe use of medications (non-prescription, natural health products, therapeutic treatments) brought into the site for personal use by a resident, including: ▪ Under what situations resident medications can be brought into the site for use by a resident. ▪ Confirmation from the most responsible practitioner that use is not contraindicated. ▪ Need for a visual inspection by a healthcare professional to confirm identity and expiry date of the medication. ▪ Expectations for safe packaging and labelling if medication support is to be provided by site staff.	☐	☐	☐	☐
6.16. Medication labels, packaging, and other materials that have resident information on them are disposed of in a manner that protects the privacy and confidentiality of resident information.	☐	☐	☐	☐
6.17. At the time of move-in and throughout their stay, residents and families are provided with information on safe medication processes at the site.	☐	☐	☐	☐
6.18. Formal processes for medication assistance are in place to safely support residents who will be away from the site during scheduled times for medication assistance.	☐	☐	☐	☐

KEY ELEMENT 7: Healthcare Provider Competence

Scope of practice (Items 7.1, 7.2, 7.3):

Profession-specific regulations in the Health Professions Act (HPA) determine the scope of practice of regulated healthcare professionals in Alberta and the activities each can perform. [7] Some care activities are restricted to specific regulated healthcare professionals (***restricted activities***). [7] Healthcare professionals may assign some activities of their profession, as defined under the HPA regulations, to others (e.g., another healthcare professional or healthcare aide/unregulated healthcare provider) when appropriate supervision is in place. Supervision can be direct, indirect, or remote depending on the nature of the activity as long as a healthcare professional qualified to perform the activity is available for consultation. [1]

- Job descriptions of site staff include key responsibilities related to the medication system that are consistent with their defined scope of practice. This may include receipt and storage of medications, medication support activities, documentation, and communication about medications with the resident, support person(s), and other members of the healthcare team.
- Nursing professionals may assign certain restricted activities for a specific resident to a healthcare aide or other healthcare provider, including some medication-related activities. [1] The nursing professional is responsible for assigning resident care appropriately and for ongoing evaluation of the resident; the healthcare aide or other healthcare provider is responsible for completing the assigned tasks in the manner instructed. [1] Site administration is responsible for ensuring that current policies to guide staff in the assignment of tasks to healthcare aides.[1] Clear documentation and communication of all aspects of the nursing process around performance of specific restricted activities for a specific resident by a healthcare aide is essential for safe care. This includes addressing the need for reassessment in the plan such as when there are changes in the resident health status or medication regimen.
- Supervision needs to be clearly defined, understood, and accepted by all healthcare providers involved in the care of residents, both at the site and in the community. This includes appropriate responsibility and accountability of all healthcare providers for their role in medication-related activities and issues.

Communication (Item 7.4):

A clear process is in place to support direct care providers to obtain guidance and address questions related to the medication system or a resident's medication. Communication should be with an appropriate healthcare professional who has the knowledge, skill, and judgment to provide guidance in that situation.

Orientation and competency assessment (Items 7.5, 7.6, 7.7):

Orientation for new staff is required to ensure that important aspects of resident medication support and medication management are reviewed. Staff completion of this orientation should be documented. The use of a checklist to support the orientation is recommended. A process to assess competency should be in place for both new and established staff providing medication assistance.

- Competency assessment involves ensuring the healthcare provider has the knowledge and skills to fulfill their responsibilities within the medication system. It should be done prior to being assigned medication support activities. A process is in place to ensure competence is maintained (e.g., assessed as part of a staff member's regular performance appraisal, with annual or bi-annual education or more frequently if there are concerns about a care provider's performance). A formal documented process such as return demonstration and sign off of competence by a healthcare professional is the best way to verify this.
- If temporary or agency staff are used to fill staff vacancies or for casual employment, they must be orientated to the medication system, site policies and procedures related to the medication system, and expectations of healthcare providers related to medication management before they commence work at the site.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 7: Healthcare Provider Competence

	Y	P	N	N/A
7.1. Job descriptions for healthcare providers, both unregulated and healthcare professionals: ▪ Are current. ▪ Reflect their defined scope of practice. ▪ Include key responsibilities related to the medication system, including but not restricted to receipt and storage of medication, medication support activities, documentation, and communication.	☐	☐	☐	☐
7.2. The site ensures that assignment of restricted activities related to medications for a specific resident by a nursing professional to a healthcare aide/unregulated healthcare provider is completed in compliance with relevant standards.	☐	☐	☐	☐
7.3. The way in which medication-related activities are supervised by healthcare professionals is clearly defined and understood.	☐	☐	☐	☐
7.4. All members of the healthcare team clearly understand communication channels and lines of authority for concerns related to medication-related processes or a resident's medications.	☐	☐	☐	☐
7.5. The site orientation program for new employees involved in medication activities includes: ▪ A review of the site's policies and procedures related to the medication system. ▪ An assessment of competency related to medication-related tasks to be performed by the employee, which is supervised by a healthcare professional.	☐	☐	☐	☐
7.6. When agency or temporary healthcare providers are used for casual employment or to fill staff vacancies, they are orientated to site policies, processes, and expectations related to the medication system before being assigned medication support activities.	☐	☐	☐	☐
7.7. Any staff providing medication assistance must be verified as competent related to their activities in the medication system: ▪ Prior to being assigned medication support activities. ▪ On an ongoing basis to ensure competence is maintained. ▪ Competency is verified by a healthcare professional working within their role and scope of practice.	☐	☐	☐	☐

KEY ELEMENT 8: Medication System Quality and Safety Improvement

Quality and safety improvement program (Item 8.1):

A quality and safety improvement program is a planned and systematic cycle of activities that is focused on improving systems of healthcare delivery to continually improve quality and safety of care. A system comprises people, processes, tools and technology, and the environment in which care is provided. The quality and safety improvement cycle includes identifying hazards and opportunities for improvement, planning, and implementing changes, and evaluating changes to determine if they had the desired effect.

The medication system includes all the interacting elements that help healthcare providers do the right thing during their medication-related activities. Activities that can help identify medication system issues that need to be addressed include utilization reviews (e.g., of high-alert medications), regular review of medication incident reports, periodic reviews of the medication system (e.g., using the Medication Management in Supportive Living Checklist), or reviews of pharmacy service agreements. Involvement of other healthcare team members in medication system improvement efforts is strongly recommended.

Reporting and learning system that includes medications (Items 8.2, 8.3, 8.4):

A reporting and learning system is one component of an ongoing quality and safety improvement program. Human error is an inevitable part of healthcare and is often a signal that the system supporting healthcare providers needs to be improved. To learn from medication incidents, it is essential that processes be in place for:

- Documenting medication incidents and ***close calls*** involving medications.
    - Site policies clearly describe internal processes for reporting and documenting medication incidents, requirements for when and how to notify the case manager, Alberta Health Services and/or Alberta Health (where applicable) as well as the process for reviewing and learning from incidents within a just culture.
- Investigating reports of medication incidents to determine contributing system factors.
    - An investigation process that looks beyond the contribution of the individual to examine the circumstances and contributing system factors that influenced the behaviour of the individual is critical to build a culture in which adverse events drive learning, not fear of punishment. While human error is almost always a factor in medication incidents and close calls, it is important to look beyond individuals to other factors in the medication system that contributed to the incident and can be targeted for improvements. Recommendations that are focused on improvements to the medication system are more likely to improve the safety of future residents over recommendations that target an individual.
    - The Health Quality Council of Alberta (HQCA) has resources to guide safety reviews (Systematic Systems Analysis) and to assess the accountability of individuals involved (Just Individual Assessment) within a just culture.
- Using the reporting and learning system to drive medication system improvements.
    - The goal of any reporting system is to learn from the incident and make improvements that reduce the likelihood of a similar incident occurring in the future. Having a process in place to prioritize recommendations from an investigation and follow through with system changes will ensure learning occurs.
    - Persistent system issues that need to be addressed can also be identified by a regular review of accumulated incident reports looking for trends in medication incidents. For example, what kinds of medication incidents are recurring and what can be done to improve the system so these issues are less likely to happen in the future? A collaborative process with other team members can be helpful in identifying potential improvements to the medication system.

Y= item fully in place	P = item partly in place	N = item not in place	N/A = item not applicable

KEY ELEMENT 8: Medication System Quality and Safety Improvement

	Y	P	N	N/A
8.1. A planned, systematic quality and safety improvement program is in place to identify and address medication system issues and continually improve medication safety.	☐	☐	☐	☐
8.2. A reporting and learning system is in place that is: ▪ Used by healthcare providers to report both medication incidents and ***close calls***. ▪ The process to investigate the incident looks beyond the contribution of the individual to examine the circumstances and contributing system factors that influenced the behaviour and actions of the individual.	☐	☐	☐	☐
8.3. If applicable, staff are aware of and understand the reportable incident process for reporting medication adverse events to Alberta Health Services and/or Alberta Health.	☐	☐	☐	☐
8.4. Reports of medication incidents are used to identify medication system issues that need to be addressed through a quality improvement initiative.	☐	☐	☐	☐

GLOSSARY OF TERMS

Authorized prescriber
A healthcare professional who is permitted by legislation, regulatory college and practice setting to prescribe medications.

Best possible medication history (BPMH)
A history created using 1) a systematic process of interviewing the resident/support person; and 2) a review of at least one other reliable source of information to obtain and verify all of a resident's medication use (prescribed and non-prescribed). Complete documentation includes drug name, dosage, route, and frequency. The BPMH is more comprehensive than a routine primary medication history which is often a quick preliminary medication history which may not include multiple sources of information. [2]

Care conference
A multidisciplinary meeting with the resident/resident representative to discuss care and medication related needs, goals, and issues.

Care plan
A comprehensive, coordinated plan of care which is developed, shared, and managed collaboratively across the continuum of service. It is based on resident assessment and documents the resident's needs and goals, the interventions to meet these needs, and outcome measures. [8]

Close call
An event that has potential for harm and is intercepted or corrected before it reaches the resident.

Controlled dosage system
A packaging system used by pharmacies to dispense medications in a form that controls the amount of medication to be taken at each dosing time. The systems may include controlled dosage cards (seven and 30-day), compliance (pouch) packs, and dosettes.

Healthcare professional
A healthcare provider who is a member of a regulated health profession in Alberta and is expected to practice under the provisions of the Health Professions Act.

Healthcare provider
Anyone receiving payment for providing healthcare services to a resident. This includes unregulated healthcare providers or healthcare professionals who are site staff or work for a community partner.

High alert medications
Drugs that bear a heightened risk of causing significant resident harm when they are used in error. [10]

interRAI, interRAI HC
A suite of tools built on a common set of items that support clinical assessment and care planning for people at the point of care. RAI stands for 'Resident Assessment Instrument'. The interRAI HC tool and supporting documents were developed specifically for use by home care (HC). The interRAI has become a standard for resident assessment, care planning, and follow-up in the continuing care sector in Alberta.

MA/AR/eMAR (Medication assistance/administration record/ electronic medication assistance/administration record)
An abbreviation used in the checklist to refer to the document in which medication support provided to a resident is recorded. The amount of medication-specific information provided on the MA/AR/eMAR's should be appropriate to the level of medication support being provided. For example, some MA/AR/eMAR's may not include any medication-specific information if the healthcare aide (HCA) is signing that assistance was provided at medication times (not signing that specific medications were given).

Medication administration
The activity of supplying to a resident a dose of a medication for the immediate ingestion application, inhalation, insertion, instillation, or injection. The administration of medications is more than just a psychomotor task of giving a medication to a resident. It is a cognitive and interactive aspect of care and involves assessing the resident, making clinical decision, and planning care based on this assessment. [8]

Medication adverse event
Harm resulting from a medication, lack of an intended medication, or lack of intended effect of a medication. It includes medication adverse reactions (see below), harm from medication incidents, and unintended consequences of an interaction between medications or between medications and food. [11]

Medication adverse reaction
Any harmful, unexpected response to a medication, including an allergic response, which occurs at doses normally used for prevention, diagnosis, or treatment of a medical condition.

Medication allergy
A medication adverse reaction in which symptoms are caused by an activation of the resident's immune system.

Medication assistance
A service provided to residents to ensure medication is taken as intended by the prescriber when the resident is assessed as being unable to independently take their own medication safely. In Alberta, three levels of medication assistance that can be assigned to a healthcare aide/unregulated healthcare provider are defined:

- Level 1: Reminder
- Level 2: Some/partial assistance
- Level 3: Full assistance

Medication incident
Any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the healthcare professional, patient, or consumer. Medication incidents may be related to professional practice, drug products, procedures, and systems, and include prescribing, order communication, product labelling/ packaging/nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use. [10]

Medication management
All the processes required to ensure safe and effective medication therapy for a resident, including prescribing, communication of medication orders, medication reconciliation, dispensing, delivery, storage, medication support, documentation, and follow-up. An integrated medication management system involves healthcare team members located in different environments working together to meet the medication-related needs of a resident.

Medication reconciliation
A formal process in which healthcare providers work together with residents, support person(s), and care providers to ensure accurate and comprehensive medication information is communicated consistently across transitions of care. Medication reconciliation requires a systematic and comprehensive review of all the medications a resident is taking (known as a Best Possible Medication History (BPMH)) to ensure that medications being added, changed, or discontinued are carefully evaluated. It is a component of medication management and will inform and enable prescribers to make the most appropriate prescribing decisions for the resident. [2]

Medication review
Medications are assessed for effectiveness, interactions, and adverse events by the healthcare team and the resident or resident representative through a structured review process. This process is coordinated by a healthcare professional (often a pharmacist or registered nurse) in conjunction with a resident or resident representative, other healthcare providers (including healthcare aides), and the resident's most responsible practitioner.

Medication support services
Services provided to a resident based on an assessment of their unmet needs to support those whose independence with medication management is impacted by changes in physical and/or cognitive abilities.

Most responsible practitioner
For the purposes of this document, the most responsible practitioner refers to a physician and/or nurse practitioner who has overall responsibility for directing the care of a resident in supportive living.

Natural health product
In Canada, a natural health product is defined as one of the following that is safe to use and sold without a prescription: [12]

- vitamins and minerals
- herbal remedies
- homeopathic medicines
- traditional medicines such as traditional Chinese medicines
- probiotics
- other products like amino acids and essential fatty acids

(PRN) medication
Medication that is taken only when required as opposed to being on a fixed schedule, from Latin pro re nata, also called "as needed medication."

Policy
For the purposes of this checklist, policies include any form of written information that articulates expectations and provides direction. This may include policy, procedures, or guidelines.

Resident
An individual residing in a supportive living environment. This term can be used interchangeably with the term client.

Restricted activity
Activities as defined by the Alberta Health Professions Act that can be completed by a designated regulated healthcare professional. Restricted activities can be delegated to other regulated or unregulated healthcare providers under defined circumstances.

Significant change in health status
A consistent pattern of change in a Resident's Health Status which is evidenced by at least two areas of decline or improvement according to the InterRAI Instrument or Standardized Assessment Tool used, and as determined by a Regulated Healthcare Provider. [9]

Supervision
Supervision is defined as consultation and guidance by the nursing professional acting within their scope in the practice setting. Supervision may be direct, indirect, or indirect remote. [1]

- Direct supervision: A nursing professional is present in the practice setting at the point of care. This means that the nursing professional is providing supervision 'at the side of the healthcare aide'.
- Indirect supervision: A nursing professional is available for guidance and consultation but is not directly at the side of the healthcare aide. This means the nursing professional is readily available on the unit or in the same location where the care is being provided. In community health settings, being readily available in the same location where the care is being provided would mean that the nursing professional is physically present in that setting.
- Indirect remote supervision: A nursing professional is available for consultation and guidance but is not physically present in the location where the care is being provided and is able to be contacted easily through the use of technology.

Support person(s)
One or more individuals identified by the resident as an important support, and who the resident wishes to be involved in their care. This may include, but is not limited to, family members, legal guardians, friends, or anyone else considered by the patient to be essential to their safety and well-being.

Supportive living
For the purposes of this checklist, supportive living is defined as a residential living for four or more individuals where an operator may also provide or coordinate personal care and other support services to assist residents in living as independently as possible.

Unregulated healthcare provider
Individuals who are neither licensed nor registered by a provincial regulatory body and are paid to perform care activities for residents in a site.

REFERENCES

1. College and Association of Registered Nurses of Alberta, College of Licensed Practical Nurses of Alberta & College of Registered Psychiatric Nurses of Alberta. Decision-making standards for nurses in the supervision of healthcare aides. Edmonton, AB. Published 2010. https://nurses.ab.ca/media/hsilyccf/decision-making-standards-for-nurses-in-the-supervision-of-health-care-aides-jun-2010.pdf
2. Institute of Safe Medication Practices (ISMP) Canada. Medication reconciliation (MedRec). Published 2015. https://www.ismp-canada.org/medrec/
3. Health Quality Council of Alberta. Hazards of medical abbreviations, symbols and dose designations. Published September 25, 2022. https://hqca.ca/resources-for-improvement/medication-safety/hazards-of-abbreviations-and-symbols/
4. Alberta College of Pharmacists, College of Physicians & Surgeons of Alberta & College and Association of Registered Nurses of Alberta. Ensuring safe & efficient communication of medication prescriptions in community and ambulatory settings. Edmonton, AB. Published 2007. http://www.cpsa.ab.ca/Libraries/Res/Guiding_Principles_for_Ensuring_Safe_and_Efficient_Communication_of_Medication_Prescriptions.sflb.ashx
5. Health Canada. Overview of the good label and package practices guide for prescription drugs. Ottawa, ON. Published June 21, 2019. https://www.canada.ca/content/dam/hc-sc/documents/services/drugs-health-products/reports-publications/medeffect-canada/good-label-package-practices-guide-prescription-drugs-profile/guidance-document/ppg-eng.pdf
6. Grissinger M. Physical environments that promote safe medication use. P T. 2012 Jul;37(7):377-8. PMID: 22876099; PMCID: PMC3411211.
7. *Health Professions Act*, RSA 2000, cH7. http://www.qp.alberta.ca/documents/Acts/h07.pdf
8. Alberta Health Services Seniors Health & Continuing Care. Medication assistance program manual. Published December 8, 2022. https://www.albertahealthservices.ca/assets/info/seniors/if-sen-map-program-in-alberta.pdf
9. Alberta Health. Continuing care health services standards. Edmonton, AB. Updated July 16, 2018. https://open.alberta.ca/publications/9781460138441
10. Institute for Safe Medication Practices Canada. Definitions of Terms. (n.d.) https://www.ismp-canada.org/definitions.htm
11. Bates DW, Spell N, Cullen DJ, Burdick E, Laird N, Petersen LA, Small SD, Sweitzer BJ, Leape LL. The costs of adverse drug events in hospitalized patients. Adverse drug events prevention study group. Journal of the American Medical Association. 1997; 277(4):307–11.
12. Health Canada. Natural health products. Updated July 25, 2022. http://www.hc-sc.gc.ca/dhp-mps/prodnatur/index-eng.php

APPENDIX 1: Facilitator Guide

The self-assessment process will be most effective under the guidance of a facilitator who is familiar with what the self-assessment process is intended to achieve, the rationale for the checklist items, terminology explained in the glossary, and the checklist items. Here are some suggestions for facilitating a successful medication management self-assessment meeting:

Before the meeting:

- Thoroughly read through the checklist document to become familiar with both the checklist items and the background information and consider how they apply to the site.
- Think about how to engage all team members in an honest, open discussion about the medication system.
- Be prepared to clarify points of confusion that may arise during the discussion, particularly as it relates to terminology. The glossary will be helpful for this.

At the beginning of the meeting:

- Give a brief overview of the purpose of the self-assessment checklist and the process to be followed during the meeting.
- Emphasize the importance of discussing what actually happens in practice (versus policies and procedures that are in place).
- Reassure participants that learning about shortcuts that care providers take will help identify vulnerabilities in the system that need to be addressed by tweaking processes, not by punishing people.

During the meeting:

- Facilitate discussion about each checklist item. A team member can be asked to read each checklist item out loud to be followed by discussion.
- Encourage discussion about what really happens in practice.
- Engage all team members in the process, including direct staff who may be hesitant to talk about times when practice may differ from policy. Giving each team member a chance to read the checklist items aloud is one way to involve them in the process.
- Clarify confusion about checklist items as necessary.
- Keep track of consensus responses for each checklist item. For items with multiple components, jot down whether each component is in place in order to determine a final response for that item.
- Make notes about:
    - Discussion points that are particularly important (e.g., when or why practice may vary from policy or established processes).
    - Uncertainties regarding checklist items that need to be clarified (e.g., with team members who are not present).
    - 'Quick fixes' that are identified through discussion.

After the meeting:

- Follow up with those unable to attend to discuss aspects of the medication system with which they are familiar.
- Summarize the results.
- Work with team members to create an improvement plan (see Appendix 2).

APPENDIX 2: Analyzing the Results to Create an Improvement Plan

The purpose of the self-assessment process is to stimulate a quality improvement process to enhance resident medication safety by identifying vulnerabilities in the medication system that can put residents at risk. Vulnerabilities in the medication system are those items scored 'Partly' or 'No'. Because the checklist includes leading practices that may not be common throughout supportive living, a site that has an open and honest discussion among team members about the checklist items will have some 'Partly' or 'No' responses.

The improvement plan should focus on addressing areas of the medication system where there are responses of 'Partly' and 'No'. In developing an improvement plan, it is not necessary to address all vulnerabilities immediately. Instead, use the results of the self-assessment to prioritize potential improvements that can be made to strengthen resident safety. A worksheet for analyzing the results of the self-assessment process is provided in Appendix 3.

An improvement plan can be developed during the team meeting or can be developed by a manager after the meeting and discussed later with the team. It is important to include team members at some point in developing an improvement plan to gain their support for and commitment to making changes in the medication system.

To develop an improvement plan:

1. List identified vulnerabilities in the medication system.

Separately list the checklist items for which a response of 'Partly' was chosen, and for which a response of 'No' was chosen.

2. For each 'Partly' or 'No' item, determine whether the issue is strictly internal or whether it involves a community partner.

Internal issues or processes are those that have no impact on or do not involve community partners (e.g., pharmacy, home care, physicians) and therefore can be addressed without involving a community partner. They may be easier to address than those that require changing a process involving partners outside the site.

3. For each 'Partly' or 'No' item, indicate how easy it would be to make a change to improve the score of that item.

This may require the input of team members who would be involved in making the change.

- Easy – a 'quick fix' that could be implemented within a short period of time (e.g., one month) with a minimum of effort and expense. Minimal staff training will be required. May require collaboration with community partners.
- Moderate – will require more time to implement (e.g., three to six months) and/or require a modest budget to be allocated. May require more extensive staff training. Will likely require collaboration with community partners.
- Difficult – Budget cannot support this item at this time or extensive negotiation with community partners is required to make this happen.

4. Select at least three issues to start working on.

When selecting priority issues, consider the following:

- Look for 'quick fixes'. Successfully addressing a medication system issue quickly will build confidence in the self-assessment process and show its value.
- Look for high-impact changes. A change that is expected to have a significant impact on safety could be worth investing some time and energy in making.
- Look for opportunities to involve a community partner (e.g., pharmacy, home care, physicians). This will demonstrate the importance of collaboration to resident medication safety. Note that most issues will benefit from the input of a community partner in some way.
- Look for opportunities to address issues that are related to known medication errors, medication adverse events, or close calls at your site. These might be more difficult to address but making them a priority will demonstrate your commitment to improving resident safety.

APPENDIX 3: Worksheet for Analyzing the Results

1. List all items with a response of 'Partly' or 'No'.
2. For each listed item, consider the scope: Indicate if the issue is strictly internal (I) or requires collaboration with a community partner (C).
3. Consider the ease of improvement: Indicate if the fix is likely to be easy (E), moderate (M), or difficult (D).
4. Identify at least three improvements to start working on immediately. At least one should be an 'easy' fix, and at least one should involve a community partner. Indicate who needs to be involved in the improvement process.

Items Scored "Partly"				Items Scored "No"			
#	Item Summary	Scope	Fix	#	Item Summary	Scope	Fix

APPENDIX 3: Worksheet for Analyzing the Results (continued)

Planning the Improvement Process:

1. For each priority item identified through an analysis of the results, write down an improvement goal – what is the change you want to make or what will the medication system look like for that item if the change is successful?
2. For each priority item, consider who should be involved in developing and implementing the improvement.

Item #	Improvement Goal	Who to Involve

NOTES

NOTES

210, 811 – 14 Street NW
Calgary, AB T2N 2A4
PH: 403.297.8162
FX: 403.297.8258
info@hqca.ca

www.hqca.ca