

Medication Administration and Delivery System – PHC Long Term Care (LTC)

Site Applicability

Providence Health Care (PHC) Long Term Care:

Effective October 30, 2023: Youville Residence, St. Vincent's Brock Fahrni, Holy Family Hospital LTC, and Mt. St. Joseph extended care unit.

Effective November 21, 2023: above sites plus St. Vincent's Langara LTC

Practice Level

- Nurse: Registered nurses (RN), licensed practical nurses (LPN), and registered psychiatric nurses (RPN) who have completed LTC orientation.
- Resident Care Aide (RCA): after receiving LTC program orientation and ongoing education as determined by LTC program.

Requirements

PHC LTC supports an interruption-free environment during medication administration. An alternate employee should be available to answer phone calls (e.g. clinical support clerk) and support problem solving in the neighbourhood (e.g. another nurse or clinical nurse leader or leader on call).

A [nurse](#) **administers** medications following professional standards set by the British Columbia College of Nurses and Midwives ([BCCNM](#)) and in compliance with [VPP Medication Administration Policy](#).

When administering medications, the nurse asks for an independent double check if at any time they identify a high risk situation and as outlined in the [Independent Double Check of Medication](#) policy.

Medications are always locked and never left unattended.

Medication cupboards are always **locked when not in use**.

Medications carts are always **locked when not in use**.

A nurse may only assign selected medicated products when specific conditions are met, as outlined in [Appendix A](#). For all medicated products assigned to RCAs, the nurse maintains responsibility for:

1. Monitoring for therapeutic effects and adverse side effects and responding appropriately
2. Assessment of the condition which the product is intended to treat.

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3. Writing clear instructions to the RCA via the care guide.
4. The assessment of the RCA task performance
5. Monitoring if the product is clinically appropriate for continued use and ensuring orders are discontinued as needed (e.g. by communicating with Most Responsible Provider (MRP) and/or clinical pharmacist, or applying clinical judgement for a non-prescription item).

Quick Links

[Steps in the Medication Delivery System](#)

[Pass Medications](#)

[Documentation](#)

[Resident and Family Education](#)

[Evaluation](#)

[Related Documents](#)

[Definitions](#)

[Appendices](#)

Need to Know

Providers enter medication orders electronically in Cerner via computerized provider order entry ([CPOE](#)). The orders flow through to an electronic Medication Administration Record (MAR). The nurse is alerted of new orders through Care Compass. The product note within the MAR contains important information, e.g. that the medication requires an independent double check, is a hazardous drug, or is a high alert medication. It is critical that nurses have and maintain knowledge of foundational Cerner skills and [medication policies](#) to facilitate safe medication administration and delivery.

PHC uses a multi-unit dose (MUD) system to dispense routine oral medications in labeled packages. Information about this dispensing system is found in [Appendix B](#). An understanding of the dispensing system is required in order to facilitate timely medication administration and minimize the chance of errors.

In our safety culture, all staff are encouraged to report any actual or potential (“good catches/near misses”) medication errors so the system can be improved and support can be provided to affected staff. Nurses should submit a report in the patient safety learning system (PSLS) for all resident medication administration errors or ‘near miss’ events.

Procedure

Steps in Medication Administration and Delivery System

Phase	Nurse Role	RCA Role	Rationale
MUD Medication Arrival to Care Home – See Appendix B for details on MUD	<p>Accept bags from the driver and initial the “MUD delivery tracking” form with second nurse.</p> <p>Sort the MUD packages and place into labeled medication drawers/bins. Ensure drawers are locked and/or otherwise secured.</p> <p>If the nurse is unable to sort the MUD strips at time of delivery, the medications must be securely stored until a nurse is available to do so.</p> <p>Follow the Narcotics and Controlled Substances standard.</p>	n/a	<p>Note: A MUD package with red tape indicates that the package has been altered in some way and the pharmacy production facility has verified the full contents.</p>
Shift Start	<p>Receive handover and attend huddle for the day. Review the activity timeline in Cerner and Nurse Reminder Sheet.</p> <p>Communicate with the RCA and ensure care guide instructions are clear.</p> <p>Coordinate timing for PRN bowel medications (suppository or enema), with the RCA. Hand the medication to the RCA at the planned time.</p>	<p>Review the RCA binder, attend huddle and complete Shift Planner sheet using the care guide.</p> <p>Clarify care guide instructions with the nurse as needed.</p>	<p>Resident safety is dependent on receiving correct information from previous shifts.</p> <p>Open communication between RCA and nursing staff is needed to ensure safe ongoing care. Bowel medications should be timed around resident care needs.</p>
Medicated products assigned to RCA for use during personal care	Enter up-to-date, clear instructions into the Care Guide (using Momentum Care Organizer).	<p>Inform nurse if the instructions are not clear</p> <p>Make sure the resident receives the correct medications by:</p>	Clear instructions are essential to prevent errors.

Phase	Nurse Role	RCA Role	Rationale
(see Appendix A).	<p>The Care Guide must be printed after each update and placed into the RCA binder and resident room.</p> <p>Multi-dose ointments and creams must be labeled resident-specific, and include expiry date (where applicable). Product name must be easily identifiable and match care guide instructions.</p> <p>Sign the MAR as “Care Aide Delivered” after receiving communication of successful medication delivery by RCA. Adjust the time on the MAR to reflect actual time given.</p> <p>*See CST Cerner Help Topic: Documentation of Medication Administration – Medication delivered by Care Aid</p>	<ul style="list-style-type: none"> Ensuring you have identified the resident correctly with two resident identifiers, against the product label and medication instructions <p>See RCA Medication Delivery Education Manual for details.</p> <p>Communicate to the nurse that the resident’s topical or bowel medication was delivered.</p> <p>Tick off task on shift planner and notify nurse before proceeding to next resident.</p> <p>Document at the end of the day by completing and initialing the daily flow chart.</p>	<p>Closed loop communication ensures that the nurse is aware of what has been done.</p> <p>The nurse and RCA work collaboratively to resolve any difficulties in medication delivery.</p>
Medication Administration	<p>Prepare medications for resident.</p> <p>If preparing a hazardous drug, use safe work procedures. Follow the Hazardous drugs control matrix for PPE requirements for administration.</p> <p>If IDC required, ask a nurse colleague.</p> <p>Follow BCCNM Medication Standards and</p>		

Phase	Nurse Role	RCA Role	Rationale
	<p>organizational policies for medication administration.</p> <p>Witness that the medication is consumed.</p> <p>Sign the MAR for medication that <i>you</i> administer.</p>		

Special Situations

Self-Administered Medications

Residents may self-administer medications when:

- There is an order for the medication with an order comment that the resident is to self-administer.
- The resident has the physical ability to self-administer.
- The resident can describe their understanding of the medication's expected effects, dose, route and time.
- The medication is not a controlled substance or narcotic.
- The medications are able to be safely stored and an individualized care plan is in place.

When residents self-administer medications, the nurse must:

- Check with the resident at least once per shift to understand when the resident self-administered the medication.
- Document on the MAR each self-administered dose by:
 - Selecting the medication
 - Entering "Self-Administered, Self-Administered" in the *Performed by field
 - Changing the time in the *Performed date / time field to the actual time of self-administration
 - Only document a medication that they know a resident has taken

Family-Administered and Family-Assisted Medications

Resident and family engagement is an expected part of the medication administration process. At times, it may be in the resident's best interest for the family or caregiver to assist or administer a medication.

1. **Family-Assisted medication administration** refers to when a clinician verifies the 7 rights of medication administration and then observes a family member giving the medication. The nurse signs the MAR and adds a comment that the family assisted the medication administration.

2. **Family-Administered medication administration** refers to when a family member administers medication to the resident independently (without the presence of the clinician) after the nurse has:
- Provided education, including 7 Rights of Medication Administration, and
 - Made a reasonable effort to evaluate the family member's comprehension and ability to administer the medication. (For example, use teach back, "I want to make sure I did a good job explaining how to give the medication, can you tell me how you will administer this?")

A family member may administer medications when:

- There is an order for the medication with an order comment that the family is to administer as part of an individualized care plan
- The family member has the physical ability to administer the medication to the resident
- The family member can describe their understanding of the medication's expected effects, dose, route and time
- The medication is not a controlled substance or narcotic

Document on the MAR each family-administered dose by:

- Selecting the medication
- Entering "Family-Administered, Family-Administered" in the *Performed by field
- Changing the time in the *Performed date / time field to the actual time of family-administration
- Only document a medication that the family member reports a resident has taken.

Pass Medications:

When a nurse gives medications to a resident or designate for offsite administration, it is called dispensing. Dispensing is a restricted practice and there are specific limits and conditions based on the [BCCNM medication standards](#) and [Dispensing Medications \(Nurses\)](#) guideline.

LTC is not set up or funded for dispensing medications. On move-in, explain to all residents and families that dispensing medications takes significant time in order for nurses to follow BCCNM requirements. 24 hours notice is required for pharmacy to prepare medications in blister packaging. For weekends, Pharmacy must receive the request by 1400H on the Wednesday prior to the pass.

Dispensing medication on short notice cannot be accommodated in the morning due to the volume of medication administration and staffing levels at that time. In many cases, medication times can be safely adjusted to allow for short leaves without need for dispensing. Short notice dispensing should only be done by exception to facilitate person and family centred care.

Leaves of any duration when given greater than 24 hour notice

Submit requests for pass medications using Cerner Medication Request by indicating the medication, doses required and dates and times of pass. 24 hours notice is required for pharmacy to prepare medications in blister packaging. For weekends, Pharmacy must receive the request by 1400H on the Wednesday prior to the pass. Any medication dispensed directly from the home (i.e. not in the blister pack) must be labeled according to the [Dispensing Medications \(Nurses\)](#) guideline.

Leaves of less than 24 hours when given short notice

When a leave request is made after the cut off time for pharmacy, a nurse may prepare medications to dispense to the resident/family, by following the and [Dispensing Medications \(Nurses\)](#) guideline.

Leaves of greater than 24 hours when given short notice

A prescription is required from the MRP and the family will be responsible for having it filled at a community pharmacy.

Opioid Narcotic Medications on pass:

Health Canada regulation requires that the Health Canada **Opioid Medicines – Information for Patients and Families** (available on PHEM <https://phc.eduhealth.ca/en/permalink/phem3887>) handout is provided, and an additional warning label is applied. The label is available for order from stores (HA item number: VCH-PHC 00125241 VMID: P-32)

Documentation

Pharmacy supplied medications: Document medication administration as outlined in this procedure on the MAR.

Stores supplied medications: Document medication administration and delivery as outlined in this procedure on 31 day paper MAR for stores supplied medications that have been built in Cerner as patient care orders (e.g. throat lozenges)

Dispensed medications: Document following the [Dispensing Medications \(Nurses\)](#) guideline.

Resident and Family Education

Working closely with residents and their families is fundamental to medication safety. Important times for conversation include:

- Prior to family administration or family assisted medication administration
- When a new medication is started
- When a medication is changed
- When a medication error has occurred

Medication specific information can be printed from Lexicomp, link available from PHC Connect (<http://online.lexi.com/lco/action/pcm>)

PHC approved education material is available from the [Patient Health Education Materials](https://phc.eduhealth.ca/) (PHEM) website (<https://phc.eduhealth.ca/>)

Opioid Medicines – Information for Patients and Families is available on PHEM: <https://phc.eduhealth.ca/en/permalink/phem3887>

Related Documents

1. BCCNM [Medication Safety Practice Standard for RNs](#)
2. BCCNM [Medication Safety Practice Standard for LPNs](#)
3. BCCNM [Medication Safety Practice Standard for RPNs](#)
4. [B-00-13-10167](#) - Dispensing Medications (Nurses)
5. [BD-00-11-40028](#) – High Alert Medications Policy
6. [B-00-14-10024](#) – Hazardous Drugs Control Matrix – Group 1
7. [B-00-14-10023](#) – Hazardous Drugs Control Matrix – Group 2
8. [B-00-07-10098](#) - Independent Double Check of Medication
9. [BCD-11-11-41006](#) – Medication Administration Policy
10. [B-00-15-10001](#) – Narcotics and Controlled Substances
11. [BCD-11-11-40002](#) – Patient-Client-Resident Identification
12. [B-00-11-10204](#) – Patient Safety Incident Management
13. [B-00-16-10048](#) - Safe Work Procedure for Preparing Oral Liquid Hazardous Drugs
14. [B-00-16-10049](#) - Safe Work Procedure for Preparation of Oral Solid Hazardous Drugs (Tablets or Capsules)
15. [B-00-16-10052](#) - Safe Work Procedure for Preparation of PV/PR Hazardous Drugs
16. [B-00-16-10050](#) - Safe Work Procedure for Preparation of Parenteral Hazardous Drugs
17. [B-00-07-10006](#) - Waste: Pharmaceutical Waste Disposal
18. [Patient Self-Administered Medications Policy](#)

References

British Columbia College of Nurses and Midwives. (2021, March). *Assigning and Delegating to Unregulated Care Providers*. Retrieved from BCCNM: https://www.bccnm.ca/Documents/learning/RN_NP_Assigning_Delegating_UCP.pdf

Definitions

CPOE means computerized provider order entry. CPOE refers to the process of a provider entering and sending treatment instructions through an electronic device.

Family is defined by the resident. Family includes persons who are related in any way (biologically, legally, or emotionally), including immediate relatives and other individuals in the Patient's support

network. When the resident is unable to define family, the Patient's Substitute Decision Maker provides the definition

Nurse means registered nurse, licensed practical nurse or registered psychiatric nurse

Two resident identifiers means the staff member uses two identifiers to ensure the right resident, receives the right medication in LTC. Acceptable identifiers are listed in the policy [Patient-Client-Resident Identification](#). In LTC the most commonly used identifiers are:

- Facial Recognition - A current photo identified underneath with the resident's name and date the photo was taken.
- Knowing the resident. Individuals have unique faces and ways of moving, holding themselves, voice etc. which are accepted to be a valid way of identifying a person. **If a staff member does not know a resident, they must check with staff members who do know the resident.**

Appendices

- [Appendix A: Medications a RCA may deliver](#)
- [Appendix B: All About Multi Unit Dose \(MUD\) System](#)
- [Appendix C: Medications that are Supplied from Stores](#)
- [Appendix D: Resident Centred Medication Plans](#)
- [Appendix E: Troubleshooting and Tips](#)

Appendix A: Types of Medications a RCA may deliver and conditions for assignment

1. Enemas & suppositories for the purposes of bowel management: glycerin, bisacodyl, sodium biphosphate, as assigned by the nurse when a provider order is present.
2. Prescription topical medications such as creams, ointments, and lotions (supplied and labeled by pharmacy, and present on Cerner MAR) if:
 - a. Product is deemed necessary to be applied during personal care (e.g. during bathing and/or dressing).
 - b. It is in the best interest of the resident to have the product applied by the RCA.
 - c. The nurse maintains responsibilities for all [Requirements](#) outlined above.

Exceptions:

- i. Topical medications for wound care *treatment* below dermis may **not** be assigned or delegated to RCA.
- ii. Narcotic topical medications may only be administered by a nurse.

3. Medicated topical lotions, creams, shampoo, bath powders products that are supplied by [stores](#), if:
 - a. Product is deemed necessary to be applied during personal care (e.g. during bathing and/or dressing).
 - b. It is in the best interest of the resident to have the product applied by the RCA.
 - c. The nurse makes the decision to assign the product based on clinical assessment, and/or a Patient Care Order is received in Cerner.
 - d. A RCA can initiate a zinc based cream (excluding Triad) for *prevention* of skin damage, as an interim measure until consultation with a nurse.
 - e. Under direction of a nurse, an RCA can apply a zinc based cream for *treatment* of skin damage above the dermis.
 - f. A label is applied indicating resident full name and date of birth, the product name is clearly visible, and expiry date is indicated if applicable.

Exceptions:

- i. Topical medications for wound care *treatment* below the dermis that are supplied by stores may **not** be assigned.

Appendix B: All About the Multi-Unit Dose (MUD) System

PHC uses a production facility to dispense routine oral solid medications in labeled packages. A machine packages each resident's medications consecutively according to dose time for the 24-hour period in a strip. All regularly scheduled oral tablet narcotics are packaged separately in a shorter strip, called a MUD-N. The MUD-N arrives in a bag labeled "NARCOTICS". Prior to leaving the production facility each package is photographed by a machine and compared to a pre-set image for verification of contents.

If staff at the pharmacy production facility need to manually verify contents and open a package, they will use **red tape** to reseal the package.

Medication Arrival to Care Home

A designated driver delivers the MUD strips in a bundle in a secure, sealed bag, to each care home. They typically arrive: on weekdays between 1800-1900 hours and on weekends and holidays between 1700-1800 hours

1. The nurse on the unit takes the bags from the driver and initials on the "MUD delivery tracking" form.
2. The nurse sorts the MUD packages by nursing assignment and places into labeled medication drawers/bins.

New Orders

It takes 48 to 72 hours for a newly ordered medication to be dispensed in a MUD strip. Pharmacy will dispense an interim supply of the new medication in a labeled bag until the MUD strip is updated.

Medications that are NOT packaged in MUD strip

- Any medication that is not in tablet or capsule form, will not be packaged in a MUD strip (e.g. patch, injectable, or liquid medication)
- Non-controlled PRN medications come in "baggies". Each package will contain fifteen (15) doses labeled for the individual resident. PRN medication is kept in the resident's medication drawer in the locked medication cart.
- Formulations not chemically stable for long periods of time when exposed to air
- Most non-Formulary medications (see below)

Non-Formulary Medications

- Pharmacy supplies non-formulary medications 15 tablets/capsules at a time via a medication bag. A nurse places a Medication Request through Cerner to receive more supply.
- The medication is identified as non-formulary on the MAR.
- Specific non-formulary drugs *are* provided in the MUD strip packaging. If the medication will be coming in the strip packages, the Nurse will need to return the baggie supply of non-formulary drugs once it appears in the strip packaging.
- Some residents choose to take their own supply of non-formulary medication/supplements. A provider's order indicating resident's own medication supply is required so that the provider is

aware and pharmacy can perform therapeutic checks. Pharmacy identifies and labels all resident's own medications following pharmacy guidelines.

Contingency supply

- A contingency supply of medications is available at each site, which can be used if,
 - A medication is dropped
 - A new medication needs to be started before Pharmacy can dispense the medication to the unit
- The medications are stocked alphabetically by generic name.
- If the medication ordered is not available in the contingency supply:
 - The Nurse must assess whether the medication should be obtained before the next day's delivery.
 - If the medication is needed without delay, the medication can be obtained using a medication request via Cerner.
 - The after hours "emergency" pharmacy services at SPH is open 24 hours, 7 days a week. Phone **604-806-8886**. There is an on-call pharmacist available at all times.
 - LTC Pharmacy hours: weekdays 0800 to 1800; weekends and holidays: 1100 to 1500. Phone 604-322-2640

Appendix C: Medications that are Supplied from Stores

Some over-the-counter medications are not provided by pharmacy and are supplied by stores. To differentiate whether a product is a medication, look for the drug identification number (DIN). In Canada, all medication must be labeled with a DIN.

Medications that are supplied by stores and have a DIN can be assigned to RCAs provided the conditions set in [Appendix A](#), are met and the nurse maintains responsibilities as outlined in [requirements](#).

Topical medication products for wound treatment that are supplied by Stores may **not** be assigned to RCA delivery.

Appendix D: Resident Centred Medication Plans

To optimize a medication regime, it is important to involve the resident, their family when appropriate, and other care team members, including RCAs, pharmacists, and providers. A provider order is required to change the frequency of a dose or discontinue a medication.

Points to consider include:

- What time does the resident like to wake up?
- What time does the resident go to sleep?
- Is the resident consistently away at certain times of the day or week?
- Can you group medications to reduce administration times?
- Start to individualize the medication delivery times around the medications that have the least flexibility for delivery time i.e. time critical medications

Nurses can independently reschedule medication times on the MAR ad-hoc to improve resident experience using clinical judgment.

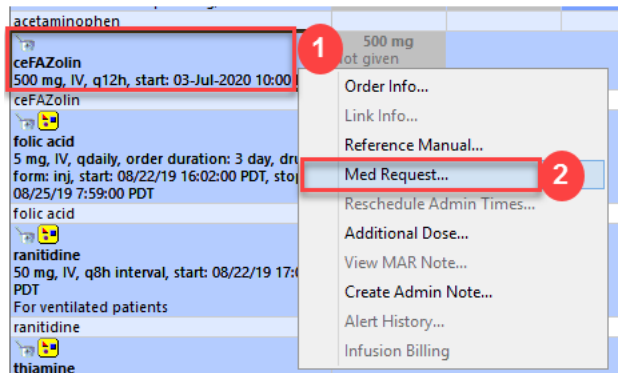
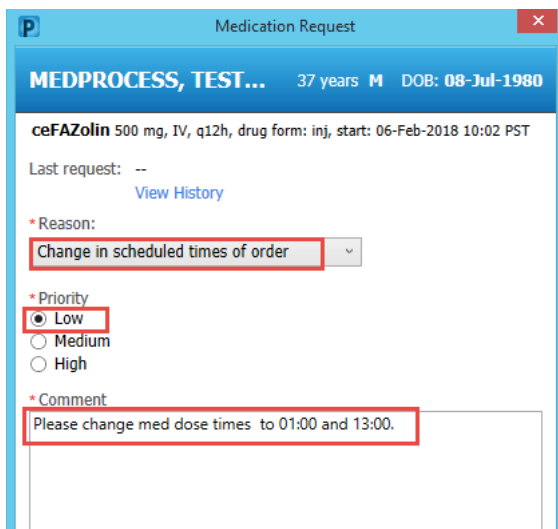
To reschedule a single dose, right click on the medication dose in the MAR. Select '**reschedule this dose**,' follow and complete prompts.

Medications	18-Jul-2019 12:00 PDT	18-Jul-2019 08:00 PDT	17-Jul-2019 17:00 PDT	17-Jul-2019 14:00 PDT	17-Jul-2019 13:23 PDT	17-Jul-2019 11:23 PDT	17-Jul-2019 10:36 PDT
Scheduled							
calcium gluconate 750 mg, PO, qdaily, start: 17-Jul-2019 10:36 PDT							750 mg Last given: 17-Jul-2019 11:23 PDT
calcium gluconate							* 750 mg Auth (N
ferrous gluconate (ferrous gl... 35 mg, PO, once, drug form: tab, start: 17-Jul-2019 14:00 PDT, stop: 17-Jul-2019 14:00 PDT				35 mg Not given within 7 days.			
ferrous gluconate							
insulin lispro 10 unit, subcutaneous, TID with food, start: 17-Jul-2019 12:00 PDT	10 unit Last given: 17-Jul-2019 11:23 PDT	10 unit Last given: 17-Jul-2019 11:23 PDT	10 unit Last given: 17-Jul-2019 11:23 PDT				
insulin lispro							
GLU Result POC Value							
GLU Result POC							
GLU Non-numeric Result POC							
sennosides 3.4 mg, PO, qdaily, drug form: oral liq, start: 17-Jul-2019 13:23 PDT		3.4 mg Not given within 7 days.					

- Order Info...
- Task Info...
- Chart Details....
- Quick Chart...
- Chart Done...
- Chart Not Done...
- Unchart...
- Reschedule This Dose...**

To reschedule all future dose times, the nurse must submit a change request to pharmacy using the medication request function.

- From the MAR, right click on the medication order you would like to change and select 'med request'.
- Select **Change in scheduled times of order** from the drop-down list for the **Reason** field.
- Choose **Low** for the **Priority** field.
- Enter the requested changes to medication administration times in the **Comment** field.
- Click **Submit**.

A screenshot of the 'Medication Request' form. The patient information at the top is 'MEDPROCESS, TEST...' (37 years, M, DOB: 08-Jul-1980). The medication is 'ceFAZolin 500 mg, IV, q12h, drug form: inj, start: 06-Feb-2018 10:02 PST'. The 'Last request' is '--' with a 'View History' link. The 'Reason' dropdown is set to 'Change in scheduled times of order'. The 'Priority' section has 'Low' selected. The 'Comment' field contains the text 'Please change med dose times to 01:00 and 13:00.'.

Appendix E: Troubleshooting and Tips

Dropped Medications

If a medication is dropped or falls on the floor, the nurse disposes the medication in the pharmaceutical waste container as per [PHC guidelines](#). The nurse can obtain the medication from the “contingency” supply (see [Appendix B](#)) or from pharmacy via a medication request.

Tips to prevent transdermal patches from peeling

- Apply the patch only to clean, dry, intact skin.
- Consider an application site on the resident’s back.
- Do not expose the application site to heat sources (e.g. heat pack).
- Consider covering the patch with a transparent dressing.

Tips to Prevent Refused Medications

For residents who are living with dementia, resisting medications can be a response to feeling rushed, afraid, or confused about what they are supposed to do. Feeling a loss of control can also trigger resistance and anger.

- Follow guidance in [Appendix D](#) to create resident-centred medication plans.
- Provide a calm and quiet environment.
- Use simple language and speak calmly, explain what you are doing.
- Break down the instructions into simple steps e.g., say "Here's the pill for your high blood pressure. Put it in your mouth and drink some water."
- Encourage the resident to participate in any step they can. E.g. you pour water into the glass, but they can pick the pill up from the table and put it in their own mouth. If they need assistance getting the glass to their mouth, gently provide that assistance.
- Give them time.
- If the person still refuses the medication despite your best attempts, stop and try again later.

Note: Respect the autonomy of residents who are capable of making their own healthcare decisions and report to provider and/or pharmacist when a change of treatment plan may be needed.

Groups/Persons Consulted:

PHC Medication Management-Medication Safety Team

LTC Pharmacy Lead

LTC Nurse Educator Group

LTC Practice Director

LTC Clinical Nurse Leader Group

Developed/Revised By:

PHC LTC Clinical Nurse Specialist

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