ieMR Advanced

Medications Management Business Rules

June 2018 v1.2

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V1.2	June 2018	Rachel Farquhar	Updates post LCCH Go Live.

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Medications Management Business Rules

Purpose

The purpose of this document is to identify and define the approved business rules that will support the Medications Management system functionality within the integrated electronic medical record (ieMR), implemented as part of the ieMR Advanced Project at Lady Cilento Children's Hospital (LCCH) in 2018.

Scope

This document provides the overall framework and guiding principles (business rules) for use of the ieMR Medications Management module as relevant to the clinical environment of the Lady Cilento Children's Hospital.

This document applies to the following Lady Cilento Children's Hospital (LCCH) stakeholders, but is not limited to:

- Emergency Department
- Inpatient Teams and Units (IPU) (both ieMR and non-ieMR inpatient locations)
- Perioperative Teams and Units
- Outpatient Teams and Units (OPD).

Note: It is expected that the business rules and guiding principles outlined in this document will be extended (as appropriate) to include all Children's Health Queensland (CHQ) locations and clinical teams as the ieMR Medications Management system functionality is implemented outside LCCH.

This document does not provide detail of the localised business rules specifically developed for use by individual clinical units and teams.

Related Documents

- LCCH ieMR Advanced General Business Rules
- Business Continuity Plan
- CHQ Policies, Procedures and Guidelines
- Quick Reference Guides (QRGs)

Admission medications

Overview

This section provides the business rules addressing the documentation of home medication and medications-related admission information related to a patient who has presented to the LCCH Emergency Department and/or has been admitted to a LCCH Inpatient Ward or has been checked into a LCCH outpatient clinic.

Home medications are those that have been taken by the patient prior to their hospital episode of care/encounter. Home medications can also include those medications that have been prescribed for the patient during a previous hospital episode of care/encounter. Immunisations are those that have been administered to the patient prior to their current hospital episode of care/encounter.

The Medications Management system functionality in use supports:

- Documenting home medications
- Documenting immunisation history
- Documenting a Pharmacist Admission History Note
- Documenting a Pharmacist Review Note.

For this section, the following roles have been identified and defined below:

- *Prescribing*: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the documentation of home medications/medication history is within their clinical scope of practice.
- *Nursing*: refers to all nurses where the documentation of home medications/medication history is within their clinical scope of practice.
- *Pharmacy*: refers to all pharmacists where the documentation of home medications/medication history is within their clinical scope of practice.
- *Allied Health*: refers to all Allied Health staff where the documentation of home medications/medication history is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Documenting home medications

All roles

- The maintenance of home medications information needs to be a joint responsibility between Doctors/ Nurse Practitioners (Prescribers) and Pharmacists taking into account patients being admitted to locations with and without Pharmacist service.

Prescribing

- The patient's admitting Medical Officer will be responsible for the documentation of a home medication history for the patient (via the Orders Profile, Document Medication by History).

- "Unable to obtain" will be checked when:

  - the parent is absent

  - the patient/parent is unsure and/or

  - the patient is unconscious.

  This will be clinically determined and documented by the patient's Admitting Medical Officer.

- "No known home medications" will be checked when the parent and/or the patient state that home medications are not being taken by the patient.

- The documentation of a completed home medication/previously prescribed medication (via the "complete" action) will be performed when the medication course has been completed by the patient.

- All medications, including Complementary and Alternative Medicines (CAMs) being taken at home shall be documented using the Document Home Medications function in ieMR.

  - Those CAMs not listed in the ieMR Orders Catalogue shall be documented as an "Unlisted Medication".

  - The name of the CAM and strength (if known) should be documented in the Drug Name field. The Special Instructions field shall contain any other relevant information about the CAM or administration information.

- Updates shall be made to a previously prescribed medication when required.

  - If a previously prescribed medication is updated via the Document Medication by History window, this will update every instance of the prescription in ieMR (including the original prescription in the patient's previous encounter).

  - Prescribers must refer to the patient's Medication History Snapshot (via the Orders Profile) to visualise the timeline of changes that have been made to the patient's medications information (particularly referencing order comments and special instructions information).

- The Delete action will not be used in the Document Medications by History window as this may completely remove a medication prescription (that has been converted into a home medication) from the patient's previous encounter/s.

- Once the patient's home medication history is documented, the patient's admitting Medical Officer will not uncheck the "Leave Med History Incomplete" checkbox.

☑ Leave Med History Incomplete - Finish Later

Nursing

- Nursing staff will not be documenting home medications information using the Document Home Medications functionality in ieMR.

- Certain Clinical Nurse Consultants may document home medication information following completion of training and competency assessment. Caution is advised when documenting home medications as these may be converted to inpatient medication orders by prescribers.

Pharmacy

- Pharmacists will review the home medications documented by the prescriber as part of the Pharmacist Clinical Review on admission of a patient.

    - This includes Pharmacists referring to the patient's Medication History Snapshot (via the Orders Profile) to visualise the timeline of changes that have been made to the patient's medications information (particularly noting order comments and special instructions information in order details).

- Pharmacists can modify documented home medications information if an error has been identified (such as wrong dose, frequency)

- If a home medication has been modified, the Pharmacist can add in order comments to document the reason for the modification.

- Pharmacists can add a new home medication if a current home medication has been omitted for the patient.

- Pharmacists who have identified a change in dose for a home medication on a prescription item are to complete the script and add a new home medication reflecting the current dose.

- A Registered Pharmacist must finalise/sign off a patient's home medications (by unchecking the "Leave Med History Incomplete" check box within the Document home medication history window) after a review of the patient's documented home medications has been performed.

☐ Leave Med History Incomplete - Finish Later

- Note: An admission eLMS is optional to be completed. Home medications must be documented in ieMR for a patient.

Pharmacist Intern/Pharmacist in Training

- Home medications information may be documented and/or updated by a Pharmacist Intern, as supervised by a Registered Pharmacist.

    - A Pharmacist Intern cannot uncheck the "Leave Med History Incomplete" check box.

    - Note: Pharmacist Interns are legally required to work under supervision of a Registered Pharmacist (as per current clinical practice).

Allied Health

- AH staff will not be documenting home medications information using the Document Home Medications functionality in ieMR.

- AH staff will only review a patient's documented home medications information via the Orders Profile (Document Medication by History or Medication History Snapshot).

- AH staff may comment on a patient's home medications within the patient's progress notes (e.g. a Dietician may comment that a patient is on Movicol).

Documenting immunisation history

All roles

- No historical vaccinations will be documented in ieMR for LCCH/CHQ patients (using the Immunisation History tab in ieMR).

- The Australian Immunisation Register (AIR) is the source of truth for a patient's historical vaccinations information, in conjunction with obtaining an immunisation history from the patient's family.

- If the patient's family provides new immunisation history information or documentation of vaccines previously administered that do not appear on AIR, this information needs to be sent to AIR, not added to the Immunisation History screen in ieMR.

- Clinicians will need to still refer to AIR for a patient's historical vaccinations information.

- Paper-based updates to AIR will still occur for LCCH Pharmacy and ED patients as per current clinical practice.

- The Queensland Specialist Immunisation Services (QSIS) will send information directly to AIR as per current clinical practice.

Documenting a Pharmacist Admission History Note

Pharmacy

- The Pharmacist Admission History Note will replace some aspects of the paper-based Medication Action Plan (MAP) and will serve as a communication tool for Pharmacists to communicate relevant medications information to the patient's Treating Team.

- For the purposes of documenting a Pharmacist Admission History Note, admission is defined as the first time a patient has been seen by the Pharmacist in an inpatient ward setting at LCCH.

- For those patients who require clinical review by a Pharmacist upon admission, a Pharmacist Admission History Note should be documented in ieMR.

  - However, a Pharmacist Admission History Note will be documented at the discretion of the Pharmacist on the day of clinical review.

- In order to document the reconciliation of medications within the Pharmacist Admission History Note, Pharmacists will compare the home medications documented with the medications that have been ordered to date for the patient during their hospital episode of care/encounter. This is to ensure the prescriber has ordered the required medications correctly for the patient's hospital episode of care/encounter.

  - This will be undertaken by the Pharmacist referring to the patient's Medication Administration Record (MAR).

- Pharmacists will also need to review the Medication History Snapshot (via the Orders Profile) to ensure previously documented order comments and special instructions are present on current medication orders as required.

- Pharmacists will annotate reconciled medications listed within the Pharmacist Admission History Note accordingly:

    - Dose increase: (increase)

    - Dose decrease: (decrease)

    - Continue: (=)

    - Cease: (//)

    - Withheld: (W)

    - New on Admission: (N)

    - Intervention: (MAP issue)

    - TDM Required: (TDM required)

    - Not charted – Monitor need in hospital (Monitor need).

- The Pharmacist should document the immunisation status of the patient (i.e. Up to Date, Catch up required including….etc.) within the Pharmacist Admission History Note.

- Additional information, including breastfeeding status, transplant history, chemotherapy in CHARM, patient on dialysis, and any changes to medications at the point of admission may be documented within the *Pharmacist Admission History* note.

- Pharmacists may choose to send the Pharmacist Admission History Note to a Prescriber's Message Centre when significant follow up is necessary and the Prescriber would like a reminder.

    - Such communication does not replace verbal discussion between Pharmacists and Prescribers, but can be used by Pharmacists as a reminder to Prescribers.

    - Discussion with prescriber should occur before forwarding of information to the prescriber's Message Centre.

- Note: The documentation of an Admission eLMS is optional for Pharmacists to complete.

Pharmacist Intern/Pharmacist in Training

- Once deemed competent, Pharmacist Interns can initially document a Pharmacist Admission History Note for the patient who has been clinically reviewed.

    - Pharmacist Interns will need to save the patient's Pharmacist Admission History Note and forward for review to their supervising Pharmacist.

    - The supervising Pharmacist will update (if required) and finalise/sign off the saved Pharmacist Admission History Note for the patient.

- Note: Pharmacist Interns are legally required to work under supervision of a Registered Pharmacist (as per current clinical practice).

Documenting a Pharmacist Review Note

Pharmacy

- The Pharmacist Review Note will serve as a communication tool for Pharmacists to communicate relevant medications information to the patient's Treating Team.

- Pharmacists may choose to send the Pharmacist Review Note to a Prescriber's Message Centre when significant follow up is necessary and the Prescriber would like a reminder.

  o Such communication does not replace verbal discussion between Pharmacists and Prescribers, but can be used by Pharmacists as a reminder to Prescribers.

  o Discussion with prescriber should occur before forwarding of information to the prescriber's Message Centre.

Pharmacist Intern/Pharmacist in Training

- Once deemed competent, Pharmacist Interns can initially document a Pharmacist Review Note for the patient who has been clinically reviewed.

  - Pharmacist Interns will need to save the patient's Pharmacist Review Note and forward for review to their supervising Pharmacist.

  - The supervising Pharmacist will update (if required) and finalise/sign off the saved Pharmacist Review Note for the patient.

  - Note: Pharmacist Interns are legally required to work under supervision of a Registered Pharmacist (as per current clinical practice).

Other relevant documents

- QRG
- Training materials

Reconciling medications

Overview

This section provides the business rules addressing the documentation of the medications required/not required (upon admission, transfer and/or discharge) for a patient who has presented to the LCCH Emergency Department and/or has been admitted to an LCCH Inpatient Ward or has been checked into a LCCH outpatient clinic.

The reconciliation of medications is a Prescriber-based activity, determining the continuation/discontinuation of existing home medications/previous medication prescriptions and current medication orders/prescriptions, the requirement for new medication orders/prescriptions and the decision to withhold continued medication orders as clinically required for the patient.

The Medications Management system functionality in use supports:

- Reconciling admission medications

- Reconciling transfer medications

- Reconciling discharge medications

- Reconciling outpatient medications.

For this section, the following roles have been identified and defined below:

- **Prescribing**: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the reconciliation of admission/transfer/discharge/outpatient medications is within their clinical scope of practice.

- **Pharmacy**: refers to all pharmacists where the reconciliation of admission/transfer/discharge/outpatient medications is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Reconciling admission medications

Prescribing

- The patient's admitting Medical Officer will be responsible for performing the reconciliation of admission medications for the patient.

- An admission medications reconciliation will occur for those patients:

    - admitted from ED to Inpatient

    - admitted from Outpatient to Inpatient

    - admitted directly to Inpatient

    - admitted to Operating Theatre (OT) from outpatient

    - admitted from ward post OT.

- The reconciliation of a patient's admission medications should be completed as soon as practicable once the decision has been made to admit the patient.

- If an Unlisted Medication item has been used to document a home medication currently being taken by a patient, if the medication is not to continue while in hospital, the admitting Medical Officer will select "Do not continue" which will stop the medication from being ordered as an inpatient orderable when performing a reconciliation of admission medications.

    - If the unlisted medication orderable has been later identified as a medication in the ieMR Order Catalogue, either the admitting Medical Officer or the Treating Team Medical Officer (as part of the next Ward Round) shall review and cancel the Unlisted Medication item.

    - The appropriate medication shall then be initially documented as a home medication and reconciled accordingly.

- When reconciling admission medications for a patient, the following decisions can be applied based on the clinical judgment of the admitting Medical Officer:

    - continue home medications/previous medication prescriptions

        - Note: This action will convert previously documented home medications/medication prescriptions to an equivalent inpatient medication order.

    - continue a medication order that has been previously placed for a patient (i.e. in emergency)

    - "Do Not continue" home medications/previous medication prescriptions

        - Note: This action will not change previously documented home medications/medication prescriptions.

    - "Do Not continue" a medication order that has been previously placed for a patient

    - add a new medication order

        - Note: This action is to be used to order new medications that are required on admission.

    - withhold (suspend) a medication order

        - Note: Two separate actions are required: 1. Continue the home medication/previous medication prescription/medication order (via the Order Reconciliation: Admission window) and 2. Immediately suspend the continued home medication/previous medication prescription/medication order being withheld (via the Orders Profile). Medication orders with a dose priority of NOW will have a medication administration task placed on the MAR immediately following the admission reconciliation being signed. The prescriber is to use the "Chart Not Done" function to remove this task if it is not to be administered to the patient.

        - Withheld medication orders are those that may be administered to the patient at a later time (via the Resume action).

- To withhold a single dose the "Chart Not Done" function should be applied to the administration task on the MAR, with the reason for withhold clearly documented by the prescriber.

- When reconciling admission medications for a patient, the admitting Medical Officer must refer to the patient's Medication History Snapshot (via the Orders Profile) to visualise the timeline of changes that have been made to the patient's medications information (particularly referencing the original order comments and special instructions information for a medication order).

  - If clinically appropriate, previous order comments and special instructions information should be copied across to the new medication orders being reconciled.

- The admitting Medical Officer will sign/submit the reconciled admission medications once complete. The admitting Medical Officer will not use the Plan action as this will convert those reconciled admission medications to proposed medication orders.

- If a new Infectious Diseases (ID) approval number is given to continue a home medication (antimicrobial), the home medication is to be competed and a new medication order is to be placed.

  - The new ID approval number is to be documented in the ID approval field on the inpatient order.

  - If this field is not available for the medication (antimicrobial), it can be added to the Special instructions field.

Pharmacy

- Pharmacists will not perform any system actions in the Order Reconciliation: Admission window.

- If an unlisted medication has been reconciled as an inpatient medication order, but the actual medication is available in the ieMR Order Catalogue, the Pharmacist should ensure correction to the medication in the ieMR Order Catalogue occurs.

- Pharmacists can review reconciliation decisions of the admitting Medical Officer from within the Order Reconciliation: Admission window via the Orders Profile.

Note: Refer to the Ordering Medications section for business rules addressing medication orders placed during a patient's hospital episode of care/encounter.

Reconciling transfer medications

Prescribing

- The Transfer Medication Reconciliation functionality (accessed via the Order Reconciliation: Transfer window) will only be used when a patient's care has been transferred from one LCCH Treating Team to another.

- The receiving LCCH Treating Team will be responsible for reconciling the medications previously ordered for a patient as part of the transfer of care.

- The reconciliation of a patient's transfer medications should be completed by the accepting Treating Team once it has been confirmed that they have taken over the care of the patient.

- When reconciling transfer medications for a patient, the following decisions can be applied based on the clinical judgment of the admitting Medical Officer:

    - continue a medication order that has been previously placed for a patient

    - cancel/discontinue (cease) a medication order that has been previously placed for a patient

    - add a new medication order

        - Note: This action is to be used to order new medications that are required on transfer.

    - withhold (suspend) a medication order

        - Note: Two separate actions are required: 1. Continue the medication order (via the Order Reconciliation: Transfer window) and 2. Immediately suspend the continued medication order being withheld (via the Orders Profile). Medication orders with a dose priority of NOW will have a medication administration task placed on the MAR immediately once the transfer reconciliation has been signed. The prescriber is to use the "Chart Not Done" function to remove this task if it is not to be administered to the patient.

        - Withheld medication orders are those that may be administered to the patient at a later time (via the Resume action).

- The admitting Medical Officer will sign/submit the reconciled transfer medications once complete. The admitting Medical Officer will not use the Plan action as this will convert those reconciled transfer medications to proposed medication orders.

- Transfer reconciliation functionality will be used for patient transfers from PICU to general wards only.

Pharmacy

- Pharmacists will not perform any system actions in the Order Reconciliation: Transfer window.

- Pharmacists can review reconciliation decisions of the admitting Medical Officer from within the Order Reconciliation: Transfer window via the Orders Profile.

Note (All roles)

- PowerPlans are not to be managed within the Transfer Reconciliation window.

    - PowerPlans can be ordered via the Orders Profile screen. PowerPlans can be 'planned' (by clicking Sign rather than Initiate), and then Initiated once the patient is about to be transferred back to the ward.

- The administration times on a medication can only be adjusted AFTER the medication order has been signed using Transfer Reconciliation window. Administration times need to be adjusted using the 'Reschedule Admin Times' function on the MAR or Orders Profile.

- The first dose date/time for a medication order can be updated within Transfer Reconciliation window (and again modified to a time that the first dose off the ieMR order should be administered i.e. after time of actual patient transfer) – however as per point above, if the order has a scheduled frequency (e.g. THREE times a day), changes to the administration times (e.g. changing from standard 0800, 1400, 2200 to 0700, 1500, 2100) will need to occur outside of transfer reconciliation as per above point. Keep in mind, interval frequencies (6 hourly, 8 hourly etc.) will automatically space apart the subsequent doses appropriately following the first dose date/time.

Refer to the Ordering Medications section for business rules addressing medication orders placed during a patient's hospital episode of care/encounter.

Reconciling discharge medications

Prescribing

- The patient's discharging Medical Officer will be responsible for performing the reconciliation of discharge medications and medication prescriptions for the patient.

- The patient's discharging Medical Officer should perform the reconciliation of discharge medications for the patient at least 24 hours prior to the patient's expected discharge date.

  o Note: Previously reconciled discharge medications can be amended post reconciliation if clinically required by the discharging Medical Officer.

- The prescriber is to print prescriptions as part of performing discharge medications reconciliation and provide these to the relevant pharmacist.

- The discharging Medical Officer will sign/submit the reconciled discharge medications once complete. The discharging Medical Officer will not use the Plan action as this will convert those reconciled discharge medications to proposed medication prescriptions.

- The standard of care will be that all patients discharged from an inpatient encounter will have a discharge medication reconciliation performed by the Medical Officer.

Note: Refer to Discharge Medications section for business rules addressing medication prescriptions.

Pharmacy

- Pharmacists will not perform any system actions in the Order Reconciliation: Discharge window.

- Pharmacists can review discharge reconciliation decisions of the discharging Medical Officer from within the Order Reconciliation: Discharge window via the Orders Profile.

Note: Refer to the Ordering Medications section for business rules addressing medication orders placed during a patient's hospital episode of care/encounter.

Reconciling outpatient medications

Prescribing

- The patient's prescriber will be responsible for performing the reconciliation of outpatient medications and medication prescriptions required for the patient.

- The prescriber is to print the medication prescriptions required during the reconciliation of outpatient medications for the patient.

Note: Refer to the Discharge Medications section for business rules addressing medication prescriptions after the patient's hospital episode of care/encounter.

Other relevant documents

- QRG

- Training materials

Ordering medications

Overview

This section provides the business rules addressing the ordering of medications for a patient who has presented to the LCCH Emergency Department and/or has been admitted to a LCCH Inpatient Ward or has been checked into a LCCH outpatient clinic.

Medications that are ordered are those intended to be administered to the patient during the patient's hospital episode of care/encounter.

The Medications Management system functionality in use supports:

- Ordering medications (including Regular (Scheduled), PRN, Once Only and NOW (STAT))
- Ordering telephone/verbal medications and co-signing telephone/verbal medication orders
- Proposing medication orders and co-signing proposed medication orders
- Ordering Nurse-initiated medication orders
- Ordering Parenteral Nutrition
- Ordering Enteral Nutrition
- Modifying medication orders
- Cancelling/discontinuing/re-ordering medication orders
- Deleting (removing) medication orders
- Rescheduling administration times of medication orders
- Ordering Intravenous (IV) fluids/IV medications
- Ordering pain infusions (including Patient Controlled Analgesia (PCA), Nurse Controlled Analgesia (NCA))
- Ordering complex medications (Heparin, Warfarin, Insulin)
- Ordering immunisations
- Ordering medications during a MET Call or treatment of a Category 1 patient in the Emergency Department
- Suspending (withholding) and resuming medication orders
- Patient approved leave (pass)
- Medication orders in PowerPlans
- Medication orders in other electronic systems
- Management of medication order favourites.

For this section, the following roles have been identified and defined below:

- **Prescribing**: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the ordering of medications is within their clinical scope of practice.

- *Nursing*: refers to all nurses where the ordering of medications is within their clinical scope of practice.

- *Pharmacy*: refers to all pharmacists where the ordering of medications is within their clinical scope of practice.

- *Allied Health*: refers to all Allied Health staff where the ordering of medications is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Allergy information

All roles

- "Allergy" is an ieMR term that encompasses the clinical terms of allergy, intolerance and sensitivity as part of the broader term of Adverse Reactions.

- The patient's allergies must be reviewed prior to ordering any medications. Documentation of a patient's allergies review can be performed in ieMR via the "Mark as Reviewed" function.

  - Note: It is important to choose the option with 'Multum Drug' in the vocabularies column in order for drug interaction checking to work in the ieMR. This means that system alerts will trigger if prescribing a medication that will interact with either an allergy or another drug.

  - The green tick next to the substance column implies that the drug is within the Multum database interaction checking will work in the ieMR.

- The patient's allergies must be reviewed prior to administration of medications. Reverse allergy check should also be performed by clicking on this button within the Allergies tab.

Medication orders

All roles

- Prior to ordering any medications or infusions, the patient's MAR Summary must be checked by the prescriber to view any medications or infusions that may have been recently ordered and/or administered in either the current or other recent ieMR encounters.

Concurrent Inpatient and Outpatient encounters

- For inpatients who need to attend to an outpatient clinic area (e.g. for an eye exam) as part of their inpatient care and have concurrent active inpatient and outpatient ieMR encounters, medications that are to be administered as part of that attendance to an outpatient area must be ordered and administered on the patient's inpatient encounter only.

Prescribing

Order sentences

- Prescribers are encouraged to order medications using the clinically relevant medication order sentence when searching the ieMR Order Catalogue.

    - Medication order sentences provide preliminary clinical support at the point of ordering, such as typical medication doses and frequencies.

    - However, medication order sentences will not exhaustively cover all indications and dosage recommendations.

- Prescribers must consult clinical reference texts and guidelines as per current clinical practice, external to ieMR, to ensure the medication being ordered is clinically appropriate for the patient.

Medication formulary status icons

- Red and Amber antimicrobials will be indicated within the ieMR Order Catalogue using the Restricted Red diamond icon.

- SAS medications and non-LAM medication items are not indicated as such within the ieMR Order Catalogue.

Use of dose ranges

- Prescribers will not specify a dose range when ordering a regular/scheduled medication for a patient. Non-use of dose ranges when prescribing medications will continue as per current clinical practice.

- Prescribers will not specify a dose range when ordering a PRN medication for a patient.

    - Note: If a dose range is specified as part of the medication order, ieMR will convert this to a "free-text" value, which cannot utilise dose checking and range capping decision support rules. Free text doses are strongly discouraged.

- If a dose range is absolutely required for patient safety, a dose range must not be annotated in the dose field, rather the dose is to be annotated as "see special instructions". In the Special Instructions field, the dose information must be included.

    - Upon administration, nursing staff need to review the dose information in the Special Instructions field, documenting the actual dose given in the Document Administration window.

Use of dose ranges for Creons

- For Creons, the dose field is to specify the dose to be administered per gram of fat (i.e. "1 capsule per 5g fat").

    - Upon administration, nursing staff need to review the dose information, documenting the actual dose given in the Document Administration window.

Use of Special Instructions

- Prescribers are to use the Special Instructions order entry field to document additional information about the medication order (such as administration instructions).
    - Special Instructions are displayed face-up to end users within the patient's MAR.

Self-administered medications

- Prescribers will not provide further instruction on whether a medication is to be self-administered by a patient or not.

- If patient own supply is to be used the tick box labelled "Patient Own Supply" will be checked by the prescriber.

Medication orders requiring different doses

- Medications that require a dose in the morning and a different dose in the evening will require a separate order for each dose.

- Each dose will have a frequency of daily/24 hours (with a minimal interval check being 23 hours).

- If a particular drug has an interval check of 12 hours, the nurse administering the medication will receive an early/late warning.

- Medications that require a different dose depending on the day of the week will also require separate orders.
    - Each dose will have a frequency of the number days of the week (e.g. 1 order as Three times a week on Mon, Wed, Fri and another order as Four times a week on Tues, Thurs, Sat, Sun).

Multiple routes for the same medication

- The following section only applies to Ondansetron and Metoclopramide for Oncology patients:
    - The same medication can be prescribed via different routes as there will be an alert if attempt made to administer too early (i.e. IV and PO ondansetron). Therefore, there may be two orders on the MAR for the same medication (one for the IV route and one for the oral route).
    - Generally, Prescribers will only prescribe duplicate medication orders for multiple routes when the dose and frequency of both orders are the same (i.e. ondansetron and metoclopramide).

Regular and PRN orders for the same medication

- When prescribing Regular and PRN medication orders for the same drug, Prescribers will write a note in the Special Instructions/Order Comments as per below example:
    - "Not to be administered within one hour of regular dose, contact Registrar on first administration on ext 1111".

- Frequencies of "as indicated" or "NOW" (STAT) should not be used when prescribing duplicate PRN and Regular medication orders.

ID approval number for restricted antimicrobial orders

- The initial Prescriber obtaining Infectious Diseases (ID) approval when ordering a restricted antimicrobial, will document the ID approval number in the designated field of the medication order.

- If the ID approval number field is not completed appropriately by the initial Prescriber, Pharmacy will follow the intervention process to ensure that this field is completed appropriately.

- If a new ID approval number is given to continue a home medication (antimicrobial), the original home medication is to be competed and a new medication order is to be placed.

Tapering medication

- Prescribers will need to document the taper directions that the patient needs to follow in the order comments/special instructions (i.e. weaning by 5mg every week until cease).

- Prescribers will need to cancel/reorder the medication whenever the dose required changes.

- The ieMR allows the tapering (dose reduction/increase over time) of certain pre-configured medications. However, it is recognised that not all medications that can be tapered are enabled within ieMR. This will allow the entire taper to be prescribed at once on the MAR. This taper cannot be translated into a discharge script.

  - If medication not available to be tapered in ieMR, but required to be tapered:

    - If weaning or up titration plan is set, the medication order is to not specify an end date, with Special Instructions field to include reference to the patient's medication plan, detailing the medication regime required.

    - At review date, the medication order is to be ceased and another medication order is to be placed (if appropriate) for the patient as per previous plan (e.g. "Weaning - see pain note 17/11/17 – next review due 1/12/17").

Ordering medication required to be administered at undefined time

- Prescribers are to use the "As Indicated" frequency for any medication that is to be administered at an undefined time. Special Instructions are to be included to clarify the date/time of administration.

- Prescribers can also specify the first dose date if known in the appropriate field of the medication order.

Ordering medication with a cessation date

- Prescribers shall only specify a medication order cease date if certain of the medication order's end date and/or number of doses.

Incorrect drug or formulation given/administered

- If a dose has been given incorrectly to the patient (i.e. incorrect medication), the Prescriber should not place an order for that medication dose but instead document incident in patient's notes and RiskMan as per current clinical practice.

Ordering clinical trial medication

- Prescribers are to use the "Unlisted medication" orderable to order clinical trial medications that are not listed in the ieMR Order Catalogue. Prescribers are to specify:

  - the drug naming convention is as per naming convention in iPharmacy (i.e. 'Trial – drug name'), delineating all clinical trials medications from standard medicines.

  - the clinical trial number/name (e.g. 'Clinical trial - <Trial Number/Name>') within the Special Instructions field.

  - administration instructions within the Special Instructions field (e.g. use separate line for infusion; compatible with 5% Dextrose, protect from light, etc).

  - the patient's own supply will be used by ticking the "Patient's own medication" tickbox, ensuring Imprest stock is not accidentally used in lieu of clinical trial medications.

- Note: The Clinical Trial or ward pharmacist should document trial medications being taken by a patient as a home medication. This will ensurnikie that upon re-admission the correct medicines are already recorded and identified as clinical trial medications as opposed to standard medicines.

Using Elastomeric Devices/Infusor Devices

- When using an Infusor Device, special instructions need to be added to the medication order to indicate that weight and checks are required.

- For inpatients the Patient Care task - IV Infusion Device Check should be instituted 4 hourly, adding "Weight Elastomeric Infusor Device" to the order comments.

Annotating dose calculations

- Prescribers are to annotate in special instructions if weight other than that documented has been used to calculate dose or dose has been modified due to organ function.

- If a prescriber has not annotated in special instructions, if weight other than that documented in ieMR has been used to calculate dose or dose has been modified due to organ function, the pharmacist can document if this has been confirmed by prescriber.

- If dose is adjusted according to TDM levels, this should be annotated in special instructions by prescriber– "Adjust dose according to levels- aim for 15-25mg/L per ID".

- If dose is to be adjusted according to TDM levels, this can be annotated by pharmacist in special instructions "Adjust dose according to levels- aim for 15-25mg/L per ID".

Medications with special handling instructions

- If cytotoxic medication does not already have "CYTOTOXIC- special handling and disposal required" in order comments, the prescriber is to add this instruction.

Biosimilars

- Prescribers to annotate in special instructions: Biosimilar – "Patient using (insert brand) – Do not substitute brand"

- In allergy section the medication should be put in as an intolerance of moderate severity with a comment documented – "Biosimilar product- brand used by patient = (insert brand) – DO NOT substitute brand"

Aminoglycoside administration documentation

- Prescribers are to annotate the Start time, Finish time, Mode, Prime line vs Not in the order comments field.

Pharmacy

Regular and PRN orders for the same medication

- Pharmacists can clarify a Prescriber's Special Instructions/Order Comments for the prescribing of Regular and PRN medication orders instructions using the Order Comments field as necessary (Modify the medication order by using "Protocol (No Co-sign)").

Ordering medication with a cessation date

- Pharmacists will not enter a medication order cease date/number of doses for a medication order.

- Pharmacists need to follow the Pharmacist Intervention pathway, modifying the medication order (by using "Protocol (No Co-sign)", to add an Order Comment to indicate an order review date (via PowerChart or PharmNet).

ID approval number for restricted antimicrobial orders

- If the ID approval number field is not completed appropriately by the initial Prescriber, Pharmacy will follow the Pharmacist Intervention process to ensure that this field is completed appropriately.

- The Antimicrobial Stewardship (AMS)/Ward Pharmacist may modify the medication order to annotate the ID approval number if they are privy to it (i.e. the number has been given directly to them) or the Prescriber is unable to input it (by using "Protocol (No Co-sign)").

Annotating dose calculations

- If prescriber has not annotated in special instructions if weight other than that documented in ieMR has been used to calculate dose or dose has been modified due

to organ function, the pharmacist can document if this has been confirmed by prescriber.

- If dose is to be adjusted according to TDM levels this can be annotated by pharmacist in special instructions "Adjust dose according to levels".

Use of Special Instructions

- If specific administration instructions are required for a medication this should be annotated in special instructions by pharmacist if it is not already within the order sentence. Examples below:

    - "Best with food"

    - "Best on an empty stomach"

    - "DO NOT USE burette during administration"

    - "Special line required for administration- (insert details)"

    - "Enteral feeds must be stopped for at least one hour prior and one hour post administration"

Medications with special handling instructions

- If cytotoxic medication does not already have "CYTOTOXIC- special handling and disposal required" in order comments the pharmacist can add this instruction.

Biosimilars

- If not input by the prescriber the pharmacist can annotate in special instructions: Biosimilar – "Patient using (insert brand) – Do not substitute brand".

- In allergy section the medication should be put in as an intolerance of moderate severity with a comment documented – "Biosimilar product- brand used by patient = (insert brand) – DO NOT substitute brand". The pharmacist can input this if not performed by the prescriber.

Break Lock functionality

- A clinician cannot access a patient's chart (Order Profile) if/when another clinician has a medication orderable on the Orders Scratch Pad or the patient's Acute Profile is open in PharmNet.

- A Pharmacist role can unlock a patient's chart by "Break the Lock" button when accessing the patient's Acute Profile in PharmNet."

- When a patient's chart is locked:

    - A Pharmacist is to contact the prescriber to ask them to close patient's chart.

    - If there is no response and the lock has been there for 30 minutes, the pharmacist has authority to break the lock.

    - The Pharmacist can also break the lock if they are unable to contact the prescriber or if the matter is urgent.

Telephone/Verbal medication orders

Prescribing

- As per current clinical practice, high risk medications should not be ordered verbally (so as to reduce clinical risk).

Nursing

- Nursing staff will need to make sure the correct patient's chart is open before contacting the Prescriber for a telephone order.

- As per current clinical practice:

    - Two Registered Nurses can listen to and confirm a telephone medication order

    - Both a Registered Nurse and a Pharmacist can listen to and confirm a telephone medication order.

- Nursing staff shall select the "Once only" medication order sentence when searching the ieMR Order Catalogue. If a "Once only" order sentence does not exist nursing staff must change the frequency drop down to "once only".

- Nursing staff must ensure that they have selected the appropriate 'Communication type' within the Provider window for the medication order being sent for Prescriber co-sign.

- Nursing staff are recommended to view the Provider Selection search window prior to documenting the telephone/verbal medication order to ensure the correct prescriber at the right facility is selected to co-sign the telephone/verbal medication order.

    - Note: Nursing staff will still be able to administer a medication order prior to Prescriber co-sign.

- When placing a telephone medication order, nursing staff must record the Nurse (or Pharmacist) Witness name and credentials within the relevant medication order field. Format is: SURNAME, First name. Designation

    - Note: Currently, the Nurse Witness field is a non-mandatory, free text (not searchable) field in ieMR.

Pharmacy

- Pharmacists can order a medication when a need has been identified to administer a once only dose promptly to the patient, provided the Prescriber will co-sign the order as soon as possible. The Pharmacist must discuss with the Prescriber prior to ordering a medication.

- As per current clinical practice:

    - A Pharmacist can listen to and confirm a telephone medication order

    - Both a Pharmacist and a Registered Nurse can listen to and confirm a telephone medication order.

- Pharmacists can prescribe regular medication on verbal instruction from a Prescriber using the "Co-sign required" functionality (as opposed to a single once only order).

- Pharmacists must ensure that they have selected the appropriate 'Communication type' within the Provider window for the medication order being sent for Prescriber co-sign.

- If a witness is available, the Pharmacist must record the Witness's name within the relevant medication order field (Nurse Witness).

    - Note: Currently, the Nurse Witness field is a non-mandatory, free text (not searchable) field in ieMR.

- When a Pharmacist is ordering a medication under the authority of a Prescriber, both actions should be qualified by adding a comment recording in the Orders Comment field:

    - Prescriber's name

    - time/date of action.

- Pharmacists must operate within their clinical scope of practice.

Review medication orders for co-sign

Prescribing

- Prescribers must co-sign telephone/verbal medication orders within 24 hours, as per current clinical practice.

- At a minimum, Prescribers must review medication orders for co-sign once per shift.

- Orders for co-sign should be reviewed via either:

    - the Prescriber's ieMR Message Centre

    - the patient's ieMR Orders Profile.

- If the medication order has been sent to the incorrect Prescriber, the Prescriber rejecting the co-sign of the medication order must contact the clinician who requested the medication order co-sign.

- If the medication order is clinically inappropriate for administration to the patient, the Prescriber rejecting the co-sign of the medication order must immediately contact the clinician who sent the medication order co-sign request as well as either cancel/discontinue or cancel/re-order the medication order as required.

Nursing

- Nursing staff must ensure that they have selected the appropriate 'Communication type' within the Provider window for the medication order being sent for Prescriber co-sign.

    - Note: An icon appears next to the medication order indicating that "This order is yet to be co-signed by the ordering physician". The Nurse can find the name of the Prescriber by reviewing the order information of the specific medication.

Pharmacy

- Pharmacists must ensure that they have selected the appropriate 'Communication type' within the Provider window for the medication order being sent for Prescriber co-sign.

Proposed medication orders

Prescribing

- Prescribers are not going to use the proposed medication orders functionality in ieMR.
    - Direct communication by a Prescriber with their medical team members about a patient's medication orders must continue to occur as per current clinical practice.

Nursing

- Nursing staff are not going to use the proposed medication orders functionality in ieMR.
    - This is not current clinical practice and is seen as an extension of clinical scope.

Pharmacy

- Pharmacists can utilise the proposed medications orders functionality in ieMR for uncommon/complex clinical situations only following the discussion of the proposed medication order with a patient's prescriber. This will assist with and improve patient safety.

- Pharmacists must ensure that they have selected the appropriate 'Communication type' within the Provider window for the proposed medication order being sent for Prescriber co-sign.

- If a proposed medication order has been placed, the Pharmacist will document the detail of the Pharmacy consultation provided to the patient's Prescriber about the proposed medication order/s in an ieMR Progress Note.
    - Note: Proposed orders functionality is part of the ieMR state-wide build. Once a proposed order is placed, clinical staff cannot administer a proposed order (as it is inactive) until a Prescriber has co-signed the medication order. This functionality cannot be removed from the system.

Review proposed medication orders for co-sign

Prescribing

- Prescribers must approve/co-sign proposed medication orders as soon as practicable.

- Proposed orders for co-sign should be reviewed via either:
    - the Prescriber's ieMR Message Centre

- the patient's ieMR Orders Profile.

Nurse-initiated medication orders

Nursing

- Nursing staff will order nurse-initiated medications in line with current CHQ clinical practice.

- Nursing staff shall select the "Once only" medication order sentence when searching the ieMR Order Catalogue.

- If a "Once only" medication order sentence does not exist for the medication being ordered, nursing staff must select the order with the most relevant order sentence. Nursing staff must then change the "Frequency" field to read "Once only".

- Nursing staff will nominate the patient's treating Prescriber within the Provider window when ordering nurse-initiated medications.

  - Note: ED Nursing staff will specify the Director of Emergency Medicine as the treating Prescriber in the Provider window when ordering nurse-initiated medications.

- Nursing staff are recommended to view the Provider Selection search window prior to documenting the nurse-initiated medication order to ensure the correct prescriber at the right facility is selected.

- Nursing staff must ensure that they have selected the appropriate 'Communication type' within the Provider window for a nurse-initiated medication order.

  - The Communication Type/co-sign required to be selected for nurse initiated medication orders is "Nurse Initiated (no co-sign)".

  - Note: Nurse-initiated medication orders will not be sent to the patient's Prescriber for co-sign.

Pharmacist protocol medication orders

Pharmacy

- Pharmacists will not be using per protocol prescribing functionality at Go Live.

  - Note: A pilot of such functionality will be required prior to introducing workflows to LCCH.

Parenteral Nutrition orders

- All TPN orders should be prescribed via the TPN Powerplan.

Prescribing

- Prescribers will order Parenteral Nutrition (PN) via the appropriate paediatric PowerPlan.

- Where a patient is on Home PN and is admitted to hospital, a prescriber will prescribe utilising the Modified PN order.

- Where Modified PN is prescribed, the prescriber must include the contents of the bag in the special instructions field.

- If a patient has time off of PN each day, the prescriber is to include the weaning instructions and OFF times in the special instructions field.

- The prescriber is to order the clear phase + fat phase + multivitamin phase in accordance to the TPN policy for patient's age and weight.

- It is recommended to order the clear phase order a true continuous order by deleting the bag duration, therefore the prescriber is required to review the order 24 hourly and make a conscious decision to cease the order when no longer required.

- The fat and multivitamin phase is not continuous and the prescriber will need to order this daily, specifying the total volume required for 24 hours to ensure the end bag tasks is dropped at the correct time after initiation of the order.

- For bags lasting longer than 48 hours (neonates) or 24 hours (triple phase bags) it is recommended for the nurse to add a nursing task to remind for bag change.

- If required, the prescriber is to input break time and weaning/titration plans under special instructions. i.e. (i.e. Break between 10am-2pm every day, wean to half rate 30ml/hr, 1 hour before and after break time.)

- Other weaning/titration plans: In the system, this needs to be done real time which is not practical and therefore additional instructions are entered under special instructions.

- Fat/vitamin Phase: These will need to be a daily order. Not continuous. The prescriber will specify the total volume required for that specific duration and the end bag tasks will fall at the correct time after initiation of the order.

Modified Bags

- Modified TPN bags and Home TPN bags can be prescribed by selecting "Parenteral Nutrition Modified IV infusion 1L. (Nb. Final bag volume can be modified)

- Enter under order comments the components of the TPN with modifications

- Details may be copied from previous order comments without the modifications.

- Specify under Special instructions the TPN base that has been modified if applicable. i.e. TPN 25/150 with total 30mmol KCl OR " Home TPN formulation +/- Vitamin)

Home TPN

- Use modified bag and Modify details in order comments as per workflow for modified bags. Under special instructions specify "Home TPN formulation +/- Vitamin". Add instructions to ensure non-vitamin bag used on correct day.

- Infusion rate and bag volume: Currently infusion rate is linked to bag volume, which will affect the end bag tasks. i.e. When hanging a 120ml Soluvit N/Vitalipid/SMOF premade bag running at 2mls/hr for 20hrs the bag volume will auto change to 40mls. This allows the end bag tasks to fall exactly at 20 hours.

Pharmacy

- Pharmacists can utilise the proposed medications orders functionality in ieMR to provide advice to prescribers regarding the bag contents for Modified PN.

- Pharmacists must ensure that they have selected the appropriate 'Communication type' within the Provider window for the proposed medication order being sent for Prescriber co-sign.

- Pharmacists will need to check order/s in TPN PowerPlan and verify TPN order/s in PharmNet once clinically reviewed.

- Pharmacists will need to work out how many bags are required for the ordering period and dispense or follow modified TPN process.

Enteral Nutrition orders

Prescribing

- Eligible prescribers will use Enteral feed Bolus Paediatric or Enteral Feed Continuous Paediatric order to prescribe enteral feeds.

- Enteral feed orders placed for Metabolic patients will use the Feed Type of "Other", with the feed recipe then to be entered into the Order Comments.

- All additional information relating to a feed order must be recorded within the Order Comments field (as opposed to the Special Instructions field), as the Special Instructions field will truncate when viewed on the 724 Downtime Viewer.

Potassium orders

Prescribing

- Prescribers are to continue prescribing potassium in mL per hour.

- A value of 0.2 mmols/kg/hr is to be used to calculate the rate in mLs per hour to be infused.

- Prescribers are to specify the potassium infusion rate and the total potassium rate (if applicable) (i.e mmols/kg/hr calculation) in the Infusion instructions field in ieMR.

- The total potassium rate should include all concurrent Parenteral (including TPN) and Enteral potassium therapy as per CHQ guidelines. Prescribers must ensure the patient's MAR is reviewed to account for all currently prescribed orders.

Niki pump

Prescribing

- Prescribers are to order Niki pumps by:
    - searching for "subcutaneous infusion pump 20 or 30ml (continuous) order sentence
    - documenting the appropriate additives for the infusion pump (select subcut additives for subcut infusion, select drug additives for intravenous infusions)

- documenting the total bag/syringe volume and set to infuse over 24 hour

- documenting under "special instructions" Niki Pump and specify syringe size to be used to make up the order.

- This is a true continuous order and will continue until the prescriber physically ceases the order in ieMR.

- For patients requiring 2 pumps to administer total dose, 2 separate orders for each site of administration should be placed.

- For intravenous administration of Niki pump, the "route of administration" must be changed to IV continuous.

- CHQ's Paediatric Palliative Care Service (PPCS) recommends to prime the line by using the Niki pump and not manually.

- PPCS will accept a rate variance of 10% between order on ieMR and pump.

- PPCA will standardise to 10mL and 20mL volumes as much as possible.

CADD pump

Prescribing

- To prescribe a CADD pump for "pain" under the care of PPCS, prescribers are to use the base order sentence of "sodium chloride 0.9% for PCA (ml) (continuous)". Prescribers are then to document the appropriate details, including drug additive, total bag volume, background infusion rate, bolus dose, bolus range, and lock out interval. Special instructions must include "via CADD pump".

  - Prescribers must select the appropriate additives in accordance to the route of administration (subcut v non-subcut).

- This is a true continuous order which requires the prescriber to review the order daily and cease the order when it is no longer required.

- To prescribe other CADD pumps, prescribers must select the appropriate IV set and document the required dose, bag volume and rate. Special instructions must include "via CADD pump".

Modify medication orders

Prescribing

- Generally, only Prescribers can modify a previously placed medication order for a patient in the patient's ieMR.

- If the following modifications need to be made, Prescribers must cancel the existing medication and re-order the medication as a new order (via the Cancel/Re-order ieMR function):

  - Dose

  - Route

  - First dose priority

- PRN fields.

- Medication orders for a patient can only be modified by a Prescriber prior to the first administration only.

- Medication orders that have been administered to a patient cannot be modified by a Prescriber. These medication orders need to be either cancelled/re-ordered or cancelled/discontinued.

Medication formulation

- If the medication formulation information requires to be modified, Prescribers will need to cancel and re-order the medication according to the required formulation.

    - Note: Where an alternative dosage form is acceptable, Prescribers will include the details of the alternative formulation as a special instruction as part of the original medication order.

Nursing

Medication formulation

- Nursing staff will not change the formulation of a medication order. If a formulation change is required, Nursing staff will inform the Prescriber (and the Pharmacist if required) that the medication order is to be re-ordered according to the required formulation.

Pharmacy

Medication formulation

- Pharmacists will not amend the product (formulation) ordered by a prescriber in PowerChart.

- Manual product assignment can be performed in PharmNet where appropriate (i.e. medication order is placed using a primary synonym).

- If the order is placed using a product-specific synonym and a change to the product is required, the pharmacist will request a prescriber to cancel and order the correct required formulation. There should not be a mismatch between the product ordered (if a product-specific synonym is selected) and the product assigned in PharmNet.

Medication indication

- Pharmacists can update the Indication field of a medication order, provided they are confident that the indication information previously documented is incorrect. This will be done following the Pharmacist Intervention process.

    - If a Pharmacist does modify the Indication field of a medication order, the Communication Type of "Protocol – no co-sign" can be used.

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Medication order substitution of enteral route only

- Pharmacists can change the route of a medication order of the enteral route only. This will be performed via PharmNet only and limited to a minor change from ORAL to another appropriate enteral route only or vice versa.
    - This is as per current CHQ clinical practice.
    - A clinical review of the medications appropriateness of prescribed route or alternative routes is performed as part of a pharmacist clinical review
    - References are used (i.e. don't rush to crush) to determine suitability of enteral routes for medication administration.

Medication order comment

- When Pharmacists perform a minor intervention, it is appropriate for Pharmacists to update the medication order comments to communicate to Nursing staff that a Pharmacist Intervention has be performed on the medication order. This will be done following the Pharmacist Intervention process.
    - Updates to the Order Comment field will be done via PowerChart, allowing visibility of such order comments on the patient's MAR.
    - Pharmacists will document: "Refer to Pharmacist Intervention on [insert date]."
    - This will prompt inspection of the correct/relevant Pharmacist Intervention.
- Pharmacists will need to document all changes made to a medication order in a Pharmacist Clinical Review note in ieMR.

Cancel/discontinue (cease) and cancel/reorder medication orders

Prescribing

- Prescribers will cancel/discontinue a medication order when the medication has been ordered correctly but is no longer required by the patient.
    - The medication order may or may not have commenced administration to the patient, with the medication needing to be ceased.
- Generally, only Prescribers can cancel a previously placed medication order and re-order the medication as a new order for a patient in the patient's ieMR.
- Prescribers can cancel/reorder a medication order prior to and/or after first administration of the medication order to the patient in the patient's ieMR.

Nursing

- Nursing staff will be responsible for charting "Not Done" for those overdue/inactive administration tasks on the patient's MAR when a medication order has been previously cancelled/discontinued by a Prescriber.

Pharmacy

- Pharmacists will not cancel/discontinue medication orders unless clinical judgement dictates that the cancel/discontinue action is time dependent for patient safety reasons and the prescriber is unavailable. This will be done following the Pharmacist Intervention process.

Delete (void/remove) medication orders

Prescribing

- Generally, only Prescribers can delete (void) a previously placed medication order for a patient in the patient's ieMR.

- A medication order is deleted (voided) by a Prescriber when the medication has been ordered by mistake for the patient.

- Prescribers can delete (void) a previously placed medication order only when the medication order has not been administered to the patient (i.e. prior to the first time of administration).

- Otherwise, if the medication order has commenced being administered to the patient and is no longer required for the patient, a Prescriber must cancel/discontinue the medication order in the patient's ieMR.

Pharmacy

- Pharmacists can void a medication order in PharmNet if the medication ordered:

  - is the wrong medication prescribed

  - has been prescribed for the wrong patient

  - has been prescribed for the wrong encounter.

- Voiding of a medication order will be done following the Pharmacist Intervention process.

- Pharmacists can void a previously placed medication order only when the medication order has not been administered to the patient (i.e. prior to the first time of administration).

- By voiding a medication order, all overdue/inactive administration tasks on the patient's MAR will be automatically removed.

Reschedule administering times of medication orders

- It is essential that all clinicians review the schedule of every medication before prescribing and/or rescheduling administering times of a medication order.

Prescribing

- Prescribers can reschedule the administration of an individual medication dose and/or multiple medication doses for a patient (via the patient's MAR).

  - Rescheduling medication doses for a patient can occur prior to and/or after the first medication dose has been administered.

- Prescribers can reschedule the administration of a medication order (by modifying the frequency of the original medication order) for a patient (via the Orders Profile).
    - Rescheduling the administration of a medication order for a patient can occur prior to and/or after the first medication dose has been administered.

Nursing

- Nursing staff can reschedule the administration of an individual medication dose and/or multiple medication doses for a patient (via the patient's MAR).
    - Rescheduling medication doses for a patient can occur prior to and/or after the first medication dose has been administered.

Pharmacy

- Pharmacists can reschedule the administration of an individual medication dose and/or multiple medication doses for a patient (via the patient's MAR or in PharmNet).
    - Rescheduling medication doses for a patient can occur prior to and/or after the first medication dose has been administered.

- Pharmacists can reschedule the administration of a medication order (by modifying the frequency of the original medication order) for a patient (via the Orders Profile). This will be done following the Pharmacist Intervention process.
    - Rescheduling the administration of a medication order for a patient can occur prior to and/or after the first medication dose has been administered.

IV fluids/IV medication orders

Prescribing

Complex IV Fluids/Medications - IV Sets v IV Sequence

- Prescribers can order a continuous infusion in one of two ways:
    - Open-ended continuous order with no duration. This order will remain active and can be used for administration until it is cancelled or discontinued by a medical officer. It is important for prescribers to review this type of continuous infusion every 24 hours to ensure it is clinically appropriate for the infusion to continue.
    - Continuous infusion order with a duration (e.g. number of bags). This order will only be valid for the duration that is specified by the prescriber. The order will automatically discontinue and not be visible in the active section of the MAR.

- If an IV fluid or medication is to be infused for a prolonged duration and it would be clinically safe to do so, the use of continuous infusion workflow is more suitable from a patient safety perspective to ensure an IV fluid/infusion is continued for the required time, with the risk of missing the review of cancelled/discontinued IV fluids/infusion orders being minimised.

- Electrolyte supplemental infusions should never be prescribed using the continuous infusion workflow (i.e. potassium or magnesium replacement).

- For continuous IV medication orders, Prescribers should annotate in the Order Comments field when the next review date/time is due.

  - This review date/time should be modified at each review of the continuous IV medication order.

Prescribing IV Fluids/Medication to be administered via a particular cannula/lumen

- If a specific cannula or lumen is to be used to administer IV fluids/medications, the Prescriber will need to specify the cannula or lumen within the Special Instructions order entry field of the medication order.

- Single orders with special instructions relating to lumen administration are to be ordered by the prescriber.

Review of IV fluids after 24 hours

- If an IV fluid/continuous infusion is being run for a patient, Prescribers will need to review the order after 24 hours (as per current CHQ clinical practice).

- Evidence of the Prescriber's clinical review will be documented in a Progress Note for the patient in ieMR.

Prescribing IV fluids replacement for losses

- Prescribers are to use a true continuous fluid order (no duration), specifying:

  - a free text rate i.e. "Replace mL for mL losses"

  - the rate in the Special Instructions field i.e. "Start at 75 mL/hr for 4 hours and then replace mL for mL losses".

- If the prescriber wants to change ratio of mL for mL loss, they need to modify the true continuous fluid order's Special Instructions field i.e. "Replace 0.5 mL per 1 mL loss".

Titrating fluids with NGF

- When it has been decided that a patient on IVF (for example maintenance) is to commence NGF with titration, prescribers are to use a true continuous order charted with IVF, specifying:

  - a free text rate i.e. "See Special Instructions" OR "Titrate with NGT"

  - the titration instructions in the Special Instructions field i.e. "Titrate with NGT feeds to a total volume of 50mL/hr. Increase NGT feeds by 5mL/hr every 12 hours and decrease IVF by same amount at same time".

IV fluid boluses

- Prescribers are to place a new IV fluid order for every bolus required by the patient.

- If the bolus is to be pushed through immediately, the Rate field must specify "999 mL/hr". This will indicate to the nursing staff to push the fluid rapidly, but must also be accompanied by verbal communication to the nurse.

Pain infusion orders

All roles

PCA/NCA Paediatric PowerPlan

- Will be ordered (planned and initiated) by Anaesthetists, Anaesthetics Registrar, Acute Pain Service (APS) Nurse Practitioners, PICU Consultant/Registrar, Oncology Consultant/Registrar and Paediatric Palliative Care Consultant/Registrar/Nurse Practitioner.

- PCA/NCA Paediatric PowerPlan will be used for all patients at LCCH regardless of weight or age.

- The prescriber will initiate the Nursing Protocol; a registered nurse can initiate the Nursing Protocol if missed.

- The Weight-Based Concentration (dose in mL) phase will be used for prescribing for patients less than 50 kg or patients requiring a "Double strength/Off protocol" order.

- The Standard Concentration (dose in mL) phase will be used for prescribing for patients 50 kg or greater requiring a standard APS prescription.

- The Standard Concentration (dose in mg/mcg) phase will NOT be used.

- Oxycodone PCA/NCAs will not be prescribed at this stage (they are not on the QHealth LAM for PCAs).

- The prescriber can deselect the Consult to APS order in the Medication Phase if the prescriber is from Oncology and/or Palliative Care Services. The Consult to APS order can remain if clinically relevant for the patient.

- The prescriber can deselect the naloxone order if clinically relevant (e.g. palliative care).

Ketamine Infusion Paediatric PowerPlan

- Will be ordered (planned and initiated) by Anaesthetists, Anaesthetic Registrars, PICU Consultant/Registrars Paediatric Palliative Care Consultant/Registrar/Nurse Practitioner, APS Nurse Practitioners.

- Ketamine Infusion Paediatric PowerPlan will be used for all patients at LCCH regardless of weight or age.

- Ketamine Order Phase – "Dose in 100mL volume" order is to be used.

- The prescriber can deselect the Consult to APS order in the Medication Phase if the prescriber is from the Palliative Care Service/Cancer Pain Service. The Consult to APS order can remain if clinically relevant for the patient.

Epidural Infusion and Neuraxial Paediatric PowerPlan

- Will be ordered (planned and initiated) by Anaesthetic Consultants and Registrars only.

- Epidural Infusion and Neuraxial Paediatric PowerPlan will be used for all patients at LCCH regardless of weight or age.

- All epidural infusions will be ordered (planned and initiated) by the anaesthetist prior to leaving OT including those transferring to PICU. The infusion will be commenced and signed in the MAR by the practitioner(s) checking and connecting the infusion e.g. anaesthetist and scrub-scout nurse. For patients going to PICU the Nursing Phase is not required to be initiated.

- Epidural infusions will be transcribed into MetaVision by PICU then Cancel/Discontinued as per PICU admission processes. PICU medical/nursing team will contact the APS in time to re-prescribe the infusion prior to discharge from PICU.

Regional Infusion Paediatric PowerPlan

- Will be ordered (planned and initiated) by Anaesthetic Consultants and Registrars only.

- Regional Infusion Paediatric PowerPlan will be used for all patients at LCCH regardless of weight or age.

- All regional infusions will be ordered (planned and initiated) by the anaesthetist prior to leaving OT including those transferring to PICU. The infusion will be commenced and signed in the MAR by the practitioner(s) checking and connecting the infusion e.g. anaesthetist and scrub-scout nurse. For patients going to PICU the Nursing Phase is not required to be initiated.

- Regional infusions will be transcribed into MetaVision by PICU then Cancel/Discontinued as per PICU admission processes. PICU medical/nursing team will contact the APS in time to re-prescribe the infusion prior to discharge from PICU.

PACU Acute Pain Paediatric PowerPlan

- Will be ordered (planned and initiated) by Anaesthetic Consultants and Registrars only.

- Regional Infusion Paediatric PowerPlan will be used for all patients at LCCH regardless of weight or age; it is for use in PACU only.

- Standard Concentration in small volume and Standard Concentration in 10mL medication phases will be used; Weight Based Concentration medication phase will not be used.

Heparin

Prescribing

- All continuous heparin infusion orders should be ordered within the PowerPlan, these include Heparin PowerPlan Therapeutic Paediatric, Heparin Prophylaxis, and Heparin locks. An exception applies to heparin used in the haemodialysis circuit will be charted under HD Care Plan in Interactive view.

- If the Heparin PowerPlan has been ordered by a Prescriber, the Prescriber must verbally communicate to the patient's Nursing staff that the Heparin PowerPlan has been ordered for the patient.

- Prescribers will not initiate the Heparin PowerPlan unless it is clinically appropriate to do so.

  - Nursing staff will typically initiate the Heparin PowerPlan for a patient, once the patient is ready for the infusion to commence.

- If the Heparin infusion is required to be withheld for the patient, the Prescriber needs to verbally communicate this to the patient's nursing staff (in addition to ordering the withhold action in ieMR via the Heparin PowerPlan).

- If a bolus amount has been ordered by a Prescriber, the Prescriber must verbally communicate to the patient's Nursing staff that a Heparin bolus has been ordered for the patient.

Nursing

- Nursing staff will initiate the required phase of the Heparin PowerPlan for a patient when it is clinically appropriate to do so for the patient.

Warfarin

Prescribing

- If the Warfarin PowerPlan has been ordered by a Prescriber, the Prescriber must verbally communicate to the patient's Nursing staff that the Warfarin PowerPlan (order and INR check) have been ordered for the patient.

- The prescriber is to order a single warfarin dose for the patient every day.

- The prescriber should indicate under the special instructions of INR/warfarin dose check orderable when the next INR level is due.

- The prescriber is able to order multiple single doses of warfarin in advance if no INR level is due. For patients on stable doses, the prescriber can change the duration of the warfarin order to last until the next INR level is due.

- If the Prescriber wishes to withhold a warfarin dose after noting of INR results, the prescriber should order warfarin with a free-text dose of "withhold" (single daily dose), and continue to put in a new withhold order daily until the patient's INR is within range for re-dosing.

- For patients who require their regular warfarin doses withhold (i.e. pre-op) and no INR level required, the prescriber may order a warfarin dose "withhold" for the duration required, and also order a INR/warfarin dose check orderable indicating when the next INR level is due for the patient.

Nursing

- Where possible, a patient's INR will be checked in within business hours while the treating team (cardiology/haematology) is still available. A dose will then be prescribed for the patient by the treating team.

- When this is not feasible (i.e. during weekends, after hours or other exceptional circumstances), nursing staff can take a phone order for a warfarin dose from a cardiology or haematology fellow (or above level only).

- Nursing staff may only take a phone order for a **single dose** for the **current day**. (e.g. ordering the appropriate warfarin once only maintenance dose order in ieMR)

- Nursing staff **cannot** take a single dose warfarin order via phone if it is the **initial dose** of warfarin for the patient.

- The same business rules for telephone/verbal orders apply when nursing staff are taking a phone order for warfarin as specified above.

Insulin

Prescribing

- All insulin orders should be ordered through the appropriate paediatric insulin Powerplan or Careset.

Renal Dialysis

All roles

Haemodialysis

- Haemodialysis will continue to be documented in ieMR as per current clinical practice.

- The prescriber is to prescribe the required Haemodialysis order under Interactive view (iView), against the HD Care Plan, including the prescribing of anticoagulants required for the circuit in ieMR.

- The patient's other complimentary medications will be charted on the MAR.

- Nursing observations will continue in iVew.

Peritoneal Dialysis

- Prescribers must order all automated and manual peritoneal dialysis (PD) and required additives in the ieMR.

- Automated Peritoneal Dialysis (APD) will be ordered using the "unlisted medication" orderable.

    - The Order Comments field must contain information about the type of dialysate required and dialysis details.

- The nurse will check all bags required for APD and sign off ONCE on the MAW and indicate in a fluid balance of zero for dialysis.

- Manual CAPD can be ordered using the "unlisted continuous, true continuous infusion" orderable.

    - The type of dialysate will be specified under the base solution and the dialysis details must be documented under order comments.

    - Note: This will be a continuous order, therefore allowing the nurse to hang multiple bags for the duration of the order. It will be conscious decision for the doctor to stop the order when no longer required.

- Fluid balance will also be entered as zero with order comments stating zero fluid balance for PD. Other additional nursing observations will stay on paper.

Plasmapheresis

- Plasmapheresis will continue to be documented on paper as per current clinical practice. This includes TPE order and nursing observations.

- Intravenous medications i.e. anticoagulant citrate, Calcium gluconate, sodium chloride 0.9% for circuit prime and albumin, etc. will be ordered in ieMR and be charted on the MAR.

Immunisation orders

Prescribing

- Ordering and Administering functionality in ieMR needs to be used for vaccines being administered in LCCH Inpatient Wards, Emergency Department and Outpatient Clinics, including the 2G Immunisation Centre. It is important for all clinicians to have visibility of vaccines ordered and administered at LCCH in ieMR (via the MAR and MAR Summary).

- Immunisations administered in PICU will be ordered in MetaVision.

Nursing

- When Queensland Specialist Immunisation Services (QSIS) Immunisation Program Nurses (IPNs) order vaccines within their clinical scope of practice, IPNs must specify the name of the QSIS Medical Lead within the Provider field and the Communication type of "Protocol (no co-sign)" of the Ordering Provider window.

Medication orders in a MET Call

- Note: Refer to the ieMR Advanced FirstNet Business Rules for further information addressing the business rules/roles/responsibilities for a MET Call activated within the Emergency Department's Short Stay Unit.

Prescribing and Nursing

- During a Medical Emergency Team (MET) Call, the MET Nursing Team Leader/Scribe will document all of the IV fluids/medications and medications that have been verbally ordered by the MET Doctor for the patient, as per current clinical practice.

- Once the MET call has been stood down, the MET Doctor who has been responsible for verbally ordering medications for the patient during the MET call will be responsible for retrospectively ordering the medications within the patients' ieMR (via the Orders Profile).

- The MET Nursing Team Leader/Scribe and Nursing staff member involved with the preparation and administration of the medications during the MET call with responsible for accessing the patient's chart and retrospectively signing for the administration of the medications given to the patient during the MET call.

- These business rules apply to all patients, regardless of whether they are to remain on the Inpatient Ward/Unit (IPU) or are for transfer to the Paediatric Intensive Care Unit (PICU).

Medication orders for the treatment of a Category 1 patient in ED

All roles

- Refer to the ieMR Advanced FirstNet Business Rules for further information about the business rules/roles/responsibilities for medication ordering pre/during/post an Emergency Department Category 1 Resus Team patient Resuscitation situation.

Suspend (withhold) and resume medication orders

Prescribing

Withhold multiple medication doses

- The Suspend function will be used for those medication orders to have dose/s withheld for more than 24 hours.

- Prescribers will apply the Suspend function to a medication order (via the patient's Orders Profile) to withhold one or multiple medication doses from being administered to a patient.

    - A reason and a free text comment, detailing the reason for the withhold, need to be documented.

    - The medication order either may or may not have commenced being administered to the patient.

- During daily ward rounds and at clinical handover times, Prescribers must check for and then review all suspended medications via the Orders Profile and the MAR in ieMR.

Withhold single medication doses

- The "Chart not done" function will be used for a single medication dose to be withheld.

- Prescribers will mark the administration task as "Chart not done" for the withholding of a single medication dose.

    - A reason of "Withhold per Medical Officer" and a free text comment, detailing the reason for the withhold, need to be documented.

    - The medication order either may or may not have commenced being administered to the patient.

Resume withheld medication

- The patient's Treating Team is responsible for resuming a suspended medication order in ieMR.

- Prescribers can set a future resume date/time for the suspended medication order if clinically appropriate.

- Prior to resuming, the Prescriber will need to review the patient's Orders Profile and MAR to check the currently suspended medication orders and consider what is clinically required for the patient.

Nursing

Withhold multiple medication doses

- ieMR will only suspend future medication administration tasks on the patient's MAR when a Prescriber has suspended a medication order. Past medication administration tasks that have not been actioned will remain active on the patient's MAR.

- Nursing staff will need to use the "Chart not done" function to remove past/overdue administration tasks from the patient's MAR relating to suspended medication orders.

  - A reason of "Withhold per Medical Officer" and a free text comment, detailing the name of the Medical Officer, date/time and reason for the withhold, need to be documented.

- If the prescriber is unable to suspend medication orders, Nursing staff are able to withhold a medication order (using the Suspend function) on behalf of the Prescriber.

  - Nursing staff must ensure that they have selected the appropriate Communication type of "Phone/Verbal (co-sign)" within the Provider window for the medication order being sent for Prescriber co-sign.

Withhold single medication doses

- Nursing staff will use the "Chart not done" function (via the patient's MAR) to document a withheld individual medication dose, once it has been confirmed with the Prescriber of the patient's Treating Team that the individual dose is to be withheld.

  - A reason of "Withhold per Medical Officer", date/time and name of prescriber is to be documented.

  - The medication order either may or may not have commenced being administered to the patient.

- Nursing staff can perform the "Chart not done" function if the medication order administration task is scheduled for a future date/time.

  - Note: "Chart not done" can be uncharted to allow the dose to then be given and is different to Suspend which allows the planned doses not to be given over an extended period.

Resume withheld medication

- If the prescriber is unable to resume medication orders, nursing staff will 'Resume' a withheld (suspended) medication order on behalf of the Prescriber.

  - Nursing staff must ensure that they have selected the appropriate Communication type of "Phone/Verbal (co-sign)" within the Provider window for the medication order being sent for Prescriber co-sign.

Pharmacy

Withhold multiple medication doses

- Pharmacists will withhold a medication order (using the Suspend function) on behalf of a Prescriber once it has been confirmed with the Prescriber that the medication order is to be withheld.

    - Pharmacists must ensure that they have selected the appropriate 'Communication type' within the Provider window for the medication order being sent for Prescriber co-sign.

Withhold single medication doses

- Pharmacists will use the "Chart not done" function (via the patient's MAR) to document a withheld individual medication dose, once it has been confirmed with the Prescriber of the patient's Treating Team that the individual dose is to be withheld or as part of the Pharmacist Intervention process.

    - A reason of "Withhold per Medical Officer", date/time and name of prescriber is to be documented.

    - The medication order either may or may not have commenced being administered to the patient.

    - Note: The "Chart not done" function will be used by Pharmacists if the medication order has been previously verified by a Pharmacist (as the "Reject" functionality in PharmNet is unavailable to be applied to such medication orders).

- Pharmacists will need to routinely confirm with the patient's Nursing staff the dose/s that have been missed/not given to the patient as per current clinical practice.

Resume withheld medication

- Pharmacists will 'Resume' a withheld (suspended) medication order on behalf of a Prescriber once it has been confirmed with the Prescriber that the medication order is to be resumed.

    - Pharmacists must ensure that they have selected the appropriate 'Communication type' within the Provider window for the medication order being sent for Prescriber co-sign.

Salbutamol variable dosing

Prescribing

- Patients receiving salbutamol should have their ordered placed via one of the following PowerPlans:

    - Pre-School Wheeze Paediatric

    - Acute Asthma Paediatric.

- Once the medical decision has been made to stretch the existing salbutamol, the prescriber will modify the current salbutamol order from within the relevant paediatric PowerPlan.

    - The Frequency field of the salbutamol order must be updated according to the frequency the patient is to be stretched to.

    - The First dose date/time must also be reviewed to ensure it aligns with the previously administered dose of salbutamol.

- If Nursing staff have contacted the Prescriber and the Prescriber is unable to review the patient but both the Nurse and the Prescriber feel the patient requires salbutamol earlier than the current prescribed time, the Nurse will document against the next medication administration task.

    - The Prescriber will then retrospectively modify the frequency of the salbutamol order when able (and after administration has occurred).

    - Updates to frequency will not affect previous documented administration tasks on the patient's MAR. Only future administration tasks will be updated accordingly.

Patient approved leave (pass)

All roles

- For patients going on leave/pass from an LCCH inpatient ward unit, a conversation is to occur by the patient's treating team (Nursing staff and Prescriber) to clinically determine whether:

    - The Prescriber will suspend the patient's active medication orders (and subsequently resume those as appropriate upon the patient's return) (long period of patient leave such as Weekend Pass/Overnight) or

    - Nursing staff will document the administration of individual medication doses using the Self-Administration workflow upon the patient's return

    - Nursing staff will document the administration of individual medication doses as "Chart Not Done", with a reason of "Patient on leave" to be documented (short period of patient leave).

- The Patient Medication Leave Report will not be used by LCCH Clinicians.

Prescribers

- Prescribers can suspend all active medication orders for a patient while a patient is on leave.

- Prescribers will need to resume those medication orders required once the patient returns from leave.

- For medications required for patient leave that the patient does not have at home, the Prescriber should write a prescription and write "leave medication" in script comments and the duration of the leave only.

- This will be processed in iPharmacy as a leave medication and therefore not incur a charge to the parent/carer.

Nursing

- Nursing staff will use their clinical discretion to either document the administration of an individual medication dose (using the Self-Administration workflow or the "Chart Not Done" function, depending on whether the medication was given by the parent/carer or withheld while the patient was not within the hospital) or request the patient's Prescriber to suspend the medication order and then resume (if clinically appropriate) for when the patient is due back.

Pharmacy

- Pharmacists can suspend all active medication orders for a patient while a patient is on leave, as per the advice of the Prescriber.

- Pharmacists can resume those medication orders required once the patient returns from leave, as per the advice of the Prescriber.

Medication orders in PowerPlans

Prescribing

- Prescribers can order medications via a pre-defined PowerPlan or a blank single/multi-phased Cross Encounter PowerPlan in ieMR.

- Prescribers will order and sign (without initiating) for medications via a pre-defined PowerPlan or a blank single/multi-phased Cross Encounter PowerPlan when those medications are to be administered during one or more future hospital presentations for a patient.

- When PowerPlans are not immediately initiated, Prescribers will need to document clear instructions detailing what PowerPlan/PowerPlan Phase is to be initiated and when via an ieMR Progress Note.

- Note: Refer to the ieMR Advanced Care Delivery Business Rules for further information about PowerPlans business rules/roles/responsibilities (including the use and management of Favourites).

Medication orders in other electronic systems

All roles

- A "placeholder" must be ordered by the clinician caring for a patient who has medications prescribed in a system other than ieMR (for example, CHARM).

- This placeholder is ordered via the ieMR Orders catalogue, and will appear at the top of the MAR and the MAR Summary. This placeholder will not appear on the MAW.

- This placeholder will state "** Separate record exists in another system **", with an associated order comment that relates directly to patients with a CHARM medication record also available.

- This placeholder will remain at the top of the MAR and MAR Summary until the placeholder is cancelled/discontinued or the patient is discharged.

- LCCH's Paediatric Intensive Care Unit (PICU) will continue using MetaVision to order and administer medications for patients under their clinical care.

- LCCH's Oncology Service will continue using CHARM to order and administer chemotherapy medications for patients under their clinical care. Refer to the local business rules established for the Oncology Service.

Medication orders in Chronic Encounters

All roles

- The following areas in LCCH will continue to use Chronic Encounters in ieMR:
    - 5B Renal
    - Post Acute Care Service (PACS).

- For patients who have Chronic Encounters in ieMR, the treating team is to use the "Separate Record Exists" orderable in the patient's Inpatient/Outpatient encounter.

- The patient's Medication History tab is to include all Chronic Encounter medication orders that have been placed for the patient.

- Prescribers must review medication orders in a patient's Chronic Encounter every 3 months (i.e. cancel/reorder).

Other relevant documents

- QRG
- Training materials

Collecting and preparing medications

Overview

This section provides the business rules addressing the collection and preparation of medications to be administered to a patient during their hospital presentation. The patient will previously have been ordered a medication in the LCCH Emergency Department, LCCH Inpatient Ward or an LCCH Outpatient Clinic.

The Medications Management system functionality in use supports:

- Collecting/preparing imprest medications (includes oral, topical, patch, drop, patient's own, IV medications, IV fluids that are not Schedule 8 and Schedule 4 Recordable)

- Collecting/preparing Controlled Drugs (Schedule 8 (S8)) and Schedule 4 Recordable (S4R) Medications.

For this section, the following roles have been identified and defined below:

- ***Prescribing***: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the collection/preparation of medication to be administered to a patient is within their clinical scope of practice.

- ***Nursing***: refers to all nurses where the collection/preparation of medication to be administered to a patient is within their clinical scope of practice.

- ***Pharmacy***: refers to all pharmacists where the collection/preparation of medication to be administered to a patient is within their clinical scope of practice.

- ***Allied Health***: refers to all Allied Health staff where the collection/preparation of medication to be administered to a patient is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Collecting/preparing imprest medications

All roles

- In LCCH Medication Rooms, the patient's MAR will be used in order to collect and prepare imprest medications for administration to a patient.

- Clinicians will view the patient's MAR prior to and during the preparation of the patient's medications/IV fluids for administration. Attention needs to be given to reviewing the order comments and special instructions documented (by hovering over the medication line on the MAR to view non-truncated information).

- Clinicians must continue to apply current clinical practice around the preparation of imprest medications and IV fluids.

Collecting/preparing S8/S4R medications

All roles

- In LCCH Medication Rooms, the patient's MAR will be used in order to collect and prepare S8 and/or S4R medications for administration to a patient.

- Clinicians will view the patient's MAR prior to and during the preparation of the patient's medications/IV fluids for administration. Attention needs to be given to reviewing the order comments and special instructions documented (by hovering over the medication line on the MAR to view non-truncated information).

- Clinicians must continue to apply current clinical practices around the retrieval and accountability for S8 and S4R medications.

- Clinicians must continue to apply current clinical practice around the preparation of medications and IV fluids.

Other relevant documents

- QRG
- Training materials

Administering medications

Overview

This section provides the business rules addressing the administration of medications to a patient as part of the patient's hospital presentation. The patient will previously have been ordered a medication in the LCCH Emergency Department, LCCH Inpatient Ward or an LCCH Outpatient Clinic.

The Medications Management system functionality in use supports:

- Administering single and double check medications

- Documenting self-administered and parent-administered medications

- Administering IV medications and IV fluids

- Administering Parenteral Nutrition and Enteral Nutrition

- Administering Patient Controlled Analgesia (PCA)/Nurse Controlled Analgesia (NCA)

- Administering complex medications (Heparin, Warfarin, Insulin)

- Administering immunisations

- Student Nurse administering medications

- Modifying administered medication documentation

- Documenting administered medication dose on behalf of another authorised clinician

- Documenting medication administered in error (wrong dose or formulation)

- Administering medications in a MET Call or treatment of a Category 1 patient in the Emergency Department.

For this section, the following roles have been identified and defined below:

- *Prescribing*: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the administration of medications is within their clinical scope of practice.

- *Nursing*: refers to all nurses where the administration of medications is within their clinical scope of practice.

- *Pharmacy*: refers to all pharmacists where administration of medications is within their clinical scope of practice.

- *Allied Health*: refers to all Allied Health staff where the administration of medications is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Allergy information

All roles

- "Allergy" is an ieMR term that encompasses the clinical terms of allergy, intolerance and sensitivity as part of the broader term of Adverse Reactions.

- The patient's allergies must be reviewed prior to administering any medications. Documentation of a patient's allergies review can be performed in ieMR via the "Mark as Reviewed" function.

  - Note: Nursing staff will go to the patient's bedside and confirm allergy status with the patient/parent/carer as per current clinical practice before documenting the medications administered.

Administering single and double check medications

All roles

Overview of administration (default MAR view)

- The default MAR view is set to "All active medications". Clinicians will need to change this default MAR view to "All medications (system)" in order to display all medications, including the suspended and discontinued medications orders.

Medication Administration Record (MAR) Batch Report

- The ieMR Medication Administration Record (MAR) Batch Report is typically printed during ieMR system downtimes, particularly for those patients who have complex IV medication/fluids orders. The ieMR MAR Batch Report is generated by ieMR accordingly:

  - LCCH Emergency Department to have MAR Batch Report generated 10 minutely.

  - All other inpatient LCCH areas (including ED SSU), to have MAR Batch Report generated 60 minutely.

- The 724 Report from the ieMR Downtime Viewers is the primary source of medication information during an ieMR system downtime.

Documentation against an inactive medication order

- Retrospective documentation of administered medications, which have then become inactive since the time of administration, is mandatory.

- Inactive orders will still be available on the patient's MAR with a discontinued status.

- Administration of an inactive order can be documented by using the 'Additional Dose' function if the administration task no longer exists.

- Minimum documentation requirements are the same as would be expected for any active medication administration documentation.

Nursing

Review of the MAR

- Nursing staff must review the date and time of last dose information when preparing to administer medications to a patient.

- Note: The system will look back for the last administration within the past 5 days across all orders for the same generic medication (including doses that are NOW, discontinued or completed).

Use of Medication Administration Wizard (MAW)

- The primary administering Nurse will access a patient's Medication Administration Wizard (MAW) to document the administration of medications to the patient.

  - This will ensure that the workflow of confirming positive patient identification (PPID) by scanning the patient's wristband prior to medication administration is adhered to.

  - A reason must be documented as a comment if the patient's wristband is unable to be scanned at the point of administration.

  - The MAW shows all medications due in the next 75 minutes, all PRN medications and any overdue medications.

  - For Outpatient areas that do not have PPID scanners available, an override reason of "Scanner Unavailable" is to be selected and a free-text reason of "Outpatients" is to be documented when using the MAW for documenting medication administration.

Barcode scanning medication products at administration via MAW

- For LCCH Go Live in 2018, the scanning of medication products via the patient's MAW when documenting the administration of medications to the patient will not be performed.

Single check medications

- Nursing staff do not need to complete the "Witnessed By" field when a single check medication is being administered to a patient (via the Document Administration window).

  - Single check medications are defined as per current clinical practice in the CHQ Medication Administration – Single Check (Nursing) Procedure.

Double check medications

- Nursing staff must complete the "Witnessed By" field when a double check medication is being administered to a patient (via the Document Administration window).

  - This is not a mandatory field in ieMR, but is mandatory as part of the medications administration workflow at LCCH.

  - Double check medications are defined as per current clinical practice in the CHQ Medication – Administration Procedure.

- When the Witnessed By field is completed, the second nurse witness's Novell password must be entered before the primary nurse can sign off the administered dose.

Telephone/Verbal medication orders

- Nursing staff can administer a telephone/verbal medication order placed on behalf of a Prescriber prior to Prescriber co-sign, as per current clinical practice in the CHQ Telephone Prescriptions for Emergency Situations (includes Verbal Orders) Procedure.

- Nursing staff are able to administer a once off (NOW) medication order to the patient that has been ordered by a Pharmacist with co-sign by a Prescriber, as per current clinical practice.

- Nursing staff are able to administer a regular (scheduled) medication order to the patient that has been ordered by a Pharmacist with co-sign by a Prescriber.

Medication orders requiring different doses

- Nursing staff will observe a false early administration warning for those medications that require a dose in the morning and a different dose in the evening (as separate orders will need to be placed for each dose).

- Each dose will have a frequency of daily/24 hours (with a minimal interval check being 23 hours).

Dose not given

- When a patient is not administered a medication for a particular reason, the primary administering Nurse will need to document "Not given" against the medication administration task on the patient's MAR.

  - For example, when the patient has a broken line and cannot be administered medication, or the patient is vomiting.

  - This is required to maintain an accurate MAR for the patient.

Retrospective signing of medication administration

- The primary Nurse who administered the medication can apply the Modify action against a medication administration task, if the "Witnessed By" field is unable to be completed by the second nurse witness at the time of medication administration, this information can be documented after the fact (i.e. retrospectively).

- When the Witnessed By field is completed, the second nurse witness's Novell password must be entered before the primary nurse can sign off the administered dose.

  - This does not change the medication administration time, but will change the task to show up as "modified" on the patient's MAR and show the time of signing.

Medications for administration via a specific lumen

- Nursing staff are to document in the administration comments field the lumen administration.

Aminoglycoside administration documentation

- Nursing staff are to document the Start time, Finish time, Mode, Prime line vs Not by nurses during administration in the administration comments field.

Pharmacy

Dose not given

- Pharmacists can document "Not given" against a medication administration task on the patient's MAR when a patient is not administered a medication for a particular reason. This will be done following the Pharmacist Intervention process.

    - For example, when the patient has a broken line and cannot be administered medication, or the patient is vomiting.

    - This is required to maintain an accurate MAR for the patient.

Documenting self-administered and parent-administered medications

Nursing

- For self-administered and parent-administered medications, the nurse caring for the patient at the time will use the MAW to document the medication administration.

- The nurse witness field will be left blank in the Document Administration window.

    - A comment will also be added to the administration i.e. "self-administered" or "parent-administered".

Administering IV medications and IV fluids

Nursing

- All infusions must be started from the MAW for patient safety.
- Modifying, charting infused amounts or ending a bag can be facilitated from the MAR.
- Confirm the volume, rate and dose in mg/kg/hr of the infusion is consistent with DERS (drug error reduction software).
- Current CHQ policies addressing changing infusion bags and syringes after specific time periods still apply. The End Bag task on the MAR will not reflect the specific time the bag needs to be clinically changed.

IV medications (intermittent fluids) via push, syringe driver or IV burette

- Nursing staff shall document the site of administration for an IV medication (intermittent fluids).

- Nursing staff shall document the administration of an IV medication by selecting the diluent in the diluent field and entering the total volume (medication and the diluent used to prepare/dissolve the medication – i.e. the volume that will be added to the burette or the syringe driver, or the volume of the IV push) before signing via the Document Administration window.

    - The volume will be recorded in the patient's Fluid Balance Chart (FBC) against the IV medication.

- Nurses will need to create a new dynamic group relating to IV flushes in the patient's FBC (if no order exists) and enter the pre and post IV medication flushes via this dynamic group.

- Note: For further information, refer to the ieMR Advanced Care Delivery Business Rules – Fluid Balance Chart.

IV medications (continuous fluids) via push, syringe driver or IV burette

- Nursing staff shall document the Site of administration for an IV medication (continuous fluids).

- Routine Method: If stopping fluids while the IV antibiotics are being administered, Nursing staff shall stop the infusion by changing the rate to 0ml/hr until after the infusion of the IV antibiotics, then adjust the rate back to the ordered rate (via the Document Administration window).

- If required, the nurse may need to adjust the rate of the infusion accordingly (either increase or decrease) to reflect the infusion rate of the medication. After the medication infusion the rate would then need to be re-adjusted to match the fluid order.

- Ad hoc/PRN flushes: Can be added as a dynamic group or can again be documented using the "infuse" function from the IV fluid order.

- Note: For further information, refer to the ieMR Advanced Care Delivery Business Rules – Fluid Balance Chart.

IV fluid boluses

- A separate order must be placed for every fluid bolus required.

- Nursing staff must contact the patient's prescriber for a phone order for IV fluid bolus.

- If appropriate, nursing staff may need to document a waste from the bag (if fluid bolus volume taken from an existing bag and/or the fluid bolus fluid is to continue as an infusion).

Administering IV fluids replacement for losses

- Nursing staff will manually enter the prescribed rate (mL/hr) into the rate field as part of the begin bag task on the MAR.

- A rate change to 0 is required when the 4 hour initial replacement has finished.

- When the infusion needs to re-commence again due to losses, nursing staff are to change the rate as appropriate.

Stopping IV fluids temporarily

- If stopping fluids while the IV antibiotics are being administered, nursing staff shall stop the infusion by changing the rate to 0ml/hr until after the infusion of the IV antibiotics, then adjust the rate back to the ordered rate.

Administering Parenteral Nutrition

Nursing

- Nursing staff are to check the PN bag contents supplied by pharmacy against the contents listed in the special instructions.

Clear Phase

- A continuous order.

- Start Bag: Can start bag at any time, allows for more than 1 bag required within 24 hours.

- End bag: conscious decision, the end bag task will not be accurate may be cleared or re-assign new tasks.

    o Recommend to set end bag tasks for TPN lasting longer than 48 hours of 24 hours if using triple phase.

Break time and titrations

- Follow instructions by prescriber in the OEF under special instructions.

- Reasoning: This workflow accounts for early bag changes including line change, access issues, or when patient uses more or less than a bag of TPN, avoids wastage. (system otherwise only allows TPN to be ordered in "bags").

Fat/Vitamin Phase

- Daily IV order from prescriber, will be associated with the correct end bag tasks.

Administering Enteral Nutrition

Nursing

- Enteral feeds will not appear on the MAR. Related enteral feed tasks will appear in Care Compass for nursing staff.

Pharmacy

- Pharmacists may review enteral feed orders under Orders profile ensuring All orders (All Statuses) is displayed or under Fluid Balance in Interactive View.

Administering PCAs/NCAs

Nursing

- Two pieces of documentation have to be completed in ieMR by nursing staff when commencing a PCA:
    - documenting the medication administration via the MAW
    - creating a dynamic group within iView to document the nursing cares and infusion observations (iView Paediatric Lines – Devices), including:
        - Vital signs
        - Pain assessment

- ▪ PCA/NCA routine observations paediatric (infusion specific observations).

PACU pain protocol orders

- In PACU, patients can be prescribed PRN administrations of morphine or fentanyl by anaesthetists as per the PACU Acute Pain Protocol (these are ordered using the 'PACU Acute Pain Paediatric' PowerPlan). These are ONLY for administration in PACU and the orders contain this restriction within the description.

- To ensure that patients are not transferred from PACU to a ward with any active PACU pain protocol orders, PACU nursing staff can cancel/discontinue these orders. The workflow to be followed is outlined below:

  - When a patient is to be imminently transferred to the ward and no longer requires the PACU pain protocol order, the nurse should apply a 'Cancel/Discontinue' action to the relevant medication order from the Orders profile. They must double check they are cancelling/discontinuing the correct order.
  - In the 'Ordering Physician' window, they are to enter the name of the prescriber (anaesthetist) who initially placed the order. A communication type of 'Co-Sign required' is to be selected.
  - A 'Discontinue reason' of 'No longer required' is to be entered.
  - Once the Cancel/Discontinue action is signed and the Orders profile is refreshed, the PACU nurse should check the MAR to ensure the order has been ceased appropriately.

Niki pumps

- When a patient is converted from a PCA to a Niki pump (subcutaneous pain infusion pump), nursing staff will need to document the insertion of the subcutaneous cannula including the syringe contents in the relevant iView band. Refer to the Care Delivery Business Rules document for further information.

Administering Heparin

Nursing

- Nursing staff are to inform the patient's treating doctor of the latest APTT results. The doctor will need to review the Heparin PowerPlan and adjust the Heparin infusion order accordingly (or as clinically indicated).
- Nursing staff are to change the rate of the Heparin infusion via the MAR (not the MAW).

- The Heparin Withhold order will fall on the MAR immediately after the corresponding phase has been initiated and signed. The Heparin Withhold order will remain under the Heparin infusion order until the specified time period has lapsed, dropping to the discontinued medication section on the MAR.

- Nursing staff must re-commence the Heparin infusion at the appropriate time, i.e. 60 minutes after the patient's infusion was paused. Nursing staff are to refer to the MAR to note the time when the rate of the Heparin infusion was changed to 0mL/hr.

Administering Warfarin

Nursing

- If Warfarin has been ordered via a PowerPlan, the prescriber will have selected an order for "warfarin/INR dose check" to prompt the check of the patient's INR result.

- Nursing staff are to sign off the warfarin "withhold" dose administration tasks by using chart not done functionality with reasons as "withhold as per medical officer".

- Nursing staff must review the start date/time on the warfarin order which will specify when the dose from that order is due (each order is for a single dose only). Only one administration task will be available for a given day.

- The warfarin/INR dose check is a set medication safety check for nurses to ensure that:
  - the latest INR result has been reviewed by a Medical Officer
  - an ordered dose (or withhold dose) has been prescribed for today.
- By signing the task on the warfarin/INR dose check, nursing staff acknowledge that the patient's latest INR result has been reviewed by a medical officer and there is a confirmed warfarin dose for today that can be administered.

Administering Insulin

Nursing

- Nursing staff are to contact the Endocrine Team as per current clinical practice for insulin dosing.
  - Note: The dose check order is used as a reminder to obtain the insulin doses from the endocrine team.

Administering Immunisations

Nursing

- All immunisations received in LCCH will be ordered and administered on the MAR with the exception of PICU patients. This will be reflected under the Immunisation History Tab.

- The Lot Number field within the Document Administration Window is where nursing staff will document the Immunisation Batch Number.

- For PICU patients only: Immunisations ordered and administered in PICU will be documented in MetaVision.

Pharmacy

- For PICU patients only: The Immunisation Pharmacist will update the Immunisation History tab using the Ad hoc function for immunisations received in PICU after email confirmation from the PICU Pharmacist.

Student Nurse medication administration

Nursing

- The primary responsible Registered Nurse shall log in to ieMR and document the administration of a medication by a Student Nurse.

- The "Performed by" field, within the Document Administration window, must be completed with the Student Nurse's name.

- If a single check medication, the "Witnessed by" field within the Document Administration window must be completed with the primary responsible Registered Nurse's name.

- If a double check medication is being administered, the "Witnessed by" field within the Document Administration window must be completed with the second Nurse witness's name.

    - When the "Witnessed by" field is completed, the second nurse witness's Novell password must be entered before the primary nurse can sign off the administered dose.

- The primary responsible Registered Nurse will sign off the Document Administration window information.

    - Note: ieMR will have the primary responsible Registered Nurse as having "Verified" the medication administration (via View Result Details).

Documenting medication administration on behalf of another authorised clinician

Nursing

- Nursing staff can document that a medication has been administered to a patient by another Nurse.

- The primary responsible Nurse (on shift) will contact the previous Nurse looking after the patient to confirm that the medication has been administered to the patient, as per current clinical practice.

- When documenting a medication administration on behalf of another Nurse, the primary responsible Nurse (on shift) within the Document Administration window will:

    - Change the time/date fields to reflect the time/date the medication has been administered to the patient.

    - Change the "Performed by" field to the Nurse's name who administered the medication to the patient.

- Add a free-text comment to document that the medication has been administered to the patient by another Nurse and that the other Nurse has been contacted to confirm this.

- The primary responsible Registered Nurse will sign off the Document Administration window information.

  - Note: ieMR will have the primary responsible Registered Nurse as having "Verified" the medication administration (via View Result Details).

Documenting medication administered in error (wrong dose or formulation)

- Medication administered to a patient in error may be due to:

  - Administering the incorrect medication to the patient (where medication has been previously ordered for the patient)

  - Administering the incorrect medication dose to the patient (where medication has been previously ordered for the patient)

  - Administering medication to the incorrect patient (where medication order has not been previously ordered for the patient).

Nursing

Dose given in error

- Nursing staff can use the "Unchart" action via the patient's MAR to document when a medication administration has been incorrectly documented for the patient.

  - "In Error" will then be displayed on the patient's MAR for that administration task.

- However, if the nurse has physically given the medication incorrectly, they cannot "Unchart" the medication administration, as they have technically still given the medication (even if it was in error).

  - Nursing staff will add a free-text comment to document that the medication has been administered to the patient incorrectly where possible.

  - Note: If a medication dose was given to the wrong patient, a Prescriber will not order the incorrectly administered medication via that patient's Orders Profile as per current clinical practice.

- Nursing staff will follow current clinical practice to report and document that a medication dose has been given in error to a patient within an ieMR Progress Note and complete a RiskMan Clinical Incident report.

- Nursing staff will discuss actions with the patient's treating physician as well as ward pharmacist as required.

Pharmacy

Dose given in error

- Pharmacists can use the "Unchart" action against a medication administration chart on the patient's MAR when a patient has had a dose of medication accidentally given. This will be done following the Pharmacist Intervention process.

    - "In Error" will then be displayed on the MAR for that administration task.

Modifying administered medication documentation

Nursing

- Nursing staff must add a free-text comment when modifying medication administration information, documenting the reason for updating the medication administration information.

    - This free-text comment will be documented post updating the medication administration information.

Uncharting a dose

Nursing

- Nursing staff can use the "Unchart" action via the patient's MAR to document when a patient has vomited a dose of medication previously administered.

    - Nursing staff will add a free-text comment to document that the medication administered has been vomited by the patient.

Documenting discontinued medication administration tasks

Nursing

- Nursing staff will be responsible for charting "Not Done" for those overdue/inactive administration tasks on the patient's MAW when a medication order has been previously cancelled/discontinued by a Prescriber.

    - Nursing staff will need to check the patient's progress notes to ensure no further administration instructions for the medication have been provided by the prescriber.

    - Nursing staff will add a free-text comment to document that the medication order has been previously cancelled/discontinued by the Prescriber.

Administering medication in a MET Call

- Note: Refer to the ieMR Advanced FirstNet Business Rules for further information addressing the business rules/roles/responsibilities for a MET Call activated within the Emergency Department's Short Stay Unit.

Prescribing and Nursing

- During a Medical Emergency Team (MET) Call, the MET Nursing Team Leader/Scribe will document all of the medications and that have been verbally ordered by the MET Medical Officer and subsequently administered to the patient. This documentation will remain on the paper Resuscitation Data Sheet during the MET Call.

- Once the MET call has been stood down, the MET Medical Officer who has been responsible for verbally ordering medications for the patient during the MET call will be responsible for retrospectively ordering the medications within the patients' ieMR (via the Orders Profile).

- Once the MET Doctor has retrospectively ordered the medications within the patient's ieMR, the MET Nursing Team Leader and the MET Drug Nurse are responsible for accessing the patient's MAR to retrospectively document and sign for the IV fluids and/or medications that have been administered to the patient.

- These business rules apply to all patients, regardless of whether they are to remain on the Inpatient Ward/Unit (IPU) or are for transfer to the Paediatric Intensive Care Unit (PICU).

Administering medication in the treatment of a Category 1 patient in ED

All roles

- Refer to the ieMR Advanced FirstNet Business Rules for further information about the business rules/roles/responsibilities for medication ordering pre/during/post an Emergency Department Category 1 Resus Team patient Resuscitation situation.

Administering medication orders in PowerPlans

Nursing

- Nursing staff can initiate future PowerPlan phase(s) when required (i.e. when a patient presents to hospital for treatment).
    - Note: Medication orders within either a pre-defined signed PowerPlan or a blank Cross Encounter PowerPlan will have been prescribed and signed by an authorised clinician/ medical officer.

- Nursing staff can initiate a PowerPlan for a patient, without the need to contact the Prescriber, if there is clear documentation of the PowerPlan name/Phase and when to initiate in the Prescriber's documentation (ieMR Progress Note).
    - Nurses will need to enter a communication type/co-sign when initiating PowerPlans/PowerPlan Phases that have been ordered by a Prescriber. The communication type used would be "co-sign required".

- If no clear instructions have been provided by the Prescriber (either verbally or within a written progress note), the Nurse would phone the Prescriber to confirm when to

initiate the PowerPlan Phase. The communication type used would be "phone/verbal (co-sign required)".

- Note: Refer to the ieMR Advanced Care Delivery Business Rules for further information about PowerPlans business rules/roles/responsibilities.

Enrolled Nurses

- Enrolled Nurses are not authorised to plan, initiate or sign an order for a CareSets or PowerPlan. However, it is vital that Enrolled Nurses understand the purpose of CareSets / PowerPlans and are able to utilise them effectively to identify and complete related medication activities, patient assessments and other required cares.

- Enrolled Nurses are authorised to check and administer medications related to CareSets and PowerPlans as scope of practice according to relevant hospital policy / procedure describes.

Salbutamol variable dosing and administration

Nursing

- Nursing staff will contact the patient's Prescriber when the patient's salbutamol order requires review.

  - The Prescriber will then review the patient's salbutamol order and modify the frequency of the order as required.

  - Nursing staff must remove any overdue administration tasks for the salbutamol order post prescriber modification, using the Chart Not Done workflow.

  - Nursing staff must reschedule a single administration time via the MAR if it is determined that a single dose of salbutamol needs to be rescheduled.

  - Nursing staff must reschedule all administration times via the MAR if it is determined that all salbutamol doses require rescheduling.

- However, if Nursing staff require administration of the scheduled dose prior to the Prescriber updating the frequency of the salbutamol order, the Nurse will administer the next scheduled dose to the patient (as per discussion with the Prescriber).

  - The administration of the next scheduled dose will be documented against the next available medication administration task. An early administration reason will need to be specified prior to signing off the medication administration task documentation.

- Note: The Prescriber will then retrospectively modify the frequency of the salbutamol order when able (i.e. post administration).

Other relevant documents

- QRG
- Training materials

Clinically reviewing medications

Overview

This section provides the business rules addressing the clinical review of medications ordered for and administered to a patient as part of the patient's hospital presentation. Typically, the clinical review of medications will occur for patients within the LCCH Emergency Department and within an LCCH Inpatient Ward/area.

The Medications Management system functionality in use supports:

- Verifying a medication order

- Performing a Pharmacist Intervention (minor, moderate and major/catastrophic risk)

- Modifying a previously verified medication order

- Manually assigning a medication product to an unverified medication order

- Re-supplying medication for a patient

- Reviewing cancelled/discontinued medication orders

- Documenting a Pharmacist clinical review

- Performing Therapeutic Drug Monitoring.

For this section, the following roles have been identified and defined below:

- *Prescribing*: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the clinical review of ordered and administered medications is within their clinical scope of practice.

- *Nursing*: refers to all nurses where the clinical review of ordered and administered medications is within their clinical scope of practice.

- *Pharmacy*: refers to all pharmacists where the clinical review of ordered and administered medications is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Future use of current medication alert stickers

All roles

- Currently, medication alert stickers are used by Pharmacists to identify patients with special conditions to Prescribers and Nursing staff.

Alerts and Problems List

The ieMR Alerts and Problems List should be used for identifying:

- Transplants and devices in situ - if available.

- Medications to be administered through NGT (add 'Nasogastric route' problem).

- G6PD deficiency or other genetic condition that impacts medications cf with adrenal insufficiency

- Renal impairment / Liver impairment.

    - Note: Options include Renal impairment and End Stage Liver disease and End Stage Renal Disease.

- Ketogenic Diet.

- Drug-drug interaction potential (add as Problem) e.g. voriconazole – add a comment.

Allergies

The ieMR Allergies list should be used for identifying:

- Not for particular drug (i.e. no NSAIDS post liver transplant) – reaction type – intolerance – Comments clarify – Not for NSAIDS as post liver. We are recommending that this be added as an Orderable which has no associated tasks, as a heads up. Use in Home meds will need to be tested.

- Biosimilars - avoiding other brand- to go in as an allergy- reaction type – intolerance – comments clarify For No Brand Substitution. Bruce has informed that this work around is currently in play.

Pharmacist Admission History/Review Note

The Pharmacist Admission History/Review Note should be used for identifying:

- Breastfeeding mother on medications.

- Transplants and devices in situ-if not available in alert and problems list.

- Re-iteration of Drug- Drug interaction i.e. Patient on imatinib take care with drug interactions.

Verifying a medication order

All roles

Use of Mortar and pestle icon

- The "Mortar and Pestle" icon indicates that a Pharmacist clinical review of a medication order has yet to occur. The absence of the Mortar and Pestle icon means that a Pharmacist has clinically reviewed the medication order for the patient.

- The presence of the Mortar and Pestle icon will be checked by Nurses as part of their clinical workflows when administering drugs.

- Nurses will request a Pharmacist review of high risk medication orders prior to the administration of such to a patient, depending on whether the request is within Pharmacy working hours and the feasibility of a Pharmacist clinical review for the patient (as per current clinical practice).

    - Note: Nursing staff can still administer a medication to a patient prior to Pharmacist review.

Pharmacy

Non-configuration of auto-verification functionality

- The ieMR Advanced Medications Management build for CHQ does not include the auto-verify functionality for medication orders placed in the LCCH Emergency Department and Inpatient Wards.

  - Note: May re-consider potentially enabling the auto-verification functionality post ieMR Advanced Go Live, provided the state-wide medications list can be modified by LCCH.

Configuration of RxBypass functionality

- A number of LCCH hospital locations have been configured for Rx-Bypass. Rx-Bypass functionality enables the bypassing of the Pharmacist verification process (in PharmNet) for those hospital locations.

  - If required, these locations will be reviewed post ieMR Advanced Go Live for LCCH.

No supply functionality

- Following the state-wide direction, all medication orders will have a default dispense from location of "no-supply" for supply routing, preventing the sending of unnecessary medication order information to iPharmacy for dispensing.

Use of Verify and Accept Actions in PharmNet

- The "Mortar and Pestle" icon indicates that a Pharmacist clinical review of a medication order has yet to occur. The absence of the Mortar and Pestle icon means that a Pharmacist has clinically reviewed the medication order for the patient.

- There are three clinical workflow scenarios, involving the use of PharmNet Verify and Accept actions:

  1. Patient is located in an inpatient ward serviced by Pharmacy:

     a. Pharmacists to use either the Verify or Accept action (via PharmNet) for the medication order.

     b. Pharmacists is to also verify cancel/discontinued orders to acknowledge the medication has been ceased and to clear the UVOM.

     c. Pharmacists to perform any Pharmacist Interventions required.

     d. Pharmacists to complete the Pharmacist Clinical Review Task order (by signing off).

  2. Patient is located in an inpatient ward without Pharmacy service and/or weekend supply needed:

     a. If a medication order has been previously accepted/verified, Pharmacists will perform a safety check of the medication order (via PharmNet) and dispense the medication required (from iPharmacy).

b. If a medication order has not been previously accepted/verified, Pharmacists will verify the individual medication order (via PharmNet) and dispense medication required (from iPharmacy).

c. The Pharmacist Clinical Review Task not signed/completed by Pharmacists.

d. The Accept action is not used by Pharmacists.

3. Patient is located in an inpatient ward without Pharmacy service and the PharmNet Unverified Orders Monitor (UVOM) requires de-cluttering:

a. Pharmacists to use the Accept action (via PharmNet) to clear the medication order from the PharmNet UVOM. The medication is not to be dispensed.

b. The Pharmacist Clinical Review Task is not signed/completed.

Note: The PharmNet UVOM will automatically clear medication orders that have been cancelled/discontinued for 3 days.

Unable to verify a medication order in PharmNet

- When administration times have been rescheduled for a medication order prior to pharmacist verification, the pharmacist will be unable to verify the medication order in PharmNet straight away. This is a known defect within the current ieMR code level.

- Until this code-level defect is fixed, a pharmacist will need to initially modify a medication order in PowerChart, by adding an order comment such as "Modified to perform verification in PharmNet". The pharmacist will then able to launch the patient's Acute Profile in PharmNet, apply the verify action against that same medication order and successfully view the Verify Medication window for the medication.

    - Note: Pharmacists must not make any other modifications to the medication order itself in PowerChart.

Pharmacist Intern/Pharmacist in Training

- Pharmacist Interns will not verify medication orders until they have passed all relevant competency assessments. The supervising Pharmacist will review all medication orders verified by the Intern.

    - Note: Pharmacist Interns are legally required to work under supervision of a Registered Pharmacist (as per current clinical practice).

    - Pharmacist Interns will maintain a list of patient names/UR numbers they have reviewed/ performed actions to provide visibility to the supervising Pharmacist.

Use of Administration Notes

- Pharmacists will generally not use Administration Notes, except potentially for storage instructions of products. It is noted that product storage instructions should first appear within the Order Comments of the Medication Order as per updates made as part of the Intervention Process.

- Administration Notes are additional notes that able to be placed against medication ordered directly on the patient's MAR. They are similar to a paper-based "sticky note" placed on the paper medication chart.

- Note: It is difficult to identify who wrote the administration note and the time/date the Administration Note has been written. Therefore, it is difficult to query the instructions or determine if the correct clinician has written the information relating to the administration of the patient's medication order.

Performing a Pharmacist Intervention

There are three categories of Pharmacist Interventions:

1. Minor Risk Intervention: No harm to patient if medication order administered (e.g. Nilstat® prescribed tds instead of qid, using "Chart Not Done" for non-actioned past administration tasks on the MAR when a medication order has been suspended/cancelled/discontinued, changing original medication order route to an equivalent route).

2. Moderate Risk Intervention: Possible or likely irreversible harm to patient if medication order administered (e.g. Addition of medications, changing medications, incorrect frequency, incorrect route, Contraindications/precautions/additional monitoring requirements).

3. Major/Catastrophic Risk Intervention: Likely significant harm or potentially irreversible effects to patient if medication administered as prescribed (e.g. Patient charted for a drug, to which they have a documented anaphylactic reaction, patient charted for a drug which is an overdose for that patient).

Note: Pharmacist Interventions will be documented in ieMR, not eLMS.

All roles

Minor Risk Intervention

- Pharmacists shall document a Pharmacist Intervention for a minor risk intervention against the medication order in PharmNet.

- Pharmacists will modify the medication order according to "Protocol (no co-sign)" (Communication Type) to add in an Order Comment "See Pharmacist intervention *insert date*".

- Pharmacists will notify the patient's Prescriber in the appropriate time-frame that a minor risk Pharmacist Intervention has been documented.

  - Note: If the Pharmacist Intervention will have limited immediate impact to the patient then Nursing and Prescribing staff do not need to be directly contacted to resolve these issues immediately but they can instead be discussed later in the day to improve efficiency.

- Nursing staff must refer to the Pharmacist Intervention documentation prior to administering the medication dose to the patient.

- Pharmacists will not routinely send Minor Risk Interventions to Prescribers for review. A discussion with the Prescriber should occur before forwarding this information to the Prescriber's Message Centre if required as a reminder to the Prescriber.

  - Note: Medication orders routing for co-sign are already sent to the Prescriber's Message Centre.

Moderate Risk Intervention

- Pharmacists will firstly reject the medication order using the 'Reject' function in PharmNet.

  - Pharmacists will document "Chart Not Done" against remaining previous administration tasks on patient's MAR (prior to the discontinue/cancel time for the medication order) if required.

- Pharmacists shall document a Pharmacist Intervention for a moderate risk intervention against the medication order in PharmNet.

- Pharmacists will immediately contact the patient's Nursing staff if the medication is due to be administered to the patient within 30 minutes of rejecting the medication order.

- Pharmacists will also contact the patient's Prescriber in the appropriate time-frame that a moderate risk Pharmacist Intervention has been documented.

  - Note: The rejection of the medication order can be retracted at this point by the Pharmacist if required.

- Prescribers must rectify the medication order that has been rejected as part of the Pharmacist's moderate risk intervention if it is clinically appropriate to do so.

- Nursing staff must refer to the Pharmacist Intervention documentation prior to administering the medication dose to the patient.

  - Nursing staff must document a reason for overriding the rejection warning as part of continuing to administer the medication dose to the patient.

- Pharmacists will routinely send Moderate Risk Interventions to Prescribers for review. A discussion with the Prescriber should occur before forwarding this information to the Prescriber's Message Centre.

Major/Catastrophic Risk Intervention

- Pharmacists will immediately "Cancel/Discontinue" the patient's medication order.

  - Pharmacists will document "Chart Not Done" against remaining previous administration tasks on patient's MAR (prior to the discontinue/cancel time for the medication order) if required.

- However, Pharmacists will immediately "Void/Delete" the patient's medication order when it has been identified that the medication order has been placed against the wrong patient, the wrong orderable has been specified, and/or the order has been placed against the wrong patient encounter.

  - Voiding a medication order will discontinue the medication order and remove all related administration tasks on the patient's MAR.

- Pharmacists will immediately contact the patient's Nursing staff once the medication order has been cancelled/discontinued or voided/deleted.

- Pharmacists will immediately contact the patient's Prescriber once the medication order has been cancelled/discontinued or voided/deleted.

- Pharmacists shall document a Pharmacist Intervention for a major/catastrophic risk intervention against the medication order in PharmNet.

- Note: If there has been a misunderstanding and the medication order should continue to be administered to the patient, the Prescriber or the Pharmacist (co-sign required) can re-chart the medication order for the patient.

- Pharmacists will not routinely send Major/Catastrophic Risk Interventions to Prescribers for review. A discussion with the Prescriber should occur before forwarding this information to the Prescriber's Message Centre if required as a reminder to the Prescriber.

    - Note: Medication orders routing for co-sign are already sent to the Prescriber's Message Centre.

Medication order error in planned/uninitiated PowerPlan

- Pharmacists are currently unable to verify medication orders that are proposed/planned within a planned/uninitiated PowerPlan.

- When a medication order error has been identified in a planned/uninitiated PowerPlan, Pharmacists are to follow the following Intervention workflows:

    1. Minor: Pharmacist to modify medication order and annotate "Intervention - see intervention", document Intervention and contact prescriber.

    2. Moderate: Pharmacist to modify order and annotate "Intervention documented - see intervention", document intervention and contact prescriber. Pharmacist to also add "Follow up to Pharmacy" order to planned PowerPlan. No supply is to be provided.

    3. Major/Catastrophic: Pharmacist to cancel order, document intervention, contact prescriber and document clinical review note in pre-arrival encounter. No supply is to be provided.

Pharmacist Intern/Pharmacist in Training

- Pharmacist Interns will not verify medication orders until they have passed all relevant competency assessments. The supervising Pharmacist will review all medication orders verified by the Intern.

    - Note: Pharmacist Interns are legally required to work under supervision of a Registered Pharmacist (as per current clinical practice).

    - Pharmacist Interns will maintain a list of patient names/UR numbers they have reviewed/ performed actions to provide visibility to the supervising Pharmacist.

Modifying a previously verified medication order

Pharmacy

Two clinical workflows exist for when an error has been identified with a previously verified medication order:

1. If an error has been identified with a previously verified medication order and a Pharmacist cannot rectify it (e.g. incorrect frequency of medication):

a. Follow the Pharmacist Intervention process (Minor/Moderate/Major)

b. Exception: Moderate Pharmacist Intervention process involves Rejecting the medication order. This is not possible if the medication order has been previously verified by a Pharmacist. The Pharmacist will need to cancel/discontinue the medication order and send for co-sign as well as immediately contacting the patient's Nursing staff and Prescriber.

2. If a minor error has been identified with a previously verified medication order, a Pharmacist can modify the verified medication order via PharmNet (e.g. adding order comments to clarify medication administration details, changing the medication product assignment, rescheduling administering times, amending supply details). An order comment will be added to the medication order as per Minor Risk Intervention business rules.

Manually assigning a medication product to an unverified medication order

Pharmacy

Modify assigned medication product

- Pharmacists can modify a medication order according to the assigned medication product when required.

    - For example, a Pharmacist could change Ceftriaxone assigned product from 250mg vials to 1000mg vials if that was all that was available) or whether the patient's own medication will be used.

Documenting a Pharmacist clinical review

Pharmacy

Patient List Types for Pharmacist Clinical Review activities

- For Pharmacist Clinical Review activities, the "Location list" is most appropriate to use in ieMR, as per current clinical practice.

- If a Pharmacist is specialised, the ieMR "Relationship list" can be used once shared by the Prescriber in ieMR.

Clinical Pharmacist Review signed as complete

- All patients admitted as LCCH inpatients will have a Clinical Pharmacist Review task available.

- Pharmacists must conduct a full clinical review of all medicines the patient has been ordered, had ceased/suspended etc and action any required Pharmacist Interventions before the Clinical Pharmacist Review task can be signed.

- Each time a Pharmacist performs a clinical review for the patient, the Pharmacist will sign the Clinical Pharmacist Review task as having been completed.

- Signing of the Clinical Pharmacist Review Task means that a full clinical review of the patient has been undertaken by the Pharmacist.

- This is the same as the pharmacist signing in purple at the bottom of the P-NIMC paper charts.

- Nursing staff and Prescribers may use the Clinical Pharmacist Review task to identify patients who have not been reviewed by a Pharmacist who they consider are high risk/ in need of Pharmacist review in wards serviced by a Pharmacist.

  - Nursing staff or Prescribers can contact the Pharmacist directly, notifying them of the reasons a review is needed by a certain time and can check that this has occurred via the time/date the Clinical Pharmacist Review task has been signed.

- Nursing staff and Prescribers can determine the time/date of the last Pharmacist Clinical Review by referring to the Clinical Pharmacist Review task.

Performing Therapeutic Drug Monitoring

Medication Level Required Placeholder

All roles

- A Therapeutic Drug Monitoring (TDM) "placeholder" must be ordered by the clinician caring for a patient who requires a medication level to be taken as part of the TDM activities for the patient.

- This placeholder is ordered via the ieMR Orders catalogue, and will appear at the top of the MAR and the MAR Summary. This placeholder will not appear on the MAW.

- This placeholder will state "**Medication level required**". The following information shall be documented:

  - The Order Comments field must specify:

    - the medication name

    - the time/date of the medication level required.

  - The Doses field must specify:

    - the number of medication levels required.

- The TDM placeholder can be ordered for the specific time/date when the medication level required is due.

- The TDM placeholder in ieMR will flag and generate task/s to help remind Nurses to collect the required pathology specimens prior to medication administration to the patient.

  - Nurses will sign off these tasks as Done/Not done as per medication administration workflow. Such tasks will appear on both the MAR and Care Compass.

- This placeholder will be listed in the Discontinued section of the MAR and MAR Summary when the patient's medication level has been documented.

- Note: Prescribers can place the **Medication Level Required** orderable in ieMR. However, the *primary focus* of Prescribers is to ensure the required Pathology orders are placed in ieMR.

Communication regarding withholding dose administration until TDM result returned

All roles

- When a dose is to be withheld for administration until pathology results are returned for a patient, the Prescriber is to suspend the medication order according to the future date/time for the patient (via the Orders Profile).

- It is also the Prescriber's responsibility to resume the medication order for the patient when clinically appropriate.

- Pharmacists and Nursing staff can suspend/resume a medication order for the purposes of TDM only after discussion and direction by a Prescriber.

- Pharmacists will use the ieMR Pharmacist Review Note to track TDM results and recommendations.

Pharmacist Intern/Pharmacist in Training

- After discussion with the supervising Pharmacist, a Pharmacist Intern can:
    - request TDM verbally and through the Pharmacist Intervention process to the Prescriber
    - order a TDM placeholder for the patient in ieMR
    - recommend to the Prescriber to withhold medication administration until the pathology results are returned
    - provide advice to the Prescriber about TDM interpretation.
        - Note: Pharmacist Interns are legally required to work under supervision of a Registered Pharmacist (as per current clinical practice).
        - Pharmacist Interns will maintain a list of patient names/UR numbers they have reviewed/ performed actions to provide visibility to the supervising Pharmacist.

Other relevant documents

- QRG
- Training materials

Prescribing discharge/departure medications

Overview

This section provides the business rules addressing the prescribing of discharge/departure/outpatient medications to a patient. Prescribed medications will be administered outside of the LCCH environment, post the patient's hospital presentation.

The Medications Management system functionality in use supports:

- Prescribing a medication for a patient, including cancelling/discontinuing, re-printing, modifying, renewing, completing prescriptions

- Documenting a Pharmacist Discharge Note

- Verifying a medication prescription

- Documenting a discharge medications list.

For this section, the following roles have been identified and defined below:

- ***Prescribing***: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the prescribing of medications is within their clinical scope of practice.

- ***Pharmacy***: refers to all pharmacists where the prescribing of medications is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Medication Prescriptions

Prescribing

Discharge medication prescriptions

- The patient's discharging Medical Officer must provide printed medication prescriptions to Pharmacy 24 hours prior to the patient's expected discharge date.

- Refer to Reconciling Medications section for business rules addressing reconciling discharge medications.

Duplicate medication prescription copies

- Prescribers need to ensure that both A4 copies of the ieMR prescription are sent to Pharmacy for dispensing.

ID approval number for restricted antimicrobial prescriptions

- When a discharge prescription requires an ID approval number, the initial Prescriber obtaining ID approval for prescribing a restricted antimicrobial, will document the ID approval number in the Order Comments field of the medication prescription.

- If a new ID approval number is given to continue a home medication (antimicrobial), the home medication is to be competed and a new medication prescription is to be written.

Medication prescriptions requiring different doses

- Medications that require a dose in the morning and a different dose in the evening do not require a separate prescription for each dose. This also includes medications that require a different dose depending on the day of the week.

- Prescribers are to specify "See Special Instructions" in the dose field, and specify the morning and evening doses in the Special Instructions field (e.g. 25 mg mane and 50 mg nocte).

Use of unlisted medication orderable when prescribing discharge prescriptions

- The use of the unlisted medication orderable for medication prescriptions is to be discouraged as there is no inbuilt clinical decision support available within the ieMR.

- However, there will be limited circumstances where the unlisted medication orderable will be used for medication prescriptions.

    - For example, when prescribing SAS medications that have yet to be added to the ieMR formulary/order catalogue.

Tapering discharge medications

- For discharge prescriptions, the taper functionality is not available. The prescriber will need to document the taper instructions in the order comments/ special instructions field.

Prescribing clinical trial medication

- Paper based prescriptions will continue to be used as per current clinical practice to ensure compliance with clinical trial recommendations.

Modifying discharge medication prescriptions

- There are three workflow options if a medication prescription requires modification:

    - *Option 1*: The Pharmacist will contact the Prescriber, requesting Prescriber to modify the patient's medication prescription in ieMR. The Prescriber will modify the patient's medication prescription, re-prints the medication prescription and signs (in black ink). The Prescriber will forward both copies of the patient's medication prescription for dispensing to Pharmacy.

    - *Option 2*: The Pharmacist will contact the Prescriber, confirming the medication prescription modifications. The Pharmacist will modify the medication prescription in ieMR according to the Communication Type of "Protocol (no co-sign)". Handwritten amendments will be made to the printed medication prescription by the Pharmacist who is dispensing the medication.

    - *Option 3*: The Pharmacist will contact the Prescriber, confirming the medication prescription modifications. The Pharmacist will make handwritten amendments on the printed ieMR medication prescription. The Pharmacist will then modify the medication prescription in ieMR according to the

Communication Type of "Co-sign required". The Prescriber will co-sign the modified prescription, re-prints the medication prescription and signs (in black ink). The Prescriber will forward both copies of the patient's medication prescription for dispensing to Pharmacy.

- Prescribers will need to be aware of and use all three workflow options for modifying a prescription. The workflow option being used will depend on the type of prescription and patient situation.

Pharmacy

ID approval number for restricted antimicrobial prescriptions

- If the ID approval number field is not completed appropriately by the initial Prescriber, Pharmacy will follow the intervention process to ensure that this field is completed appropriately.

- The AMS/Ward pharmacist may modify the medication prescription to annotate the ID approval number if they are privy to it (i.e. the number is given directly to them) or the prescriber is unable to input it.

Documenting a Pharmacist Discharge Note

Pharmacy

- It is not compulsory to document a Pharmacist Discharge Note in PowerChart. It is up to the discretion of the Pharmacist whether a Pharmacist Discharge Note will be documented for the patient.

Verifying a medication prescription

Pharmacy

Triaging script - physical script annotations

- Pharmacists will use Clinically Checked 'CC' for endorsement of the physically printed medication prescription together with the date of endorsement. A Pharmacy Department stamp will be organised that has the LCCH address.

Pharmacist Intern/Pharmacist in Training

- A Pharmacist Intern can:
    - Triage a patient's discharge medication prescription
    - Print the Discharge Reconciliation Report for a patient from ieMR
    - Send the Discharge Reconciliation Report to the relevant Pharmacy Assistant for discharge eLMS production.

- Note: Pharmacist Interns are legally required to work under supervision of a Registered Pharmacist (as per current clinical practice).

- Pharmacist Interns will maintain a list of patient names/UR numbers they have reviewed/ performed actions to provide visibility to the supervising Pharmacist.

Documenting a discharge medications list

Pharmacy

- Ensure discharge reconciliation has been completed by prescriber, this is important as the discharge reconciliation information will drag and update the "Home medication history" tab upon the patient's discharge.

- The Pharmacist may choose to print a Medication Discharge Report to compare against the MAR and the Pharmacist Admission History Note to ensure a complete Medication discharge list has been generated for the patient.

- Pharmacy Assistants will document a draft Discharge Medication Record (DMR) in eLMS for those patients being discharged as per current clinical practice.

- The responsible Pharmacist must authorise the draft DMR in eLMS and provide to the patient (can be sent by mail/email if required and consent available).

- Note: Medications entered into the DMR (on eLMS) will automatically transfer to the Electronic Discharge Summary for checking by the prescriber.

Documenting pharmacy-related patient discharge information

Pharmacy

- There will be some patients who will require additional discharge documentation to be completed by the Inpatient Ward Pharmacist, when possible. This will be documented as part of the Pharmacist's Review Note.

Other relevant documents

- QRG
- Training materials

Transfer medications

Overview

This section provides the business rules addressing the various clinical handover scenarios where medications related to a patient's current and/or future hospital presentation.

The Medications Management system functionality in use supports:

- Future outpatient clinic appointments and inpatient admissions

- Outpatient clinic to Emergency and Inpatient Ward

- Emergency to Inpatient Ward/Operating Theatre

- Operating Theatre to Inpatient Ward

- PICU transfers

- Inpatient to CHQ@Home (Hospital in the Home (HITH))

- External transfers.

For this section, the following roles have been identified and defined below:

- *Prescribing*: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the clinical handover of ordered and/or prescribed medications is within their clinical scope of practice.

- *Nursing*: refers to all nurses where the clinical handover of administered medications is within their clinical scope of practice.

- *Pharmacy*: refers to all pharmacists where the clinical handover of reviewed medications ordered/prescribed and administered is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Future outpatient clinic appointments and inpatient admissions

All roles

Ordering medication for a patient prior to arrival (outpatient clinics)

- Any medication orders placed against a patient's pre-arrival encounter in ieMR will be available within the patient's outpatient encounter in ieMR. This is because the pre-arrival encounter is designed to "flip" all orders across to patient's outpatient encounter once the patient has been checked in to their outpatient clinic appointment.

Ordering medication for a future outpatient clinic appointment/inpatient admission

- Prescribers will order medications for a patient intended to be administered during a future outpatient clinic or planned admission to Day Care or Inpatient Ward (not serviced by a Pharmacist) via a blank Cross-Encounter PowerPlan.

- If medication is to be supplied by the Pharmacy Department, Prescribers must also provide a printed prescription of the medication required for dispensing together with written/verbal communication to Pharmacy Department (as per localised business rules), a minimum of 48 hours in advance.

    - The printed prescription (both copies) must include the due date required and the patient's intended care location.

- Refer to "Medication orders in PowerPlans", "Administering medication orders in PowerPlans" and "Dispensary Supply: Level 2 Pharmacy - Planned admission to Day Care or Ward not serviced by a Pharmacist" sections for additional business rules.

Outpatient to Emergency and Inpatient Ward

All roles

- Any medication orders placed against a patient's outpatient encounter in ieMR that need to be continued in Emergency Department and/or an Inpatient Ward will need to be cancelled against the outpatient encounter and re-ordered in the appropriate encounter.

Concurrent Inpatient and Outpatient encounters

All roles

- For inpatients who need to attend to an outpatient clinic area (e.g. for an eye exam) as part of their inpatient care and have concurrent active inpatient and outpatient ieMR encounters, medications that are to be administered as part of that attendance to an outpatient area must be ordered and administered on the patient's inpatient encounter only.

ED to Inpatient Ward/Operating Theatre

All roles

- Any medication orders placed against a patient's emergency encounter in ieMR will be available within the patient's inpatient encounter in ieMR. This is because the emergency encounter is designed to "flip" all orders across to patient's inpatient encounter once the patient has been admitted as an inpatient via HBCIS.

Operating Theatre (OT) to Inpatient Ward

All roles

Medications prescribed and dispensed prior to OT

Three options:

- Cross encounter PowerPlan and medication prescription needed – if medication administration to be charted on the patient's MAR (i.e. performed by nursing staff) and require medication supply from Pharmacy Department.

- Medication prescription only – if medication supply required from Pharmacy Department and medication administration not to be charted on the patient's MAR (ie. If administration planned to be performed by surgeon or proceduralist).

- Cross encounter PowerPlan only – if medication administration to be charted on the patient's MAR (i.e. performed by nursing staff) and medication supply not required from Pharmacy Department.

Medications administered by Anaesthetists in OT

- All medications administered by Anaesthetists in OT will be documented in SAA. The administration information will appear on the discontinued section of the MAR when the case is finalised. This will flag in the medication administration tasks when it was last given if the same medication is also charted regularly on the MAR.

- If regular medication is due intra-op, it will be administered and documented by the Anaesthetist in SAA if appropriate.

- Fluids and insulin infusions will also be documented in SAA and write back to the MAR post case.

Medications administered by Surgeons in OT

- Any medications administered by surgeons/proceduralists in OT will be documented in SurgiNet. A medication order will not be placed or administration documented via the MAR.

Transfer Handover and Reconciliation

- Clinical handover of medications administered in OT needs to occur with PACU and Inpatient Ward Nursing staff.

- The PACU Nurse will use "Chart not done" functionality for regular medication orders on the MAR that have been administered in OT by referring to the administration record from SAA.

- If regular medication has not been administered in OT, during Nurse handover a plan is to be determined as to whether dose is to be made up, administration times rescheduled, or dose to be missed (and may require further prescriber discussion). "Chart not done" is to be used to indicate that a clinical decision has been made to not give medication to patient (i.e withheld).

Patient transfers from OT to PICU

- PICU Team will review medications in ieMR and cancel/discontinue all active medications in ieMR, transcribing those medications that will be continued in PICU to MetaVision.

- The anaesthetist may prescribe PCA/NCA/epidural/regional/ketamine infusions in ieMR to give direction to PICU staff about the prescription in Metavision. (A prescription will be necessary for the infusion to be prepared in PACU for use in PICU at handover).

Post-operative medications

- Fluids, anti-emetics, pain medications – will be prescribed and charted in ieMR by Anaesthetists.

- Antibiotics – will be prescribed and charted in ieMR by surgeons/proceduralists.

PICU Transfers

All roles

On Admission to PICU

- On Admission to PICU, all medication and fluid orders in ieMR will be cancelled by the admitting PICU Medical Officer.

- All appropriate medication and fluid orders will be prescribed/transcribed in MetaVision (PICU authorised electronic medical record) by the admitting PICU Medical Officer as per current clinical practice.

    - Note: Refer to Care Delivery Business Rules for PICU admission clinical documentation tasks.

On Discharge from PICU

- On the day of discharge, the relevant PICU Medical Officer is to 'plan' all medications and fluid orders in ieMR using the 'Transfer Reconciliation' functionality.[1] These planned medications and fluid orders will be sign off by the PICU Medical Officer prior to the patient leaving PICU.

    - Note: The Discharging Medical Officer will compare medications discontinued on arrival to those prescribed on discharge to ensure 'regular' medications are included for the patient.

- All Discharge paperwork, including medication and fluid orders in ieMR, to be checked by PICU RN prior to discharge from PICU ensuring administration scheduling times correlate with MetaVision scheduling.

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[1] *Transfer Reconciliation functionality – allows for medications to be planned but do not become active with associated tasks until the orders are signed.*

- Last dose of PRN medications administered in PICU are to be signed on the MAR for the time they were administered with a comment **'Documented in MetaVision'** by PICU nurse if given within 24 hours of PICU discharge.

- Last dose of all scheduled medications administered in PICU within the last 24 hours are to be signed for on the MAR. PICU nursing staff will use the "additional dose" functionality to document each last dose and add a comment 'Documented in MetaVision'.

- Any outstanding medication tasks should be reconciled prior to, or at the time, of discharge - marked 'administered' with a comment – '**Documented in MetaVision**'.

On Handover

- On handover of patient to the accepting ward, all medication orders should be checked and reconciled by the discharging PICU RN and accepting Ward RN.

- Active fluid/infusions should be checked at handover and signed as an active order in the ieMR by the discharging PICU RN, with the receiving ward RN as the witness.

- A comment is to be added that the infusion was **'Commenced in PICU'.**

  - Note: To reflect infusion volume remaining, infusion waste should also be documented at time of handover.

Note: Refer to Care Delivery Business Rules for PICU discharge clinical documentation tasks.

Pharmacy

- ieMR is the source of truth for Pharmacists and PICU patients (not eLMS and iPharmacy).

Documentation of home medications in PICU

- PICU Pharmacists to document home meds (medication history) in ieMR while the patient is in PICU (not in eLMS).

Documentation of Pharmacist Interventions in PICU

- PICU Pharmacists to document Pharmacist Interventions in ieMR while the patient is in PICU (not in iPharmacy).

Documentation of Pharmacist Clinical Review task in PICU

- PICU Pharmacists must complete pharmacist clinical review task in ieMR following medication reconciliation and clinical review of patient's medications on discharge to ward.

- Note: PICU Pharmacists to utilise pharmacist tasks and interventions to communicate follow up tasks for Ward Pharmacists. Verbal communication only when necessary.

PICU transfer to hospice/home/care – D/C script process and eLMS

- All Medications will be prescribed for patients within and printed from the ieMR, as the source of truth on discharge.

- Discharge eLMS will be generated by Pharmacists as per current clinical practice.

Inpatient to CHQ@Home (Hospital in the Home) Transfers

- All patients should leave LCCH with a printed copy of the Medications Transfer Report (MTR) which works as a standing order for downtime use and the orders will last for the duration of HITH treatment.

- This should be printed at the time of patient transfer to HITH. The MTR should be printed in the first instance by the home ward nurse. If this does not occur, the HITH coordinator or CHQ at Home pharmacist can print the MTR.

- If any changes to HITH therapy are made during the HITH admission, the CHQ at Home Pharmacist will perform a clinical review and follow the Pharmacist workflow for PharmNet and Powerchart.

- An updated copy of the MTR should be printed immediately following any changes and be provided to the HITH coordinator/CHQ at Home nurse.

Prescribing

- The Prescriber is to complete

  - HITH referral form

  - ID approval number for relevant Antimicrobial Stewardship medication orders for HITH administration. The prescriber will obtain and document the ID approval number along with the indication in the designated field of the medication order in ieMR.

  - prescribe HITH medications (including PRN medication) on the patient's ieMR inpatient encounter, with the correct start and end dates (end dates if appropriate)

  - notify the CHQ at Home Pharmacist immediately of the intent to transfer the patient to HITH. This will ensure sufficient time available for the pharmacist to order/dispense HITH medications.

  - complete a medications discharge reconciliation, excluding the medications required for HITH, to update the patient's home medications and generating any discharge prescriptions

  - order laboratory test requests for HITH on the inpatient encounter (for example: medication levels, CHEM20, CRP, FBC)

  - suspend medication orders not required to be administered by HITH upon the patient's transfer to HITH. (The home ward nurse, HITH Coordinator and CHQ at Home Pharmacist will liaise with doctor to ensure suspending happens within a timely manner.)

  - In the event that the prescriber is unable to suspend medication orders, this can be performed by nursing staff/pharmacists if there is written direction by the prescriber/treating team in progress notes.

- If patient is readmitted to hospital, the prescriber is responsible for re-charting all regular medications for the patient via the patient's inpatient encounter in ieMR.
- If there is a change or extension to treatment, the prescriber is responsible for modifying medication orders (with ID approval extension number as required) and communicating the medication order changes made immediately with CHQ at Home Pharmacist and HITH Coordinator/Nurse.
- If the patient has been accidently discharged instead of being transferred to HITH in HBCIS and all medication orders have been cancelled in ieMR, the prescriber is responsible for re-ordering all medication orders requiring HITH administration as soon as possible.

Pharmacy

- The CHQ at Home Pharmacist will perform a clinical check of medications required for HITH in Powerchart, follow the Pharmacy verification workflow and supply HITH medications from the orders on the MAR, including Medication Level Placeholders (if required).
- The CHQ at Home Pharmacist will liaise with the doctor to ensure timely suspension of inpatient medication orders, ID approval granted, medication reconciliation completed, and pathology forms ordered and printed if required.
- The CHQ at Home Pharmacist will follow current process of communication to the HITH nurse regarding medications supplied and liaise regarding printing of the MTR prior to patient transfer to HITH.

Nursing

- The hospital ward nurse should print the MTR after medications not requiring HITH nurse administration have been suspended.
- The Medications Transfer Report is to be sent home with the patient along with their medications, aligning with current clinical practice.
- If the medications not requiring HITH administration have not been suspended by the treating team/medical officer, the ward/CHQ at Home nurse can suspend these medications prior to printing the MTR if a progress note has been documented by the prescriber/treating team to indicate the need for the medication to be suspended.
- The CHQ at Home nursing team will also print a copy of the MTR prior to the first home visit - this MTR will be kept in a chart which will travel to and from the house as a backup in case the family misplace or do not receive the MTR on transfer home from the hospital.
- The CHQ at Home nurse at the patient's home will sign for the medication administered in ieMR, and then forward the administration task to the nurse who has

witnessed the administration event via Facetime®. The second CHQ at Home nurse who witnessed the medication administration will then sign the administration task as a witness.

- If any changes to HITH therapy are made during the HITH admission, the CHQ at Home Pharmacist will perform a clinical review and follow the Pharmacist workflow for PharmNet and Powerchart.
- An updated copy of the MTR should be printed immediately following any changes and provided to the HITH coordinator/CHQatHome nurse.

Downtime

Nursing

- In the event of a downtime (ieMR downtime or unable to access internet), the CHQ at Home nurse will use the Medication Transfer Report to check the medication order/s and administer HITH medication/s.
- The six rights will be performed as per CHQ at Home Medication Checking Procedure (Appendix 3 – CHQ Guideline https://qheps.health.qld.gov.au/__data/assets/pdf_file/0028/708841/proc_01039.pdf) via Facetime® with the CHQ at Home nurse visiting the patient at their home/accommodation and a 2nd second CHQ at Home nurse (at LCCH base or elsewhere) with both nurses viewing the MTR/ieMR medication order.
- The CHQ at Home nurse at the patient's home will sign on the MTR at the time of administering medication and then transcribe the administration task (with corrected time) along with the other documentation to ieMR when access is restored. The second nurse who has witnessed the medication administration via Facetime® will be required to sign as a witness, once the ieMR medication administration task has been signed and forwarded by the administration nurse.
- The CHQ at Home nurse will also carry the CHQ Elastomeric infusor device monitoring form (current workflow) for documentation of infusor connection and disconnection weights. This information should be transcribed into ieMR as part of the CHQ at Home nurse Daily review Progress note, to enable the CHQatHome pharmacist to review infusor function.

PACS (Post-acute care service) workflow and Hospital avoidance

Non-palliative care patients

- The prescriber will refer patient to CHQ at Home and a chronic encounter will be opened once the patient is accepted.
- The prescriber can then prescribe any medications required in this chronic encounter.

- ID approval number - when ordering an antimicrobial for PAC administration the prescriber will obtain and document the ID approval number and indication in the designated field of the medication order. The CHQ at Home Pharmacist will provide clinical check and supply if required.
- The CHQ at Home Pharmacist/Nurse will put a placeholder on the MAR indicating this is a chronic encounter and contains medications for HITH nurse administration ONLY.
- The CHQ at Home team is responsible for ensuring the encounter in the patient's chart is closed when episode of care is completed. Episodes of care lasting longer than 12 months (Hospital Avoidance) will be closed and re-opened prior to the 12 month mark.

Palliative care patients (PPCS)

- Medications for administration by CHQ at Home nurses will be prescribed on the Paediatric National Inpatient Medication chart (P-NIMC) and/or approved PPCS opioid infusion form (for example: Nikki pump infusions).
- No medications will be prescribed in the MAR while the patient is being cared for in community by the PPCS/CHQ at Home PACS service.
- The CHQ at Home/ Palliative care Pharmacist will provide a clinical check and supply PPCS prescriptions if required.
- The CHQ at Home Pharmacist/Nurse will put a placeholder on the MAR indicating that a **Separate record exists in another system**, as this patient has an active paper Medication chart outside of ieMR.
    - This placeholder order is located at the top of the MAR and will remain until the placeholder order is cancelled.
    - This order should only be used for the period when there are current, active medications orders being administered and should be discontinued outside of these times.
- The placeholder can be ordered by Medical Officer, Nurse and/or Pharmacist (multi-disciplinary team effort) users in ieMR.

Other relevant documents

- QRG
- Training materials

Pharmacist Clinical Consults

Overview

This section provides the business rules for requesting a Pharmacist Clinical Consultation relating to the ongoing healthcare management of a patient who is typically located within the LCCH Emergency Department and LCCH Inpatient Ward/areas.

The Medications Management system functionality in use supports:

- Requesting a Pharmacist Clinical Consult

- Completing a Pharmacist Clinical Consult.

For this section, the following roles have been identified and defined below:

- *Prescribing*: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the requesting of Pharmacist Clinical Consultations is within their clinical scope of practice.

- *Nursing*: refers to all nurses where the requesting of Pharmacist Clinical Consultations is within their clinical scope of practice.

- *Pharmacy*: refers to all pharmacists where the clinical review of ordered and administered medications is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

Requesting a Pharmacist Clinical Consult

All roles

Use of Consult to Pharmacy order

- Nursing and Prescribing staff will continue current clinical practice of contacting the Pharmacist by phone when a Pharmacy review is needed.

- The ieMR "Consult to Pharmacy" order functionality will not be encouraged to be used by Nursing and Prescribing staff at LCCH ieMR Advanced Go Live.

  - A trial, promoting the use of the ieMR Pharmacist Consult Order functionality by Nursing and Prescribing staff, will need to be considered to place post LCCH ieMR Advanced Go Live.

- Additional Pharmacist consult order types are available in the ieMR Orders Catalogue. These include "Consult to Renal Pharmacist", "Consult to Heart Failure Pharmacist" and "Consult to Mental Health Pharmacist" orders. However, for LCCH ieMR Advanced Go Live, only the ID Pharmacist Consult order will be used.

  - Post Go-Live, the Pharmacy Department will review whether the other pharmacist consult orders in the ieMR Orders Catalogue will be used.

Use of Consult to Infectious Diseases (ID) Pharmacist

- The use of the "Consult to ID Pharmacist" order in ieMR will be voluntary.

- A Ward Pharmacist may choose to order the ID Pharmacist Consult in ieMR to request an Anti-Microbial Stewardship (AMS) Pharmacist Review for a patient.

- If the ID Pharmacist Consult required is urgent, the requesting Pharmacist will also contact the AMS Pharmacist by phone.

- The requesting Pharmacist will ensure the reason for an ID Pharmacist consult is clearly documented (within the "Reason for Pharmacy Consult" field).

- The AMS Pharmacist will document a Pharmacist Intervention as per Pharmacist Intervention process if further action is required.

- The AMS Pharmacist will document a Pharmacist Clinical Review Note in the patient's ieMR for all circumstances.

PowerPlan Pharmacist Consult Orders

- Consult to Pharmacy orders can be placed automatically as part of ordering and initiating some PowerPlans (Pharmacy to consult) and they will have an icon saying this consult has come from a PowerPlan. These would mainly be from the high risk PowerPlans as not all PowerPlans will have a consult generated.

- PowerPlan Pharmacy Consults will be left for a Pharmacist to review them on the weekend and all other tasks to be pharmacist tasks.

Pharmacy

Use of "Follow Up to Pharmacy" order

- Pharmacists will use the Follow Up to Pharmacy orderable in ieMR for special supplies and reminders for next supply.

Pharmacy weekend workflow

- Pharmacists will use the Consult to Pharmacy or the Follow Up to Pharmacy orderables in ieMR to refer patients for weekend review.

- This will avoid the need to create new tasks that already exist in ieMR.

- Pharmacists will need to change the Priority of the Consult to Pharmacy or the Follow Up to Pharmacy order to "Urgent".

- The Consult to Pharmacy or Follow Up to Pharmacy orderables may be rescheduled to the next day, but will still be retained on the Pharmacist's Multi-Patient Task List.

- If a Pharmacist use an Admin Note for communication purposes on the Consult to Pharmacy or the Follow Up to Pharmacy orderables in ieMR, the Admin Note must be annotated with the Pharmacist's initials for visibility/traceability.

Other relevant documents

- QRG

- Training materials

Medications Stock Control Management

Overview

This section provides the business rules for requesting and fulfilling a request for supply of a medication product ordered for a patient located within the LCCH Emergency Department, LCCH Inpatient Ward/areas or a LCCH outpatient clinic.

The Medications Management system functionality in part supports:

- In hours supplies

- Re-supplying medication for a patient

- On call supplies.

For this section, the following roles have been identified and defined below:

- *Prescribing*: refers to all prescribers (such as Medical Officers, Nurse Practitioners) where the ordering of medications and requesting the supply of medication products for a patient is within their clinical scope of practice.

- *Pharmacy*: refers to all pharmacists where the supply of medication products for a patient is within their clinical scope of practice.

If a role has not been identified within a sub-section, it is assumed no applicable business rules apply.

In hours supplies

Prescribers

Dispensary Supply: Level 2 Pharmacy - Planned admission to Day Care or Ward not serviced by a Pharmacist

- Prescribers will order medications for a patient intended to be administered during a future planned admission to Day Care or Inpatient Ward not serviced by a Pharmacist via a blank Cross-Encounter PowerPlan.

- Prescribers will write an ieMR Progress Note for the patient to indicate what medications are to be administered when to the patient during the patient's future planned admission to Day Care or Inpatient Ward.

- Prescribers must also provide a printed prescription of the medication required for dispensing together with written/verbal communication to Pharmacy Department (as per localised business rules), a minimum of 48 hours in advance.

  - The printed prescription (both copies) must include the due date required and the patient's intended care location.

- The number of repeats on the printed prescription may correspond with the number of doses required to be prescribed by the clinician (i.e. to correlate with the number of phases) with a limit of SIX month duration.

  - This duration corresponds with a standard PBS prescription length and also would allow for the maximum number of phases able to be created for weekly therapy.

- Alternatively if there is a PBS prescription (i.e S100, streamline or authority script) the Prescription can be used for the maximum number of doses for which the Authority script allows over cross encounter.

Dispensary Supply: Level 2 Pharmacy - Unplanned admission to Day Care or Ward not serviced by Pharmacist or Outpatient Clinic

- Prescribers will order medications for a patient intended to be administered during an unplanned admission to Day Care or Inpatient Ward not serviced by a Pharmacist or Outpatient Clinic within ieMR.

- Prescribers must also provide a printed prescription for PBS claimable medications required for dispensing together with verbal communication via Phone to Pharmacy Department.

Dispensary Supply: Complex patients in locations not serviced by a Pharmacist

- The admitting medical officer will take medication history and update home medications history for the patient.

    - The home medications documented can be converted to inpatient medication orders via the medication admission reconciliation screen. New medications can also be ordered at this point.

- The admitting medical officer can then contact Level 2 pharmacy for supply.

Dispensary Supply: Requires compounding by Aseptic Pharmacy Unit (APU)

- For unplanned admissions, follow the current work instruction/clinical for placing requests to APU. APU have access to and visibility of the ieMR

- For planned admissions, forward medication prescriptions required to APU.

Dispensary Supply: Level 5 Pharmacy

- Refer to above sections for Level 2 Pharmacy supply for Prescribers.

Pharmacy

Urgent supplies

- Urgent supplies require verbal communication as per current clinical practice.

Dispensary Supply: Level 2 Pharmacy – Ward serviced by Pharmacist

- Inpatient Ward Pharmacists will send medication orders from PharmNet to iPharmacy e-Rx when supply is needed from Level 2 Pharmacy.

- Pharmacy Assistant (OO4) in Aisle 3 will be responsible for monitoring the iPharmacy eRx Monitor and processing these orders to generate a label (competency assessment required)

- Medication products that are sent to the iPharmacy eRx Monitor and are not available on the shelves require communication from Aisle 3 to the requesting Inpatient Ward Pharmacist for re-evaluation.

- The medication quantity that is sent to the iPharmacy eRx Monitor can **ONLY** be changed by a Pharmacy Assistant by **increasing** the quantity. The quantity

requested by the Inpatient Ward Pharmacist cannot be reduced. Changes can be made by the Inpatient Ward Pharmacist via the modify action in PharmNet.

- Direct iPharmacy supply dispensing process will run in conjunction with the iPharmacy eRx Monitor process if:

    - the product is not available in PharmNet

    - complex infusions (and additives)

    - unlisted medications.

Dispensary Supply: Level 2 Pharmacy - Planned admission to Day Care or Ward not serviced by Pharmacist

- The Ambulatory Care Pharmacist will clinically review the medications that have been ordered as part of the patient's Cross-Encounter PowerPlan in ieMR together with the ieMR Progress Note detailing the instructions for the medication order by the Prescriber.

- The Ambulatory Care Pharmacist will modify the medication order in ieMR to indicate the order has been clinically reviewed and verified by a clinical Pharmacist.

    - The medication order must be modified with the annotation 'Pharmacist verified' and pharmacist's initials in the Order Comments field. (e.g. pharmacist verified RL).

    - Note: The medication order cannot be clinically verified via PharmNet.

- The Ambulatory Care Pharmacist will endorse the printed prescription as clinically checked as per standard review procedure with the addition handwritten modification of "Day Care Supply- (insert ward) and (date administration due)".

Dispensary Supply: Level 2 Pharmacy - Unplanned admission to Day Care or Ward not serviced by Pharmacist

- The Ambulatory Care Pharmacist will clinically review the medications that have been ordered as per medication verification process.

- The Ambulatory Care Pharmacist will dispense the medication required for supply by:

    - sending the medication order from PharmNet to iPharmacy eRx

    - manually dispensing directly from iPharmacy (i.e. for urgent supply)

    - screenshot of ieMR order taken and put on dispensing board (good for working using a visual prompt).

- A log will be used in Level 2 and 5 Pharmacies to record all requests so there is a flag that supply needs to be dispensed.

Dispensary Supply: Complex patients in locations not serviced by a Pharmacist

- The pharmacist will clinically review the item that requires supply and verify the single item.

- The pharmacist is not responsible for performing a full clinical review of the patient and should not sign the Pharmacist Clinical Review as complete.

- Complex patients can be reviewed by inpatient ward pharmacists as is current practice on request of medical team for patient safety and if the ward pharmacist is able to perform the review in normal day's work.

Dispensary Supply: Requires compounding by Aseptic Pharmacy Unit (APU)

- For unplanned admissions, follow the current work instruction/clinical for placing requests to APU. APU have access to and visibility of the ieMR

- For planned admissions, forward medication prescriptions required to APU.

Dispensary Supply: Level 5 Pharmacy

- Refer to above sections for Level 2 Pharmacy supply for Pharmacists.

- For patients located in 5C who are being transferred to the ward and require supplies, Nursing staff are to phone Level 5 Pharmacy to request dispensing.

Dispensary handout process

- Continue current clinical practice at ieMR Advanced Go Live regarding updating home medication information in iPharmacy as part of the Dispensary handout process. As per current requirement, Pharmacists will need to follow up with the prescriber for an updated medication prescription if required.

- Note: It will be up to the Pharmacist's clinical discretion whether to update the patient's home medications history information in ieMR. Pharmacists will also determine whether to write an ieMR Progress Note if a difference in medications has been identified.

- Pharmacist Interns are not triage competent to receive home medications information from a parent. Interns will not be updating home medications in ieMR.

Re-supplying medication for a patient

All roles

Configuration of Pharmacy Cart Fill functionality for LCCH

- The Cart Fill functionality in ieMR has not be configured for use at LCCH.
  - o Note: The ieMR Cart Fill functionality is typically used for automating notifications of monthly medication dispensings required for patients in a specific ward (such as a rehabilitation ward).

Pharmacy

Prescription put into Pharmacy for dispensing with original dose changed

- Pharmacists who have identified a dose change (as confirmed by the patient/parent/carer), to the original prescription, can complete the original prescription in ieMR and add a new medication to the patient's home medications history to reflect the currently administered dose.

- The paper prescription remains valid even if the original script item in ieMR has been completed and a new home medication has been added with a different dose. The paper prescription that is signed by the Prescriber is the legal prescription.

- A note can be made on the original paper prescription to document dose changes and source of information.

- The label on the medication can be changed to reflect current dose if written or verbal confirmation by Prescriber and/or it is required for patient safety and the dispensing Pharmacist is confident of dose. Alternatively the words "or as directed by the doctor" can be added to reflect the dose may change from the original prescription.

- If the Pharmacist has safety concerns relating to the patient and what dose is being taken, contact with the Prescriber should be made.

On call supplies

Pharmacy

- If the on-call Pharmacist comes on site to LCCH to dispense a medication, then the medication order needs to be verified in the ieMR prior to dispensing (as per medication verification process).

- If medications are being released from the After Hours Cupboard, it will be at the on-call Pharmacist's discretion (according to the risk of the medication being released) whether the medication order will be verified in the ieMR prior to being released.

Other relevant documents

- QRG
- Training materials

Terms and abbreviations

CEC	Current Encounter Chart
ED	Emergency Department
HBCIS	Hospital Based Corporate Information System
ieMR	Integrated electronic medical record
MAR	Medication Administration Record in ieMR. This replaces the current paper-based Paediatric National Inpatient Medication Chart (P-NMIC).
OT	Operating Theatre
PAS	Patient Administration System – HBCIS for LCCH.
PowerPlan	A PowerPlan is a pre-prepared set of orders (such as radiology, pathology, medications, patient care etc.) and associated instructions for a specific condition, procedure or element of treatment. Cross Encounter PowerPlans are used to custom build plans ahead of time (prior to a patient's future hospital presentation), that can be initiated when clinically required.
PPID	Positive Patient Identification
Resus	Resuscitation (as part of the Emergency Department)
SAS	Special Access Scheme. Refers to arrangements which provide for the import and/or supply of unapproved therapeutic goods in Australia for a single patient, on a case by case basis.
URN	Unit Record Number – the hospital-based patient identification number assigned to a patient that uniquely identifies that patient for that hospital facility.
LCCH	Lady Cilento Children's Hospital
CHQ	Children's Health Queensland
IPU	Inpatient Teams and Units
OPD	Outpatient Teams and Units
QRG	Quick Reference Guide
CAM	Complementary and Alternative Medicine
eLMS	
AH	Allied Health
AIR	Australian Immunisation Register – The source of truth for a patient's historical vaccinations information.
QSIS	Queensland Specialist Immunisation Services
MAP	Medication Action Plan
CHARM	Oncology Service information system
ID	Infectious Diseases
SAS	Special Access Scheme
LAM	List of approved medicines