



Guidance Document for incidents that involve a medication

Important considerations when recording a medication incident in Datix CIMS

This document should be read in conjunction with the [Datix CIMS Notifier User Guide](#).

Introduction

A medication incident is any preventable event which could have, or did lead to patient harm while the medication is in the control of the healthcare professional, patient, or consumer. Medication incidents may be related to professional practice, drug products, procedures, and systems. They include incidents involving prescription, order communication, product labelling/packaging/nomenclature, compounding, dispensing, distribution, administration, education, monitoring, and use.

Choosing the correct type of medication incident¹

It is important to select the correct part of the medication process where the incident occurred from the tier 2 drop-down list as different tier 3 options are available depending on the tier 2 option chosen (See Appendix 1 for a full list).

This may not necessarily be the root cause of the incident but reflects the outcome to the patient. For example the nurse administers the medication in error based on what was written on the prescription on the medication chart. The prescriber made an error on the prescription which is the root cause of the incident; however the patient received the medication which resulted in an administration error.

Incident type tier one (1): select 'Medication/Biologics/Fluids' when recording a medication incident.

1. What medication incident type do I select for tier two (2)?

Type of Clinical Incident	
Definition: A clinical incident is an event or circumstance resulting from health care which could have, or did lead to unintended and/or unnecessary harm to a patient/consumer and includes near misses.	
* Incident type tier one	Medication/Biologics/Fluids
* Incident type tier two	
* Incident type tier three	
Medication related incidents Select the Medication involved in the clinical incident (e.g. PANADOL). DO NOT SAVE FREE TEXT <ul style="list-style-type: none"> • Combination products containing more than one active ingredient (e.g. TARGIN) • Typing the first four letters of the generic name • If the required generic drug name does not appear in the dropdown list, click on the search icon to search for the medication • Further details of the medication involved 	Administration to Patient Delivery Processes Dispensing Processes Post-administration Patient Monitoring Preparation/Formulation Processes Prescribing Processes Procurement/Supplier Processes Storage Processes (in pharmacy or on unit)
* Medication involved ?	Medication names are listed by generic name (e.g. Paracetamol) rather than brand name Brand names (e.g. Oxycodone – Naloxone) rather than generic name (e.g. Oxycodone) Check what you have entered in the Medication involved field and enter the generic name of the drug in the next Actual form administered and Actual dose administered fields.

¹ A full list of definitions for all medication-related clinical incidents is available in Appendix 1.

Two incident types that are often confused are 'Administration to Patient' and 'Dispensing Process'.

Example of incorrect allocation as 'Dispensing Process':

- Patient's 2200 Tazocin® dose was omitted. Not realised until giving 0600 dose.
- Protophane® dose not given as charted. Novorapid® doses on 26/1 at breakfast and lunch not given.

Both of these incidents were listed as a 'Dispensing Process' incident when they should have been 'Administration to Patient' incidents.

Tier 2 Incident Type	Description
Administration to Patient	If the patient has been administered a medication then it is an 'Administration to Patient' incident type. It involves the 6 rights of medication administration, encompassing re-assessment of the need for the medicine, the selection of the correct medicine and appropriate preparation and administration of the medicine by a suitably skilled clinician to the correct patient on each occasion. This includes a record of administration as well.
Dispensing Process	This step includes the process of dispensing the medication from a pharmacy undertaken by a pharmacist. The correct medicine should be manufactured or selected, then labelled fully and clearly, in line with legislative requirements and a record is made in the pharmacy's dispensing software. Medication can be dispensed by a pharmacist for inpatient use, discharge medication supply and outpatient prescription supply.

2. What medication incident type do I select for tier three (3)?

 **Tip to avoid confusion!**

The two incident types 'Failure to Administer' and 'Incorrect Frequency of dose (omitted dose)' as part of the 'Administration to Patient' process are also often confused.

Type of Clinical Incident
Definition: A clinical incident is an event or circumstance resulting from health care which could have, or did lead to unintended and/or unnecessary harm to a patient/consumer and includes near misses.

★ Incident type tier one: Medication/Biologics/Fluids

★ Incident type tier two: Administration to Patient

★ Incident type tier three: Failure to administer

Medication related incidents
Select the **Medication involved** in the clinical incident (e.g. PANADOL). **DO NOT SAVE FREE TEXT** in this field.

- Combination products containing more than one active ingredient (e.g. TARGIN)
- Typing the first four letters of the generic name of the drug in the next field
- If the required generic drug name does not match the selected medication
- Further details of the medication involved

★ Medication involved  Incorrect frequency of dose (omitted dose)

DO NOT SAVE FREE TEXT IN THIS FIELD

- Formulation of medicine was wrong
- Inappropriate/incorrect Self Administration
- Incorrect dose
- Incorrect duration of treatment
- Incorrect frequency of dose (extra dose)
- Incorrect frequency of dose (omitted dose)
- Incorrect medication/fluid
- Incorrect patient

name (e.g. Paracetamol) rather than brand name
one – Naloxone) rather than brand name (e.g. Naloxone)
er
and enter the generic name of the drug in the next field.
Administered and **Actual dose administered** fields.

Tier 3 Incident Type	Description
Failure to administer	<p>When a medication is due and acknowledged/prepared for administration but is not given.</p> <p><i>Examples</i></p> <ul style="list-style-type: none"> • <i>Patient charted for medication however ward did not stock this medication; therefore patient did not receive medication.</i> • <i>When staff were showering patient, it was noticed that the silver backing of the patch was not removed completely and as a consequence the patient was not receiving the correct dose.</i> • <i>Nurse went to patient room at 2200hr and noticed a tablet by bedside. Patient had stated that previous afternoon nurse had given medication to help him sleep, but patient had not taken as he wasn't ready to sleep.</i>
Frequency of dose (omitted dose)	<p>A dose of a medication is not administered to the patient as prescribed. This is usually due to oversight or not being aware that the medication has been prescribed.</p> <p><i>Examples</i></p> <ul style="list-style-type: none"> • <i>Pain patch was required to be changed at 08:00 hour, nursing staff forgot to change patch and this was identified during PM shift change</i> • <i>Medication charts checked at 15:00 hour medication round, and it was noticed that the patient 08:00 hour medication was not administered.</i> • <i>Patient on BD medication, nursing staff went to administer 20:00 hour dose and noticed that 08:00 hour dose was not administered.</i>

3. Choosing the medication involved



Tip

The medication involved section is listed by the medication's **generic name**, the more letters of the medication name you provide the more refined the search outcome will be. Avoid using free text entry. You must type in the first four characters at a minimum for the search function to work.

* Medication involved ?

DO NOT SAVE FREE TEXT IN THIS FIELD

If 'Other' please specify the medication involved

* Actual route of delivery

* Actual form administered

* Actual dose administered

Was this the correct medication?

oxyc

- Amoxycillin
- Amoxycillin - Clavulanic acid
- Doxycycline
- Esomeprazole - Amoxycillin - Clarithromycin
- Hydroxychloroquine sulfate
- Omeprazole - Amoxycillin - Clarithromycin
- Oxychlorosene
- Oxycodone
- Oxycodone - Naloxone

* Medication involved ?

DO NOT SAVE FREE TEXT IN THIS FIELD

oxycod

- Oxycodone
- Oxycodone - Naloxone

Trade names for medications are not currently listed in the Datix CIMS library, and as such there are no options available to choose by trade name.

* Medication involved ?

DO NOT SAVE FREE TEXT IN THIS FIELD

clexane

No codes available

Free text medication names will not be captured in the reporting function of Datix CIMS. Therefore please take the time to ensure you search for the medication name according to its generic name.

* Medication involved ?

DO NOT SAVE FREE TEXT IN THIS FIELD

enoxapar

- Enoxaparin
- Enoxaparin - Warfarin

Clinical Incident details

When submitting a clinical incident it is important to include as much information as possible about

- what happened, and
- why the incident may have occurred / what factors contributed to the incident occurring (i.e. was an administration incident caused by a prescribing error?)

These details will assist the review of the incident by your hospital's medication safety committee to develop strategies to reduce the risk of these incidents occurring again.

For example - Incident: An insulin dose was omitted prior to lunch for a patient

- Rather than just documenting this, explain what happened and whether this incident affected the patient's care.
- Was the reason for the omission because:
 - There was no stock available on the ward
 - The patient was not on the ward
 - The nurse was busy with another patient and the dose was overlooked
 - The insulin order had not been prescribed on the chart
 - The insulin chart was missing from the medication chart folder
 - Or another reason?

Each of these causes will require a different strategy to address the problem.

Appendix 1 – Guidance for Tier 2 and Tier 3 Incident Types

Table 1 – Definitions for Tier 2 Incident Types

Tier 2 Incident Type	Definition
Administration to Patient	<p>When a nurse, midwife or doctor administers a medication to a patient. It involves the 6 rights of medication administration, encompassing re-assessment of the need for the medicine, the selection of the correct medicine and appropriate preparation and administration of the medicine by a suitable skilled clinician to the correct patient on each occasion. This also includes a record of administration as well.</p> <p>Self-administration Process: This process step relates to a patient self-administering a medication.</p>
Delivery Process	<p>This step involves the medication being transferred from one setting to another (i.e. from pharmacy department to the ward, or from ward to ward)</p>
Dispensing Process	<p>When a pharmacist dispenses a medication for a patient.</p> <p>This step includes the process of dispensing the medication from a pharmacy undertaken by a pharmacist. The correct medicine should be manufactured or selected, then labelled in line with legislative requirements and a record is made in the pharmacy's dispensing software.</p> <p>Medication can be dispensed by a pharmacist for inpatient use, discharge medication supply and outpatient prescription supply.</p> <p>It is important to note that if a patient is administered the medication, even if the cause of the event is due to a dispensing or prescribing error; the error must be recorded as an administration incident.</p>
Post-administration Patient Monitoring	<p>This process step encompasses a suitable skilled clinician to assess the patient and the effect that the prescribed medication is having.</p>
Preparation/Formulation Processes	<p>This process step involves choosing the correct preparation or formulation of the medication for administration. Some medications are available in different formulation, for example regular release and slow release product. It can also involve choosing the correct formulation for the route of administration (i.e. oral liquid, suppository, oral tablets).</p> <p>Preparation process is when the medication cannot be administered in its original form. It usually involves dilution of the product so that it can be administered parenterally (i.e. diluting a powdered medication in a vial with diluent and then adding this solution to an intravenous infusion bag).</p> <p>Sometimes different dilutions are required for a specific medication, and it is important that the correct dilution is followed for the preparation of the medication.</p>
Prescribing Process	<p>When a doctor or nurse practitioner prescribes a medication for a patient.</p> <p>This step relates to the prescriber and their need for accurate, comprehensive, complete and up-to-date patient specific information to assess the most suitable treatment option in light of the best available evidence and the patient's treatment goal. This step also includes the record of the medicine order on the medication chart or prescription by the prescriber. The medicine order needs to be legible, unambiguous and contain enough information to support the use of the medication as intended.</p> <p>It is important to note that if a patient is administered the medication, even if the cause of the event is due to a prescribing error; the error must be recorded as an administration incident.</p>
Procurement/Supplier Processes	<p>This step involves the distribution of medication to the ward or unit.</p>
Storage Process (in pharmacy or on unit)	<p>This process relates to the storage of the medication and encompasses any special storage conditions related to stability of the medication or legislative requirements.</p>

Some medication incidents involve documentation in the patient's medical record. This process step relates to incomplete or incorrect documentation in the medical record or the medication order/prescription. **These are recorded until Tier 1 – Documentation.**

Table 2 – Definitions for Tier 3 Incident Types

Tier 2	Tier 3	Definition
Administration	Administered but drug chart not signed	When a medication is administered to a patient but the medication chart is not signed to confirm the medication has been administered.
	Administered but not prescribed	When a medication is administered to the patient and there is no prescription on the medication chart authorising the medication being required for the patient.
	Calculation error	When checking the correct dose for a patient or preparing a dose of medication (i.e. calculating volume of an oral liquid required for a dose) a calculation error is made resulting in the patient receiving the incorrect dose.
	Contraindication due to history of allergy	A medication is administered to a patient who has a known allergy (previous history of allergy or adverse drug reaction) documented for the medication in the medical record or on the medication chart
	Contraindication due to interaction with another medication	A medication is administered that is contraindicated due to an interaction with another medication which may result in sub-therapeutic levels or toxic levels of a medication. This may be a result of a prescribing error, but is considered an administration error if the patient has been administered the medication.
	Contraindication due to medical conditions	A medication is administered that is contraindicated due to a medical complication which may increase chance of toxicity and/or side-effects. For example renal or hepatic impairment may impair the clearance of a medication. This may be a result of a prescribing error, but is considered an administration error if the patient has been administered the medication.
	Expired medication/fluid	The medication/fluid administered had passed its expiry date. This can be the original expiry date provided by the drug company or for sterile preparations such as chemotherapy, eye drops, or TPN that are provided by the pharmacy department that have short expiries. It is important to include the reason the medication has expired if it is related to delivery/storage of the medication/fluid.
	Extravasation	The leakage of intravenously (IV) infused, and potentially damaging, medications into the extravascular tissue around the site of infusion.
	Failure to administer	When a medication is due and acknowledged/ prepared for administration and the patient is unavailable to administer the medication and no reason is documented for not administering the medication. (E.g. this may be due to the patient not being on the ward at the time of administration)
	Formulation of medication was wrong	The incorrect formulation of a medication was administered to the patient (i.e. slow release instead of regular release formulation)
	Inappropriate/Incorrect Self Administration	Patient self-administers medication resulting in incorrect dose, frequency etc.
	Incorrect dose	The patient was administered the incorrect dose of a medication.
	Incorrect duration of treatment	The duration of the administration of the medication was incorrect (e.g. administered for 3 days instead of 2, or intravenous infusion time was longer than prescribed duration).
Incorrect frequency of dose (extra dose)	The patient received an extra dose that was not prescribed.	

	Incorrect frequency of dose (omitted dose)	A dose of a medication is not administered to the patient as prescribed. This is usually due to oversight or not being aware that the medication has been prescribed.
	Incorrect medication/fluid	The patient was administered the incorrect medication or incorrect fluid replacement
	Incorrect patient	The patient was administered medications that were prescribed for another patient
	Incorrect quantity	When preparing the dose of a medication, the incorrect quantity of medication form is administered resulting in an incorrect dose.
	Incorrect rate of administration	The intravenous medication was administered at an incorrect rate - the volumetric infusion pump rate was set too fast or too slow compared to the prescribed/protocol rate of administration.
	Incorrect route of administration	The medication was administered via the incorrect route. For example a medication might incorrectly be administered intravenous via the route instead of oral liquid. This can also account for confusion of parental routes (e.g. epidural instead of intravenous)
	Incorrect strength	When preparing the dose of a medication, the incorrect strength of the medication is chosen resulting in an incorrect dose.
	Incorrect timing of dose (delayed)	The administration of a medication dose was delayed as to the time it was meant to be administered (> 30 minutes for time critical medications and >2 hours for non-time critical medications)
	Incorrect timing of dose (premature)	The administration of a medication dose was given prior to the dose being due.
	Refusal by patient	Medication prepared but unable to administer as patient refuses therapy.
	Unauthorised self-administration	The patient self-administered their own medication without being observed by nursing/midwifery staff. (this can either be as per prescribed or self-prescribed)
Delivery Process	Damaged/contaminated during delivery	A medication was damaged/contaminated during the delivery process
	Delayed delivery to unit/ward	Medication delivery was delayed to appropriate unit/ward
	Delivered to wrong destination	Medication was delivered to the wrong unit/ward
Dispensing Processes	Damaged/contaminated product	A damaged/contaminated medication was dispensed by a pharmacist for a patient.
	Dispensed in fact of know contraindication	A medication is dispensed that is contraindicated due to a medical complication or an existing allergy/adverse drug reaction.
	Dispensed to incorrect patient	Medication/s was dispensed by a pharmacist for the incorrect patient.
	Expired product	An expired medication was dispensed by a pharmacist for a patient.
	Incorrect dose	The incorrect dose of a medication was dispensed by a pharmacist for a patient.
	Incorrect frequency	The incorrect frequency instructions on a medication label that was dispensed by a pharmacist for a patient.
	Incorrect medication/fluid	The incorrect medication/fluid was dispensed by a pharmacist for a patient.
	Incorrect patient information leaflet	The incorrect patient information leaflet for a medication was provided to the patient by the pharmacist
	Incorrect product due to similar packaging	The incorrect medication was dispensed by a pharmacist for a patient which was due to similar packaging
	Incorrect product not due to similar packaging	The incorrect medication was dispensed by a pharmacist for a patient which was not due to similar packaging

	Incorrect quantity	The incorrect quantity of a medication was dispensed by a pharmacist for a patient.
	Incorrect route	The incorrect route formulation of a medication was dispensed by a pharmacist for a patient.
	Incorrect strength	The incorrect strength of a medication was dispensed by a pharmacist for a patient.
	Incorrect verbal patient directions	The patient was provided with incorrect verbal directions about their medications from the pharmacist
	Omitted patient information leaflet	The patient did not receive a patient information leaflet from a pharmacist required to assist the patient in taking the medication correctly.
	Omitted verbal patient directions	The patient was not provided with the appropriate verbal directions from a pharmacist to assist adhering with medication treatment
	Product label illegible	The directions on the label of the medication container dispensed by a pharmacist are illegible.
	Product label incorrect	The medication or directions on the label of the medication container dispensed by a pharmacist are incorrect.
Post-administration Patient Monitoring	Blood level monitoring not actioned	Failure to action blood level monitoring (e.g. aPTT levels for managing the rate of infusion for heparin infusions)
	Blood level monitoring not reviewed	Failure to check/acknowledge blood level monitoring resulting in adverse outcomes for the patient's medication management
	Failure to activate rapid response/resuscitation team	Failure to escalate care in response to medication management
	Failure to discontinue treatment	Failure to discontinue treatment as prescribed by the doctor/nurse practitioner
	Failure to review medication	Failure to review the appropriateness of continuation of a medication in accordance with the prescription and monitoring parameters.
	Failure/insufficient response to significant change in patient status	Failure or insufficient response to a change in patient status which would affect medication management for the patient. For example patient's blood sugar level is low and patient administered insulin.
	Failure/insufficient/incomplete monitoring	Monitoring for medication therapy was either insufficient or not undertaken
	Incorrect patient	When the monitoring/laboratory results for another patient are used to manage the incorrect patient.
	Incorrect/insufficient handover/transition	This type of incident involves inadequate, incomplete or non-existent clinical handover of a patient's medication requirements including monitoring patient parameters and blood levels.
	Incorrect/insufficient triage in emergency situations	This type of incident involves incorrect/insufficient assessment and triaging of patient incident types involve inadequate assessment, escalation and management of patient's medication requirements including monitoring patient parameters and blood levels.
	Unplanned elevation of care to intensive care setting	When patient deterioration results in transfer to intensive care setting (e.g. ICU) due to insufficient/inadequate monitoring of the patient post-administration of medication.
	Unplanned transfer of care to other institution or clinical service	When patient deterioration results in referral/transfer to specialised care due to insufficient/inadequate monitoring of the patient post-administration of medication.
	Expired constituents	Date of administration has surpassed the expiry date provided on the label of the container of the medication/fluid and has been administered to the patient

Preparation/ Formulation Processes	Incorrect preparation/formulation (dose/concentration)	When preparing a medication/fluid for administration, the incorrect medication, strength, dose, or diluent is chosen prior to administration of the medication.
	Medication delayed	The administration of the medication was delayed due to difficulties during the preparation process.
	Omitted Ingredient	A medication/fluid/electrolyte was omitted/not included in the preparation unintentionally when preparing a product for administration
	Use of damaged/contaminated ingredients	Medication integrity has been damaged or contaminated such that it is not suitable for administration, but has been administered to the patient
Prescribing	Contraindication due to history of allergy	A medication is prescribed to a patient who has a known allergy (previous history of allergy or adverse drug reaction) documented for the medication in the medical record or on the medication chart, but is not administered to the patient
	Contraindication due to interactions with other medications	A medication is prescribed that is contraindicated due to an interaction with another medication which may have increased the chance of toxicity and/or side-effects, but has not administered to the patient.
	Contraindication due to medical condition	A medication is prescribed that is contraindicated due to a medical complication which may increase the toxicity of a medication which may result in increased side-effects/toxicity. For example renal or hepatic impairment may impair the clearance of a medication.
	Delay in prescribing	When medications are not prescribed in a timely manner such that a dose that is required to be administered is missed.
	Duplicate prescription	Medication is unintentionally prescribed twice for the patient resulting in possible duplicate dosing of a medication.
	Incorrect frequency of dose	The frequency of administration of a medication is prescribed incorrectly but is not administered to the patient
	Incorrect dose	The incorrect dose is prescribed for the patient but is not administered
	Incorrect duration of treatment	The duration of treatment is prescribed incorrectly but is not administered to the patient.
	Incorrect formulation	The incorrect formulation of a medication was prescribed for the patient (i.e. slow release instead of regular release formulation), but is not administered to the patient
	Incorrect medication/fluid	The incorrect medication/fluid is prescribed for the patient but is not administered
	Incorrect patient	The medication is prescribed for the incorrect patient, but is not administered. Could involve the wrong patient addressograph attached to medication chart
	Incorrect quantity	Incorrect quantity of a medication is prescribed for a patient, but not administered
	Incorrect rate of administration	The rate of administration is prescribed incorrectly but is not administered to the patient.
	Incorrect route	The incorrect route of administration is prescribed but is not administered to the patient
	Incorrect strength	Incorrect strength of a medication is prescribed (i.e. incorrect dilution of a medication or strength of a topical cream/ointment etc.) but is not administered to the patient, but is not administered to the patient.
Incorrect timing of dose	The time of administration documented for the medication is prescribed incorrectly but is not administered to the patient	

	Medication not prescribed	Medication is not prescribed on the medication chart for administration to the patient. This may be a result of inadequate medication reconciliation or poor clinical handover of information
	Not prescribed required medication (reconciliation error)	After undertaking a medication reconciliation on admission a regular medication is not prescribed.
	Prescription illegible	The prescription is poorly documented on the chart resulting in either an illegible/difficult to read order or an incomplete order.
	Wrong type of medication chart used	Most medications are prescribed on the WA Hospital Medication Chart; however there are some exceptions which require a medication to be prescribed on a specialised chart (e.g. anticoagulants, insulins, opioid infusions etc.)
Procurement/Supplier Process	Damaged/contaminated product	Medication/fluid integrity has been damaged or contaminated such that it is not suitable for administration
	Expired product	Date of administration has surpassed the expiry date provided on the label of the container of the medication/fluid, but has not been administered to the patient.
	Product not available	Medication not available in the clinical area for administration
Storage Processes (in pharmacy or on unit)	Damaged/contaminated product	Medication/fluid integrity has been damaged or contaminated such that it is not suitable for administration
	Expired product	Date of administration has surpassed the expiry date provided on the label of the container of the medication/fluid, but has not been administered to the patient.
	Incorrect storage environment	Medication has not been stored appropriate as per requirements. For example a medication requiring protection from light is stored outside of packaging resulting in the product degrading being ineffective.
	Non-secure storage of controlled substances	Schedule 8 (S8) and Restricted Schedule 4 (S4R) are not stored in correct safe location according to Medicines and Poisons Regulations 2016 and hospital policy
	Refrigeration failure	Medication requiring refrigeration has not been stored in the refrigerator or cold chain has been breached (refrigerator temperature has not been maintained within required range)