1901

Medicine Management - A guide for Student Nurses

Adult Nursing

This document has been designed to support you in objective setting for your clinical placements, identifying learning opportunities and resources related to medicine management



The aim of this booklet is to help you identify learning opportunities during your clinical placements and support you in setting appropriate objectives and achieving your medicines management skills and competencies. It will also guide you in planning you own study. The information given here relates to your Learning Opportunities in Placement, Professional Values and Skills Clusters. This is not a competency document that you need to get signed off. All learning opportunities and skills should be carried out with the appropriate level of supervision. If a Learning Opportunity or Skill is identified for year one, this should continue to be practised in years two and three, not only in year one. The same is true of the Learning Opportunities and Skills identified for year two, these should continue to be practised in year three.

In order to be able to prepare and administer medicines safely under direct supervision, from your first placement onwards, learn the medicines in use in that clinical area. Your goal should be that at the end of every placement you have an understanding of the medicines that your ward / area keep as stock.

For each medicine you need to know the following as a minimum:

- What it is used for
- Side effects to monitor for and how to monitor for these
- The normal dose range

This will be hard at first as there are a lot of medicines used. As you progress through your training it will get easier as a lot of medicines are used in different areas so that over time you have less new ones to learn. As you approach the end of your training you will be glad that you did this as you will have more time available to gain experience in ward and patient management issues.

Tips for learning about the medicines

- Find out about your placement in advance what types of patients are cared for there? Make sure your anatomy and physiology knowledge is up to date.
- Every day look at the drug charts of the patients that you are helping to care for. Make a note of the medicines that they are taking and look them up. It will be easier for you to understand and remember them if you can relate them to the patient that you are looking after.
- Offer to tidy up the medicines trolley. Test yourself as you do it, do you know what each medicine is for? Keep the BNF to hand while you do it. Make sure that your mentor knows what you are doing as this may take some time.
- Talk to patients about their medicines. What side effects have they experienced? How did this make them feel?
- Talk to pharmacists on the ward

Student Nurses and checking Medicines

Second checks should be fully independent. The second checker needs to have full knowledge of what they are checking, so that they have the capability to spot any errors. The second checker must also feel confident in speaking out if they do spot a mistake.

For these reasons student nurses should not take the place of a registered nurse in the checking process.

In order for you to gain knowledge and experience you should participate in checking processes but as an additional person.

Additional resources are at the end of the booklet.

- Management of controlled drugs
- Checklist for discharge medications
- Medicines commonly involved in errors
- Checking and recording the drug fridge temperature

Year one

| Knowledge | Learning Opportunities | Skills |
|--|---|--|
| Legal and Ethical Framework | Legal and Ethical Framework | Legal and Ethical Framework |
| Read the following documents and reflect on how they affect you: • NMC Code • NMC standards for Medicine Management Available from the NMC website | Look at how the different types of medicines are stored on the ward. Understand the difference between stock and non stock medications. Relate this to the Trust Policies and NMC standards. | Be able to obtain Trust policies and BNF from the intranet |
| Legal and Ethical Framework | Preparing and Administering Medicines Safely | Legal and ethical framework |
| Access the following policies from the intranet and understand how they relate to practice in the clinical area • Refrigerated medicines policy • Management and Prevention of Omitted and Delayed doses Policy • Medicines Policy –appendix E, medicine administration | Accompany Your mentor on medicine rounds. Look for the following: • How the 'Rights' of drug administration are put into practice • How the NMC standards are put into practice in the clinical area | How to read the drug fridge temperature, record the data, reset the thermometer, understand if any readings are out of range and get support from a qualified nurse if this occurs |
| Legal and Ethical Framework Learn and understand the 'rights' of drug administration. Reflect on why they are essential | Preparing and Administering Medicines safely Ask your mentor to show you the drug chart and how it is used in practice | Preparing and Administering Medicines Safely Be able to correctly use the BNF, both in paper form and on the intranet |

| Preparing and Administering Medicines Safely | Preparing and Administering Medicines Safely | <u>Calculations</u> | |
|--|---|---|--|
| If you use a smartphone, download the BNF app (this is free of charge) | Identify how the following different types of medicines are stored on the ward • Patient's own drugs (oral) • Ward stock drugs (oral) • Controlled drugs – ward stock and patients own • Drugs for the non oral route | Complete the Student Nurse Calculation workbook Borrow calculation textbooks from the library as required | |
| Legal and Ethical Framework | Preparing and Administering Medicines Safely | Preparing and Administering Medicines safely | |
| Read the legislation on the storage and administration of controlled drugs. | Observe controlled drugs being administered on the ward. Identify how this differs to the administration of other medicines | Administer oral medications Administer a subcutaneous injection | |
| | | Administer an intramuscular injection | |
| | | Administer inhaled medication | |
| | | All under direct supervision Reflect on the potential hazards of each route of administration and how these can be minimised | |
| Preparing and Administering Medicines Safely | Preparing and Administering Medicines Safely | Preparing and Administering Medication Safely | |
| Understand the difference between a side effect and an allergy | Observe how allergies are identified and recorded | Set up a nebuliser | |
| Preparing and Administering Medicines Safely | Preparing and Administering Medicines Safely | Preparing and Administering Medication Safely | |
| Have knowledge of the different types of waste – read the policies on the intranet | Participate in ordering stock and non stock medications | Correctly assemble a sharps bin and close a sharps bin | |

Year two

| Knowledge | Learning Opportunities | Skills |
|--|---|---|
| <u>Legal and Ethical Framework</u> | Preparing and Administering Medicines Safely | Preparing and Administering Medicines safely |
| Understand the uses of and differences between the following: • Medical prescribers • Non-medical prescribers • Patient Group Directions • Patient Specific Directions | Follow the flow sheet for obtaining medicines out of hours. This includes accessing and using the Stock Locator on the Trust intranet, Accessing the Emergency Drug Room (at QEH) or contacting the Outreach Nurse Practitioner Team (at UHL) | Administer medications via a nasogastric tube and a PEG tube under direct supervision. Reflect on the potential hazards of each route of administration and how these can be minimised |
| Preparing and Administering Medicine Safely | Preparing and Administering Medicines Safely | Preparing and Administering Medicines Safely |
| Understand the signs, symptoms and treatments for anaphylaxis | Check the emergency trolley, identify drugs used in anaphylaxis | Can prepare pre-filled syringes that are stored on the emergency trolley, ready for use |
| Legal and Ethical Framework | Preparing and Administering Medicines Safely | Preparing and Administering Medicine Safely |
| Understand the role of the nurse with regards to the storage of medication by patients in their own homes. Reflect on the challenges this may present | Participate in medicine administration rounds / medication administration in community settings with a registered nurse | Countersign administered medicines during the medicines administration round appropriately and use the correct omission codes and take all required actions to rectify issues causing a dose omission. Document these correctly |
| Working with the Multidisciplinary Team | Working with the Multidisciplinary Team | Preparing and Administering Medication Safely |
| Understand the role of community pharmacies | Attend a post-take ward round. Understand the role of the pharmacist | Identify if a patient is prescribed a medication that they are allergic to and take correct action |

| Working with the Multidisciplinary Team | Working with the Multidisciplinary Team | Working with the Multidisciplinary Team | |
|--|---|--|--|
| Understand the role of the LIMOS team | Make a referral to the LIMOS team (Lewisham Only) | Be able to identify which patients would benefit from a referral to the LIMOS team (Lewisham only) | |
| Working in Partnership with the Patient | Working with the Multidisciplinary Team | Working with the Multidisciplinary Team | |
| Read the Self Administration of Medicines Policy. Reflect upon the challenges this may present the nurse in relation to accountability | Participate in referring a patient to the District Nurse for support with medication administration | Can identify which patients need to be referred to the District Nurse | |
| Working in Partnership with the Patient | Working with the Multidisciplinary Team | Working with the Multidisciplinary Team | |
| Identify why patients may not adhere to their prescribed medications. Reflect upon how the nurse can support the patient to do so | Identify the differences between discharging a patient to their own home and a nursing or residential home by working with your mentor to discharge patients | Can identify a MAR chart and when it is required | |
| Working in Partnership with the Patient | Working in Partnership with the Patient | Working in Partnership with the Patient | |
| Understand the principles behind successful patient education | Observe the respiratory nurses educate the patient as to how to use their inhalers correctly / Attend chest clinic / attend a teaching session on use of inhalers | Can teach a patient how to use their inhaler correctly | |
| Working in Partnership with the Patient | Preparing and Administering Medicines Safely | Preparing and Administering Medicines Safely | |
| Have knowledge of how different insulin types work and when they should be taken in relation to food | Participate, as a third person, in the daily Controlled Drug Balance Checks | Can state the appropriate actions to take in the event that the CD balance held does not correlate with that documented in the CD register | |

Year Three

| Knowledge | Learning Opportunities | Skills |
|---|--|---|
| Administering Fluids | Administering Fluids | Administering Fluids |
| | | |
| Understands the following terms: | Calculate the rates that infusion pumps should | Can identify and document cannula VIP Scores |
| Osmosis | run at in order to administer IV fluids according to | |
| Diffusion | a prescription | |
| Oncotic Pressure | Administering Fluids | Administoring Fluids |
| Administering Fluids | Administering Fluids | Administering Fluids |
| Understand the difference between crystalloids | Participate in the care of a septic patient | Accurately completes the fluid balance chart of a |
| and colloids | Tarticipate in the care of a septic patient | patient receiving IV fluids |
| Administering Fluids | <u>Calculations</u> | Working with the Multidisciplinary Team |
| | | |
| Understands the physiology, signs and symptoms | Participate in the care of a patient that is | Can refer a patient to the LIMOS Team (Lewisham |
| of sepsis | receiving intravenous insulin. Understand how the | Only) |
| | rate of the infusion is calculated | |
| Administering Fluids | Preparing and Administering Medicines Safely | Working with the Multidisciplinary Team |
| Can Identify the common anter of the (compic six) | Double in the control of the control | Con water a matient to the District Numer for |
| Can Identify the components of the 'sepsis six' care bundle | Participate in a 'Medicine Safety Walkabout' with either the pharmacist, practice development | Can refer a patient to the District Nurse for support with medication at home |
| Care bullate | nurse or specialist nurse, medicines management | support with medication at nome |
| Preparing and Administering Medicines Safely | Preparing and Administering Medicines Safely | Preparing and administering Medicines Safely |
| | | |
| Understand the concept of bioavailability and | Participate in the administration of controlled | Can check that medications are stored safely on |
| how this affects route and dose selection | drugs as the 'third' checker | the ward and escalate if they are not |
| | Working in Partnership with the Patient | Working in Partnership with the Patient |
| | | |
| | Counsel (educate) patients regarding their | Can print the discharge summary from iCare |
| | discharge medications under the supervision of a | |
| | registered nurse | |



Management of controlled drugs

The following principles of controlled drug [CD] management must be adhered to at all times as per Trust policy. The full policy for the management of controlled drugs is in the acute medicine policy which is available via the LGnet.

- The CD keys must be kept separate from any other keys
- The CD keys must be held <u>on the person</u> of the nurse in charge or the designated deputy at all times. The designated deputy must be a registered nurse.
- Giving CD's is a 2 person process. These must be the same 2 registered nurses throughout the whole process.
 - a) To check the amounts of stock held against the register
 - b) To check and prepare the drug
 - c) To identify the patient
 - d) To administer the drug / observe the patient take the drug
 - e) To sign to state that the drug has been administered.
- If multiple patients require the administration of CD's these must be given one at a time. It is not acceptable to check and administer multiple patient doses
- Any wastage of drug either intentionally or unintentionally must be recorded in the CD register
- Only one CD preparation can be entered per page of the register
- Patients own CD's must be entered in the 'Patient's Own Drug' CD register. If they
 are returned to the patient on discharge this must be entered on the register and the
 balance documented as zero.
- All CD's must be checked every 24 hour period. All stock and all patients own CD's must be checked.
- Discrepancies must be reported immediately to the senior nurse on duty at that time i.e. ward manager or clinical site manager.



Checklist for Discharge Medications

- Print out a copy of the TTO prescription from iCare
- Check that this matches the copy in the TTO bag
- Take the TTO bag to the patient's bedside
- Check your patient's allergy status
- Start at the top of the sheet and identify each medicine in turn.

Each medicine will have a pharmacy endorsement on the TTO prescription:

| Endorsement | Explanation | Location of Medicine |
|-------------|----------------------------------|----------------------------|
| POD | patient's own supply of the | In the POD locker |
| | drug will be used. | |
| DFD | supplied in advance for the | In the POD locker |
| | patient during their admission | |
| PODH | the patient has a supply of this | At the patients home. Will |
| | medicine at home | not be supplied by LGT |
| | | pharmacy |
| Pharmacy | the Pharmacy department will | In the TTA bag |
| | dispense | |

Check the label on each box of medicine is correct

Name of patient

Drug name

Drug dose

Time of dose

- Explain each medicine to your patient. Include why they have been prescribed the medicine, side effects to observe for, what to do if side effects occur
- Provide the 'You and Your Medicines leaflet'
- Sign a copy of the TTO to state that you have checked the medicine. File this in the medical notes

Where dosette boxes have been supplied, or Pharmacy have assessed a patient's own dosette box to be suitable for continued use, ensure that this has been added to the bag

Unlabelled medicines / ward stock must not be sent home with the patient

If a patient is going to a nursing home or Brymore House a MAR chart must also accompany the patient

Medicines commonly involved in drug errors

| Drug name | Drug may be confused with | | |
|---|--|--|--|
| Adcal | Adcal D3 caplets, Adcal D3 chewable | | |
| Adcal D3 caplets | Adcal, Adcal D3 chewable | | |
| Adcal D3 chewable | Adcal, Adcal D3 caplets | | |
| Amiloride | Amlodipine | | |
| Amlodipine | Amiloride | | |
| Azarga® (Brinzolamide + Timolol) | Azopt® (Brinzolamide) | | |
| Azopt® (Brinzolamide) | Azarga® (Brinzolamide + Timolol) | | |
| Betnovate® (Betamethasone) | Dermovate® (Clobetasol propionate) | | |
| Bisacodyl | Bisoprolol | | |
| Calcichew | Calcichew D3, Calcichew D3 Forte | | |
| Calcichew D3 | Adcal D3, Calcichew, Calcichew D3 Forte | | |
| Calcichew D3 Forte | Calcichew, Calcichew D3 | | |
| Carbamazepine | Carbamazepine MR version | | |
| Carbamazepine MR | Carbamazepine non-MR version | | |
| Cefotaxime | Ceftazidime, Ceftriaxone and Cefuroxime | | |
| Ceftazidime | Cefotaxime, Ceftriaxone and Cefuroxime | | |
| Ceftriaxone | Cefotaxime, Ceftazidime and Cefuroxime | | |
| Cefuroxime | Cefotaxime, Ceftazidime and Ceftriaxone | | |
| Co-amilofruse | Co-amilozide | | |
| Co-amilozide | Co-amilofruse | | |
| Co-beneldopa | Co-careldopa, confusion between different formulations of Co-beneldopa | | |
| Co-careldopa | Co-beneldopa, Co-careldopa MR version | | |
| Co-careldopa MR | Co-careldopa non-MR version | | |
| Direct acting oral anticoagulants (e.g. apixaban) & low molecular weight heparins (e.g. enoxaparin) | Common errors resulting in concurrent prescribing and administration of both drug classes | | |
| Escitalopram | Citalopram | | |
| Enoxaparin | Different strengths available and dose is dependent on patient's weight and renal function | | |

| Epoetin | Different brands and strengths available (include brand name in order) |
|------------------------------|--|
| Folinic acid | Folic acid |
| Humalog® Products | Confusion between Humalog, Humalog Mix25 and Humalog Mix50 |
| Humulin® Products | Confusion between Humulin I, Humulin M3 and Humulin S |
| Hydroxychloroquine | Hydroxycarbamide |
| Hydroxycarbamide | Hydroxychloroquine |
| Hydralazine | Hydroxyzine |
| Hydroxyzine | Hydralazine |
| Inhalers | In all cases, strength and type of device needs to be specified |
| Insulins | In all cases, strength and type of device needs to be specified |
| Interferon | Different brands available (include brand name in order) |
| Maxidex® | Maxitrol® |
| Methylprednisolone Injection | Confusion between different methylprednisolone salts intended for different routes |
| Morphine PO | Confusion between immediate release and modified release preparations |
| Nicardipine | Nifedipine |
| Nifedipine | Nicardipine, Nimodipine |
| Novomix 30 Insulin | Novorapid Insulin |
| Novorapid Insulin | Novomix 30 Insulin |
| Oxycodone PO | Confusion between immediate release and modified release preparations |
| Penicillamine | Penicillin |
| Pramipexole | Different strengths available (and base/ salt detail is confusing) |
| Rifadin® (Rifampicin) | Rifinah® (Rifampicin + Isoniazid) |
| "Sando-" products | Common errors between: Sando-K, Sandocal, Phosphate Sandoz |
| "Slow-" products | Common errors between: Slow-K, Slow-Sodium |
| Sodium valproate | Confusion between enteric coated and modified release preparations, Valproic acid preparations |
| Sulfadiazine | Sulfasalazine |
| Sulfasalazine | Sulfadiazine |
| Valproic acid | Sodium valproate preparations |

| Xalacom® (Latanoprost + Timolol) | Xalatan® (Latanoprost) |
|----------------------------------|----------------------------------|
| Xalatan® (Latanoprost) | Xalacom® (Latanoprost + Timolol) |
| Zolpidem | Zopiclone |



Checking and recording the drug fridge temperature

| This needs to | be c | lone | every | y day |
|---------------|------|------|-------|-------|
|---------------|------|------|-------|-------|

Document the current temperature

Document the previous maximum temperature

Document the previous minimum temperature

RESET THE THERMOMETER

If any of the numbers that you have written down are outside the range of $+2 - +8^{\circ}$ C action must be taken

Check that the door is shut and locked

Recheck the current, maximum and minimum temperatures after 30 minutes. **Document your findings on the fridge monitoring sheet**

If the recordings are still out of range contact estates / Vinci / Bouygues as applicable. **Document this on the fridge monitoring sheet**

The Refrigerated Medicines Policy is on the intranet with more details and information on quarantining medicines

If you are unsure what to do, contact your pharmacist during normal working hours. Out of hours contact the senior nurse on duty.