MIL Oxford University Hospitals NHS Trust

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This Medicines Information Leaflet is produced locally to optimise the use of medicines by encouraging prescribing that is safe, clinically appropriate and cost-effective to the NHS.

Prescribing Guidelines (summary)

Please see the full Prescribing Guidelines for more details.

A prescription is a means of communication from the prescriber to another healthcare provider about intended use of a medicine for a patient. It should be legible, clear, accurate, and complete.

Studies on prescribing show that errors occur at every step, and are all too common. The EQUIP study found 8.9% of all prescriptions contain an error; 1.74% of these are potentially lethal. Across the OUH about 12,000 prescriptions are written every day; around 1,000 will contain an error of some sort, and 17 may contain a potentially fatal error. Despite safety nets, such as nurses, pharmacists and colleagues, the potential for error is high.

Never rush, **always check carefully**, **write clearly and legibly**, **concentrate**; **do not allow yourself to be interrupted**. Use the BNF and prescribing information resources, and **always ask if in ANY doubt**.

Prescribing should always be in the patient's best interests. Appropriate prescribing is to understand the pathophysiology of a health problem and match it to the mechanisms of action of the relevant medicines. Follow the key principles of prescribing *(overleaf)*.

Only certain healthcare professionals are legally allowed to prescribe. Prescribers must recognise and work within the limits of their competence and develop the relevant knowledge and skills relevant to their prescribing practice.

Medical staff with limited registration, such as Foundation year 1 doctors (FY1's), are permitted to prescribe only for inpatients in the speciality in which they are employed. They are not permitted to prescribe for outpatients, on FP10 (HP) prescriptions or for private patients.

Hand-written prescriptions should be in blue or black indelible ink and must not be written in pencil.

Legally, prescribers must sign and date all prescriptions; some may be computer-generated (the prescriber must still sign prescriptions for CDs in ink). The prescriber should print their name and contact/bleep number on all prescriptions. Non-medical prescribers must be identified as such on the prescription by annotating their name and prescribing status as per Non-medical Prescribing Policy.

Blank prescriptions must never be signed in advance of prescribing to avoid potential misuse; particularly FP10 (HP) prescriptions which can be used outside the Trust.

All prescriptions must include:

- Prescriptions may be handwritten and must include the prescriber's signature or may be computer-generated (prescriptions for CDs must still be signed in ink by the prescriber)
- Date (prescriptions for controlled drugs (CDs) must have the date prescription was signed)
- Name or other appropriate identification of the patient (prescriptions for controlled drugs (CDs) must have the patient's name and address)
- Name of the medicine –use the international non-proprietary (generic) name but some medicines should be prescribed by brand name (*see Table 1*)
- Allergy status of the patient must be clearly documented on the prescription. The information about the hypersensitivity reaction should include the name of the medicine, reaction experienced, and the source of the information as a minimum.
- Age (or date of birth) and weight of the patient if under 12 years of age
- Controlled drug (CD) prescriptions must also have the following:
  - Dose clearly defined (does not need to be in words and figures)
  - Strength of the medicine if available in more than one strength
  - Formulation (liquid, capsules, patch) – not always necessary for inpatient prescriptions
  - Total quantity in words and figures (liquid quantities in millilitres) – not required on the inpatient prescription chart

A prescription should also include:

- Dose – clearly specified with a max. if necessary
- Route to be administered – avoid multiple routes
- Frequency or dosage interval – for "when required" include maximum frequency or total daily dose
- Formulation – specify if a liquid is required or modified-release preparation
- Indication and duration should be stated when prescribing antimicrobials
- Bodyweight (or estimated working weight) or body surface area (BSA) should be documented for all patients and must be documented on any prescription for children

Ten Principles of Good Prescribing

1. Be clear about reasons for prescribing
- Establish an accurate diagnosis whenever possible
- Be clear how the patient is likely to gain from the prescribed medicines

2. Take into account patient's medication history before prescribing
- Obtain an accurate list of current & recent medications (including over the counter and alternative medicines), prior adverse drug reactions, and drug allergies from the patient, their carer/s, or colleagues

3. Take into account other factors that might alter the benefits and harms of treatment
- Consider other individual factors that might influence the prescription such as physiological changes with age and pregnancy; kidney, liver, or heart function)

4. Take into account the patient's ideas, concerns, & expectations
- Seek to form a partnership with the patient when selecting treatments, making sure they understand & agree with the reasons for taking the medicine

5. Select effective, safe, & cost-effective medicines for patient
- The likely beneficial effect of the medicine should outweigh the extent of any potential harms, and this judgement should be based on evidence
- Do not prescribe medicines that are unlicensed, 'off-label', or outside standard practice unless satisfied no other medicine would meet the patient's needs
- Choose the most appropriate formulation, dose, frequency, route of administration, & duration of treatment

6. Adhere to national guidelines & local formularies
- Be aware of guidance produced by respected bodies, but always consider the individual needs of the patient
- Select medicines with regard to costs & needs of other patients
- Be able to identify, access, and use reliable and validated sources of information (eg. BNF), and critically evaluate potentially less reliable data

7. Generate unambiguous legal prescriptions (*see overleaf*)
- Be aware of common causes of medication errors and how to avoid them

8. Monitor the beneficial and adverse effects of medicines
- Identify how to assess the benefits & adverse effects of treatment
- Understand how to alter the prescription accordingly
- Know how to report adverse drug reactions (ADRs)

9. Communicate & document prescribing decisions & reasons
- Communicate clearly with patients, carers/relative and colleagues
- Give patients important information about how to take the medicines, the benefits, potential adverse reactions (especially those requiring urgent review), & any monitoring required
- Document prescribing decisions accurately

10. Prescribe within your limitations of knowledge, skills, & experience
- Keep your practice, knowledge & skills up to date
- Be prepared to seek the advice and support of suitably qualified professional colleagues
- Where appropriate make sure prescriptions are checked (e.g. calculations of intravenous doses)

Prescribers should be aware of current guidance including licensed indications, side effects and contraindications of medicines. They should be aware of the clinical and cost-effectiveness of the medicines they prescribe.

Guidance on writing a prescription and the clinical use of medicines, including NICE guidance and recommendations, can be found in the British National Formulary (BNF).

Only accepted abbreviations should be used. Please see the full Prescribing Guidelines for more details.

To avoid error prescribers should not abbreviate medicine names. For example, "ISMN" should be written "isosorbide mononitrate" and "FeSO4" as "ferrous sulphate."

Units must be written in full, particularly for heparin and insulin. Abbreviations such as "IU" or "U" can be misinterpreted and may also be misread as "IV" leading to administration and dosing errors.

Electrolytes should be prescribed in millimoles (mmols) or micromoles to avoid confusion, particularly when prescribed for parenteral administration.

Insulin must be prescribed by brand name only for subcutaneous use, and generic name only for intravenous infusions. The intended insulin product (brand and device) must be confirmed on the prescription.

Other medicines which need to be prescribed by brand name (and generic name) include:

Medicines which should be prescribed by both brand and generic name	**Medicines for which its useful to prescribe brand name as well as generic name**
- Amphotericin - Botulinum toxin - C1-esterase - Ciclosporin - Tacrolimus - Subcutaneous Insulins (including device such as vial, pen, cartridge) - Interferon - Lithium - Mesalazine - Theophylline/Aminophylline - Medicines which are available as various devices such as adalimumab, somatropin.	- Hormone replacement therapy (HRT) - Products with multiple ingredients - Inhalers (including the device patient usually uses) - Eye and/or ear and/or nose drops - Oral electrolyte products (e.g. *Sando K* contains potassium 12mmol per tablet; *Slow-K* contains potassium MR 8mmol per tablet; *Slow Sodium* contains 10mmol sodium per tablet; *Phosphate Sandoz* contains 16mmol phosphate per tablet) - Methylprednisolone to clarify preparation and route e.g. IM depot injection or IV or SC

References:

Dornan T. An in depth investigation into causes of prescribing errors by foundation trainees in relation to their medical education. EQUIP study. 2009 www.GMC-uk.org

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