‘How to guide ’

Safe use of insulin: Inpatients
Example 1 Prescribing abbreviations

Aim
To help pharmacists ensure that prescribing abbreviations for insulin (e.g. ‘u’ or ‘iu’) are never used, as required by NPSA RRR013 Safer administration of insulin (link)

Background
Prescribing abbreviations and unclear insulin prescriptions are a major threat to patient safety. Continual correction of these prescribing errors by pharmacy staff is not a safe or sustainable position. In some circumstances, overdose of insulin due to abbreviations or incorrect device is a Never Event (2015/16) (link)

Overdose refers to:
=> When a patient receives a tenfold or greater overdose of insulin because a prescriber abbreviates the words ‘unit’ or ‘international units’, despite the care setting having an electronic prescribing system in place

Current performance
1) Find example drug charts showing ‘u’ or other unclear doses. Ask all the ward pharmacists to make anonymised copies of any poor examples they see so you have a selection from around the hospital. Work closely with your Medication Safety Officer.

2) Quantify the problem by doing a simple audit of all prescriptions on 2 or 3 separate days – choose a different day each week. The audit can be done on any number of wards (try for as many as possible). Use a simple tally chart showing
   - the number of patients on each ward who are prescribed insulin
   - the number that have an abbreviation for units or units is written unclearly anywhere on the chart.
   - include charts where this has been corrected
   - make sure everyone collecting this data knows what’s required; pilot your data collection form with a few staff before using more widely

3) Summarise the data you collect as a table or chart. Depending on the number of wards included, you may want to break this down by speciality as well as having overall totals

4) If you have an electronic prescribing system, is there any way that ‘u’ abbreviations could happen?

Strategies
Success is crucially dependent on support from prescribers, nurses and management; pharmacy cannot fix this alone. The example poor prescriptions and data summary need to be presented at appropriate medicines, diabetes and safety committees in your trust. The chief or other senior pharmacist should attend these meetings to ensure actions are agreed.

Sad but true, the one sure way of getting this issue to the top of all agendas is for a Serious Incident caused by ‘u’ to actually happen. Obviously you want the problem fixed without this. Anonymised local examples (illustration top right) where no harm occurred can be used to make the risk relevant and tangible. For clinical staff, stress, with examples, the real danger of patient harm. Managers need to know the extreme risk to the organisation if a serious incident occurs, so not acting becomes impossible. Aim for a trust-wide zero tolerance policy and regular formal reporting on performance, preferably at board level.
Example policy statement: For patients prescribed insulin, abbreviations for the word ‘unit’ must never be used. Failure to comply with this policy puts patients at increased risk of a very serious and well-documented medication error. All incidents of non-compliance will be reported to……….

Possible actions

- **Training** National on-line training on insulin safety is available from The Virtual College, but there is a charge for organisations or individuals to use this link. Many pharmacy departments also include insulin prescribing in induction programmes for junior doctors. You could recommend that training for clinical staff is increased with more pharmacy in-put. Nursing staff have an important role to play, identifying potential errors and ensuring abbreviations are not used in administration records. Monitor training uptake by making attendance/completion records widely available. Training has an important part to play. However, without further follow up, training is unlikely to result in major change.

- **Chart design** Many trusts have redesigned their diabetes/insulin drug charts to improve safety and now include pre-printing the word ‘units’. The Useful information (1) below has some examples. Any new drug chart would require agreement across the organisation. Better chart design can improve safety, but is not totally reliable. There are anecdotal reports of clinicians still writing ‘u’ abbreviations even with pre-printed charts. Electronic prescribing systems must have software that prevents use of unsafe prescribing abbreviations.

- **Ward round feedback** The consultant nominates a junior doctor or pharmacist to review basic prescribing safety issues (e.g. legibility, unsafe abbreviations, incomplete allergy status etc) on each chart during the ward round. The reviewer then highlights any issues to the group. This provides an excellent feedback opportunity and the consultant involvement ensures recognition that this is a serious issue.

- **Speed dating** Recognising that it can be difficult to track down prescribers when an error is noticed, ‘PharmDoc’ dating has been tried. Short time slots (10-20 minutes) are set aside each week when junior doctors and pharmacists meet together to feedback on errors and other medicines issues. Highlight good prescribing as well!

- **Incident reporting** The NHS Outcomes Framework for 2015-16 uses safety incident reporting as an indicator of patient safety and patient safety reporting culture. Your Medication Safety Officer should know about all medicines safety incidents in the organisation. Staff could continually report all insulin abbreviation incidents or report during pre-set time periods. Incident reports are reviewed within the trust so this route ensures that insulin stays on your local safety agenda. Staff can be reluctant to report incidents because of fear it may damage relationships with their colleagues. Support for reporting from senior clinicians and managers can alleviate this. On a one to one level, anyone involved in a serious error case knows what a heavy toll it takes. If you and your colleagues can prevent this happening, have no doubt that your intervention matters to patients, clinicians and the trust.

- **Audit** The simple audit in the earlier current performance section can be carried out regularly (e.g. monthly, quarterly) to demonstrate progress and provide assurance that insulin prescribing abbreviations are no longer used. Ward/site comparisons can be helpful to show where change has been effective. Comparative data can help motivate change in departments which appear well outside ‘normal’ practice. Nevertheless be careful not to get pinned down in data, trying to resolve small anomalies. Keep focussed on whether or not unsafe prescribing abbreviations for insulin are still being used. Audit reports need to be shared with senior colleagues and clinical governance committees; the chief pharmacist can advise on this.

- **Service Contracts** Your commissioning organisation may want to support improvements in insulin safety. Commissioners can do this by including specific requirements in the contract or using other incentives such as CQUINS. [The Commissioning for Quality and Innovation payment framework enables commissioners to link a proportion of the trust’s income to the achievement of local quality improvement goals.]. For example, the trust might be required to conduct 3 successive audits which demonstrate that unclear abbreviations for insulin are not used. Such initiatives can encourage buy-in
from staff across the Trust. Collaboration with commissioners can be very worthwhile in developing Key Performance Indicators for potential inclusion in quality contracts.

**Tips for success**

* Really stress the awful consequences of not changing: patient harm, never events, litigation, dissatisfied patients, poor governance, financial risk, bad publicity

* Pharmacy cannot fix this alone; support from all clinicians, managers and patients is vital

* Soap box what you are doing: tell everyone you see, get the message in bulletins, e-mails, screensavers, etc. Very important, keep on telling everyone – reminders are essential to keep things on the agenda

* Decide simple things to monitor so it’s easy to provide regular feedback on progress

**Useful information**

1. 2014 UK insulin prescription chart design competition winners. [link]
2. Caldwell G. Real time check and correct of drug charts on ward rounds – [link]
3. University Hospitals of Leicester NHS Trust. PharmDoc dating project. [link]

This is one of three ‘How to guides’ on insulin safety:

- Safe use of insulin: Inpatients
  - General guide [link]

- Safe use of insulin: Inpatients
  - Example 1 Prescribing abbreviations [link]

- Safe use of insulin: Inpatients
  - Example 2 Patient self-administration [link]

There is also a ‘How to guide’ on reducing the incidence of omitted medicines [link]