

SAFE PRESCRIBING & ADMINISTRATION OF MEDICINES IN SCOTTISH HOSPITALS

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RCPE Symposium

**Royal College of
Physicians of Edinburgh**

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Hospital Medication errors – the pharmacist's perspective

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What does a pharmacist do

Pharmacists are responsible for:

- the quality of medicines supplied to patients
- ensuring that the supply of medicines is within the law
- **ensuring that the medicines prescribed to patients are suitable**
- advising patients about medicines, including how to take them, what reactions may occur and answering patients' questions.

Initial musings / 1

- 20 bed ward, average of 3 medicines per patient prescribed per administration time = 1680 medicine administration tasks per week. Clinical pharmacist on ward 2.5 hours per day Mon-Fri
- Most prescribing, preparation, administration and monitoring occurs outwith allocated “clinical pharmacy” visit
- Pharmaceutical needs met by –
 - **direct patient-specific interventions (clinical pharmacy) AND**
 - **construction and maintenance of medication processes to ensure safety and efficiency in the ordering / storage / preparation / prescribing / administration and monitoring of medicines (indirect care)**
- Systems and processes must ensure safe, effective and appropriate prescribing and administration occur 24/7

Initial musings / 2

- Staff often want to absorb and accept blame themselves (“It was all my fault, I made the mistake”). This can stifle the learning process.
- What role does “luck” (good and bad) have to play in medication errors?



Scenario 1

- Patient diagnosed with vertebral artery dissection. Heparin initiated as a 5000 unit IV bolus followed by continuous IV infusion.
- Dialogue reflects staff recollection of the event.....

What process improvements could have prevented this?

- Physical presence of heparin on ward
 - Ward shouldn't have had that strength of heparin – non stock
 - “best fit” chosen by staff supplying medicines - appropriate?
 - Automated ward drug cupboards / automated top up systems
 - Tidy cupboards?
- 2nd check – what purpose? Is a single check better?

Clinical pharmacy intervention unlikely to have prevented this error.

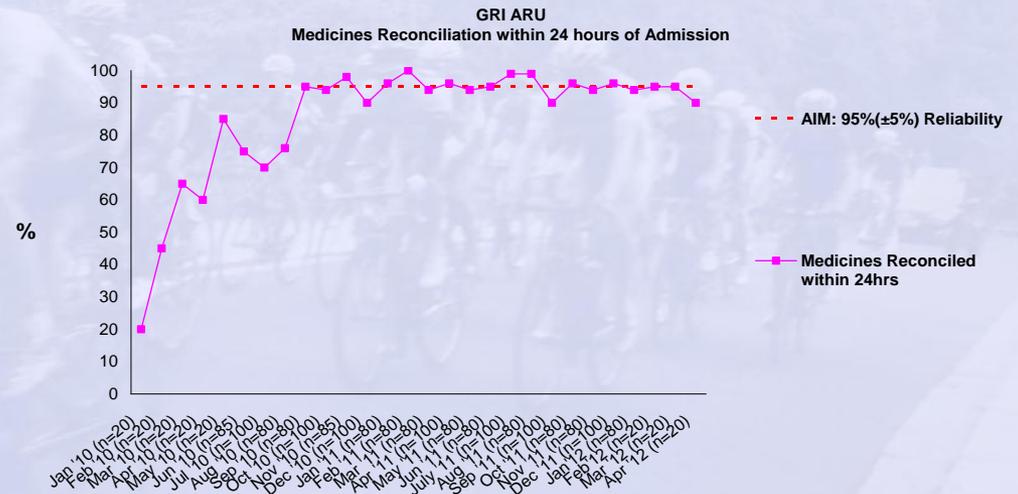
Medication supply processes not simple - how many more drugs are out there like Heparin 25000 units / 5ml.

Pharmacy perspective

- Clinical pharmacists are key in preventing medication errors – but resource is scarce and requires targeting (Triage / referral)
- Errors can occur even with “perfect” prescribing
- All medicines have the potential to cause harm
- Targeting clinical pharmacy resource places more pressure on the “indirect” processes that govern medicines use
- Reactive learning approach – difficult to change to proactive

Final musings / 1

- Systematic review of processes and application of the (better) refined process can result in significant changes e.g. ventilator acquired pneumonia / medicines reconciliation
.....winning the Tour de France?



Operational definition: Medicines Reconciliation is collecting an accurate list of patient's medicines on Admission and documenting in the 'Medicines Reconciliation' page of the unitary case record, whether each medicine is to continue, stop or be amended. Measures apply at transition point i.e. prior to transfer from ARU

Final musings / 2

- What part does luck play? Would it have been bad luck or process failure if Bradley Wiggins or Chris Froome had to withdraw from the Tour (e.g. illness / crash) in the early Tour stages?
- Is it “good luck” that we often challenge the human body (intentionally and unintentionally) with dangerous and complex medicines – and patients survive this unscathed or with minimal damage?
- Not all medication errors are preventable – but by redesigning processes and targeting clinical pharmacy resources we can reduce the incidence of medication errors