PostScript Safety

NHS Greater Glasgow and Clyde

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Medicines Reconciliation

Physicians who work in medical receiving should appreciate the importance of medicines reconciliation. The argument runs like this: as physicians, prescribing represents our main therapeutic intervention, so to do our job well, we have to prescribe well. To prescribe to the best of our abilities, we must obtain an accurate account of the medicines a patient is taking at the time of admission; decide which should be continued, stopped, adjusted or added based on the patient's condition; and finally ensure that the inpatient prescription chart accurately reflects these decisions. Medicines Reconciliation is just the formal name for this process. In theory, we have always done it, but in practice it is too often done informally and incompletely, leading to avoidable drug errors, omissions and interactions, as well as inaccurate discharge communication with GPs. Therefore, to do our job well, we must formally complete medicines reconciliation for every admission.

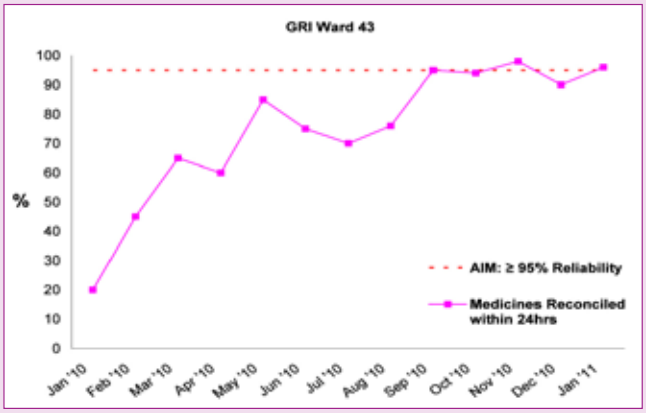
Over the last five months to January 2011 at the acute medical unit in Glasgow Royal Infirmary we have completed formal medicines reconciliation for 95% of our patients within 24 hours of their admission. This is a substantial improvement on the completion rate in the first half of 2010, and is due to a package of measures we instated with this goal in mind.

The first step was to identify a consultant in acute medicine to lead on improving medicines reconciliation in conjunction with the pharmacy team. We also went through a stepwise process of designing, modifying and adopting a medicines reconciliation form as part of the universal patient record so that it fitted with the workflow of record-keeping.

Education and culture change were the most important aspects of improving completion rates. We timed our drive to start with the junior doctor changeover in August and our formal induction included taking all the new doctors in small groups to educate them on the process and reinforce its importance. To increase senior buy-in and to widen clinical leadership, we highlighted the importance of medicines reconciliation to each medical registrar and consultant working on-call in the receiving unit in person. Many of the consultants, and in particular those in acute medicine, led through example by completing medicines reconciliation forms themselves. For further emphasis, we gave daily feedback to junior medical staff on completion rates, and the pharmacy team provided us with run charts to monitor performance (Fig 1).

One of the barriers we found to successful completion was that there was often no accurate source of information on the patients' regular medication, particularly in the out-of-hours period. We therefore ensured that all our new foundation and specialty trainee doctors received passwords for the Emergency Care Summary (ECS) and Clinical Portal systems. This gave the doctors access to up-to-date information on the medication recently prescribed by the patient's GP and during recent hospital encounters.

Fig 1: Medicines Reconciled within 24hrs of Admission



Operational definition: Medicines Reconciliation is collecting an accurate list of patient's medicines on admission and documenting 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 ward 43

We encouraged doctors clerking patients in A&E to print the ECS in lieu of a traditional drug history to avoid duplication and to facilitate medicines reconciliation on the ward.

Finally we instituted a number of safety "check-points". The first is that when taking referrals from A&E, the floor co-ordinator reminds the referring doctor to print out an ECS if possible. The second is that medicines reconciliation is included as a standard part of the initial ward review. The third check-point is the consultant ward-round itself, where the appropriateness of the plan is also approved. The fourth is pharmacy review, double-checking for accuracy. Finally, the member of nursing staff who gives the handover to the downstream ward checks that medicines reconciliation is complete, and if not, brings this to the attention of medical or pharmacy staff.

By these measures, we have significantly improved completion rates. We still rely heavily on the ward pharmacists, who act as a safety net for forms that are not fully completed, and also play a large role in educating junior (and senior!) medical staff. They have carried out the auditing of our completion rates so that we can see week-to-week how the measures we have implemented are working.

Improving the quality of our service required the help of many colleagues from different disciplines: medical, pharmacy, nursing and clerical. Physicians who work in medical receiving will definitely appreciate that.

Many thanks to Dr Allan Cameron, Consultant in Acute Medicine, Glasgow Royal Infirmary for producing this article on behalf of the Safer Use of Medicines Subcommittee.

Safe-Keeping Of Medicines Potentially Involved In Significant Clinical Incidents

Within the busy healthcare environment clinical incidents can occur that cause potential or actual harm to patients. Many of these incidents involve medicines. As part of the clinical incident investigation process for potentially significant incidents, it is often vital that any medicines that may have been administered to the patient at or shortly before the time of the incident are available for scrutiny. During the retrospective investigation of an incident it is often difficult to find a patient's own medicine or ward / clinic stock medicine that were administered to the patient some days or weeks previously.

Therefore medicines that have been consumed by or administered to the patient at or shortly before the incident should be held safely and securely, be clearly labelled to indicate they are not for use, and the person in charge of the investigation informed of their whereabouts. If the medication is a patient's own property (e.g. patient's own medicine brought in to hospital for use during the inpatient period) permission should be sought from the patient or their representative(s) and consent to quarantine the medicine clearly documented in the patient notes. (If these medicines are later not required or are not clinically suitable for return to the patient then permission should be sought from the patient or their representative(s) for destruction to take place and this should also be documented in the patient notes or other paperwork used for this purpose locally. Local procedures should be followed regarding safe destruction of patient's own medicine, e.g. in acute sites return medicine to pharmacy with a completed Medicines Returned to Pharmacy Form.)

If the patient or their representative(s) refuse to give consent for the medicine to be quarantined and / or destroyed advice should be sought from an appropriate senior colleague (e.g. consultant; senior clinical pharmacist; ward manager).

Examples of significant incidents involving medicines (fictitious examples have been used for illustrative purposes)–

1. Patient admitted with very high INR and subsequently suffers a hemorrhagic stroke. Scrutiny of the patients own warfarin medication reveals the patient has mixed 1mg and 5mg tablets in a container and may have inadvertently consumed the wrong dose, resulting in the high INR.

2.. Patient given 10mg of an opioid containing liquid medicine for pain – had received 3 previous doses with good effect. One hour after administration of the 4th dose the patient was noted to be very drowsy and had a low respiratory rate. The patient was clinically assessed, treated for opioid toxicity and suffered no long term harm. The bottle of medicine administered to the patient was quarantined and it was noted that the wrong strength solution had been administered, resulting in opioid toxicity. The subsequent clinical incident investigation noted that the different strength bottles had a very similar appearance and steps were taken to address this at both a manufacturer and local level.

If you require further information or wish to discuss further please contact **Colette Byrne, Lead Pharmacist, Medicines Governance 0141 211 2706 (52706), colette.byrne@ggc.scot.nhs.uk**

For guidance and advice on reporting medicines incidents contact your Clinical Risk Manager or Pharmacist.

PostScript Safety is edited by the Safer Use of Medicines Subcommittee of the NHSGG&C Drug and Therapeautics Committee.

Comments and suggestions for future editions are welcome, email:

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