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Medicines Reconciliation: the accuracy of unconfirmed medicines lists for acute admissions.

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And including medical teams, junior doctors on rotation, pharmacists and pharmacy technicians working in the Acute Admissions Unit, Chelsea & Westminster Hospital NHS Foundation Trust in collaboration with CLAHRC for NW London.

1) Context:
Chelsea & Westminster Hospital Acute Admissions Unit involving newly admitted patients, their medical teams, junior doctors on rotation, pharmacists and pharmacy Medicines Management Technicians.

2) Problem:
Errors in prescribing and particularly inadvertent omissions of regular medication are known to occur at transitions of care. This may be more frequent when dealing with acutely unwell patients, who have come into hospital without their regular medicines or an up-to-date list. This lack of an accurate medication history can delay or compromise treatment. It may also render any review of medicines unsafe.

3) Assessment of problem and analysis of its causes:
Medicines Reconciliation is a process designed to ensure that all medication a patient is currently taking is correctly documented on admission to hospital and at each transfer of healthcare. It encompasses: collection of the medication history; checking that medicines currently prescribed are correct; and communicating any changes to the next person(s) caring for the individual. Even if given verbally there must also be a written record documenting the reasons for starting new medicines and what has stopped or changed (doses, formulation etc). Pharmacy staff support medicines reconciliation by compiling an accurate list from the patient (by face to face conversation using prompts and examining any packs of their own medicines) confirmed using a second source: either the GP practice or other appropriate record. Anecdotally, the pharmacy second check leads to more medicines being documented with detail such as the dosing schedule, properly documented. Regular local audit shows over 70% of patients have their medicines reconciled to this level on admission. As part of a wider project looking at where in the patient journey we can safely prescribe ‘new’ and stop ‘old’ medicines, we needed to know at what ‘level’ medicines are reconciled.

4) Intervention:
We defined three levels of medicines reconciliation (see table) and then compared medicines lists obtained at levels one and two in patients admitted to AAU.

Table of Levels of Medicines Reconciliation:
<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
<th>Patient Groups</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>Admission or transfer-led</td>
<td>All admissions and Day cases on arrival</td>
<td>Part of clerking procedure for Drs</td>
</tr>
<tr>
<td>Two</td>
<td>Pharmacy consolidation</td>
<td>All admissions &gt;24h predicted stay but further defined locally</td>
<td>Check of the medication history using a separate reliable 2\textsuperscript{nd}/3\textsuperscript{rd} source</td>
</tr>
<tr>
<td>Three</td>
<td>Medication Review</td>
<td>High risk/targeted patients</td>
<td>Consider appropriateness of continuing each medicine on an individual basis</td>
</tr>
</tbody>
</table>

5) **Study design:**
We undertook an audit based on the assumption that once checked using at least one independent separate source, the medication history as documented was a true reflection of what was currently being taken by the patient just prior to admission. Allergies and other medicines related problems and idiosyncrasies are also checked.

6) **Strategy for change** (see 3)

7) **Measurement of improvement:**
Medicines reconciliation at level one and level two in 101 patients was compared. Full and accurate documentation at level one was found in 27%. In the other 74 patients, the most common reason for discrepancy was missing current medicines when eliciting the history at level one. An average of 5.6 medicines were recorded on admission by junior doctors and 7.4 by pharmacists representing 3 per patient omitted prior to second checking.

8) **Effects of changes:**
Unchecked medication lists are not sufficiently accurate as the basis for prescribing (or deprescribing) medicines for ongoing treatment.

9) **Lessons learnt:**
The involvement of a pharmacist in the process appears to be vital as is having in place a structured checking and documentation process. However, Initiatives are needed to improve access to patients' medication lists in the acute setting and thereby improve level one reconciliation.

10) **Message for others:**
Reconciliation to level 2 should be included in any structured medication review to be undertaken before stopping or starting any long-term medicines.

11) **Please declare any conflicts of interest below:**
None. Research supported by NIHR CLAHRC for NW London