“How to” Guide:

Monitoring the Incidence of Omitted Medicines

Aim

This document together with its companion - the “How to” Guide for Making a difference – Designing and Implementing Interventions to reduce the incidence of omitted medicines - has been developed to help organisations to undertake a quality initiative through:

1. Improving patient safety and hence patient outcomes
2. Reducing the incidence of omitted medication doses
3. Working with the multidisciplinary team to ensure medicines are given on time.

NHS England is currently piloting a Medicines Safety Thermometer which includes omitted doses.

Tips on using this How to Guide

This “How to” Guide gives step by step guidance on identifying current incidences of omitted medicines as part of a quality improvement programme. It is designed such that Pharmacy Managers can give the document to more junior staff who can undertake the work in a structured manner and check back with progress. There is also an Appendix that can be used as an action plan/check list to monitor progress and for the junior staff to record any issues.

Background

One of the few specific mentions of medicines in the Francis Report into Mid Staffordshire Hospitals recommends ensuring that medicines are given on time and that it is the responsibility of the ward manager to ensure this happens.

Although the NPSA Rapid Response Report 009 Reducing Harm from omitted and delayed medicines in hospital came out in February 2010 citing an incidence for omitted doses of 5% it would appear there is still room for improvement.

A collaborative audit of Delayed and Omitted Antimicrobial Doses undertaken by Specialist Pharmacy Services across 54 organisations in December 2010 found an omission rate of 5.3% doses affecting 13.2% of patients.

Similar percentages of omitted medicines are seen in reports to the National Patient Safety Agency (NPSA). The NPSA has moved to NHS Improvement in the Patient Safety Directorate. Some organisations contribute data to the Medicines Safety Thermometer. Data is collected monthly on a small sample basis – usually by nurses. Additional more in depth or targeted work can supplement the Safety Thermometer..

How to get started

Gathering background information:

1. Read the NPSA RRR 009 on Reducing Harm from Omitted and Delayed Medicines in Hospital
2. Read the Specialist Pharmacy Services Report of A collaborative audit of Delayed and Omitted Antimicrobial Doses. Antimicrobials were chosen for this audit because they are a common intervention and would appear on all organisations critical medicines lists (where critical medicines lists exist) and could be used as a proxy for other medicines.
Gathering information on who to involve locally

1. Identify who drives practice and improvements locally. Talk to your manager and consider how to engage them in this area.
2. Consider what motivates people to change practices.
3. Identify local champions from nursing staff and medical staff – you will also need at least one pharmacy champion – these people may not always be the most obvious – discuss your thoughts with your manager.
4. Identify an area where the nursing staff are particularly interested, motivated and/or supportive. Perhaps they already have a record of successful change/improvement implementation or strong leadership. **Rationale:** Nurses are key to ensuring medicines are given on time but have many competing priorities and have complex reasons for not giving or recording administrations. It is easier to make a change when staff are engaged and have a sense of ownership.
5. If your target clinical area is not interested in omitted medicines – find some issues that make it a top priority for them or show them changes in practice that make their life easier. Patient Stories can be very powerful. Getting ahead with the Medicines Safety Thermometer may appeal to those with a competitive nature.
6. Check that there is senior organisational commitment to reducing the incidence of omitted medicines e.g. The Trust Governance or Safety Lead, The Medical Director or Chief Nurse – make Omitted Medicines an agenda item for Trust Committees. You may need help from your manager.

Gather some local baseline data

1. Find out if your organisation has a list of Critical Medicines and whether actions were put in place in response to the RRR.
2. Identify whether your organisation already collects data on omitted doses – there may be local data held in pharmacy or clinical areas. Remember your organisation may have been asked to report on omitted medicines to e.g. a Governance Committee.
3. Did your organisation take part in the audit of Delayed and Omitted Antimicrobial Doses run by the Specialist Pharmacy Services in December 2010? If so, find the results – your antimicrobial, clinical or safety pharmacist should have them.
4. Check your incident reporting database.
5. Does your organisation have electronic prescribing? – You will be able to get reports of missed doses from the system; find out who to ask.
6. Do the results of any of these audits/databases give you some clues as to ‘problem’ areas or groups of medicines that are omitted more frequently than others?
7. Discuss with your manager if you need to undertake a targeted or whole organisation base line audit to identify areas for improvement.

**Top Tips – aim for small successes that could be rolled out in other areas. Choose clinical areas where the nursing staff are already interested.**

Method for auditing to identify areas for improvement

If you need to collect some baseline data consider the pros and cons of concentrating on:

1. Antimicrobials
2. All critical medicines on your local list (if you have one)
3. Certain problem areas only e.g. therapeutic areas/groups of medicines/care areas
4. All types of medicines
5. Regular and stat doses or all doses including as required ones
6. The red or orange medicines from the list of critical medicines developed by the Medicines Information Service [Link](#)
When designing your audit consider:

1. Auditing all charts on one day – a point prevalence audit - what would be representative of a typical day?
2. Or audit over a few days to capture a typical weekday as well as weekend administration
3. Auditing all charts in one area or a random selection of charts from a wider area
4. The pros and cons of one person collecting the data as opposed to “all” staff
5. The pros and cons of non-pharmacy staff collecting the data – is it more meaningful to nursing staff if they can easily see the numbers for their clinical area?
6. Consider completing the audit monthly (or weekly) and preparing a “run (or control) chart”. You will need between 12 and 20 data points to make this data meaningful so this would be a long-term commitment; it is easy to see improvements or dips in performance. SPC (Statistical Process Control) packages can calculate upper and lower control limits. There are a number of “rules” to help interpret the plots. Your Service Improvement Department may be able to help you. For more information on SPC and run charts. Link
7. Remember to set targets for the audit e.g. 95% of doses to be given on time.

Consider what data collection tools to use:

1. You may already have a data collection tool – if staff are familiar with that continue to use it or modify if necessary
2. The Specialist Pharmacy Service Antimicrobial Collaborative Audit form has been simplified and modified to collect data for all missed doses. It consists of a data collection form and an Excel spreadsheet with embedded formula for some instantaneous results. They are available through this link, and may be modified further for local use if necessary.
3. There are other examples of data collection tools in the literature.
4. Pilot the data collection tool you plan to use to ensure it meets the requirements of your audit and that it is simple and easy for data collectors to understand.

Consider how the data will be collected:

1. Will data collectors use paper forms or an electronic device?
2. How will the data be entered for analysis – who will do the data entry?
3. Who will do the data analysis? Can a database be set up that automatically produces reports?

Consider how to present the data:

1. In what format will you communicate the results and to whom? Remember to feed back to the staff who collected the data.
2. It is useful to include graphs, bar charts or run charts.
3. Some people will want to know the absolute numbers
4. Make your report to the point.

Checking and confirming progress

Regularly discuss with your manager your findings and your preferred approaches. Agree a timetable of action this should include meeting with the key champions to discuss and agree the proposed audit methodology. The Appendix is provided to give you a structured way to ensure everything is covered.

Collecting the data:

1. Ensure all the data collectors know what they are collecting you may need to provide crib sheets so they can check they are collecting the right information.
2. Ensure they know when are where to return their data to or how to enter it onto a data base.
Appendix 1 – Action Plan/Check List

Use this action plan/check list to check your progress and when meeting with your manager.

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<thead>
<tr>
<th>Activity</th>
<th>Deadline/Achieved</th>
<th>Notes/Issues</th>
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<tbody>
<tr>
<td>Gather background information</td>
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<td>Gather information on whom to involve locally</td>
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<td>Identify who drives practice locally</td>
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<td>Identify Local Champions</td>
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<td>Obtain Senior Organisational Commitment</td>
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<td>Identify if local base line data already exists e.g. local audits, Specialist Pharmacy Service audit</td>
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<td>Review Incident Reports if necessary</td>
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<td>Use electronic prescribing records if you have them</td>
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<td>Discuss whether to target areas or cover the whole organisation</td>
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<td>Discuss which medicines to target</td>
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<td>Design the audit – e.g. point prevalence or regular monitoring; one auditor or lots</td>
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<td>Review data collection tools; refine or design as necessary</td>
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<td>Pilot the data collection tools</td>
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<td>Decide who will analyse the data</td>
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<td>Discuss how the data will be presented and to whom</td>
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<td>Agree a timetable for data collection and analysis</td>
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