Implementing a Medication Reconciliation & Order Form on a Surgical Unit
Does it Reduce Discrepancies?
Gillian Slater, BSc Pharm., Claire Fisher R.N., Richard Bachand, Pharm D

Introduction
Medication Reconciliation is defined as a formal process of obtaining a complete and accurate list of each patient’s medications (including name, dosage, frequency, and route) and comparing the physician’s admission, transfer, and/or discharge orders to that list.

It is well-known that discrepancies can lead to Adverse Events (AEs). AEs are unintended injuries or complications that are caused by health care management, rather than by the patient’s underlying disease. AEs may lead to death, disability at the time of discharge, or prolonged hospital stays. Preventing AEs is the driving force of medication reconciliation. The focus of this project was to decrease medication discrepancies upon admission to a surgical unit by implementing a Medication Reconciliation and Order Form (MROF).

This project is part of a larger Vancouver Island Health Authority (VIHA) initiative sponsored by the Canadian Patient Safety Institute known as the Safer Healthcare Now (SHN) campaign. It is a Canadian initiative that enlists healthcare organizations in implementing six patient safety interventions to improve quality of patient care.

Methods
Project Phases
<table>
<thead>
<tr>
<th>PHASE</th>
<th>DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Oct 1700- Jan 1200</td>
<td>Baseline data collection</td>
</tr>
<tr>
<td>II</td>
<td>Jan 12-Mar 800</td>
<td>Implementation of MROF</td>
</tr>
<tr>
<td>III</td>
<td>Mar 7-May 3008</td>
<td>Post-implementation data collection</td>
</tr>
</tbody>
</table>

Table 1: Medication Discrepancies Broken Down by Type

<table>
<thead>
<tr>
<th>Phase</th>
<th>#</th>
<th>Age</th>
<th>Sex (M/F)</th>
<th>Total #</th>
<th>Type 1</th>
<th>Type 2</th>
<th>Class 3</th>
<th>%</th>
</tr>
</thead>
</table>
| I     | 21| 42-86 | 57 | 69 | 62 | 5 | 13 | 3 | 9
| II    | 25| 25-86 | 64 | 115 | 92 | 6 | 6 | 6 | 11
| III   | 25| 25-86 | 64 | 115 | 92 | 6 | 6 | 6 | 11

Change - 37.9% + 1.1%

Discussion
Prior to the implementation of the MROF, a patient’s medication history was taken by a nurse in pre-admission clinic, recorded on a form and placed in the patient’s chart. Post-op orders for a patient’s home medications often read “re-order home medications.” Often, a patient’s home medications are listed in different sections of the chart including the pre-admission clinic consult, the surgery consult, anesthesiologist consult, GP history, and pharmacist. This created a problem for nurses, pharmacists, and patients; which list of home medications is accurate? The medication reconciliation and order form was a tool we introduced to accurately identify home medications and help resolve this problem. Feedback from nurses and physicians who worked with the form was that it was very useful and decreased their workload.

There are some limitations to our project and these include:
- Trial period short, results based on 4 months of implementation, ideally would like to implement for 1 year
- Patient sample small, results too preliminary to calculate statistical difference
- New process for physicians (not yet routine), 1/3 of forms unsigned, contributed to more unintentional discrepancies (Type 3)
- New process for nurses, unsure what to do when form was unsigned, so left alone and not resolved

Conclusions
Medication reconciliation using a MROF is a potentially useful tool to reduce the number of discrepancies upon admission to a surgical unit. The results of our study showed a decrease in the number of unintentional intentional discrepancies (type 2) as well as a decrease in the potential to cause severe harm. Although the number of unintentional discrepancies increased, this was due to the study limitations as described.

In order to show a significant difference, the medication reconciliation form must be implemented on a larger scale, following more patients for a longer period of time. The study was important to VIHA in that they are committed to patient safety and have chosen medication reconciliation as one of their interventions to improve patient care.

The medication reconciliation and order form will continue to be used at the Royal Jubilee Hospital. It is anticipated that with greater exposure, and with more routine use, physicians will sign the form and ultimately reduce the number of both type 2 and type 3 discrepancies.