IMPACT OF AN ELECTRONIC MEDICINES RECONCILIATION PROGRAM USED IN A GENERAL SURGERY UNIT


BACKGROUND AND PURPOSE

Medicines reconciliation is a key tool in the prevention of adverse drug events. The objective is to assess the impact of a medicines reconciliation programme for hospital admission into a general surgery unit, including an electronic tool, in the number and type of unintended discrepancies between chronic medicines and medicines prescribed upon admission.

METHODS

- Quasi-experimental/retrospective study. Inclusion criteria: Patients admitted into a general surgery unit for more than 24 h who were taking ≥ 3 drugs chronically at home.
- A total of 191 patients were included (52.9% male, 47.1% female), 107 patients in the phase before intervention and 84 in the phase after intervention.

RESULTS

- Distribution of discrepancies: the majority of discrepancies were intended
- Distribution of unintended discrepancies
- Severity of unintended discrepancies
- Omission of drugs was the most common unintended discrepancy, being 89 (9.2%) in the phase before and 55 (5.6%) in the phase after intervention (p<0.05). The summary of unintended discrepancies was as follows:

<table>
<thead>
<tr>
<th>Unintended discrepancies (UD)</th>
<th>Total sample</th>
<th>Before intervention</th>
<th>After intervention</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number</td>
<td>167</td>
<td>102</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Average (SD) per patient</td>
<td>0.87 (1.435)</td>
<td>0.95 (1.622)</td>
<td>0.77 (1.283)</td>
<td>P=0.677</td>
</tr>
<tr>
<td>UD per drug investigated (%)</td>
<td>8.6</td>
<td>10.6</td>
<td>6.6</td>
<td>P=0.002</td>
</tr>
<tr>
<td>Patients with UD N (%)</td>
<td>75 (39.3)</td>
<td>43 (40.2)</td>
<td>32 (38.1)</td>
<td>P=0.885</td>
</tr>
</tbody>
</table>

CONCLUSIONS

- The implementation of the medicines reconciliation program has shown a reduction of the rate of unintended discrepancies detected during admission into a general surgery unit.
- Omission of drugs was the most common type of discrepancy detected in both phases and decreased after intervention.

ACKNOWLEDGEMENTS

- Members of CONCILIA Group, belonging to Pharmacy, Preventive Medicine, General Surgery and General Medicine Services
- alvaro.gimenez@salud.madrid.org