**AN ECONOMIC ANALYSIS OF THE INTRODUCTION OF A WARD BASED “DISPENSING FOR DISCHARGE” PHARMACY TECHNICIAN MEDICINES MANAGEMENT SERVICE**

**Background**

Most hospitals in the UK now use a “dispensing for discharge” (DFD) model for issuing medication to inpatients. There is significant evidence of substantial improvements in productivity and service delivery, however, little evidence of financial savings currently exists. DFD is a medicines management strategy, in which all of the patients’ medication are dispensed upon first admission to the ward, and are utilised throughout the patient journey including discharge. This should improve efficiency and reduce waste from duplicate dispensing of medicines.

**Purpose**

- To elucidate the drug cost benefit of introducing a pharmacy technician led “dispensing for discharge” service.
- To prove that the service was cost beneficial after accounting for all associated staffing costs.

**Method**

A DFD service was setup on 2 acute respiratory wards using a band 5 medicines management technician (MMT) and a band 3 medicines management assistant (MMA). The project had an initial run in period of several weeks to allow to new working practices to be fully established. Data was then recorded from April 2015 for a period of 6 months and compared to the same period in 2014. Admission data derived from the hospital patient administration system were combined with pharmacy drug expenditure data. Data from the intervention wards was compared to 2 clinically similar acute respiratory wards not running the enhanced service. The data were then analysed to establish the drugs costs for all admissions to these wards to allow direct comparison.

**Results**

The results showed that the 2 intervention wards had lower drug expenditure when compared both, to the same period from the previous financial year, and to the non-intervention wards during the intervention period. This resulted in a cumulative saving of £31,984 for the 6 months studied.

<table>
<thead>
<tr>
<th>Non-intervention wards</th>
<th>Intervention wards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ward 1</td>
<td>Ward 1</td>
</tr>
<tr>
<td>+£7,972</td>
<td>-£9,044</td>
</tr>
<tr>
<td>+11.6%</td>
<td>-13.6%</td>
</tr>
<tr>
<td>+£10,197</td>
<td>-£21,787</td>
</tr>
<tr>
<td>7.3%</td>
<td>-18.8%</td>
</tr>
</tbody>
</table>

**Discussion**

- The results show that the no intervention wards spent more money on medication in the study period, compared to the same timeframe from the previous financial year. This is as expected due to increasing medication costs and an increase in patient activity.
- The intervention wards however, spend less money on medication, when compared to the previous year; indicating the successful financial impact of the dispensing for discharge service. A decrease in overall medication use was achieved by reduced wastage and reduced duplication of work.
- The reduction in medication spending remained when adjusted for changes in activity.
- The overall financial savings were greater than the investment required in additional staffing.
- There are also numerous established clinical advantages to a ward based medicines management technician, such as increased medicines reconciliation rates, improved prescribing error recognition and subsequent increased patient safety. These were beyond the scope of this analysis.

**Conclusion**

The financial benefits of a ward based pharmacy DFD service outweighed the cost of the staff investment required in an acute respiratory setting.

**Acknowledgements**

Lydia Simons, Kayleigh Hewitt and Fiona Watson. Sheffield Teaching Hospitals NHSFT, Pharmacy Department, Sheffield United Kingdom.

**References**