Transformation of a gastroenterology inpatient service

Authors: Suraj Pathak\(^a\) and Ajay Verma\(^b\)

Introduction
Numerous studies have demonstrated that consultant delivered care can lead to: increases in productivity, reduction of length of stay as well as increasing patient satisfaction.\(^1\) The gastroenterology inpatient (IP) service at Kettering General Hospital was reconfigured to implement NHS Improvement’s SAFER patient flow bundle.\(^2\)

Materials and methods
The incumbent arrangements were on Deene C Ward (DCW): 29 patients under the care of three consultants conducting twice weekly ward rounds not prospectively covered, newly admitted and unwell patients reviewed by any ward round as a safety net arrangement.

This was transformed to a digestive diseases unit (DDU): bed base reduced from 29 beds (three side rooms, three six-bedded bays, a five-bedded bay, and a three-bedded bay), to 20 beds, achieved by reducing six-bedded bays to four beds, and converting the three-bedded bay to a nurse-led gastroenterology treatment area (GTA) for daycase ambulatory patients. This allowed the introduction of a consultant of the week (CotW) model in November 2017.

The CotW, for 2 weeks (prospectively covered), is responsible for daily DDU ward rounds of all 20 patients under their care, review of inpatient referrals, in-reach into urgent care wards, and support of GTA. There is minimal outpatient commitment during this period (no endoscopy lists or outpatient clinics). These arrangements were analysed after 12 months to assess the impact on patient care.

A retrospective observational study was conducted to benchmark and evaluate changes in consultant-led care subsequent to the structural reorganisation of the ward, and introduction of the CotW rota. Patients were identified through electronic records. Data was collected from both electronic discharge letters and paper notes. Statistical analysis was performed using Matlab and Microsoft Excel.

Results

<table>
<thead>
<tr>
<th></th>
<th>DCW</th>
<th>DDU</th>
<th>Delta</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median length of stay</td>
<td>141</td>
<td>104</td>
<td>-26.2%</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Discharges per week per bed</td>
<td>0.79</td>
<td>1.06</td>
<td>+34.2%</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Consultant reviews per week</td>
<td>0.63</td>
<td>1.16</td>
<td>+84.1%</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td>Complaints</td>
<td>12</td>
<td>11</td>
<td>-8%</td>
<td>-</td>
</tr>
</tbody>
</table>

GTA treating >90 patients and generating >£35K each month. Gastroenterology inpatient services are now SAFER compliant.

Conclusion
The transformation of gastroenterology inpatient services has been a great success. A reduction in bed base by nine beds has allowed a CotW model of care to be implemented. This has made the inpatient service SAFER compliant while being cost-neutral. Length of stay has been significantly reduced by 26.2% (p<0.01). Discharges per week per bed and consultant reviews per week have significantly increased by 34.2% (p<0.01) and 84.1% (p<0.01) respectively. In addition, GTA is an income-generating unit, treating >90 patients per month, preventing admissions, facilitating earlier discharges, and freeing capacity in the pressured main hospital ambulatory unit. This reconfiguration confirms that a CotW model of care is optimal and SAFER compliant, even if a bed base reduction is required to facilitate this.

References

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