### Appendix

![Image of a table and a figure]

**Figure 1:** The Microsoft excel spreadsheet surgical list with its headings and manually transcribed data.
<table>
<thead>
<tr>
<th>What</th>
<th>Pre-Handover</th>
<th>Handover</th>
<th>Post-handover</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Creating and updating the surgical lists</strong></td>
<td><strong>Discussing patients seen and patients to be seen</strong></td>
<td><strong>Revision and updates of lists, addition of patients and preparation for the next handover</strong></td>
</tr>
<tr>
<td>Who</td>
<td>Surgical junior doctors</td>
<td>Surgical team (Registrars, senior house officers, foundation year one doctors +/- consultant on-call)</td>
<td>Surgical junior doctors</td>
</tr>
<tr>
<td>Where</td>
<td>Surgical wards and offices</td>
<td>Acute surgical unit for the on-call team, surgical doctors’ offices for the ward teams</td>
<td>Surgical wards and offices</td>
</tr>
<tr>
<td>Time</td>
<td>120-240</td>
<td>30-40</td>
<td>120-240</td>
</tr>
</tbody>
</table>

Figure 2: Process flow map of the Royal Devon and Exeter Hospital surgical handover system.
Figure 3: The automated software surgical list intervention at the Royal Devon & Exeter Hospital. Circled regions are examples of changes made through the iterative PDSA cycles. Patient demographics included age, the procedures were written in the third column and blood results were changed from existing in columns to a row underneath each patient after feedback from surgical team members. The number of post-operative days, the clavien-dindo score and antibiotic therapy were also additions to the list after feedback sessions.
Figure 4: The onboarding document for all new junior doctors at the Royal Devon & Exeter Hospital
Figure 5: Run chart to show time taken for junior doctors to create and update the colorectal surgery ward list. The first PDSA box denotes the implementation of the clinical secretaries (PDSA 1). The second PDSA box denotes the earliest implementation of the automated software (PDSA 2).

Figure 6: Run chart to show time taken for junior doctors to create and update the Day on-call list
Figure 7: Run chart to show time taken for junior doctors to create and update the night on-call list

Figure 8: Run chart to show time spent by secretaries to update surgical lists