Redesigning the Elective Surgical Journey

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Clinical Involvement

• Clinically led
• Evidence based
• Adequate support
Caerphilly District Miners Hospital
The Vascular Clinic

• Mainly varicose vein
• “Outreach”
• Geographically separate (~30 Kilometres)
• Functionally distinct
• No junior medical staff
Elective Vascular Demand Map

GP - 3 - 10 - Outpatient Clinic - 7 - PAC Clinic - 6 - Procedure - 6 - Home

Further Diagnostics - 3 - 3

Patients in Queue = 47

Patients in Queue = 32

Not Fit for Procedure

Patients in Queue = 6
Vascular Surgery Current State

- **GP Referral**: 50 Days (22% of total)
- **OP Clinic**: 229 Days
- **PAC**: 179 Days (78% of total)
- **Operate**: 179 Days (78% of total)

- **Outpatient Clinic**: P/A = 60%, Working Hrs. = 8am-5pm, Capacity = 250 c/s, Freq. = Weekly
- **Pre-Assessment Clinic**: P/A = 57%, Working Hrs. = 8am-5pm, Capacity = 42 slots, Freq. = M, W, F
- **Pre-OP Procedure**: P/A = 89%, Working Hrs. = am, Capacity = 6 slots, Freq. = Tuesday 2x month
- **Operating Theatre**: P/A = 100%, Working Hrs. = 8am to 5pm, Capacity = 6 slots, Freq. = M, F
- **Post-OP Assessment**: P/A = 100%, Working Hrs. = 9am to 5pm, Capacity = 6 slots, Freq. = M, F

- **Total Wait Time**: 428,750
- **Patients Treated**: 382
Vascular Surgery

- GP Referral: 50 Days (66% of total)
- OP Clinic
- PAC
- Operate: 26 Days (34% of total)

Flowchart:
- FIFO: 43,200 → 63 → 40,320 → Max
- Depending on Patient Choice
- Operating Theatre: P/A = 100%
  - Working hours: 8 am - 6 pm
  - Capacity: 6 per hour
  - Freq: Every Tuesday 2x month
- Post-Op Assessment: P/A = 100%
  - Working hours: 8 am - 5 pm
  - Capacity: 6 per day
  - Freq: M to F

Other details:
- WT = 83,750
- PT = 382
## Plan for Experiment

<table>
<thead>
<tr>
<th>What</th>
<th>When (W/ Ending)</th>
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<tbody>
<tr>
<td><strong>Plan</strong></td>
<td></td>
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<tr>
<td>Design Experiment &amp; Comms Plan</td>
<td>31 Aug, 07-Sep</td>
</tr>
<tr>
<td>Communicate &amp; agree Experiment</td>
<td>14-Sep, 21-Sep</td>
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<tr>
<td><strong>Do</strong></td>
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<tr>
<td>Conduct same day OP &amp; PAC Experiment</td>
<td>28-Sep, 05-Oct,</td>
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<tr>
<td>Conduct within 26 day Operate experiment</td>
<td>02-Nov</td>
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<td>(over 2 x sessions)</td>
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<td><strong>Check</strong></td>
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<tr>
<td>Summarise &amp; analyse results</td>
<td>12-Oct</td>
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<tr>
<td><strong>Adjust</strong></td>
<td></td>
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<tr>
<td>Plan next experiment</td>
<td>19-Oct, 26-Oct,</td>
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<tr>
<td></td>
<td>02-Nov</td>
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SUMMARY

• Simple patient pathway
• Value stream mapping
• “Muda” = waiting times
• Able to combine steps to reduce waiting
• Better planning of operating lists
• Achieved RTT target
Decision Making……Its’ a Process

Current State Map - Management Decision Making Process

53 Days Lead time…… 1.5 Days Process time

Initial approach
C/T = 15 mins
2 staff

1st meeting
C/T = 60 mins
4 staff

Planning Scope etc
C/T = 1520 mins
1-3 staff
several days
with waits

Finish Define above
C/T = 480 mins
1-4 staff

Proposal
C/T = 90 mins
5 staff

Decision y/n
C/T = 60 mins
5 staff

Way Forward

Value add = 2.9%
Assumes all process time is Value Add

PT = 2225 Mins
LT = 76745 Mins

15 Mins
10020 Mins
14400 Mins
1520 Mins
480 Mins
10020 Mins
90 Mins
30060 Mins
60 Mins

10
Decision Making ………… Its’ a Process

While we’ve been waiting………..
2133 new Orthopaedic referrals
3130 new Outpatients seen in Clinic
31 Clinics Cancelled
1233 Operations completed
187 Operations cancelled

Current State Map - Management Decision Making Process

Way Forward

Assumes all process time is Value Add

Value add = 2.9%

PT = 2225 Mins
LT = 76745 Mins

Initial approach

C/T = 15 mins
2 staff

Value add

15 Mins
10020 Mins
60 Mins
14400 Mins
1520 Mins
10020 Mins
480 Mins
10020 Mins
90 Mins
30060 Mins
60 Mins