Looking Beyond Hospital Length of Stay Reduction

More physiotherapy less problems?
Why ERAS post thoracic surgery?

• Limited experience of ERAS within Thoracic surgery in the UK

• However, NUH had ERAS well established in other specialties such as upper GI, Colorectal and orthopaedics

• If it works for other areas why not Thoracics?

• ERAS pathways for patients following lung resections were initiated in the summer of 2011
ERAS - The physio bit!

• ERAS to be successful needs all parts of the MDT to work together

• As physiotherapists our responsibilities included;
  – Respiratory assessment and treatments
  – Exercise tolerance and specific goal setting
  – Individualised treatment plans
  – Liaising with MDT
  – Promotion of patient independence
However....

• As a physiotherapy team we were unable to fulfil our part of the pathway, due to the increased demands.

• This was the driving force for seeking funding for increased physiotherapy.

• In December 2011 physiotherapy staffing was re-evaluated.
Staffing

• Increased physiotherapy provision at NUH
  – 1 working day equivalent = 7.5 hour working day

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<thead>
<tr>
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<th>2011-12 ‘before’</th>
<th>2012-13 ‘after’</th>
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<tbody>
<tr>
<td>December</td>
<td>37.5</td>
<td>57</td>
</tr>
<tr>
<td>January</td>
<td>41</td>
<td>75</td>
</tr>
<tr>
<td>February</td>
<td>34</td>
<td>62</td>
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• Average monthly provision
  – 37.5 days ‘before’ to 64.7 days ‘after’
More physiotherapy = Less problems?

- We recorded **clinical outcomes** ‘before’ and ‘after’ restructured physiotherapy provision

- By completing a retrospective case note review for respiratory complications
  - Evidence of pneumonia
    - Clinical
    - Radiological
  - Requirement for respiratory support
Results

• 100 patients
  – 50 ‘before’ and 50 ‘after’
  – Lobar resection for primary or secondary malignancy
  – Equal proportion VATS/open

• Baseline respiratory function was similar (p=0.42)

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<th>2011-12</th>
<th>2012-13</th>
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<td>FEV1 mean (SD)</td>
<td>1.97 (0.76)</td>
<td>2.10 (0.79)</td>
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Results

• Postoperative respiratory complications

![Bar chart showing percentage before and after with P<0.05](chart.png)
Discussion

• ERAS-inspired increases to physiotherapy provision improves patient outcomes
  – Decreased complications with this first phase of our thoracic ERAS pathway

• We have quantified the benefits of Enhanced Recovery using clinical parameters
  – An alternative to composite measures such as LOS
Discussion

• Potential further benefit from pre-op physiotherapy
  – Education
  – Preoperative exercises
  – Smoking cessation
  – Identification of high risk patients
References


• Enhanced Recovery Partnership programme. Delivering enhanced recovery. 
  Accessed 08/05/2013.
