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SCTS
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History and Evolution of ERAS

Originally developed in Denmark by Henrik Kehlet in Colorectal Surgery.

- Improve patient outcomes and speed up a patient's recovery after surgery.
- Reduce stress response to surgery, improving recovery time
- Patients are active in their own recovery.
- Growing in momentum in other surgical specialties including Thoracic
ERAS Principles

- Getting the patient in the best possible condition for surgery
  - Mentally and physically
- Have the best possible management during surgery
- Experience the best possible post-op rehabilitation

Active Patient Involvement
Multidisciplinary Team Approach
Improved Patient Outcomes
What my study is about?

- **Aim** – To investigate overall patient satisfaction and the relationship between specific facets of care provision in patients undergoing ERAS in thoracic surgery.

- **Population** – Post-op lung resection.

- **Methods** – Quantitative descriptive design.

- **Tool** – Questionnaire adapted from nationally administered inpatient survey.

- **Statistical Analysis** by SPSS
Thoracic ERAS Programme

- Pre-op
- Intra-op
- Referral
- Post-op
Referral

- Managing pre-existing medical conditions and comorbidities
- Informed decision making linked from referrer to provider
- Optimising patients
  - Start Prehabilitation – future work
Pre-operative

- Shared decision making
- Patient education
- Management of expectations
- Pre-operative assessment
- Commence discharge planning
- Minimise fasting times – no carb loading
Intra-operatively

- Minimally invasive surgery – Video Assisted Thoracoscopic Surgery (VATS)
  - Uni-portal, Bi-portal, Three ports
- Regional anaesthesia – Paravertebral block or Intercostal block
- 1 drain instead of 2 – Thopaz
- Minimal use of drips, drains and catheters
Post-operatively

- Minimal use of IV fluids
- Active, planned mobilisation
- Early introduction of oral nutrition
- Active management of PONV
- On-going discharge planning in partnership with patient
- Follow-up phone call
Methods and Materials

- A 17 point questionnaire adapted from validated existing patient satisfaction tool with permission from the Care Quality Commission
  
- Administered on discharge from the ward to home
  
- Inclusion – all post-operative lung resections
  
- Exclusion – those deviating from the ERAS pathway, those with cognitive impairment
Results

- 47 out of potential 110 patients returned questionnaire (43% return rate)
- Female 49%
- Male 51%
- Of those 47, 42.5% (n=20) were under 65 years old and 57.5% (n=27) were over 65 years old.
Overall, how would you rate your care?
# Age Related Demographics

<table>
<thead>
<tr>
<th>Patients</th>
<th>Over 65</th>
<th>Under 65</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Age (mean ± SD)</td>
<td>74.5± 5.8</td>
<td>60.6 ± 5.9</td>
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<tr>
<td>Length of stay (median ± IQR)</td>
<td>7.0 ± 2.5</td>
<td>7.0 ±1.5</td>
<td>0.105</td>
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Does age matter in overall satisfaction?

<table>
<thead>
<tr>
<th></th>
<th>Over 65</th>
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<tbody>
<tr>
<td>Patients</td>
<td>27</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>24</td>
<td>20</td>
<td>0.305</td>
</tr>
<tr>
<td>Good</td>
<td>1</td>
<td>0</td>
<td></td>
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<tr>
<td>Average</td>
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<td>0</td>
<td></td>
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<tr>
<td>Poor</td>
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<td>0</td>
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<tr>
<td>Blank</td>
<td>2</td>
<td>0</td>
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Areas for improvement: Booklet engagement – age comparison

- 87.5% patients found booklet useful. But only
  - 48% completion rate (age comparison \( p=0.685 \))
  - 79% followed the pathway (age comparison \( p=0.534 \))
- <65 - 11% were not engaged
- >65 - 26.6% were not engaged
- Not statistically significant
Areas for improvement: Contact post-discharge – age comparison

- 78% of patients felt they knew who to contact after discharge
- 65% of <65

88% of >65

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<tbody>
<tr>
<td></td>
<td>27</td>
<td>20</td>
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</table>

Do you know whom to contact if you are worried about your condition or have any questions at home?

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<th></th>
<th>Yes</th>
<th>No</th>
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<td></td>
<td>24</td>
<td>0</td>
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**0.041**
Discussion

- Overall satisfaction is good

- Areas for improvement
  - Patient engagement in booklet and pathway – targeting >65
  - Communication

- Further research with higher sample size required for more significant and generalisable results
Future of ERAS in Thoracic Surgery

- 3D VATS
- Robotic Surgery
- Prehabilitation
- Increase DOSA
- Home drain management
- 1 day lobectomy?
Questions?