Patient utilisation of a cardiothoracic wound clinic:
Potential to reduce complications and readmission rates

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Surgical Site Infections (SSI’s)

- ~4.5% of cardiac surgical patients develop an SSI
  Cristofolini et al, 2012

- Those patients undergoing CABG with SSI’s had:
  - increased mortality at 1 yr (22% vs. 1%)
  - ~20 additional days in hospital
  - costs approximately $20k extra per patient
  Hollenbeak et al, 2000

- Mortality higher with deep (19.2%) compared to superficial / no SSI (4.5%)
  Coskun et al, 2005
### National / Local figures

<table>
<thead>
<tr>
<th></th>
<th>No. of CABG + Cardiac (not CABG) Operations</th>
<th>Number of SSI’s (inpatient + readmissions)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>National 2006-2011</td>
<td>27,754</td>
<td>1,185</td>
<td>4.3</td>
</tr>
<tr>
<td>LCH 2011 Jan-Oct</td>
<td>439</td>
<td>16</td>
<td>3.6</td>
</tr>
<tr>
<td>LCH 2012 Jan-Oct</td>
<td>436</td>
<td>11</td>
<td>2.5</td>
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Reasons for a Wound Clinic

- Point of care
- Service improvement
- Reduce readmissions rates
Methods

- From Jan 2012: All patients given information about the Wound Clinic
- Encouraged to directly self-refer if concerned
- GP Practices advised about Wound Clinic
- Tertiary referral from GP / hospitals
Data collection

- Audited patient utilization of the Wound Clinic in first 10 months (Jan-Oct 2012), including:
  - mode of presentation
  - time to presentation
  - severity of wound
Information Given to 436 patients

Attended Clinic
N = 103 (23.6%)

Did Not Attend Clinic
N = 333 (76.3%)

‘Direct’ Attendees
N = 88 (85.4%)

‘Indirect’ Attendees
(via old system)
N = 15 (14.5%)

Appointment Arranged At Discharge
N = 31 (35.2%)

Self-Referral Post Discharge
N = 57 (64.7%)
Time to Presentation

Median No. of Days to Clinic Presentation

P = 0.002
CDC Classification of Wounds

Superficial

Deep/Dehisced

Ref: Centres for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333, USA
Wound Severity

Percentage of Patients with Deep / Dehisced Wounds

P = 0.070
All patients surveyed were happy with the service provided.

Approximately half (56.6%) surveyed had attended the Clinic for > 1 month.

Half of patients attended the Clinic at least twice a week, initially.
Summary

- A Wound Clinic run by the primary surgical team can allow early identification + treatment of SSI’s
- In the first 10 months, approximately 1-in-4 patients utilised our Wound Clinic
- Patients appear to be happy with the service
- Estimate that we have prevented readmissions to hospital / reduced costs
Further Work....

- Means of encouraging more patients to directly self-refer to wound clinic
- Educating the patient in early assessment of potential wound problem
- Understand risk factors for re-admission so that patients can be identified whilst still in hospital.
- Develop an e-learning tool to increase understanding and management of wound severity / treatment.