Audit in Screening

Dr LS Wilkinson
What is clinical audit?

Clinical audit is a process that has been defined as "a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change".

https://en.wikipedia.org/wiki/Clinical_audit
1. Identify problem or issue

2. Set criteria & standards

3. Observe practice / data collection

4. Compare performance with criteria & standards

5. Implementing change

https://en.wikipedia.org/wiki/Clinical_audit
The audit cycle

1. Select a Standard
2. Assess Local Practice
3. Compare with Standard
4. Implement Change
5. Re-Audit

Improvement or Reassurance

Royal College of Radiologists
An example...

**Figure 4: Cost Comparison of All Diagnostic Stereotactic Biopsies 2012-15**

<table>
<thead>
<tr>
<th></th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>14G</td>
<td>£14,904.00</td>
<td>£19,170</td>
<td>£33,832.00</td>
</tr>
<tr>
<td>VAB</td>
<td>£74,922.00</td>
<td>72,180.00</td>
<td>£32,622.00</td>
</tr>
<tr>
<td>Total</td>
<td>£89,826.00</td>
<td>£91,350</td>
<td>£66,454.00</td>
</tr>
</tbody>
</table>

**Figure 6: Biopsy Outcome – All Stereotactic Biopsy 2012-15**

<table>
<thead>
<tr>
<th></th>
<th>B1%</th>
<th>B2%</th>
<th>B3/4%</th>
<th>B5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/13</td>
<td>8.03</td>
<td>60</td>
<td>9.3</td>
<td>20.53</td>
</tr>
<tr>
<td>2013/14</td>
<td>5.7</td>
<td>66.6</td>
<td>9.48</td>
<td>18.18</td>
</tr>
<tr>
<td>2014/15</td>
<td>6.3</td>
<td>65.1</td>
<td>12.36</td>
<td>16.16</td>
</tr>
</tbody>
</table>

Anuma Shrestha, BSBR, 2015
Where do you start?

- Understand your process
- Guiding principles
  - eg maximise cancer detection
  - treat client well
  - meet process targets
- Create an organisational structure
  - Ensure team ownership
Planning your audit programme

• Team approach
• Identify an audit lead
• Plan a schedule
  – Rolling audits
  – Ad hoc
• Communicate results
  – Annual report
  – Team meetings
  – Regional level
Standardise the process

• Audit template
  – Aim
  – Define standards
  – Describe methods and identify data to be reviewed
  – Time frames
    • Dates of audit
    • Report to be produced
    • Repeat the audit
Can’t see the wood for the trees?
Domains

**Population**
- Identify eligible cohort
- Contact individuals
- Ensure equity
- Optimise access
  - Time
  - Location
- Client satisfaction

**Test**
- Best test
- Criteria for positive/negative outcome
- Further evaluation
- Equipment
- Standardised reporting

**Individual**
- Personal specification
- Training
- Competence
- True positive
- False negative
- Volume
  - Speed v accuracy
- Turnaround times
## Types of audits

<table>
<thead>
<tr>
<th>Administrative</th>
<th>Clinical</th>
<th>Patient experience</th>
</tr>
</thead>
</table>
| • Audit of QMS e.g. Work instructions/ SOPs  
• Audit of exclusions  
• Audit of Campaign work to increase uptake e.g. DNA rates, Health Promotion activities at pharmacy, mosques, gyms | • Audit of QA Images  
• Audit of Diagnostic Screening Accuracy  
• Audit of Referrals over 5.5 cm but when reviewed are under 5.5 cm  
• Audit of non-visualised images | • Audit of Satisfaction Surveys  
• Audit of Clinic Locations – DNAs, Accessibility and Transport  
• Audit of DNAs |

-audience to participate!
An example....

62 day target for breast cancer treatment
  – From date of decision to recall
  – To date of first treatment

1. Establish baseline
2. Identify areas for change
3. Communicate and manage change
4. Set up achievable monitoring
Communication + time to re-arrange appointment

May need repeat / additional tests

Optimal referral process

- Last read
- Assessment
- Results to client
- Referral to treating hospital
- Outpatient Appointment
- Treatment

- Second read or arbitration
- Client may need more time
- Capacity for short notice OPA
- Capacity for surgery

Optimal referral process
# Optimal and Minimum Standard

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Target (days)</th>
<th>Minimum standard (days)</th>
<th>Total from last read (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last read</td>
<td>Assessment</td>
<td>10</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Assessment</td>
<td>Result to client (inc MDM)</td>
<td>5</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Results to client</td>
<td>Referral received by surgical team</td>
<td>1</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Referral</td>
<td>Surgical OPA</td>
<td>7</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Surgical OPA</td>
<td>Treatment</td>
<td>14</td>
<td>31</td>
<td>47</td>
</tr>
</tbody>
</table>
Target waiting times

31 days  62 days
Minimum standard waiting times

31 days

62 days

- Assessment
- Results
- Referral
- OPA
- OPA
- surgery
SWLBSS 2013-14

383 Cancers, 298 flagged as screening

Days to treatment

62 days
Pathway analysis - 1 treatment centre
- referred 01/01 to 30/06/2014

31 days 62 days
## Breach analysis

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Number referred after 31 days</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;63 days</td>
<td>33</td>
<td>1</td>
<td>1 x Client delayed assessment</td>
</tr>
<tr>
<td>63 – 65 days</td>
<td>4</td>
<td>1</td>
<td>1 x mastectomy, 1 x mastectomy + immediate reconstruction, 2 x ?</td>
</tr>
<tr>
<td>66-90 days</td>
<td>7</td>
<td>1</td>
<td>1 x B3 excision, coincidental small cancer, 3 x mastectomy (inc 1xbilateral risk reducing), 2 x client holiday, 1x surgical capacity</td>
</tr>
<tr>
<td>&gt;90 days</td>
<td>3</td>
<td>3</td>
<td>1 x B3, VACE – dcis + 4mm ILC, needed MRI, 2 x delayed assessment</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>47</strong></td>
<td><strong>6</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Screening Cancers on NBSS (episode) 2013/14</td>
<td>Screening Cancers on Open Exeter (treatment) 01/9/2013 – 31/08/2014</td>
<td>Percentage of NBSS/Open Exeter - very approximate</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>NLBSS</td>
<td>508</td>
<td>290 (excluding West Herts)</td>
<td>57%</td>
</tr>
<tr>
<td>WoLBSS</td>
<td>358</td>
<td>314</td>
<td>88%</td>
</tr>
<tr>
<td>BHRBSS</td>
<td>215</td>
<td>157 (excluding Brentwood)</td>
<td>73%</td>
</tr>
<tr>
<td>CELBSS</td>
<td>193</td>
<td>186</td>
<td>96%</td>
</tr>
<tr>
<td>SELBSS</td>
<td>356</td>
<td>382</td>
<td>107%</td>
</tr>
<tr>
<td>SWLBSS</td>
<td>383</td>
<td>336</td>
<td>88%</td>
</tr>
</tbody>
</table>
Issues

1. Documenting screening origin
2. Delays to pathway
   - Patient choice
   - Complex diagnostics (B3 lesions)
3. Optimise referral process
   - Documentation
   - Allocated clinic spaces

Establish routine audit
Actions to date

• Require all screening services to log cancer referrals on cancer tracking
  – Issue breach comments for referrals after 31 days
• Ask screening services to provide data on referrals with breach comments
• Standardise referral proformas (including details of pathway dates)
How to improve AAA screening by audit

• Use audit to:
  – Confirm standards are maintained
  – Strive for continuous improvement
• Incorporate audit into routine work
• Be systematic
  – Audit programme
  – Standardised processes
• Communicate
  – Local
  – External
  – Use to compare and share good practice