Prioritising patients for elective surgery: Evaluation of the use of clinical priority assessment criteria in New Zealand

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Background
• Demand for elective surgery exceeds the capacity of the publicly-funded sector to provide that surgery
• Chronological waiting lists may not result in patients with the most potential to benefit being treated first
• Surgical prioritisation and booking policy developed since the 1990s
• Policy intention is that clinical priority assessment criteria (CPAC) should be used as decision support tools to determine access to public sector

Accessing elective surgery
• GP referral to public or private sector
• Public sector - First specialist assessment
  – Assess patient’s potential to benefit from surgery
  – CPAC are used as clinical decision support tools - a CPAC assessment is mandatory
  – Based on a clinician’s judgement informed by CPAC
    • patient receives certainty
    • active review
    • returned to GP for ongoing management

CPAC
• Theoretical prioritisation factors
  – Symptoms: pain, nausea, dyspnoea etc
  – Disability: extent of disability
  – Cost of delay: symptoms, death, poorer result
  – Capacity to benefit: degree and likelihood of improvement
• Above factors are combined into a variety of national and local CPAC

Evaluation of CPAC
• Ministry of Health funded a consortium of researchers to evaluate CPAC
• Range of approaches
  – Using routinely collected data (NMDS, CABG)
  – Reliability of CPAC using computerised case scenarios
  – Validity of the constructs used in the tools
  – Description of GP awareness of CPAC and how CPAC were used by surgeons and in the booking process

Processes determining pathways to care
• GP strategies
• Surgeon prioritisation
• Systems factors
GP strategies to improve access

- Advocacy – via referral letter
  - Stressing urgency, the ‘cancer red flag’
  - Describing the patient’s social circumstances
- Private sector referral for FSA for later public sector access to surgery
- Personal approaches to the surgeons
- Sending patients in as acute cases

Prioritisation scores

- Prioritisation score constructed at the FSA (also in the private sector)
- Generally by the surgeon, registrar or house surgeon, sometimes a nurse
- Not all conditions are scored
  - “...there are some conditions which are so obvious, ... but officially it is my responsibility or my registrars.” (Location 1 GS)
- Can include the patient
  - “I think the other important thing is that you involve the patient in the scoring system because the score includes some subjective data like sort of the pain they are in.” (Location 1 VS)

CPAC scoring

<table>
<thead>
<tr>
<th>Calculate accurately</th>
<th>Median (5 point scale)</th>
<th>% scoring 4 &amp; 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.0</td>
<td>33.0 (23.5–43.6)</td>
</tr>
<tr>
<td>Estimate based on general knowledge of patient</td>
<td>4.0</td>
<td>57.1 (46.3–67.5)</td>
</tr>
<tr>
<td>Estimate based on FST</td>
<td>2.0</td>
<td>22.8 (14.7–32.8)</td>
</tr>
</tbody>
</table>

Access to surgery

- Booking clerk booked patients according to the CPAC score
- Surgeon and booking clerk work together to construct the list - influenced by the score and many other factors
- Surgeon determination of theatre list (potentially irrespective of CPAC)
- Access was in the context of systems factors and availability of resources

Selection of patients for lists

<table>
<thead>
<tr>
<th>Clinical opinion</th>
<th>Median</th>
<th>% scoring 4 &amp; 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical opinion</td>
<td>5</td>
<td>87.0 (82.8–90.5)</td>
</tr>
<tr>
<td>Ability to benefit</td>
<td>4</td>
<td>76.2 (71.1–80.8)</td>
</tr>
<tr>
<td>Waiting time</td>
<td>4</td>
<td>54.1 (48.2–59.8)</td>
</tr>
<tr>
<td>CPAC</td>
<td>3</td>
<td>48.5 (42.8–54.3)</td>
</tr>
<tr>
<td>Squeaky wheel</td>
<td>3</td>
<td>26.4 (21.7–31.7)</td>
</tr>
<tr>
<td>Fillers</td>
<td>3</td>
<td>32.0 (26.9–37.6)</td>
</tr>
<tr>
<td>Education/interest</td>
<td>2</td>
<td>15.9 (12.1–20.5)</td>
</tr>
<tr>
<td>FST</td>
<td>2</td>
<td>18.1 (13.9–22.9)</td>
</tr>
<tr>
<td>Access to private</td>
<td>1</td>
<td>8.0 (5.3–11.7)</td>
</tr>
</tbody>
</table>

Why not clinical opinion alone?

- Acceptance of rationing requires the clinician to take a population view of health and this may be seen to be in conflict with the clinician’s role as the patient’s advocate.
  - “The main problem is that surgeons and doctors are patients’ advocates and they will try to get their patient through the system ...” (Location 2 OS)
- Clinical variation
  - “… I might feel that patient probably is not as bad as my colleague ... because you can’t take a blood test ... you just can’t do it. It is subjective.” (Location 2 OSM)
Clinicians’ values

• Prioritising workforce participation
  – “With something like a hip I’m not prepared to try to push someone early but if it was say someone who has been working with a carpal tunnel syndrome I would write a letter.” (Location 4 GP)
• Ability to access private sector
  – “... you give them the social history, they’re not some white middle class woman with a nanny and a gardener ...” (Location 5 GP)

Perceptions of benefit

• A lot of people that are on the waiting list for joints are pretty immobile anyway, not because of their joint, but because of their lifestyle, because they are over-weight and they’ve got chronic obstructive lung disease and that sort of thing. I can’t see what on earth they are going to get anyway from their operation. (GP)

Independence

• Keeping old people independently and so forth may be just as important. (Registrar)

Cultural considerations

• “... it’s a cultural thing... in that if you’ve got a Pacific Islander who tells you that he’s sore, he’s really sore... they don’t come to hospital until things become unbearable. (Surgeon)

Evaluation of complex interventions

• Defining the objectives of the implementation
• Mixed methods and a variety of approaches to evaluation
• Reliability and validity of the intervention
• Need to understand how the intervention (CPAC) is being used as well as the outcomes
• Implementation may influence the way the intervention is used
• Interaction between the intervention and ‘systems factors’
• The political environment

• What is the solution? How can prioritisation be achieved effectively?