Colposcopy Management Policies

Screening Policies

Objective:
To develop a model which will allow local clinicians in England to input population and policy data for their own colposcopy service and evaluate the effects of new guidelines in terms of capacity and cost-effectiveness.

Background:
Recent guidelines suggest referral to colposcopy after one mild dyskaryosis cervical screening result rather than two.

- We previously developed a computer model of colposcopy service management and capacity to examine increases in referrals.

- A separate developed model examined long-term cost-effectiveness but only on a national basis.

This study links the two models to test how local policy for managing colposcopy affects cost-effectiveness.

Methods:
The models allow clinicians to choose from local policy options.

- If increase in referrals is significant, clinicians test different colposcopy management policies to reduce capacity and/or improve cost-effectiveness.

Model user manual were piloted to be user-friendly.

Model allows for '000s of scenarios. We examine:
- 'Typical' (most frequently adopted in current practice),
- 'High intensity' (most capacity required),
- 'Low intensity' (least capacity required).

Policy type

<table>
<thead>
<tr>
<th>Policy type</th>
<th>Choices available</th>
<th>Low intensity</th>
<th>Typical intensity</th>
<th>High intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIN 1 management policy</td>
<td>Discharge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPV management policy</td>
<td>Discharge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-negative colposcopy policy</td>
<td>Repeat colposcopy in 6 months</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Screening Policy Results for a Local service (total population = 300,000)

Single mild dyskaryosis referral is cost-effective for all types of service. On average, colposcopy workload increases 21.7% in services not currently operating this policy.

<table>
<thead>
<tr>
<th>Policy</th>
<th>Costs LYs QALYs</th>
<th>Benefits LYs QALYs</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>£12,730,247</td>
<td>1,886,362</td>
<td>£46,903</td>
<td>£416</td>
</tr>
</tbody>
</table>

Conclusions:
This local-level model for practitioners helps establish 'best practice' for their service. Integrating local health systems modelling with cost-effectiveness analysis is possible.

A user-friendly model is now available on the ScHARR website via the NHS Cancer Screening Programme website to aid local service planning. See:

http://www.shef.ac.uk/scharr/sections/heds/modelling/cervical-screening

References: