How Vascular Societies Should Prevent Risk Averse and Gaming Behaviour by Surgeons

Professor Jonathan Beard
Previous President, the Vascular Society of Great Britain & Ireland

No Disclosures

Surgeon Level Reporting

- NHS Choices:
  - ‘More choice and transparency’
- Surgeon level outcomes derived from national databases e.g. NVR:
  - 10 surgical specialities
  - 1st wave 2013, 2nd wave 2014
- Elective infrarenal AAA and CEA reported for Vascular Surgery:
  - Perioperative mortality for AAA
  - Stroke and death for CEA

Problems With Individual Procedural Data

- Misinterpretation by media
- Defining meaningful and relevant outcomes
- Reliable risk adjustment
- Case-mix (e.g. open vs. EVAR)
- Low volume and newly appointed surgeons

Who is the Good Surgeon?

SUR = Death related to the surgeon
ME = Death due to errors by the team
RISK = Death due to high-risk case

Funnel Plots

Analytical Issues:
Unit Outcomes More Useful for Patients

- Adjusted outcomes by surgeon

<table>
<thead>
<tr>
<th>No. of procedures</th>
<th>Patients discharged alive</th>
<th>Adjuoted mortality rate %</th>
<th>Length of stay (days) Median (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Surgeon Outcomes Useful for Internal Quality Improvement

- Adjusted outcomes by surgeon

Turn-Down Rates

- High-risk patients have shown a willingness to accept increased complication and death rates*
- Publication of turn-down rates essential to avoid risk-averse behaviour**

* Cykert Thorac Surg Clin 2004
** Karthikesalingham et al EJVES 2015

Other Strategies to Help Surgeons AND Patients

- ‘Buddy’ newly appointed surgeons
- Advise those with small numbers to stop doing that operation
- Don’t publish league tables
- Ensure outcome measures are meaningful (e.g. EVAR reintervention)
- Develop robust risk-stratification