Residency Redesign

John G Hunter MD FACS FRCS Edin(hon)
Chair, American Board of Surgery
Mackenzie Professor and Dean (Interim)
Oregon Health and Science University School of Medicine
Disclosure

These reflections are my own and do not represent the official position of the American Board of Surgery.
Residency Redesign

- Competency Based Resident Education
  - EPA based, mapped to milestones and ACGME competencies
- Entrustment for independent practice once competence achieved
- Faculty development in teaching and assessment of competence
- Flexibility in pathways (I-5, ESP, FIT, Traditional)
CBRE: Are case numbers a reliable surrogate for competence?

“You gotta be kidding me”
The Intersection of CBRE and Case Numbers

Original article

Correlation between experience targets and competence for general surgery certification

J. R. De Siqueira and M. J. Gough

Yorkshire School of Surgery, Health Education Yorkshire and the Humber, Leeds, UK

Correspondence to: Mr J. R. De Siqueira, Leeds Vascular Institute, Leeds General Infirmary, Great George Street, Leeds LS1 3EX, UK
(e-mail: jonathan.desiqueira@nhs.net)

De Siqueira, Gough (2016)
BJS (epub Feb 5)
Correlation between experience targets and competence for general surgery certification

J. R. De Siqueira and M. J. Gough

Yorkshire School of Surgery, Health Education Yorkshire and the Humber, Leeds, UK

Correspondence to: Mr J. R. De Siqueira, Leeds Vascular Institute, Leeds General Infirmary, Gipton Road, Leeds LS1 3EX, UK
(e-mail: jonathan.desiqueira@nhs.net)

Background: Working time restrictions and publication of results have stimulated competence-based assessment in surgery. Nevertheless, certification, revalidation, and board accreditation across the developed world, still rely on experience targets based on indicative numbers as markers of operative competence. This study assessed the correlation between trainer assessment of competence and completion of indicative numbers.

Methods: Analysis of UK Imperial National Curriculum Programme portfolios of general surgical trainees in a single deanery. The Specialty and Training Board allowed comparison of Procedure Based Assessment (PBA) (indicative competence) for cholecystectomy, segmental colectomy and Hartmann’s procedure to operative numbers.

Results: A positive correlation was demonstrated in 649 PBA (indicative competence) scores and 1058 operative numbers: cholecystectomy ($r_s = 0.532, P < 0.001$), segmental colectomy ($r_s = 0.552, P < 0.001$) and Hartmann’s procedure ($r_s = 0.663, P < 0.001$). Of those who completed the indicative numbers defined to achieve certification of completion of training, only eight of 30 performing cholecystectomy, eight of 52 undertaking segmental colectomy and seven of 36 performing Hartmann’s procedure had achieved three PBAs at the level considered to represent independent operating (level 4).

Conclusion: A minimum number of index procedures did not reflect competence in a significant proportion of trainees. A more reliable tool is required for certification.
Growth of competence over time

Advancement (entrustment) decisions

Training  Deliberate professional practice
from Olle ten Cate

Growth of competence over time -

Independent practice in training

- novice
- advanced
- competent
- proficient
- expert

Shades of decreasing supervision

Ready for unsupervised practice

Billing?

Independent Practice

training

deliberate professional practice

OHSU
Entrustable Professional Activity

“A unit of professional practice that can be fully entrusted to a trainee, as soon as he or she has demonstrated the necessary competence to execute this activity unsupervised”

How EPA’s Differ from Competencies—Reductionist v. Holistic
## The Intersection of CBRE and Post Graduate Year

<table>
<thead>
<tr>
<th>Procedure</th>
<th>OSAT Level</th>
<th>OSATS Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendectomy</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Small bowel resection</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Carotid</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Lap Cholecystectomy</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Aorto-iliac</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Peri-anal abs</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td>Sigmoidectomy</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td>Hip fracture</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>Inguinal hernia (open)</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td>AV-fistula</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>Venous</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>Amputation</td>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>

**PGY 2**   **PGY 4**   **PGY 6 (vasc)**
General Surgery Program Director (on a good day)

WTF?
Faculty Development
Structure of Surgical Training

General Surgery Residency Graduates

- ACMGE approved fellowship: 40%
- Non-ACGME approved fellowship: 40%
- No fellowship: 20%

N = 1000
New Trails to Specialty Training

- Early Specialization
- Flexibility in Training
- Integrated Track
Focused Expertise or Special Qualification: ABMS proposal to pilot ABS certification following non-ACGME accredited specialty training

Have we lost progress?
The House of Surgery: Key Stakeholders Working on Residency Redesign

- American College of Surgeons
  - Creates Educational Programs
  - Accredits Educational Institutes
- Accreditation Council for Graduate Medical Education (ACGME) is responsible for residencies
  - Residency Review Committee for Surgery (RRC) reviews and accredits programs
- The American Board of Surgery (ABS) is responsible for certifying competent surgeons
- Association of Program Directors in Surgery
The “House of Surgery” has many zip codes.
Why has something so “obvious” as residency redesign failed so many times?
Summary - Success in Residency Redesign Will Require Attention To

- **Structure**
  - Core plus terminal training
  - Integrated pathways
  - Innovative and adaptive

- **Process**
  - Competency Based
  - Faculty Development

- **Outcome**
  - Measurement only Beginning

- **Politics**
  - Long Table, Big Tent, and Capable Leadership