Modernising a Skills Curriculum
Dara Kavanagh
NASCE meeting, Charter Day 2015
Historical background

✧ Curriculum 360 BC
  • What to teach?
  • How to teach it?
    » ‘The Republic’, Plato

✧ Curriculum 1900’s
  • Content to be studied
  • Time taken to study
  • Teaching method
Historical background

✧ Current GMC definition:

- “A statement of the intended aims & objectives, content & experiences, outcomes and processes of an educational program, including:
  - A description of training structure (entry requirements, length and organisation of the programme, including its flexibilities, and assessment system)
  - A description of the expected methods of learning, teaching, feedback & supervision."
RCSI curriculum has evolved to meet the changing needs of trainees:

- Shorter training program
- Shorter working week (17,500 hours)
- Reduced operating lists
  - Abolition of ‘twin theaters’
- Altered casemix
  - Increasing non-operative treatment
- Complex technology
  - ‘Consultant learning curve’
- Changing public expectations
✧ OPERATIVE SURGICAL SKILLS SYLLABUS

• BOOTCAMP

• TAKEHOME KITS

• WWW.MSURGERY.IE

• OPERATIVE SKILLS ASSESSMENT
SURGICAL BOOTCAMP
Intensive 5-day introductory course in surgical skills/management

Technical skills

✧ Knot tying
✧ Suturing
✧ Wound closure
✧ Anastomosis
✧ Surgical technique/theatre skills
✧ Drains/catheters
✧ Minor surgical procedures
✧ Laparoscopy & endoscopy
SIMULATION TAKE HOME KIT
What do they measure

<table>
<thead>
<tr>
<th>What</th>
<th>Right hand</th>
<th>Left hand</th>
<th>Total</th>
</tr>
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<td>Speed</td>
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<td>Acceleration</td>
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<td>Smoothness</td>
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<td>Off screen</td>
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<td>calculation)</td>
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<tr>
<td>Handedness</td>
<td>Right</td>
<td>Left</td>
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MOBILE APP: WWW.MSURGERY.IE
SMARTPHONE APP FOR SURGICAL TRAINEES

One Handed Knot Tying - Basic Surg Video to follow - Slow Motion Loop
<table>
<thead>
<tr>
<th>Day</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td><strong>TITLE</strong></td>
<td>Open Surgery Part A</td>
<td>Open Surgery Part B</td>
<td>Lap Surgery Part A</td>
<td>Lap Surgery Part B</td>
<td>Endoscopy</td>
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<tr>
<td><strong>LEARNING OBJECTIVES</strong></td>
<td>Fundamentals of open surgery and tissue handling</td>
<td>Principles of bowel anastomosis &amp; wound management</td>
<td>Fundamentals of laparoscopic surgery</td>
<td>Development of applied laparoscopic skills</td>
<td>Understanding the fundamentals of endoscopy. Principles of vascular surgery</td>
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<td><strong>ASSESSMENT</strong></td>
<td>Assessment of Open Skills</td>
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<td></td>
<td>Assessment of Open Skills</td>
<td>Endoscopy Equipment (Storz)</td>
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<tr>
<td><strong>OTHER</strong></td>
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<td>Anatomy</td>
<td>Anatomy</td>
<td>Anatomy</td>
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</tbody>
</table>
LAPAROSCOPIC CHOLECYSTECTOMY
ANNUAL OBJECTIVE SKILLS ASSESSMENT

- Inguinal hernia repair
- S-F junction ligation
- Excision of sebaceous cyst
- Resection of IGTN
- Bowel anastomosis
<table>
<thead>
<tr>
<th>Day</th>
<th>Overview</th>
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<tbody>
<tr>
<td>1</td>
<td>General / Gynaecological emergencies</td>
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<tr>
<td>2</td>
<td>Neurosurgery / Trauma &amp; Orthopaedics</td>
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<tr>
<td>3</td>
<td>Plastics / E.N.T.</td>
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<td>4</td>
<td>Urology</td>
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<td>5</td>
<td>Cardiothoracic</td>
</tr>
<tr>
<td>6</td>
<td>Paediatrics</td>
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</tbody>
</table>
STANDARDISATION

Defined Curriculum
Practice in safe environment
simulation
Feedback and coaching
Assessment and certification
A: Surgical skills laboratory: Acquire skills

- Coaching
- Practice
- Feedback
- Demonstrate

Assessment

Documentation of proficiency
B. Workplace: Develop skills

- Practice/Observation
- Documentation of capability
- Accumulate experience
- Achieve competence
- Expert/Mastery
SELECTION FOR ST3

A. Performance during Core Surgical Training: 650 marks

Workplace Assessments: 130 marks x 3 = 390 marks
The following assessments are performed in each of the first 3 rotations during Core Surgical Training:
- SSAOP x3 (15 marks each): 45 marks
- SCA x 3 (10 marks each): 30 marks
- E logbook: 30 marks
- Trainer reports: 25 marks

Total: 130 marks (x3 rotations)

RCSI Assessments: 260 marks
- Case Based Discussions (SCHOOLforSurgeons): 60 marks
- Technical Skills Assessments: (ST1 x4/ST2 x4) 100 marks
- Human Factors OSCEs: (ST1 x4/ST2 x4) 100 marks

Must have passed all parts of MRCS examination in order to participate in the interview.

B. Specialty Interview: (5 x 70 marks) 350 marks

Multiple Mini Interview format: 5 stations/5 themes:
- Quality and Safety in Surgical Healthcare
- Commitment to Academic Advancement and Lifelong Learning
- Knowledge of Current Issues Relevant to Surgical Practice
- Decision Making and Judgement in Surgery
- Professionalism and Probity in Surgical Practice

Grand Total: 1000 marks
RCSI Surgical Curriculum continues to evolve by utilising a combination of:

- Traditional methods
- Broad ranging fidelity simulators
- Take-home simulators
- Electronic learning via the smartphone platform
- Live operating
- Coaching and assessment to achieve competence
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