The Value of Data:
Capturing Trainee Trauma Exposure in the Australian AOA 21 Training Program in Orthopaedic Surgery

Author: Ian Incoll
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I do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

Je n’ai aucune affiliation (financière ou autre) avec une entreprise pharmaceutique, un fabricant d’appareils médicaux ou un cabinet de communication.
Acknowledgements

Co-Authors:
Anthony Silva
Belinda Balhatchet
Nicole Williams

Statistics:
Ian Incoll
eLog data

Includes Feb 2017 – July 2019 unless specified
  • **219,551 cases**

All AOA trainees
  • De-identified for trainee

Compare
  • Regions (de-identified)
  • Supervision
  • Exposure

Legend: Level of Supervision

- Teaching/Supervising
- 1º - Surgeon Available
- 1º - Surgeon Present
- 1º - Surgeon Scrubbed
- Assisting Surgeon

Increasing entrustment
AOA Training App - eLogbook
Supervision Over Time - Australia
Supervision Over Time - Australia
# Orthopaedic LogBook Comparisons

(Average numbers/year)

<table>
<thead>
<tr>
<th>Year of Training</th>
<th>USA (Baskies 2008)</th>
<th>Canada (Froelich 2009)</th>
<th>UK (Froelich 2009)</th>
<th>Australia (Incoll 2019)</th>
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Australia – Trainees by Region - Training Year (Feb – Feb)

2017
Mean cases = 384/yr
Median cases = 376/yr

2018
Mean cases = 392/yr
Median cases = 405/yr
Australia – Trainees by Region - Training Year (Feb – Feb)

2017
Mean cases = 384/yr
Median cases = 376/yr

2018
Mean cases = 392/yr
Median cases = 405/yr
Supervision Over Time – by Region

Region 4

Region 7
Australia – Progression of Entrustment
Australia – Progression of Entrustment Hip and Knee Replacement Elective Surgery
Supervision Over Time – Region 7
Trauma vs Elective
Supervision by Procedure level – by Region
Australia – Highest 15 Procedures 2018
Level 1 Procedures – Lowest 15 2018
<table>
<thead>
<tr>
<th>Region</th>
<th>SCFE</th>
<th>Hip Arthroscopy</th>
<th>Supracondylar #</th>
<th>Hip # Fixation</th>
<th>Ankle #</th>
<th>Forearm #</th>
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Index Procedure Rates 2018 - Region
Australia – Trauma - 2018
Australia – Elective 2018
Elective Procedure Supervision - 2018

- Teaching a colleague the procedure: 3975
- Operating surgeon - unsupervised: 12536
- Operating surgeon - consultant scrubbed: 2543

Total: 23353

Trauma Procedure Supervision - 2018

- Operating surgeon - consultant present: 6621
- Assistant surgeon: 9537
- Total: 17470

Australia – Elective vs Trauma 2018
Stage of Training 2018
AOA NJRR 2017: 37,137 primary THRs
AOA Trainees involved in 4,464 (12%) of cases and 1,707 (4.6%) as primary surgeon

Primary Hip Arthroplasty - 2017
AOA NJRR 2017: 55,042 primary TKR
AOA Trainees involved in 6,604 (12%) of cases and 3,229 (5.9%) as primary surgeon

Primary Knee Arthroplasty - 2017
Gender - Stage of Training 2018

11.7% female
Orthopaedic eLogbook data learnings

• Comparable caseload to peer countries
• Wide variation in levels of supervision between regions
• Some Level 1 procedures (mandatory) have very low caseload
• Progression of entrustment occurs
• Gender difference in levels of entrustment
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