Guiding Standards for Successful Completion of an AAES-Accredited Fellowship in Comprehensive Endocrine Surgery

The guiding standards were created in 2018 for AAES-accredited fellowships in Comprehensive Endocrine Surgery. These standards will be used to guide the affirmation by each program director that finishing fellows have met the minimum requirements of the AAES. The below requirements are the minimum standards required for graduating fellows and are not intended to remove local control over the breadth of expectations set by the individual AAES fellowship program directors. These standards will comprise part of the tracked outcomes reportable each year to the fellowship accreditation committee, and will serve as a cornerstone of the triennial reaccreditation process for fellowship programs.

1) Case volumes: Each fellow will track their operative case experience using the AAES-approved experience log. A copy of this is attached. The minimum number of operative cases required during an AAES-accredited fellowship is:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Minimum Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thyroid operations</td>
<td>60</td>
</tr>
<tr>
<td>Parathyroid operations</td>
<td>30</td>
</tr>
<tr>
<td>Adrenal operations</td>
<td>10</td>
</tr>
<tr>
<td>Central neck lymphadenectomy(^1)</td>
<td>10</td>
</tr>
<tr>
<td>Lateral neck lymphadenectomy(^1)</td>
<td>5</td>
</tr>
<tr>
<td>Advanced endocrine operations(^2)</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total case number</strong></td>
<td><strong>125</strong></td>
</tr>
</tbody>
</table>

\(^1\) Central and lateral neck lymphadenectomies can be counted when done concurrent to the index thyroid operation
\(^2\) Advanced cases include (but are not limited to) reoperative thyroid/parathyroid/lateral neck surgery, reoperative adrenal surgery, adrenalectomy performed with concomitant multivisceral resection, cortical-sparing adrenalectomy, enteropancreatic neuroendocrine tumor procedures, and pediatric endocrine surgical procedures.

For those fellowship programs that extend to two years, these minimum case volumes would be expected to be met during the first year, or equivalent of clinical time as determined by the program’s structure.

These minimum numbers have been achieved by our programs and fellows in years past. The categories chosen, especially the reoperative cases in the advanced operations designation, are intended to demonstrate the exposure and experience with a breadth of complex endocrine surgery, as well as exposure to the inherent multidisciplinary care required especially for revision operations.

2) 15 complete ultrasound examinations (5-characterization of thyroid nodules, 5-parathyroid localization or lymph node mapping; and 5 ultrasound guided FNA)

*This will be attested to by the program director. Documentation of these examinations necessary for external certification may be completed at the discretion of the fellow. A documentation rubric will be provided that is modified from the American Association of Clinical Endocrinologists-sponsored Endocrine Certification in Neck Ultrasound.*
3) Cases presented by the Fellow and reviewed at an institutional multidisciplinary conference; discussion at the bi-annual AAES national videoconference may be included in this number.

4) Scholarly experience: It is the intention of the AAES to train surgeons in the science of endocrine surgery. To do this, a wide variety of scholarly work and its dissemination is to be considered. This list includes:
   - Peer reviewed manuscript
   - Book chapter
   - Non-peer-reviewed print or electronic publication
   - Locoregional, national, or international meeting presentation – poster or oral podium talk (inclusive of clinical science, basic science, interesting case, techniques)
   - Instructional video
   - Grand rounds (or equivalent) lecture (local or invited)
   - Faculty lecture at CME course
   - Institutional teaching conference/director of regular journal club
   - Resident or Medical student (or other student – e.g., DO, PA, NP) lecture
   - Development of novel curriculum (and, ideally disseminated – for example, in MedEd Portal)
   - Advisor/mentor for junior learner (student or resident) in research project

It will be the responsibility of the individual fellowship program director to attest to the fellow meeting the scholarly requirement. The annual attestation by the program director will include a statement:

- I hereby attest that __________ (fellow name here) has satisfactorily completed an active intellectual and scholarly pursuit during the period of fellowship training.
### Operative Cases

<table>
<thead>
<tr>
<th>Thyroid</th>
<th>Benign</th>
<th>Malignant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thyroid lobectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completion thyroidectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total thyroidectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reoperative thyroidectomy (previous thyroidectomy, parathyroidectomy)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many of the above were pediatric (age &lt;18)?</td>
<td></td>
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<tr>
<td>Operative approach other than anterior cervical collar incision</td>
<td></td>
<td></td>
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<tr>
<td>Central neck dissection - initial</td>
<td></td>
<td></td>
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<tr>
<td>Central neck dissection - reoperative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral neck dissection - initial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral neck dissection - reoperative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many of the above were pediatric (age &lt;18)?</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Parathyroid</th>
<th>SGD</th>
<th>MGD</th>
<th>Malignant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parathyroidectomy - MIP / ULE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parathyroidectomy - BLE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reoperative parathyroidectomy (previous thyroidectomy, parathyroidectomy)?</td>
<td></td>
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<tr>
<td>Transcervical thymectomy</td>
<td></td>
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<tr>
<td>Parathyroid autotransplantation (including for thyroid surgery)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>How many of the above were pediatric (age &lt;18)?</td>
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<table>
<thead>
<tr>
<th>Adrenal</th>
<th>Nonfunctional</th>
<th>Functional</th>
<th>Malignant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrenalectomy - open (including with concomitant visceral resections)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Adrenalectomy - minimally invasive (transabdominal)</td>
<td></td>
<td></td>
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<tr>
<td>Adrenalectomy - minimally invasive (retroperitoneal)</td>
<td></td>
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<tr>
<td>Reoperative adrenalectomy</td>
<td></td>
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<tr>
<td>How many of the above were cortical-sparing?</td>
<td></td>
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</tr>
<tr>
<td>How many of the above were pediatric (age &lt;18)?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>GI Neuroendocrine</th>
<th>Procedure - 1st Assist</th>
<th>Procedure - 2nd assist/other</th>
<th>Clinic</th>
<th>Multidisciplinary Conference (e.g. tumor board)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pancreas</td>
<td></td>
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<tr>
<td>Other GI neuroendocrine tumors</td>
<td></td>
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</tr>
<tr>
<td>How many of the above were pediatric (age &lt;18)?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Other</th>
<th></th>
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<tbody>
<tr>
<td>Other (Head and Neck procedures - e.g. Sistrunk)</td>
<td></td>
<td></td>
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<tr>
<td>Other (General Surgery)</td>
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</tbody>
</table>

### Nonoperative Experience

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Performed</th>
<th>Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrasound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FNA - Thyroid</td>
<td></td>
<td></td>
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<tr>
<td>FNA - lymph node</td>
<td></td>
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<tr>
<td>Vocal cord examination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ultrasound</td>
<td></td>
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<tr>
<td>Laryngoscopy</td>
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<tr>
<td>Other (e.g., video stroboscopy)</td>
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</tbody>
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