Aligning Graduate Medical Education with Surgical Workforce Needs

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American College of Surgeons
GME Position Paper Under Development

- Cecil G. Sheps Center for Health Services Research collaborating with American College of Surgeons to develop ACS position paper on GME
- ACS developing forward-thinking, data-driven GME position paper to answer question:

What changes are needed to better align GME policy to meet the surgical health needs of the US population?
Project Overview

Project includes:

- Projection of future supply of surgeons for 12 ACGME surgical specialties

- Cartographic analyses showing geographic distribution of surgery services

- Synthesis of lessons learned from state-based initiatives to expand GME training
Overall Supply of Surgeons Projected to Decline

Projected Surgeon Supply, 2010-2028

18% Reduction in Headcount and 16% Reduction in FTE, 2010-2028

Declines in Surgical Workforce More Rapid than HRSA’s Previous Projections

<table>
<thead>
<tr>
<th>Surgical Specialty</th>
<th>Change in FTE 2010-2025</th>
<th>HRSA Physician Supply Model</th>
<th>Sheps/ACS Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery</td>
<td>-2,053</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Colorectal Surgery</td>
<td>298</td>
<td>1.28</td>
<td></td>
</tr>
<tr>
<td>Pediatric Surgery</td>
<td>97</td>
<td>1.18</td>
<td></td>
</tr>
<tr>
<td>Thoracic Surgery</td>
<td>-847</td>
<td>0.86</td>
<td>0.74</td>
</tr>
<tr>
<td>Vascular Surgery</td>
<td>145</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-Total Surgery</strong></td>
<td><strong>-2,359</strong></td>
<td><strong>0.97</strong></td>
<td><strong>0.91</strong></td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>-72</td>
<td>1.01</td>
<td>0.98</td>
</tr>
<tr>
<td>Ob/Gyn.</td>
<td>-3,426</td>
<td>1.09</td>
<td>0.88</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>-1,898</td>
<td>1</td>
<td>0.88</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>-2,612</td>
<td>0.98</td>
<td>0.79</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>-888</td>
<td>1.01</td>
<td>0.87</td>
</tr>
<tr>
<td>Plastics</td>
<td>-589</td>
<td>0.93</td>
<td>0.87</td>
</tr>
<tr>
<td>Urology</td>
<td>-1,502</td>
<td>0.93</td>
<td>0.78</td>
</tr>
<tr>
<td><strong>All Surgery</strong></td>
<td><strong>-13,347</strong></td>
<td><strong>1.01</strong></td>
<td><strong>0.87</strong></td>
</tr>
</tbody>
</table>

Proposed Changes to GME Will Not Solve Supply Issues

Effect of Proposed Changes to GME on Surgeon Supply

In 2009:

- **959 counties** did not have a surgeon.
- **9.7 million people** lived in these counties.
In 2009:

1,183 counties did not have a general surgeon.

15 million people lived in these counties.
National GME Policy Can Learn From State Policy “Laboratories”

Project Aims

Synthesize lessons learned from state-based initiatives to expand GME training, including innovations and pitfalls in:

- Assessing health workforce required to meet population health needs
- Identify governance structures to allocate GME positions between specialties, geographies and training sites
- Identify various funding models, including all-payer systems

Timeline

January 1, 2012 to December 31, 2012
Need for Surgical Voice **Now** in GME, One That is Collaborative With Other Specialties

- Most policy efforts aimed at primary care, fewer on general surgery
- Yet General Surgery faces same issues as Primary Care: increasing specialization, erosion scope of practice, “branding issues”, diminished attractiveness to medical students, need for enhanced community-based training

“**A mutually beneficial political synergy with family medicine, especially as seen in inner city or very rural practices could occur.**”

Recent Recommendations from Conference on GS Workforce Shortfalls

- Increase size of accredited surgery residencies
- Increase flexibility and breadth in general surgery training
- Enhance links with community-based hospitals
- Seek loan forgiveness for general surgeons
- Select resident candidates (in part) based on commitment to General Surgery

Why Not Train General Surgeons and Family Physicians Together in Critical Access Hospitals?

<table>
<thead>
<tr>
<th>In 2009:</th>
<th># of Hospitals</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 50 Miles of a GS Res Program</td>
<td>2,979</td>
<td>240,210,154</td>
</tr>
<tr>
<td>More than 50 Miles from a GS Res Program</td>
<td>2,214</td>
<td>66,414,114</td>
</tr>
<tr>
<td>Within 100 Miles of a GS Res Program</td>
<td>4,234</td>
<td>282,378,993</td>
</tr>
<tr>
<td>More than 100 Miles from a GS Res Program</td>
<td>959</td>
<td>24,245,275</td>
</tr>
</tbody>
</table>

Sources: OSCAR Provider of Services File, 2nd quarter, 2009; “Claritas” 2009 (zip code population). Note: Hospitals include Short-Term General, CAH, Children’s, and “other” (typically Federal). Population calculated for zip codes whose centroids are within 50 and 100 miles of a GS Res Program.
Distance of Hospitals from General Surgery Residency Programs, 2009

Note: Programs are placed at the ZIP Code centroid. Overlapping symbols were slightly separated.
Source and Produced By: American College of Surgeons Health Policy Research Institute, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, 2009.
General Surgeons per 100,000 Population and Provision of Operating Room Services by CAHs, 2009

Produced By: American College of Surgeons Health Policy Research Institute, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Source: AMA Physician Masterfile, 2009: Data include non-federal, non-resident, clinically active physicians less than 70 years old reporting a primary specialty classified by the ACS HPRI as "general surgery"; OSCAR Provider of Services file, 3rd quarter, 2009: Data include hospitals categorized as Critical Access Hospitals, and provision of OR services includes by staff, arrangement, and/or agreement.
Enhancing community-based surgery training programs difficult due to financial constraints, need to ensure volume/breadth of procedures and accreditation challenges

“Program requirements have become prescriptive, and opportunities for innovation have progressively disappeared”

Nasca et al., NEJM, 2012
Questions? Comments!

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American College of Surgeons if you wish at ddetmer@facs.org