Workforce Considerations, And The Impact on Urologic Practice

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Describing the Current U.S. Physician Workforce

Who Are We?
Specialties With the Largest Number of Active Physicians, 2013

- Internal Medicine
- Family Medicine/General Practice
- Pediatrics
- Obstetrics & Gynecology
- Anesthesiology
- Psychiatry
- Emergency Medicine
- Radiology & Diagnostic Radiology
- General Surgery
- Cardiovascular Disease
- Orthopedic Surgery
- Ophthalmology
- Hematology & Oncology
- Anatomic/Clinical Pathology
- Gastroenterology
- Neurology
- Dermatology
- Urology
- Nephrology
- Otolaryngology
- Physical Medicine & Rehabilitation
- Critical Care Medicine
- Child & Adolescent Psychiatry
- Infectious Disease
- Plastic Surgery
- Preventive Medicine
- Endocrinology, Diabetes & Metabolism
- Pulmonary Disease
- Rheumatology
- Neurological Surgery
- Neonatal-Perinatal Medicine
- Geriatric Medicine
- Radiation Oncology
- Thoracic Surgery
- Allergy & Immunology
- Internal Medicine/Pediatrics
- Pain Medicine & Pain Management
- Vascular Surgery
- Neurosurgery
- Interventional Cardiology
- Vascular & Interventional Radiology

Source: AMA Physician Masterfile (December 2013)
Percentage of Active Physicians Who Are Age 55 or Older by Specialty, 2013

Source: AAMC Physician Specialty Data Book
Center for Workforce Studies
November, 2014
Percentage of Active Physicians Who Are Female by Specialty, 2013
Percentage of ACGME Residents/Fellows Who Are Female by Specialty, 2013

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetrics &amp; Gynecology</td>
<td>80.1%</td>
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<tr>
<td>Pediatrics</td>
<td>80.5%</td>
</tr>
<tr>
<td>Endocrinology, Diabetes &amp; Metabolism</td>
<td>81.7%</td>
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<tr>
<td>Allergy &amp; Immunology</td>
<td>80.2%</td>
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<tr>
<td>Geriatric Medicine</td>
<td>80.7%</td>
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<tr>
<td>Neonatal Perinatal Medicine</td>
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<tr>
<td>Dermatology</td>
<td>80.3%</td>
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<tr>
<td>Child &amp; Adolescent Psychiatry</td>
<td>80.1%</td>
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<tr>
<td>Internal Medicine/Pediatrics</td>
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<tr>
<td>Rheumatology</td>
<td>79.6%</td>
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<tr>
<td>Family Medicine/General Practice</td>
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<tr>
<td>Preventive Medicine</td>
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<td>Psychiatry</td>
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<tr>
<td>Anatomic/Clinical Pathology</td>
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<tr>
<td>Infectious Disease</td>
<td>79.2%</td>
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<tr>
<td>Hematology &amp; Oncology</td>
<td>79.3%</td>
</tr>
<tr>
<td>All specialties</td>
<td>79.1%</td>
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<tr>
<td>Neurology</td>
<td>79.5%</td>
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<tr>
<td>Ophthalmology</td>
<td>79.8%</td>
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<tr>
<td>Internal Medicine</td>
<td>79.5%</td>
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<tr>
<td>Nephrology</td>
<td>79.4%</td>
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<tr>
<td>Physical Medicine &amp; Rehabilitation</td>
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<tr>
<td>General Surgery</td>
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<tr>
<td>Emergency Medicine</td>
<td>78.7%</td>
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<tr>
<td>Anesthesiology</td>
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<td>Gastroenterology</td>
<td>78.0%</td>
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<tr>
<td>Otolaryngology</td>
<td>77.9%</td>
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<tr>
<td>Critical Care Medicine</td>
<td>77.7%</td>
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<tr>
<td>Vascular Surgery</td>
<td>77.6%</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>77.4%</td>
</tr>
<tr>
<td>Radiation Oncology</td>
<td>77.2%</td>
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<tr>
<td>Radiology &amp; Diagnostic Radiology</td>
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<tr>
<td>Neuroradiology</td>
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<td>Urology</td>
<td>76.3%</td>
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<td>Cardiovascular Disease</td>
<td>76.2%</td>
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<tr>
<td>Thoracic Surgery</td>
<td>76.0%</td>
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<tr>
<td>Pain Medicine &amp; Pain Management</td>
<td>75.5%</td>
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<tr>
<td>Pulmonary Disease</td>
<td>75.2%</td>
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<tr>
<td>Neurological Surgery</td>
<td>74.8%</td>
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<tr>
<td>Orthopedic Surgery</td>
<td>74.3%</td>
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<tr>
<td>Vascular &amp; Interventional Radiology</td>
<td>74.0%</td>
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<tr>
<td>Interventional Cardiology</td>
<td>73.7%</td>
</tr>
</tbody>
</table>

Source: 2013 AAMC/AMA National GME Census
Age Distribution of Practicing Physicians, 2013
Will There Be a Physician Shortage In the Years Ahead?
Demographics
Number of Persons 65+ In the United States, 1900 to 2060

Source: U.S. Census Bureau, Population Estimates and Projections
The Impact of Population Age on Physician Workforce Needs

Physicians Needed per 100,000 People by Specialty and Pt. Age

Percent Change in the Number of Active Physicians by Specialty, 2008-2013

Source: AAMC Physician Masterfile (December 2008 and December 2013)
So What Does This All Mean?
Projected Supply and Demand for Surgeons, 2013-2025
Projected Total Physician Shortfall, 2013-2025
Projected Primary Care Physician Shortfall, 2014-2025

Exhibit 5: Including primary care–trained hospitalists in the updated 2016 projections, as was done in the 2015 report, results in a smaller projected shortage, likely reflecting the impact of the inclusion of the rapidly growing supply of PAs in the updated 2016 projections and an increase in the number of new graduates entering primary care.
Projected Change in Physician Supply by Specialty Category
2014 to 2025
Some Specialties Will Be Impacted More Than Others

“Try not to hit my urologist.”
By 2030 it is estimated that nearly 20% of the US population will be age 65 or older.  
   – Elderly patients require 3 times the rate of surgical services the general population uses.  
   (Williams 2010, US Census Bureau 2000 - 2050)

To meet these population demands, HHS projects a need for **16,000** urologists by **2020**.

Projected number of Urologists practicing in **2020**: fewer than **8000**  
(Charnow, JA (Pruthi, R): Renal and Urology Times, Jan. 2014)
Why is This Happening?
M.D. and D.O. Student Growth
Outpacing GME Growth

Total = 7,253

Source: Results of the 2011 Medical School Enrollment Survey. Center for Workforce Studies, AAMC (May 2012)
Residency Positions vs. Applicants

Source: NRMP 2012
U.S. Residency Match Results - 2015

Registered Applicants vs. Positions

- Positions: 30,750
- Registered Applicants: 42,370
Percent Change in Number of First-Year ACGME Residents/Fellows by Specialty, 2008-2013

Source: 2008 and 2013 AAMC/AMA National GME Censuses
Urology Match - 2016

Programs Registered – 124
Positions Available - 295
Applicants Submitting Match Lists – 417
Average Applications Sent by Applicants - 65
Average Interviews Per Applicant - 10
Applicants Ranked by Programs – 373
Applicants Unmatched - 123 (29%)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Matched</th>
<th>Unmatched</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Medical Students</td>
<td>356</td>
<td>274 (77%)</td>
<td>82 (23%)</td>
</tr>
<tr>
<td>Previous U.S. Grads (not Seniors)</td>
<td>32</td>
<td>15 (47%)</td>
<td>17 (53%)</td>
</tr>
<tr>
<td>International Medical Stu. &amp; Grads</td>
<td>29</td>
<td>5 (17%)</td>
<td>24 (83%)</td>
</tr>
</tbody>
</table>

American Urological Association
So What’s the Problem?
Resident Salary & Benefits, University of Colorado 2014-2015

Total = $342,176.00
+ $32,018.00
$374,194.00

Mean = $68,435.00
Conclusions

• By 2025 there will be a physician shortage of 61,700 – 94,700.
• This shortage will include 25,200 - 33,200 surgical specialists.
• Urology will be hit especially hard as this plays out.
• A further increase in medical graduates would be helpful, but only if accompanied by a marked increase in residency positions.
• Given the high cost of funding additional residency slots, there is unlikely to be a marked increase in the coming years.
• Increased participation by advanced practice providers should have a positive impact, but the effect will be limited in surgical specialties.