Physician Shortages in Kentucky: What Can be Done?

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Objectives

- Estimate magnitude of Kentucky physician shortage
- Take into account rate of physician “production” in Kentucky
- Focus on primary care provider shortages as important example
- Alarm you!
- Suggest possible solutions
A few numbers to take home

- **426**: number of physicians we must add per year in Ky to catch up to mean USA workforce
- **309**: maximum number of new physicians ready for practice that we can now produce per year in Ky
- **1500**: number of people that one full-time family physician should take care of
- **163**: number of family physicians that we need to add in Kentucky each yr to meet 1500:1 by 2025
- **57**: max number of family physicians that could be produced per year in Ky now
## Key Physician Shortages in Kentucky

### Kentucky Physician Shortages 2012 *

<table>
<thead>
<tr>
<th>Category</th>
<th>US pop per doc</th>
<th>KY Shortfall (docs needed to meet USA mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>453 : 1</td>
<td>1,655</td>
</tr>
<tr>
<td>Primary Care Physicians</td>
<td>1287 : 1</td>
<td>557</td>
</tr>
<tr>
<td>Psychiatrists</td>
<td>10,310 : 1</td>
<td>169</td>
</tr>
<tr>
<td>OBs/GYNs</td>
<td>9,804 : 1</td>
<td>183</td>
</tr>
<tr>
<td>General Surgeons</td>
<td>12,048 : 1</td>
<td>264</td>
</tr>
</tbody>
</table>

* Figures do NOT take into account ACA effects, aging population, or chronic illness burdens.
Kentucky Physician Workforce and Retirement

Kentucky Active Physicians by Age 2012 (N = 9,273)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-49</td>
<td>47.4</td>
<td>4,395</td>
</tr>
<tr>
<td>50-60</td>
<td>31.4</td>
<td>2,912</td>
</tr>
<tr>
<td>61-65</td>
<td>10.4</td>
<td>964</td>
</tr>
<tr>
<td>66+</td>
<td>10.8</td>
<td>1,002</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>9,273</td>
</tr>
</tbody>
</table>
Kentucky Physician Shortage

So...we are short 1,655 physicians now; and we must also replace at least 1,900 who will retire in the coming decade.

Can we add 3,555 physicians to Kentucky in the coming 10 years?

What about effects of pop growth and aging; expanded insurance? (add ~20%)

Total: 426 ‘new’ docs per yr needed in Ky to meet USA average
Kentucky Physicians in Training
Sample 2012

**Medical student class size**
- UK 136 in 2014
- U of L 160
- UPike 135
- **Total grads per year by 2018: 431**

**Rural track med student classes**
- UL Trover up to 10 per year
- UK RPLP Morehead up to 10 per year

**Resident MD/DO grads in KY = 309**
- Allopathic 288 grads in 2012
- AOA Max 21 grads/yr
Primary care access is a key to disparities among counties

An annual ranking of counties based on health status found that gaps between the healthiest and unhealthiest regions of states are wide — and getting wider.

JENNIFER LEBELL
AMNEWS STAFF

Washington If you’re a resident of Howard County, Md., chances are fairly high that you have insurance, enjoy good health and have relatively easy access to a primary care physician. Take a short car ride to Baltimore. Maryland’s healthiest in the most recent County Health Rankings and Roadmaps survey, only 9% of residents are uninsured, and just 8% are considered in poor health. There’s one primary care physician for every 577 patients. In Baltimore City, the unhealthiest county in the state, the uninsured rate is nearly twice as high, and there’s only one primary care doctor for every 986 patients — a combination that means a significant access-to-care problem.

The comparison underscores a key finding in the 2013 survey: Gaps between the healthiest and unhealthiest the healthiest counties are 1.4 times more likely to have access to a primary care physician than those in the least healthy counties. Unhealthy areas also had higher rates of child poverty, teen pregnancy and premature death.

This is the fourth year that the Robert Wood Johnson Foundation and the University of Wisconsin School of Medicine and Public Health have surveyed the health of every county in the U.S., ranking them on a state-by-state basis to gauge the factors determining the health of residents.

All survey measures use figures on health status, including health insurance, access to care, health behaviors and health behaviors. The survey is conducted by the Robert Wood Johnson Foundation and the University of Wisconsin School of Medicine and Public Health.
State Level Analysis: Primary Care and Life Expectancy

Pressures on primary care physician workforce

20% growth in US need for primary care docs by 2025. Of that:

• 64% due to population growth
• 20% due to aging of the population
• 16% due to ACA insurance expansion

This translates to 680 more primary care docs needed in Kentucky in addition to the 557 needed to get out of current shortage... (presuming no physicians retire)

Kentucky Primary Care Doc Workforce slip-sliding away...

**Primary care doc shortfall** = 1,917

- Baseline: 557
- Effects of retirement: 680
- Effects of pop. changes and expansion of insurance: 680

Family Med docs produced / yr = 38 (allopathic / combined)
AOA capacity = 19

All other primary care docs / yr = 50

Grand Total 107 new PC docs per yr

Need 160 per year just to catch up w/ USA by 2025
Physician Assistants in Kentucky

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Percent</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td>37.6</td>
<td>444</td>
</tr>
<tr>
<td>Surgery</td>
<td>18.3</td>
<td>216</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>22.4</td>
<td>264</td>
</tr>
<tr>
<td>Other</td>
<td>21.7</td>
<td>256</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>1,180</td>
</tr>
</tbody>
</table>
### APRNs in Kentucky

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td>1,281</td>
<td>33.5%</td>
</tr>
<tr>
<td>Surgery</td>
<td>209</td>
<td>5.5%</td>
</tr>
<tr>
<td>Other Medical</td>
<td>1,412</td>
<td>36.9%</td>
</tr>
<tr>
<td>Other Non-Medical</td>
<td>925</td>
<td>24.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,827</td>
<td>100.0%</td>
</tr>
<tr>
<td>Area</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>Rural</td>
<td>230</td>
<td>23.9</td>
</tr>
<tr>
<td>Urban</td>
<td>950</td>
<td>76.1</td>
</tr>
<tr>
<td>Total</td>
<td>1,180</td>
<td>100</td>
</tr>
</tbody>
</table>

Geographic Distribution of PAs

Rural/Urban Distribution of PAs in Practice
### Geographic Distribution APRNs

<table>
<thead>
<tr>
<th>Area</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>1,304</td>
<td>34.1</td>
</tr>
<tr>
<td>Urban</td>
<td>2,553</td>
<td>65.9</td>
</tr>
<tr>
<td>Total</td>
<td>3,857</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Focus on Kentucky Family Medicine Physicians

- The desired pop : Fam Phys ratio is 1500:1
- Ky now at 2932:1 with 1,432 FPs
- To hit target, we need 1,400 more FPs now
- Accounting for retirement, ACA and population changes, need to add ~ 560 more than that by 2025
- So need to add 1,960 FPs in 12 yrs = 163/yr
  - Our max capacity now could add 57 per yr
Healthcare Workforce: the Challenges We Share

**Training**

- Pipeline into health professions schools
  - What do we hope ‘comes out the other end?’
- Curricula, teachers and training sites that prepare *the workforce we need*, to be effective *where needed*, in teams
- Optimizing capacities of training programs
  - Funding
  - Applicant pools (see pipeline)
  - Faculty pools, capacity, ability; set to win-win
Healthcare Workforce: the Challenges We Share

**Recruitment and the Affinity Model**

- It’s not just the professional opportunity
- “It’s the spouse, stupid”
- Lifestyle, schools, proximity to ______
- Debt relief, local economy
- Community “feel” compared with origin
- It takes strong family magnet or real teamwork
Factors Influencing Medical Student Specialty Choice

- Lifestyle
- Prestige
- Debt
- Compensation
- Institutional Culture
- Personal Values

- Age
- Gender
- Community of Origin
- Parental Socioeconomic Status
Healthcare Workforce: the Challenges We Share

Retention
- Truth-in-advertising at recruitment
- Avoid trading realism to force a match
- Professional support; back-up; colleagues
- Foster realistic expectations up front
- Schools working out for kids
- “It’s the spouse, stupid”
But... Let's get real

We can mitigate physician shortages, but we will not succeed unless we fundamentally change:

- healthcare needs across populations
- healthcare financing and delivery
- workforce composition

(This might require coordinated health systems... we have healthcare industries)
Revolutionizing Healthcare: Needs, financing, delivery and workforce composition

- Shift money and effort up-stream to prevent illness and disability
  - Who invests and who gets the ROI?
- Incentivize effective healthcare teams, defined by having leaders responsible to the patient....and having the right persons doing the right jobs at the right places and times
- Pay for modes of healthcare suited to the 21st century
  - Electronic and telephonic pt-provider interactions
  - Data-informed, customized approaches
Questions?

Thank you.