1. **Introduction**

Numbers matter. As a specialty, we have endorsed a goal that is ambitious within both the allopathic and osteopathic medical communities: that 25% of American medical students will choose Family Medicine by 2030.

To plan—as well as to track progress—we need to have reasonable estimates of the actual numbers of the students/residents involved. In that spirit, I have developed the following brief summary of current trends using publicly available data from the AAMC, AAOMC, the ACGME, the AOA and the ACOFP. In a couple of cases, I have written to get other “educated best guesses”

Please keep a number of caveats in mind: (1) the data are dependent on the quality of the data available to the organizations, (2) both allopathic and osteopathic schools are in a phase of remarkable growth, fueled by population growth, cultural demand, the growth of the economy and large increases in student debt: all of these makes predictions out to 2030 precarious, (3) there are many uncertainties, such as the impact of the even more explosive growth of NP/DNP and PA programs, the dramatic changes in the consolidation of health care, or factors more closely related to the educational process such as availability of student loans or the 6 year graduation rate. Of note, there are a number of experts in the room at the Working Party who will be able to help put these numbers in perspective!

2. **25 x 2030: What the Goal Means in Practical Terms**

Both allopathic and osteopathic medical schools are in the middle of dramatic growth. Allopathic schools have grown from 128 to 151 (including preliminary accreditation) in the last 15 years and are on track to graduate 21,622 this year. An AAMC survey of deans suggests that substantial growth will continue over at least the next five years. A reasonable (and likely low) estimate is 24000 allopathic medical students will graduate each year by 2030.

Osteopathic schools have increased from 21 to 49 over the last 15 years; in 2017, at least 6015 DO’s graduated and 8088 enrolled. By report, the dramatic growth in numbers of schools is slowing, but there will still be growth in enrollment per school.
A reasonable guess is 10,000 DO’s graduating annually by 2030. (I have an email into Steve Shannon for his best sense; Bob Moore and perhaps others in ACOFP will have wisdom also)

So, 25% by 2030 means 25% of 34,000=8500 new family medicine residents/year. To put this number in perspective, the ACGME 2017-18 data book indicates that there are 4218 first year ACGME Family Medicine residencies (in 620 residencies) and 12,161 total family medicine residents. The AOA reports 2383 total osteopathic residents (or approximately 800 first year residents). It should be emphasized that there is likely double counting of residents in the 53 dually accredited training programs. So, if these estimates are correct, we will need to absorb about 3500 new family medicine interns. This is likely a minimum.

It should be emphasized that these are estimates, but they make clear the magnitude of the task before us. The bottom line for me: small programs (such as the recent HRSA rural residency announcement) are important but we need to plan much larger.

3. Family Medicine Residencies – Trends Over The Last Five Years

A data note: getting precise numbers of residents and residencies is complicated by the transition to the single accreditation system and the lack of integrated data. ACGME and AOA reports do not match, likely because residencies are in flux and the data come from different years. From the ACOFP records, there were a total of 268 osteopathic residencies, of which 53 were dual, 71 which have made the transition to ACGME, and 110 in various stages of transition. From the ACGME records, as of 12/18, there are a total of 131 programs in transition.

a. ACGME (Allopathic) Current Year and Trends Over Five Years

<table>
<thead>
<tr>
<th>Specialty</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>Family Medicine</td>
<td>4,218</td>
<td>4,019</td>
<td>3,880</td>
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Source: ISSN 2743-8670, ACGME, Data Resource Book, Academic Year 2017-2018, p. 48
Number of Active Residents by Specialty and Academic Year, 2013-2014 to 2017-2018

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</thead>
<tbody>
<tr>
<td>Family Medicine</td>
<td>10,316</td>
<td>10,499</td>
<td>10,762</td>
<td>12,161</td>
<td>12,161</td>
<td>1,845</td>
</tr>
</tbody>
</table>

Source: ISSN 2743-8670, ACGME, Data Resource Book, Academic Year 2017-2018, p. 51

ACGME Family Medicine Residency Programs as of 2018-19:

Total = 620, median size 20 residents, mean 19.6 residents, largest 73.

4. Osteopathic Training Programs

Number of AOA-Approved Residency Programs and Approved/Filled Positions as Reported by Academic Year and Specialty as of May 31, 2017

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<tbody>
<tr>
<td>Family Medicine</td>
<td>252</td>
<td>2,170</td>
<td>258</td>
<td>2,314</td>
<td>246</td>
<td>2,383</td>
</tr>
</tbody>
</table>

Source: Journal of the American Osteopathic Association, April 2018, Vol. 11, No. 4, Page 271

5. Comparison of Size of Family Medicine Residencies

ACGME Family Medicine Residencies: Mean=19.6 residents (2017-18)

AOA Family Medicine Residencies: Mean=9.7 residents (2016-17)

ACGME Internal Medicine Residencies: Mean=52.3 residents (median=41) 2017-18.

6. Getting Enough Residency Slots for 25% of Medical Students in 2030

If the target is approximately 25,500 family medicine residents total and 8500 pgy 1s, and the total current number of residents is approximately 13,500 with 4,500 pgy 1s, there is a likely gap of approximately 12000 total residents.

To train these residents, we would need to create by 2030:
2000 new 2/2/2 tracks (!) or
1000 new 4/4/4 residencies or
600 new residencies of our current average 20/residency size or
200 new 20/20/20 residencies (the size of many internal medicine residencies)… or
some other options/combination

At 150,000$/resident/year (Regenstein, M. et al, NEJM 2016), this would suggest that
an additional $1,600,000,000 of support from a variety of sources would need to be
raised. This is a large number…but it will be higher if we want to get to 50% of
physicians being generalists…and it needs to be seen as a component of the overall
health care spend (in which case it is a very small number).

These are just first order estimates—I’d welcome corrections and feedback.

Warren Newton, MD MPH