

Determining and Predicting Who REALLY Goes Into Primary Care

Contributions of U.S. Medical Schools to Primary Care (2003-2014)

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BACKGROUND:

US medical schools often publicize their primary care graduation rate based on the residency choice of their graduates rather than upon entry into practice. This “residency match method” dramatically over-estimates a school’s primary care production because so many subspecialize during residency. This is termed “The Dean’s Lie”

OBJECTIVES:

1. To determine the magnitude by which primary care output is overestimated by commonly used metrics.
2. Identify a more accurate method for predicting actual primary care output.
3. Determine the relative contribution of FM, IM and Peds graduates to the primary care physician workforce.

DEFINITIONS:

“Residency Match Primary Care”: ALL who match in Family Medicine, ALL who match in Internal Medicine and All who match in Pediatrics.

“Intent to Practice Primary Care”: Only those who match in FM, IM Primary, Peds Primary and Med-Peds.

“Actual Primary Care”: _determined by tracking down “Residency Match Primary Care” grads to exclude those practicing in subspecialties, hospital medicine, urgent care, and emergency medicine.

METHODS:

Retrospective cohort study of 17,509 graduates from 20 U.S. medical schools granting the MD degree. The actual practicing specialty of those graduates considered primary care based on the Residency Match Method was determined using a variety of online sources. Analyses compared the percentage of graduates actually practicing primary care to the “Residency Match Method” and the “Intent to Practice Primary Care” Method. A method of adjusting the “Intent to Practice Primary Care” method for IM Categorical grads who enter primary care was demonstrated.

Results: Of 17,509 graduates, 22.3% actually entered primary care upon residency completion

RESULTS: Variance of “Residency Match” and “Intent to Practice Primary Care” methods from actual primary care

Method	Average Primary care % predicted by method	Variance from actual primary care practice of 22.3%
“Residency Match”	41.2%	85 % OVERestimate
“Intent to Practice Primary Care”	17.1%	23 % UNDERestimate

Results: The “Intent to Practice Primary Care” Method misses some Categorical IM residency grads who enter primary care. Any specific school can correct the method for this local variance. For the University of Colorado, this correction brings the Intent method to within 2 percentage points of actual primary care.

Results: Contribution of residency types to primary care:

Residency Type	% Primary Care	Contribution to total primary care output	Primary care grads added to workforce N=3901
Family Medicine	92.8%	47.8%	1866
Internal Medicine Categorical	20.6 to 30 %	13.6 to 19.9%	~744
Internal Medicine Primary Care	29.5 %	4.5%	~264
Pediatrics Categorical	44.6 to 51.6%	18.4 to 21.3%	775
Pediatrics Primary Care	93.5 %	1.1%	43
Med-Peds	61.1 %	5.4%	209

CONCLUSIONS:

1. The commonly-used “Residency Match” method (Dean’s Lie) over estimates actual primary care output by nearly double: (41.2% v. actual 22.3%)
2. The “Intent to Practice Primary Care” method more accurately predicts primary care output (17.1% v. actual 22.3%), under estimating by 5 percentage points but can be easily adjusted to be within 2 percentage points of actual for a specific school. This method should be used for measuring primary care output.
3. Entry into a Family Medicine residency is the single greatest predictor of future primary care practice and Family Medicine is the largest single specialty contributing to the US primary care workforce.

This study was approved for exemption by the Colorado Multi-Institutional Review Board and by the IRBs of collaborating institutions

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