UME to GME Transitions: How Do We Improve the Process?

Health Professions Educator Series

March 20, 2023

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Disclosures

I have no financial disclosures

I hold leadership positions in other organizations

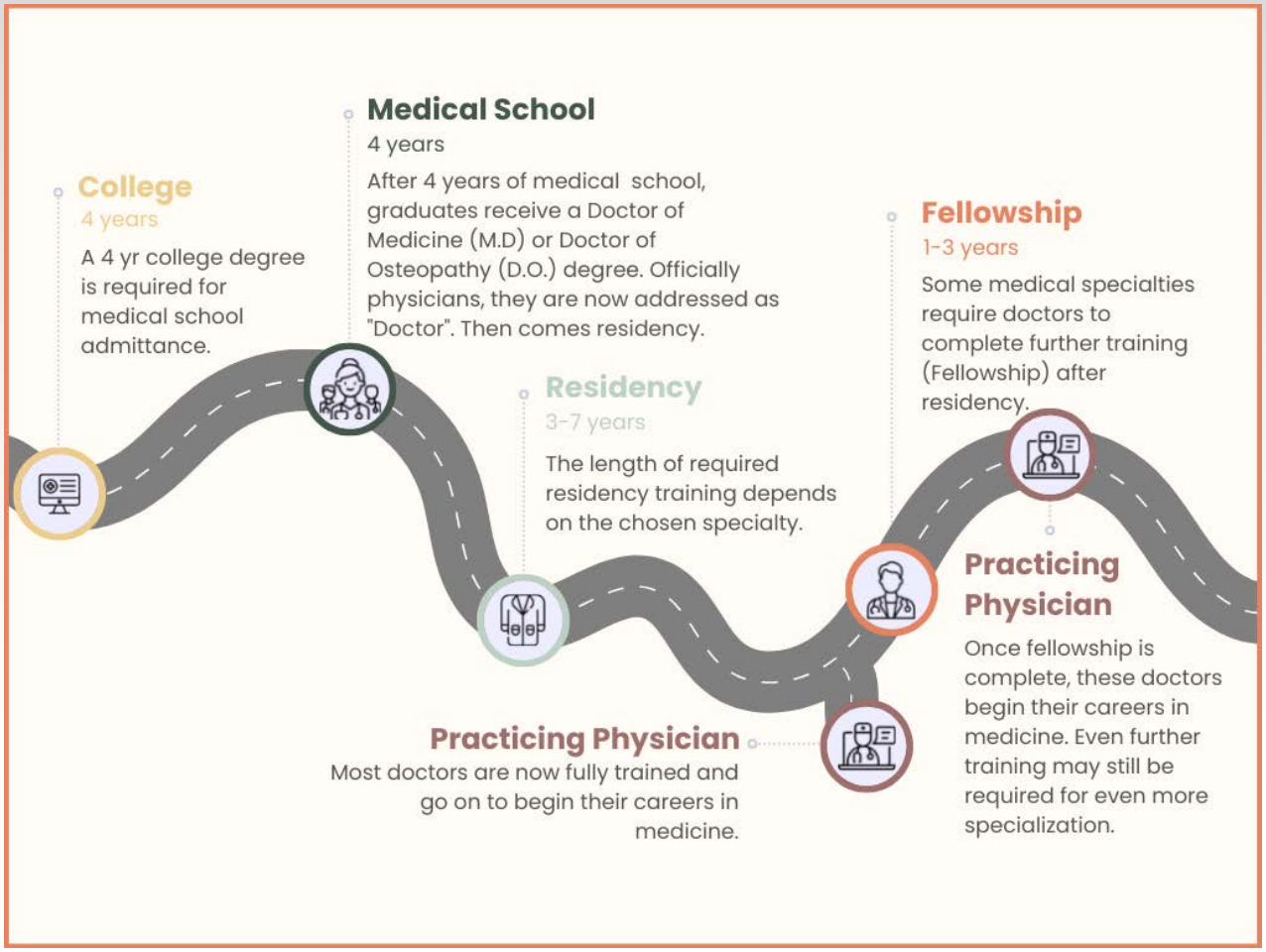
- APGO - President
- Virginia Neonatal Perinatal Collaborative (VNPC)-OB Co-Chair

This talk is based on my research and biased by my experiences. It does not necessarily represent the views of these organizations.

Intended Learning Outcomes

- To acknowledge the importance of the UME to GME transition
- To understand the goals and status of what OB/GYN and other specialties are doing to ease the transition
- To identify one thing you can do to help the transition to residency for medical students

The Journey To Becoming a Physician



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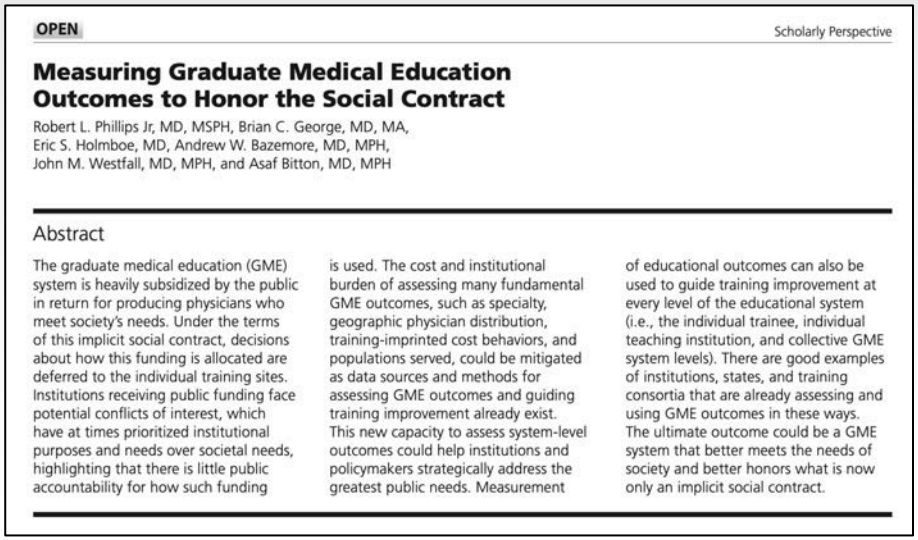
Why Focus On UME To GME Transition?

- A clearly identifiable landmark in the journey towards clinical independence
- It is (usually) when a medical specialty is chosen
- The location and type of residency program strongly influences where and in what setting one will practice

Social Contract of Medical Education

Medical Education as a Social Contract

- Medicare spent $11.2B on GME in 2019
- Medicine, as a vocation, holds a special status in US society
- Professions are given the responsibility of self-monitoring



OPEN

Scholarly Perspective

Measuring Graduate Medical Education Outcomes to Honor the Social Contract

Robert L. Phillips Jr, MD, MSPH, Brian C. George, MD, MA, Eric S. Holmboe, MD, Andrew W. Bazemore, MD, MPH, John M. Westfall, MD, MPH, and Asaf Bitton, MD, MPH

Abstract

The graduate medical education (GME) system is heavily subsidized by the public in return for producing physicians who meet society's needs. Under the terms of this implicit social contract, decisions about how this funding is allocated are deferred to the individual training sites. Institutions receiving public funding face potential conflicts of interest, which have at times prioritized institutional purposes and needs over societal needs, highlighting that there is little public accountability for how such funding is used. The cost and institutional burden of assessing many fundamental GME outcomes, such as specialty, geographic physician distribution, training-imprinted cost behaviors, and populations served, could be mitigated as data sources and methods for assessing GME outcomes and guiding training improvement already exist. This new capacity to assess system-level outcomes could help institutions and policymakers strategically address the greatest public needs. Measurement of educational outcomes can also be used to guide training improvement at every level of the educational system (i.e., the individual trainee, individual teaching institution, and collective GME system levels). There are good examples of institutions, states, and training consortia that are already assessing and using GME outcomes in these ways. The ultimate outcome could be a GME system that better meets the needs of society and better honors what is now only an implicit social contract.

Acad Med. 2022;97:643–648.

Questions I Have As An Educator
(and am seeking answers to)

1. Are graduating medical students prepared for their roles as residents? If not, what should we be doing differently?
2. What effect do our curricula have on choice of specialty and practice location?
3. Are we advising students in a way that matches their long-term goals and the needs of our communities?

Location and Its Effect on Practice

- Michigan
  - Positive likelihood ratio (+LR) is 5.31 to remain in Michigan after completing residency there[1]
- South Carolina
  - 46% who completed residency in-state remained in practice in South Carolina[2]
- Family Medicine
  - Retention rates for individual states who train family medicine physicians average 63–75%[3]

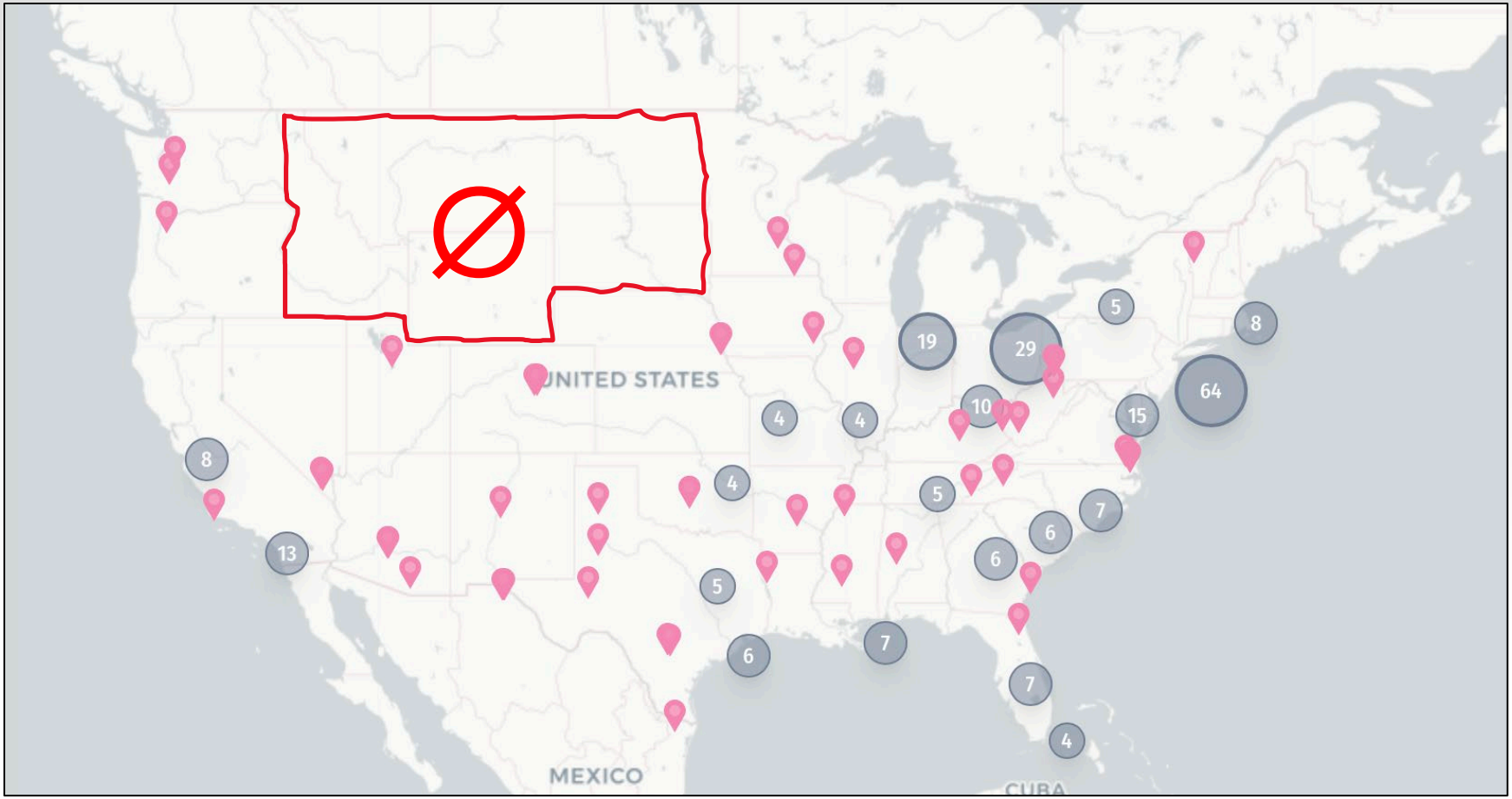
[1]J Grad Med Educ. 2017 Feb;9(1):73-78.
[2]Office for Healthcare Workforce Analysis and Planning. Data brief, March 2012
[3]J Community Hosp Intern Med Perspec 2021 Sep 20;11(5):569-575

Practice Setting after Residency

- Rural primary care
  - Physicians who graduated from a rural high school are 4.5 times more likely to practice in a rural area and 8.5 times more likely if they trained in a primary care field[1]
  - Rural aspects of residency training (broad scope of training, rural training, relationships with patients outside the clinical setting, living in a rural community, recreational/cultural activities, quality of education for children) increases interest in rural practice[2]
- Mountain Area Health Education Center (Asheville, NC) had 26 graduating residents and fellows in 2020
  - 12 went to practice in rural areas (10 in HPSA regions)
  - 3 graduates entered fellowship
    - 2 in addiction medicine and 1 in maternal-fetal medicine

[1]Rural Health Quarterly. April 23, 2020
[2]Patterson et al. Academy Health Annual Research Meeting. June 2015

ACGME-Accredited OB/GYN Residencies



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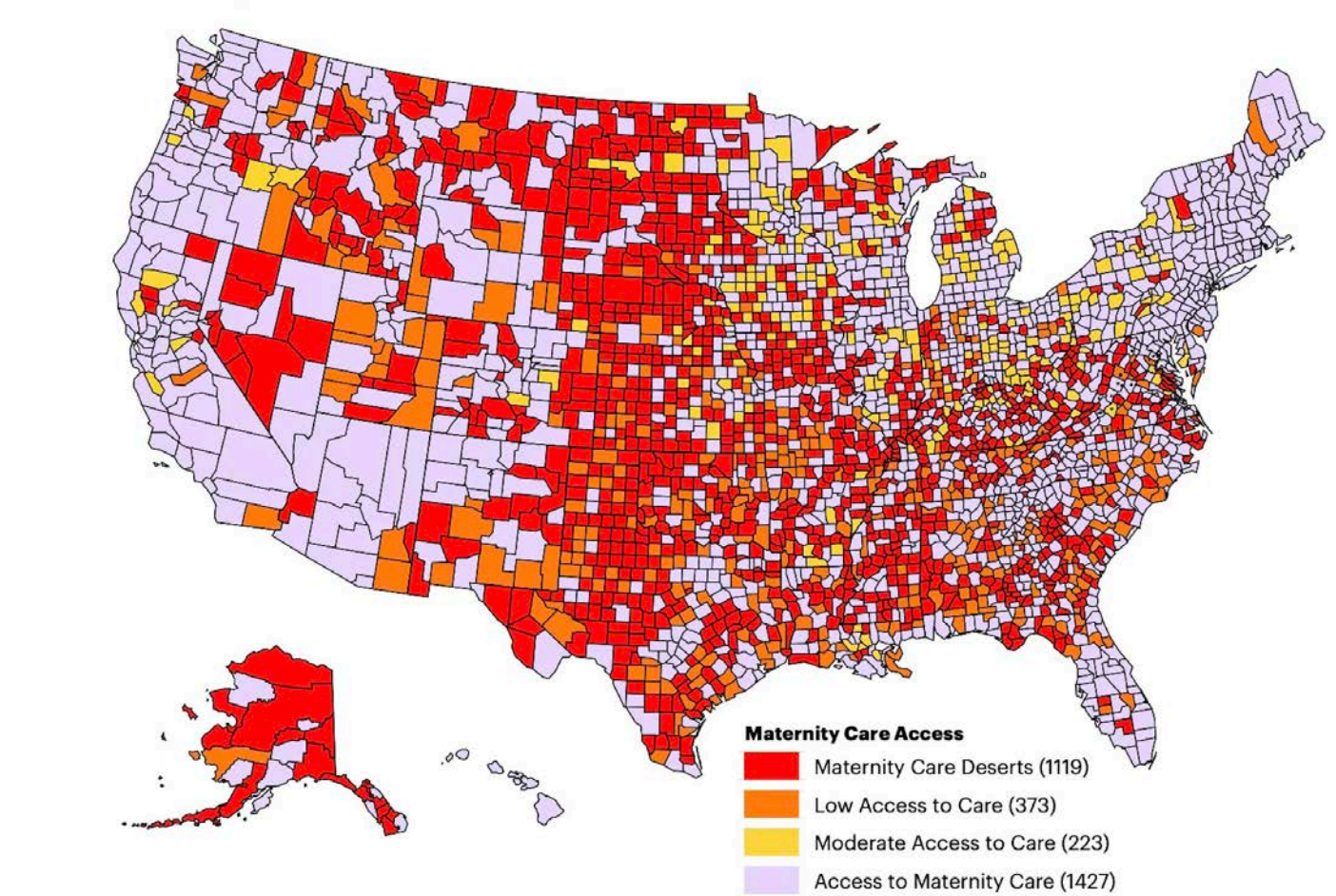
US Maternity Care Deserts



Source: U.S. Health Resources and Services Administration (HRSA), Area Health Resources Files, 2021.

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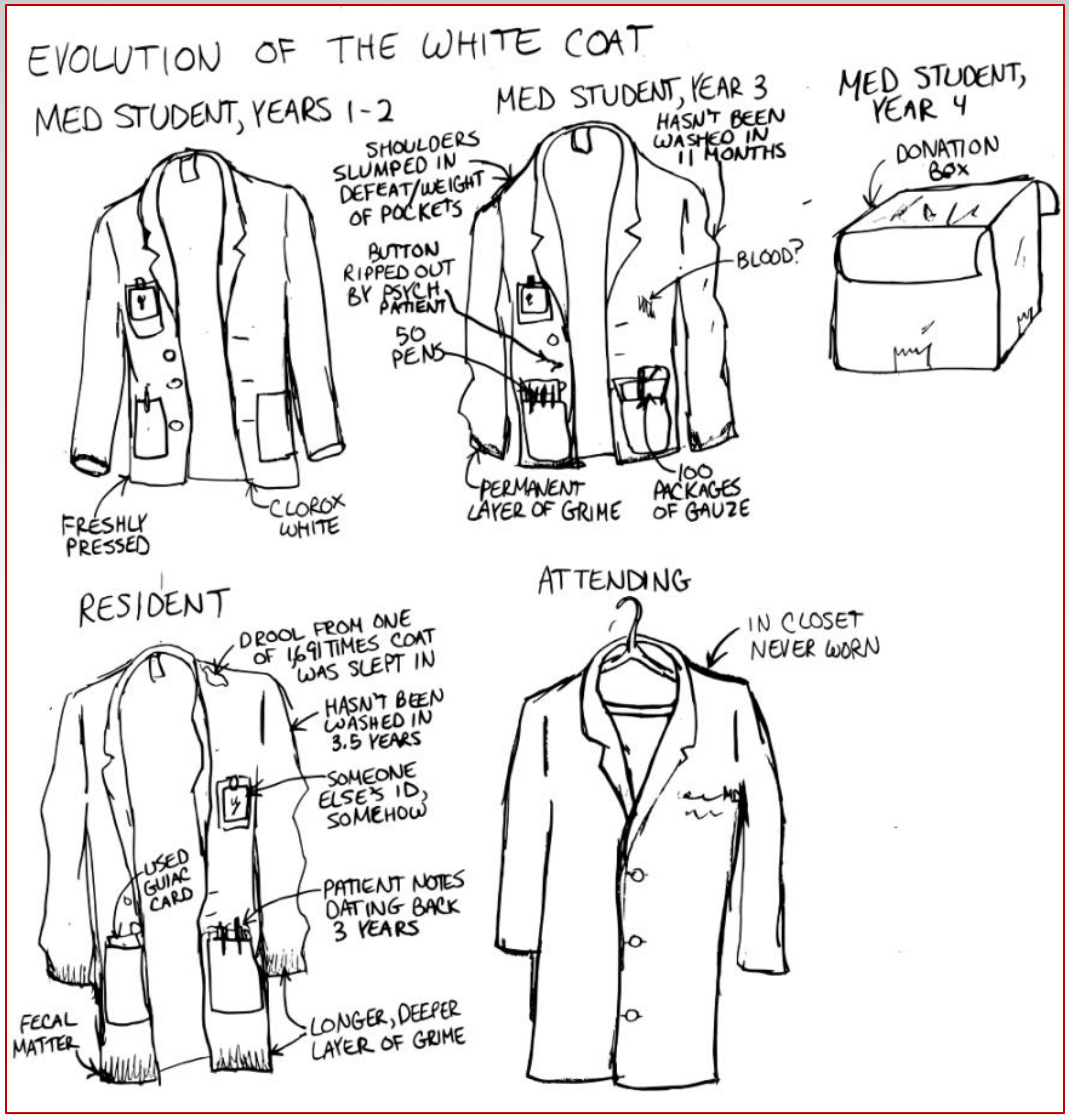


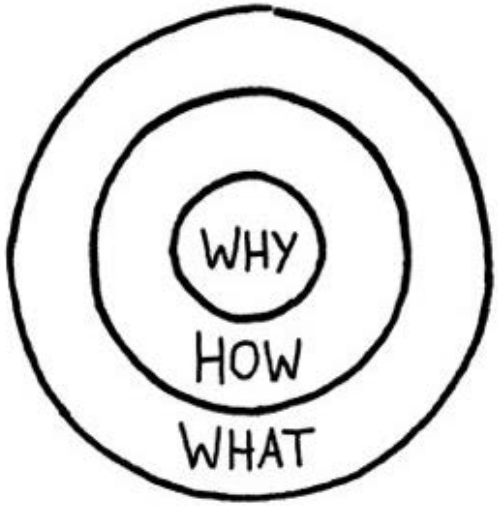
@fizzymcfizz

Problems With The UME to GME Transition

- Application process dominates the bulk of the clinical phase of medical school
  - Financial cost and stress
  - Lost opportunities for education
- Applicants and programs place great value on how high/low they go on their rank list
  - There are many ”right programs” for a given applicant
  - Programs make subtle distinctions (of questionable merit) among highly qualified applicants
- Many incoming residents do not feel prepared for their new role
  - Roughly one-third of incoming OB/GYN residents felt unprepared when they started residency (H. Morgan. Unpublished data)

Simon Sinek's Golden Circle

The Golden Circle



What

Every organization on the planet knows WHAT they do. These are products they sell or the services they offer.

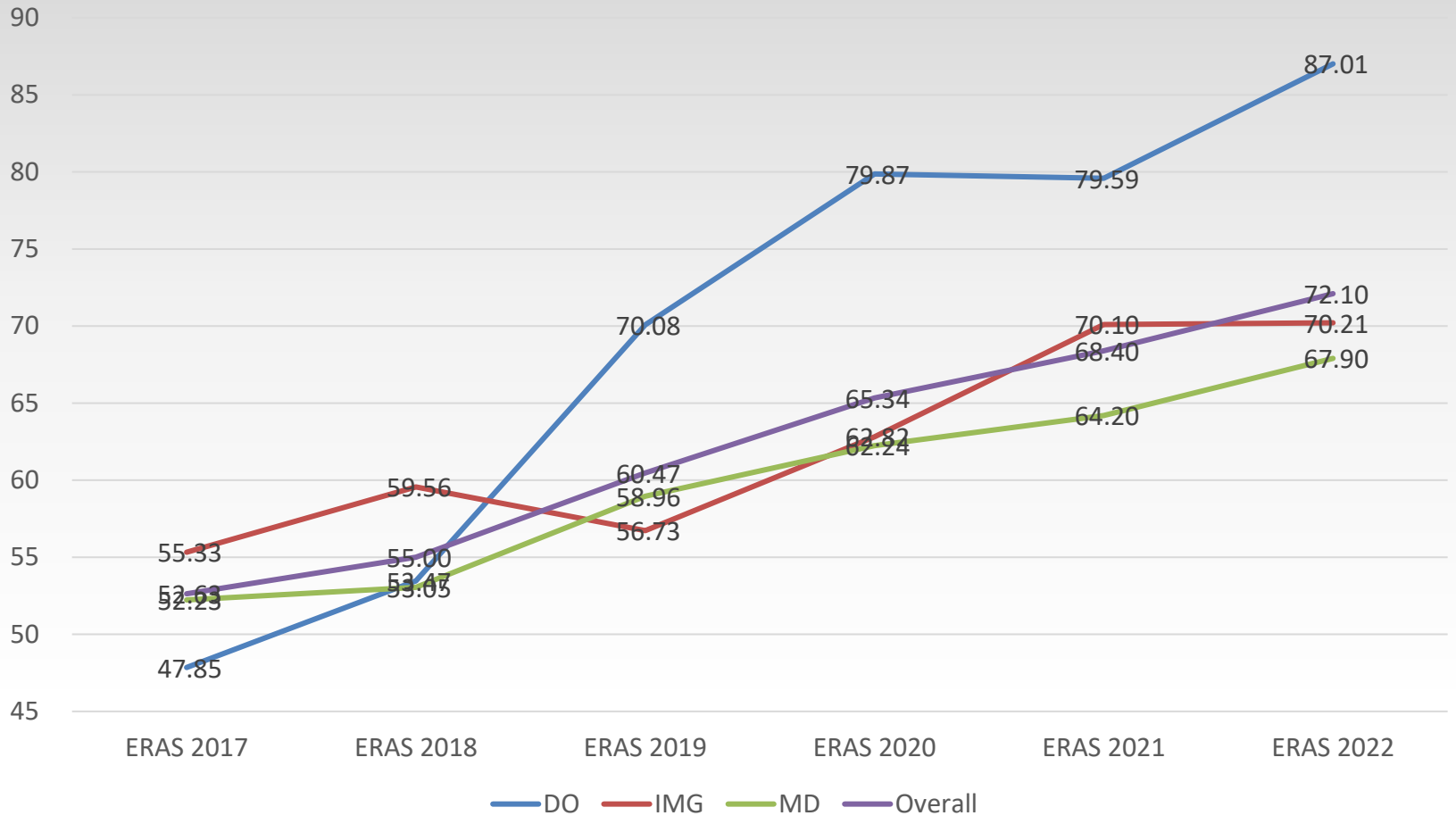
How

Some organizations know HOW they do it. These are the things that make them special or set them apart from their competition.

Why

Very few organizations know WHY they do what they do. WHY is not about making money. That's a result. It's a purpose, cause or belief. It's the very reason your organization exists.

Number of Applications per Applicant



NRMP Data. Slide courtesy of Maya Hammoud

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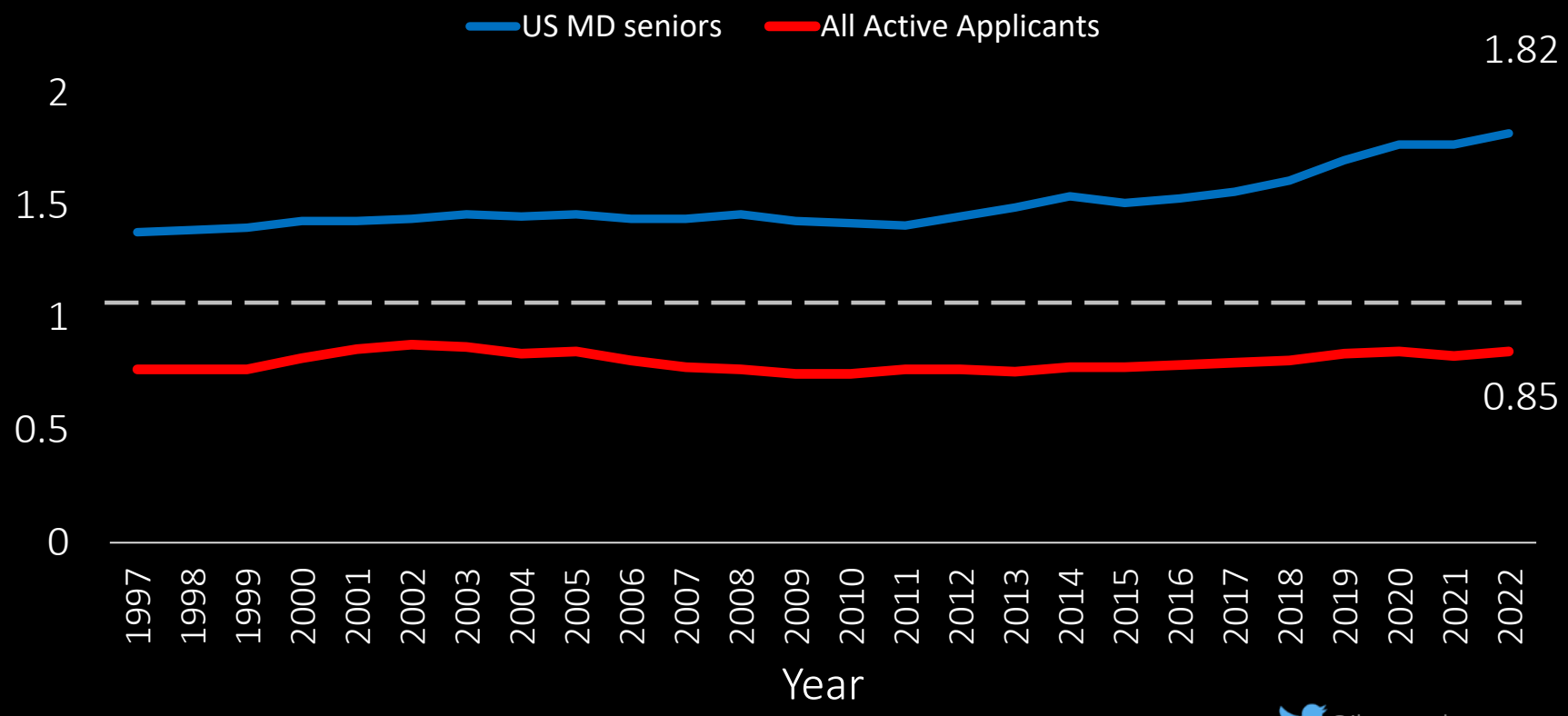
Ratio of Available PGY-1 Positions per Applicant
NRMP Main Residency Match®, 1997-2022



"Active applicants" = Match registrants who submitted a rank order list.

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How Competitive Is OB/GYN?

Applicant Type	Applied		Matched		Unmatched	
Year	2021	2022	2021	2022	2021	2022
MD	1292	1358	1088 (84%)	1106 (81%)	204 (16%)	252 (19%)
DO	336	396	225 (67%)	242 (61%)	111 (33%)	153 (39%)
IMG/Other	402	407	144 (36%)	151 (37%)	258 (64%)	256 (63%)
Total	2030	2161	1457 (72%)	1499 (69%)	573 (28%)	662 (31%)

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Slide courtesy of Maya Hammoud

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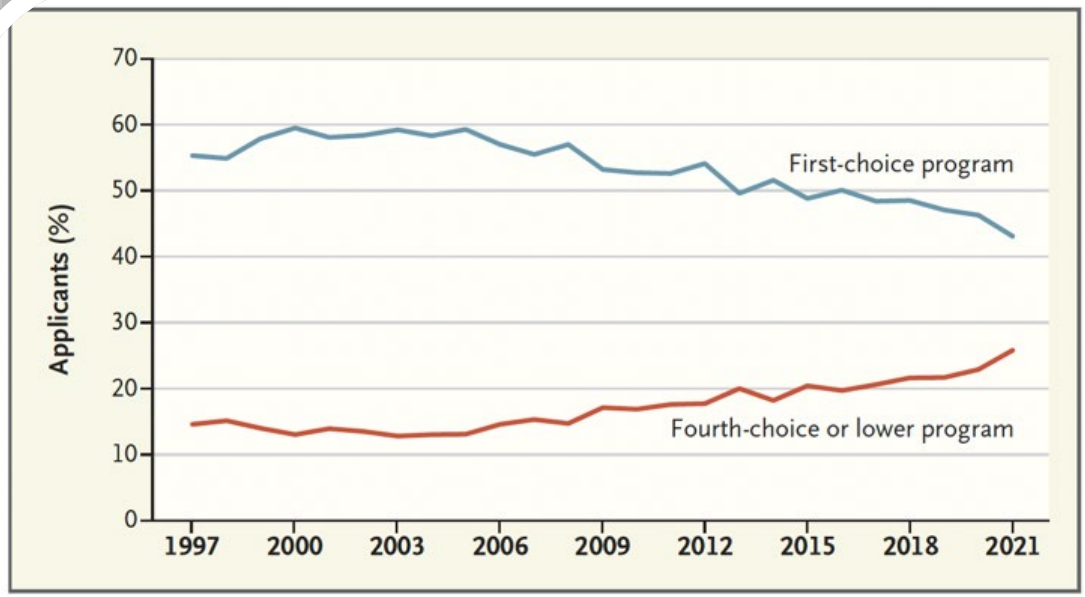
Is This Even a Meaningful Metric?



M.D. Applicants in the United States Who Matched to a First-Choice Program or to a Fourth-Choice Program or Lower.

Shown are the percentages of active M.D. applicants in the United States in the National Resident Matching Program (NRMP) who matched to their first-choice program and the percentages of applicants who matched to a fourth-choice or lower program on their rank-order list from 1997 to 2021. Data are from the NRMP.[1]

Mott NM, Carmody JB, Marzano DA, Hammoud MM. What's in a Number? Breaking Down the Residency Match Rate. N Engl J Med. 2022 Apr 28;386(17):1583-1586. doi: 10.1056/NEJMp2119716. Epub 2022 Mar 16. PMID: 35294810.

Right Resident. Right Program. Ready Day One (RRR)

- AMA innovations grant awarded to APGO and CREOG
  - Leadership team
  - Learner Advisory Group
  - Six workgroup teams
- Data-driven approach to improving the process of applying to residency and being prepared for residency
  - Acknowledging that most of what we currently do is based “what we have always done” +/- data
  - 33 publications from RRR team since 2019
- Currently in year 3 of a 5-year project
  - Beginning the transition from innovation to practice

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Objective 1

Implement changes to the residency application and processes to decrease the number of residency applications needed for a successful Match

- **Standards to the OBGYN Application and Interview Processes**
- **Application Review Metrics**
- **Alignment Check Index**
- **Program Signaling/ Early Result Acceptance Program**

Objective 2

Develop a national curriculum to prepare learners for PGY-1 OBGYN milestones and engage them in learning communities to ensure readiness for residency

Ready for Intern Year Curriculum and Assessments → **Residency Learning Communities** → **Ready Day One**

Standards to the OB/GYN Application and Interview Process (SOAIP)

- OB/GYN programs agree to a common calendar of events in the application process
  - Mitigates applicant stress
  - Limits the competition for releasing interview dates earlier
  - Allows greater time for holistic review of applications

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RIGHT PROGRAM
READY DAY ONE

Summary Changes of OBGYN Initiatives for 2022-2023 Application Cycle

This is a summary of the key initiatives for the upcoming 2022-2023 application cycle. These initiatives will include:

- Updated **Standards to the OBGYN application and Interview Process**
  - Application deadline of 10/1/2022
  - Interview offers released on 10/25/2022
  - Interview offers limited to the number of interview spots
  - Allow applicants a minimum of 48 hours to respond to interview offers
  - Interviews occur no earlier than 10/31/2022
  - Notify applicants of final status (e.g. waitlist, rejection) by 12/2/2022
  - Virtual interviews for all applicants

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Alternative Review Metrics (ARM)

- Identify ways to easily discern the traits programs seek in residents
  - Articulating what a program seeks
  - Having tools to assess those traits
- Catalyzed by Step 1 scores becoming P/F

Current Commentary

A Model for Exploring Compatibility Between Applicants and Residency Programs

Right Resident, Right Program

Abigail Ford Winkel, MD, MHPE, Helen Kang Morgan, MD, Jesse Burk-Rafel, MD, MRes, John L. Dalrymple, MD, Seine Chiang, MD, David Marzano, MD, Carol Major, MD, Nadine T. Katz, MD, Arthur T. Ollendorff, MD, and Maya M. Hammoud, MD, MBA

Obstet Gynecol. 2021 Jan 1;137(1):164-169.

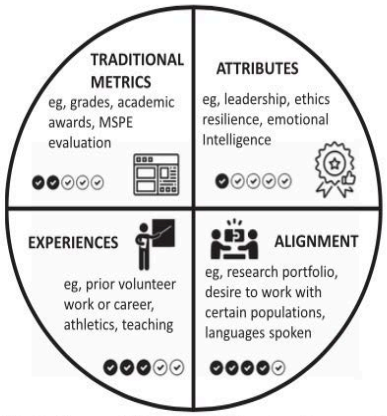

Fig. 3. Framework for using additional residency application review metrics. MSPE, Medical Student Performance Evaluation.

Winkel. Enhancing Residency Application and Review. Obstet Gynecol 2020.

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Table 1. A Five-Domain Framework for Exploring Applicant Compatibility With Residency Programs

	Applicant Metrics	Program Metrics
Clinical training	Interest in specific clinical training (eg, abortion training, transgender care, global health) Interest in particular training context (eg, case volume, number of clinical sites) Desire to work in a specific clinical setting (eg, rural health, community private practice, academia)	Availability of specific clinical training (eg, abortion training, transgender care, global health) Religious affiliation of hospital Case numbers (percentile nationally as defined by ACGME) Number of clinical sites Availability of specific focus within the program (eg, research, community or global health, education)
Academic training	Research interest (publications, meeting abstract presentations) Interest in subspecialty Fellowship Considering career in academic medicine Additional degrees Competitiveness of academic profile (grades, medical school, awards) Interest in support for learning disabilities, review courses	Research focus (requirements, grants, resident publication rate) Conference attendance policies and support Presence of Fellowship programs Fellowship match rate of graduating residents Leadership development Additional degrees of residents Competitiveness of program (minimum and average USMLE scores), % AOA, rate of applications–interviews offered Academic reputation (eg, ranking by NIH grants, U.S. News and World Report, Doximity) Didactic curriculum approach Support for learning disabilities Class failure or remediation
Practice setting	Geographic region Specific population interests (urban, suburban, rural) Community involvement (advocacy, free clinics, ACOG participation) Desired program setting Military service Desired size of residency Language proficiency	Geographic region Health professional shortage area score Insurance mix (Medicaid–Medicare, private insurance) Program setting (university, community, hybrid, military) Size of residency Languages spoken by patient population Interpreter services
Residency culture and personal life	Diversity (URiM, sexual orientation, gender identity, veteran status) Family factors (needs for child or elder care, family and personal support) Amount of vacation Benefits (salary, retirement match, housing, health insurance)	Racial, ethnic diversity of residents and faculty Gender breakdown of residents and faculty Percentage of residents with children Availability of childcare Family care benefits Availability of moonlighting Cost of living Benefits package
Professional goals	Future practice geography Future practice type (academic, HMO, private) Interest in Fellowship training	Alumni practice geography Alumni practice type (academic, HMO, private) Alumni careers in subspecialty Fellowship

ACGME, Accreditation Council for Graduate Medical Education; USMLE, United States Medical Licensing Examination; AOA, Alpha Omega Alpha; NIH, National Institutes of Health; ACOG, American College of Obstetricians and Gynecologists; URiM, underrepresented (racial minorities) in medicine; HMO, health maintenance organization.

Obstet Gynecol. 2021 Jan 1;137(1):164-169.

Standardized Letter of Evaluation (SLOE)

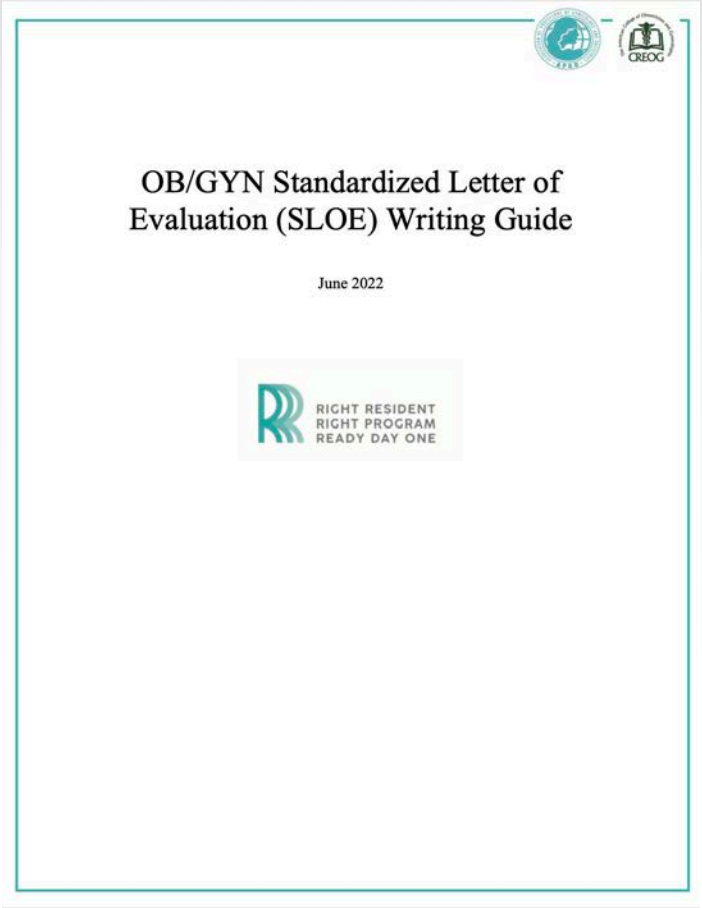
- The Coalition for Physician Accountability (COPA) UME to GME Review Committee recommends structured evaluation letters replace letters of recommendation
  - To mitigate women and Underrepresented in Medicine (UIM) candidates' lower tendency to receive standout evaluations
  - To support a more holistic application review
- Emergency Medicine first developed a standardized letter in 1997 and updated it in 2014, 2016 and 2022
- OB/GYN SLOE was developed in 2021 and modified in 2022
  - One is suggested for each applicant to OB/GYN residency

Components of the OB/GYN SLOE

- Information about SLOE writer
  - In what role is the writer completing this?
  - In what context/capacity the author has interacted with the applicant?
- Criteria-based competency assessment
- The applicant's most outstanding feature (in < 5 words)
- Up to 3 areas of focus for this individual applicant to provide future focused coaching or development opportunities
- Written comments about the candidate (limited to 250 words)

OB/GYN SLOE Writing Guide

- Produced to create a shared mental model for those completing a SLOE
  - As an individual writer
  - As a group evaluation
- Created by a team consisting of clerkship directors, residency program directors, residents, international medical graduates and allopathic and osteopathic medical education leaders



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Alignment Check Index (ACI)

- A tool for applicants to perform an assessment of their alignment with residency programs in six domains
  - Programs weight the six domains
  - Applicants perform a confidential online assessment to receive a list of programs from highest alignment to lowest alignment
- The 2022-23 application cycle was the kickoff and assessment is ongoing

- Academic metrics (USMLE Step Scores, clerkship grades, AOA, GH, etc.)
- Work Experience (non-career related work, manager experience, etc.)
- Community Service/Advocacy (volunteerism, outreach clinic, etc.)
- Research Experience (local/national presentation, first authorship, etc.)
- Teaching Experience (tutor, curriculum design, Teach for America, etc.)
- Background/Lived Experience (URM, First generation MD, single parent, etc.)

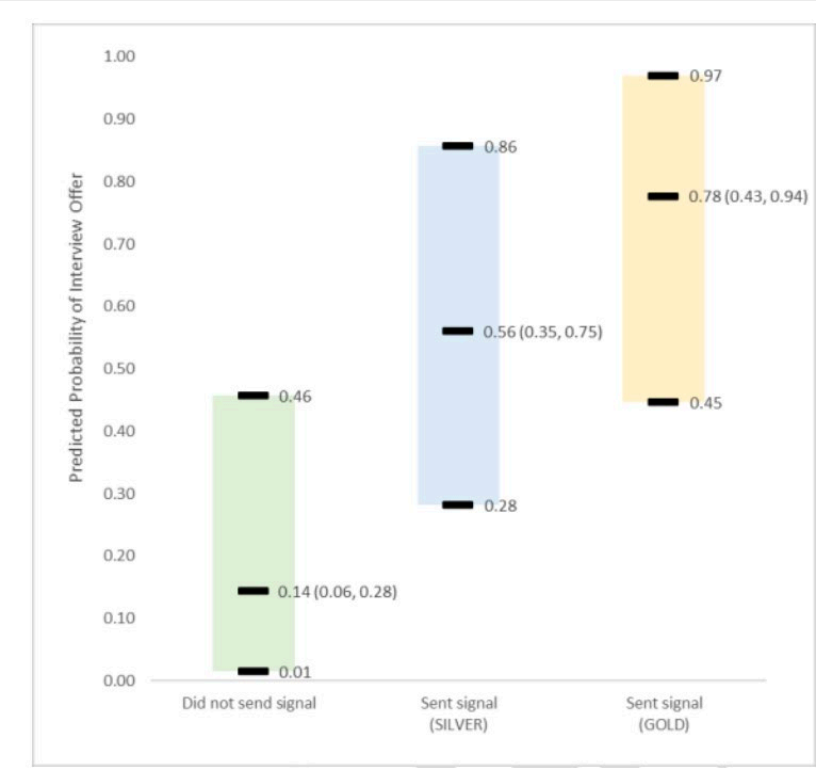
Program Preference Signaling

- A way for applicants to indicate their preference of program at the time of application
- 18 specialties used it in the current application cycle
  - Varying number of signals across specialties (3-30)
  - OB/GYN used 18 tokens (5 gold, 13 silver) this year
- RRR grant team is working with the AAMC to look at preliminary data for current Match cycle

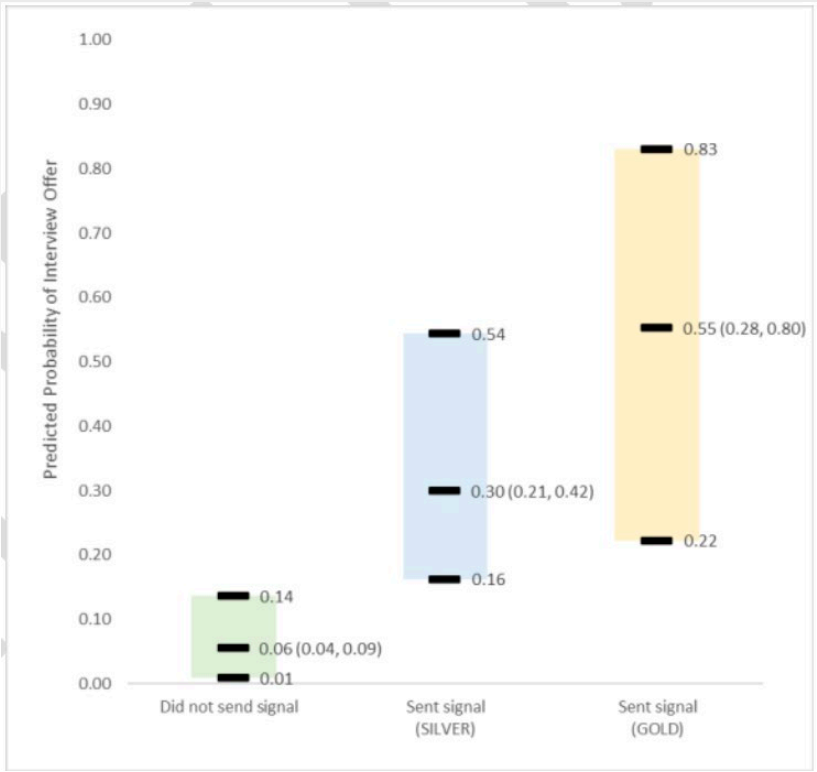
Invitation Probabilities for 2023 US Applicants to OB/GYN Programs

(AAMC Preliminary Data)

In-State Applicants



Out of State Applicants



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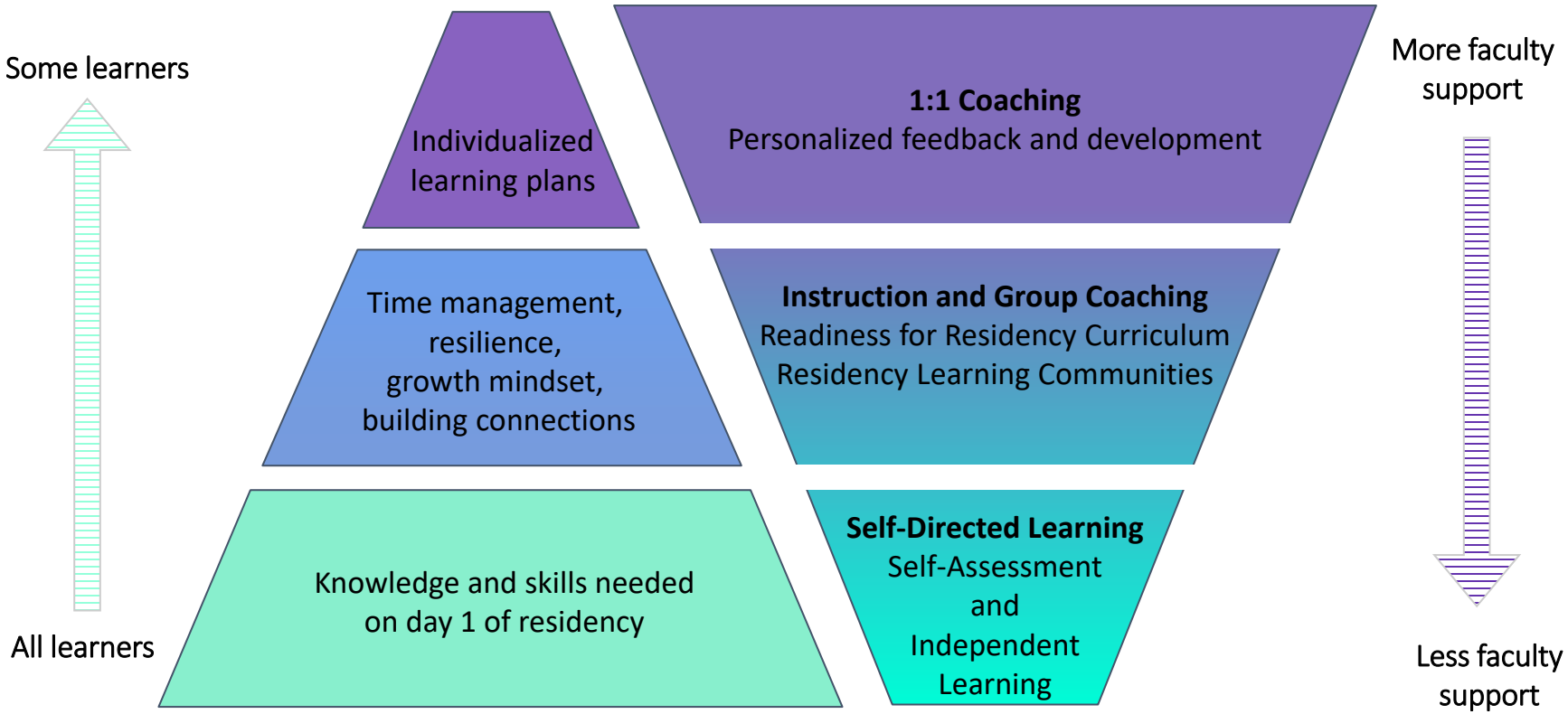
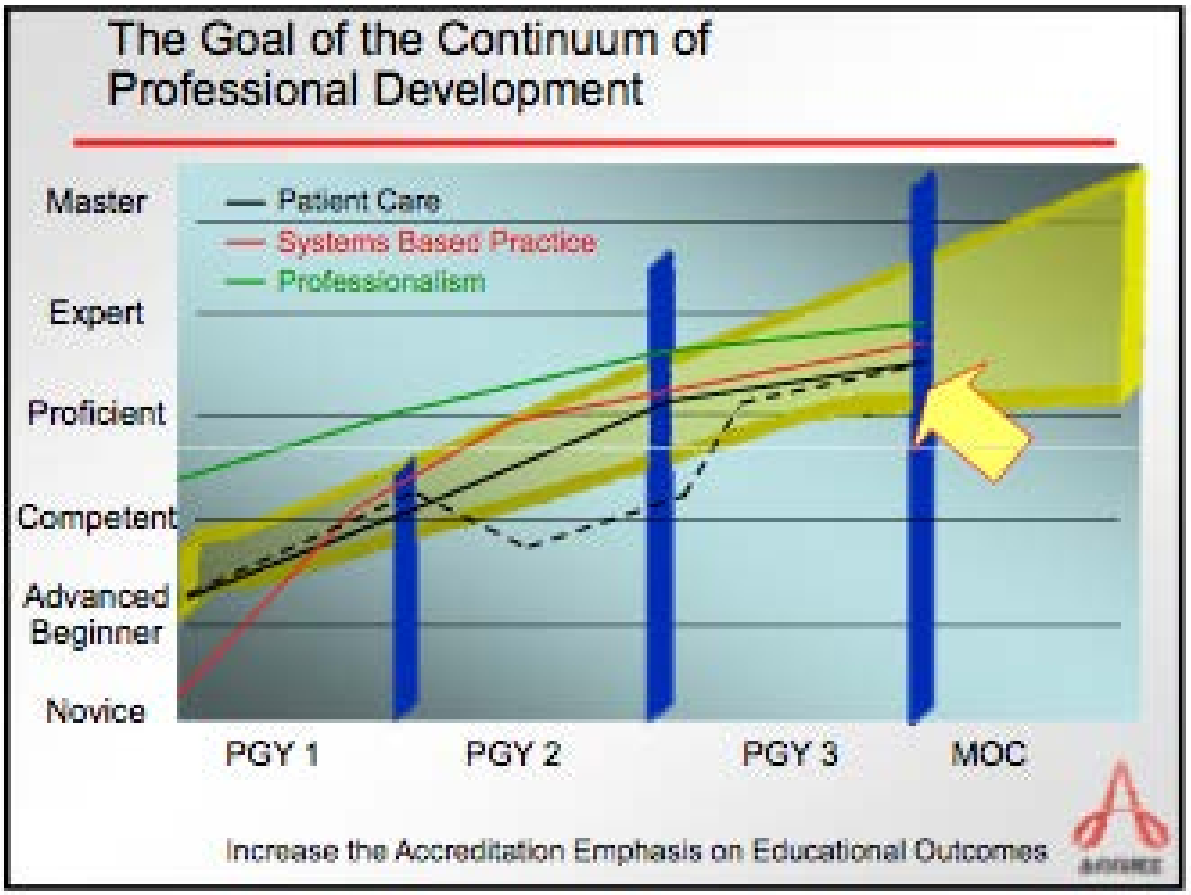
Ready Day One: Coaching and Residency Readiness Program



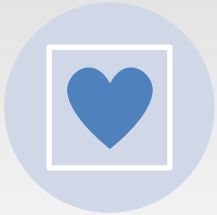
CREOG
APGO

We Should Assure All Students Have the Skills We Know They Will Require



ACGME Presentation from mid-2000's

Attitudes and Skills Of A Successful Medical School Graduate



HUMILITY

REFLECTION

CURIOSITY

- SBIRT
- Trauma informed care
- Motivational interviewing
- Evaluating the medical literature
- Systems thinking

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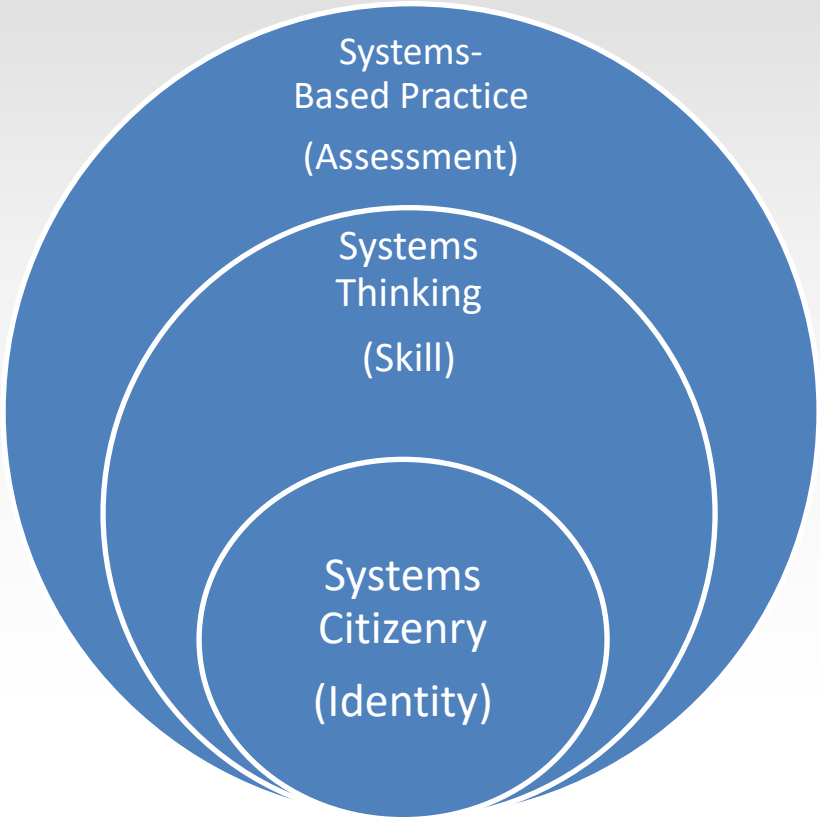
Systems Citizen

"…approaching everyday care by seeing the work through a systems thinking lens and taking a proactive approach to system errors. It also involves recognizing how one's way of approaching gaps in care is an obligatory part of their professional identity, a state we refer to as being a systems citizen."

Gonzalo J et al. Agency for Healthcare Research and Quality. PSNet. February 1, 2019.



Systems Thinking v. Work Arounds

- Re-designing UME
- Competency-based assessments to replace the MSPE and LORs
- More GME positions
- Application Caps
- Program signaling

What Is On The Horizon?

- Geographic Signaling
- Holistic application review
- Reevaluating medical school curricula
- Application Caps