Predicting the Future of Medical Education

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President, MPPDA

Tom Nasca: “We have no idea, but we must prepare”
Goals

1. Understand the models attempting to predict the future of Medicine and GME
2. What this means we need to be teaching in our programs
Agenda

1. Present and synthesize 3 national models predicting the future of Medicine
   - ACGME’s Sponsoring Institution 2025
   - AAIM’s Internal Medicine 2035
   - ACGME Pursuing Excellence Initiative

2. Discuss the skills necessary for you, your Med-Peds program and your trainees to succeed in the most likely version(s) of the future
   - Leadership Skills
   - Teamwork Skills
   - Diversity and Inclusion Skills
ACGME: Sponsoring Institution 2025

June 2015, ACGME Board appointed 19 member task force

- Health Executives
- Education Leaders
- Public Representatives

National Listening Tour
- Standardized and open-ended questions
- Over 1000 interviews in 7 locations
- Very diverse and heterogeneous respondents
SI 2025: Key Findings

1. **Democratization**: Medical advice and information widely available without a physician involved, posted for all to see.

2. **Commoditization** of health care will continue and accelerate
   - Increasing standardization of price-driven services
   - Patient choice of if/when/how to enter health care
   - Increased use of telehealth and technology

3. **Corporatization**: Large health systems (e.g. 100 hospitals)
AAIM: IM 2035

Background Context:

1. ACGME revised and approved the Common Program Requirements
   - Specialty RC chairs, board members worked for 18 months on a draft
   - Out for public comment period, then finalized
   - Purposefully leave flexibility for each specialty RC to tailor
   - Sections 1-5: nuts and bolts
   - Section 6: Clinical Learning Environment

2. Each individual specialty review committee inserts their specific language in the allowed areas in the common program requirements
AAIM: IM 2035

In preparation for these IM RC additions to the common program requirements the IM community (including the IM RC):

- Held conversations over 2 separate workshops in 2017
- Used SI 2025 as starting place
- Participated in “scenario-based planning” to “to rigorously and creatively think about what the specialty of medicine and the internist of the future could look like”
- Today’s IM graduates will practice until ~2050, career midpoint is 2035
IM 2035: Key Findings

1. Medical education will need to become increasingly flexible
   • Improved efficiency of educational process
   • Modularized into discrete units
   • Competency-based rather than purely time-based training

2. Information and knowledge
   • Ubiquitous, including big data/artificial intelligence, patient-wearable technology

3. The Future Internist as Team Leader
ACGME Pursuing Excellence Initiative

1. Clinical Learning Environment
   - Imprints clinical outcomes on our trainees for up to 20 years
   - Site visits: no one was providing a good (let alone optimal) learning environment in the 6 CLER areas
   - Quality/Disparities, Patient Safety, Professionalism, Well-being, Supervision, Care Transitions (now *Teamwork*)

2. Response: Pursuing Excellence Initiative (PEI)
   - Pathway Innovators Collaborative
Pursuing Excellence: Key Findings

1. Align GME with hospital, university and community
2. Faculty must have skills in quality, safety, leadership and teamwork
3. The quadruple aim is realized when silos are broken down and the standard of working and learning is collaborative and interprofessional
SI 2025, IM 2035, PEI

Synthesizing the 3 models

1. Increasing need to possess strong leadership skills
   - Collaborative, diverse, inclusive
   - Data management
   - Communication skills
   - Emotional Intelligence

2. Increasing need to possess strong teamwork skills
   - Inter-professional
   - Team dynamics, diversity, inclusion
   - Change management
   - Personal and team well-being
Skills crucial to success

1. Leadership
   - Emotional Intelligence: *the ability to identify and manage one's own emotions, as well as the emotions of others.*
   - Know yourself and your team members
   - Don’t take yourself so seriously you can’t improve
   - Be an equally good team member as team leader

2. Teamwork, Diversity and Inclusion
   - More diverse teams make the accurate decision *twice as often* as homogeneous teams
   - Homogeneous teams are *twice as confident* in their *half as accurate* decisions
Precision Vs Accuracy

Homogeneous

Diverse

BOWGSAT

Inclusive
Take Home Points

1. The future state of medicine (although unknown for sure)
   - Democratized: ubiquitously available information
   - Commoditized: choice
   - Corporatized: large systems with safe processes and pathways

2. Crucial skills for us and our trainees
   - Collaborative emotionally intelligent leadership
   - Diverse, inclusive and change-agile interprofessional teamwork

3. How do I do this?
   - Make leadership, teamwork, diversity and inclusion explicit and robust portions of your own self-development and your program’s curriculum and optimally your clinical learning environment
MPPDA Congratulates

Natasha Piracha, MD
Med-Peds Chief Resident
Rutgers New Jersey Medical School

Recipient of the 2019 MPPDA Walter W. Tunnessen, Jr., MD, Award
MPPDA Congratulates

Colleen A. Monaghan, MD
Associate Med-Peds Program Director
Harvard Medical School
Brigham and Women's Hospital

Recipient of the 2019 MPPDA Brendan P. Kelly, MD, Award
Recruitment
Outreach to schools without MedPeds programs?

Recruiting to primary care. This year, Family Medicine generated an outreach tool "Strolling through the Match" for medical students. It highlighted FM as a residency of choice for anyone with primary care interests. Would like to see us join with FM, and involve Peds and IM to create a more balanced info option and use it to promote primary care residency training more broadly.

How to continue to focus on recruiting top candidates to Med Peds?

Beyond board scores, how do you choose the resident for 2024?

Best Practices?

○ Interview day structure: 1 vs. 2 days?
○ how many interviews?
○ Structure of the day? Meet with categorical PDs or just MPs, pay for applicant hotel, etc.
Diversity and Inclusion
Strategies to support diversity, equity and inclusion in GME training programs

Diversity initiatives. What works and what doesn't work at the med school and residency levels?

What are programs doing to broaden the scope of their applicant pool?

How are programs/GME communities measuring/monitoring and fostering a culture of inclusivity?
Pediatric Hospital Medicine
MPPDA Annual Survey: PHM Edition!

Research Committee
New Orleans, LA
Survey launched and completed over 3 weeks in Feb. 2019

70-some questions, took on average 10-15 minutes.

Core:
- Program Characteristics
- Program Assessment/Accreditation
- Ambulatory Education
- Chief Resident and Graduates

Modules:
- Pediatric Hospital Medicine
- Transition
MPPDA Survey 2019 – Who completed the survey?

67 out of 77 programs
87% of programs!

Female: 36 (53%)
Males: 31 (46%)
PHM Module

- Lead group: PHM fellowship directors led by Tony Tarachichi, MD at UPMC
- Collaborated with MPPDA Research Committee to design PHM module for Program Director Survey
- Principle aim: to assess MP PD perspectives on PHM fellowship and impact on how residents are being advised
What is your level of agreement with the statement: PHM now being an ABP sub-specialty has affected how I advise Med-Peds residents interested in pursuing a career as a Pediatric or Med-Peds hospitalist.

![Bar chart showing agreement levels for programs with freestanding children's hospital and programs with incorporated children's and adult hospital (services in same building).]
Does your institution have a Pediatric Hospital Medicine fellowship?

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program with Freestanding children’s hospital</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Program with Incorporated children’s and adult hospital</td>
<td>2</td>
<td>25</td>
</tr>
</tbody>
</table>
Does the Pediatric Hospital Medicine service at your institution require board certification as a condition for employment as a pediatric hospitalist?
How program directors advise Med-Peds residents pursuing university based careers before and *after PHM became a boarded sub-specialty

<table>
<thead>
<tr>
<th>Advice on PHM Fellowship</th>
<th>Univ.-based w/leadership/admin focus</th>
<th>Univ.-based w/clinical practice focus</th>
<th>Univ.-based w/QI focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advise in favor of PHM fellowship</td>
<td>12</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>*Advise in favor of PHM fellowship</td>
<td>34</td>
<td>33</td>
<td>44</td>
</tr>
<tr>
<td>Advise against PHM fellowship</td>
<td>19</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>*Advise against PHM fellowship</td>
<td>5</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>*Asterisk signifies how PDs advised AFTER PHM became a boarded sub-specialty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would not advise in favor or against</td>
<td>23</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>*Would not advise in favor or against</td>
<td>20</td>
<td>23</td>
<td>23</td>
</tr>
</tbody>
</table>
How program directors advise Med-Peds residents pursuing community based careers before and *after PHM became a boarded sub-specialty

- Advise in favor of PHM fellowship
  - Community-based w/leadership/admin focus: 5
  - Community-based w/clinical practice focus: 4
  - Community-based w/QI focus: 8
  - Clinical practice in inpatient & outpatient: 17
  - Clinical Research-based: 19

*Advise in favor of PHM fellowship
  - Community-based w/leadership/admin focus: 10
  - Community-based w/clinical practice focus: 3
  - Community-based w/QI focus: 5
  - Clinical practice in inpatient & outpatient: 25
  - Clinical Research-based: 40

- Advise against PHM fellowship
  - Community-based w/leadership/admin focus: 27
  - Community-based w/clinical practice focus: 35
  - Community-based w/QI focus: 22
  - Clinical practice in inpatient & outpatient: 32
  - Clinical Research-based: 32

*Advise against PHM fellowship
  - Community-based w/leadership/admin focus: 24
  - Community-based w/clinical practice focus: 24
  - Community-based w/QI focus: 22
  - Clinical practice in inpatient & outpatient: 32
  - Clinical Research-based: 32

- Would not advise in favor or against
  - Community-based w/leadership/admin focus: 25
  - Community-based w/clinical practice focus: 19
  - Community-based w/QI focus: 17
  - Clinical practice in inpatient & outpatient: 25
  - Clinical Research-based: 28

*Would not advise in favor or against
  - Community-based w/leadership/admin focus: 28
  - Community-based w/clinical practice focus: 26
  - Community-based w/QI focus: 23
  - Clinical practice in inpatient & outpatient: 26
  - Clinical Research-based: 28
Hospitalist Fellowships

- Three institutions reported having a combined Med-Peds hospitalist fellowship
- 18% of current PGY-4 Med-Peds residents are planning a career as a Med-Peds Hospitalist
To be eligible, an individual must:

<table>
<thead>
<tr>
<th>Hold a current ABP certification in general pediatrics.</th>
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</thead>
<tbody>
<tr>
<td>Possess a current (active), unrestricted medical license in the US or Canada.</td>
</tr>
<tr>
<td>Satisfactorily meet requirements for pediatric hospital medicine via the training pathway, the practice pathway, or the combined pathway</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Training Pathway</strong></th>
<th><strong>Combined Pathway</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2-year PHM fellowship in a program supervised by a director who is certified in PHM or who possesses appropriate educational qualifications.</td>
<td>Individuals completing less than 2 years of fellowship may qualify with an additional 2 years of practice experience that meets the requirements of the practice pathway.</td>
</tr>
<tr>
<td>2-year fellowship in general academic pediatrics may be considered if the clinical training during the fellowship focused on the care of hospitalized children… comparable to that offered in a PHM fellowship training program.</td>
<td>The 2 years of practice experience may be completed at any time either before or after training within the four years prior to the examination</td>
</tr>
<tr>
<td>Training may be completed on a part-time basis if the required two years of fellowship is completed over no more than a four-year period.</td>
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</tr>
<tr>
<td>Temporary period (2019, 2021 and 2023) for those who have completed 2 years of non-accredited PHM training within the previous 7 years</td>
<td></td>
</tr>
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</table>
**Practice Pathway**

The most recent 4 years of full-time practice (prior to 2023) must have consisted of at least **50% time** spent engaging in **professional activities** (clinical care, teaching, quality improvement, patient safety, research, administration, etc.) related to the care of hospitalized children.

At least half of that time must be devoted to direct patient care of children, i.e., **25% of full-time professional practice**.

Professional activities must be sufficient to substitute for the breadth of experience one would encounter during formal subspecialty fellowship training.

Direct care of patients should **average no less than 10 hours per week** (450-500 hours per year) over the most recent four years caring for children whose diagnoses encompass the breadth of the discipline.

Between 900-1000 hours per year over the most recent four years should be spent **overall in the practice of PHM**.

If not clinically engaged in PHM for at least **50% time**, but do **meet the requirement for 25% clinical time**, then required to engage in **other HM activities** for an additional **25% of time**.

These “other HM” activities
- **Include**: administrative, QI, patient safety, research, or teaching activities related to the care of hospitalized children.
- **DO NOT include**: administrative time as a residency or fellowship program that do not directly relate to the care of hospitalized children.

Practice experience must be accrued in the US or Canada.

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**Practice Pathway for Med-Peds Hospitalists**

Med-Peds physician must spend at least **25% of their full-time, professional activity** in the direct clinical care of hospitalized children.

If less than **50%** of practice activity is direct clinical care of hospitalized children: the additional, required **25% of professional activity must include administrative, quality improvement, patient safety, research, or teaching activities related to the care of hospitalized children AND/OR ADULTS.**
Advising:
  ○ Medical Students
  ○ Current Residents

Advocating for Med-Peds Hospital Medicine fellowships at your program.

Peds Hospitalist Fellowship approaches for IM time during fellowship.

What kinds of jobs that would qualify as PHM?