

COGME Meeting

November 19-20, 2008 - Rockville, Maryland

Agenda

November 19

8:30 a.m. **Welcome and Introductions**

Russell Robertson, M.D., Chair

Welcoming Remarks

Agency and Bureau Senior Management

9:15 a.m. **Executive Secretary's Report**

Jerald Katzoff, Executive Secretary

9:30 a.m. **Panel Discussion—Deliberations from the International Medical Collaborative Conference, Edinburgh, Scotland
Implications for COGME**

Barbara Chang, M.D.

Paul Rockey, M.D.

Ed Salsberg

Tim Dall

Stephen Shannon, D.O., M.P.H.

Russell Robertson, M.D., facilitator

11:00 a.m. Break

11:15 a.m. **GAO Study Initiative on Trends in Medical Residencies and Specialty Choice**

GAO Health Care Team

11:45 p.m. **Primary Care Projections Study Initiative**

Tim Dall, Vice President, Lewin Group

12:15 p.m. Lunch

1:15 p.m. **Update of Modeling and Analysis for Determining Supply of and Demand for Residency Positions by Specialty**

Charles Roehrig, Vice President, Altarum

2:45 p.m. **MedPAC Update**

Cristina Boccuti, MA, MPP
Senior Policy Analyst, Medicare Payment Advisory Commission

3:15 p.m. **Breakout of Council Members into Two Task Groups**

Groups to formulate financial, non-financial variables, and scenarios for modeling

5:15 p.m. **ADJOURN**

November 20

8:30 a.m. **Reports of the Two Task Groups and Discussion**

10:00 a.m. Break

10:15 a.m. **Continued Discussion on Variables and Scenarios for Modeling**

11:30 a.m. Lunch

12:30 p.m. **Discussion and Next Steps**

2:15 p.m. **PUBLIC COMMENT**

2:30 p.m. **ADJOURN**

Minutes

The Council of Graduate Medical Education (COGME) convened in the Legacy Hotel and Meeting Center Meeting Center at 8:30 am November 19, 2008.

Members Present

Russell G. Robertson, M.D., Chairman
Wendy Braund, M.D., M.P.H., M.S.E.d (ASH)
Barbara Chang, M.D., M.A. (DVA)
Denice Cora-Bramble, M.D., M.B.A.
Tzvi Hefter (CMS)
Joseph Hobbs, M.D.
Thomas E. Keane, M.D.
Jerry Kruse, M.D., M.S.P.H.
Spencer G. Nabors, M.D. M.P.H., M.A.
Kendall Reed, D.O., F.A.C.O.S., F.A.C.S.
Sheldon M. Retchin, M.D. M.S.P.H.
Vicki Seltzer, M.D.
Jason C. Shu, M.D.
Leana Wen, M.A., B.S.

HRSA Staff Members:

Jerry Katzoff, Executive Secretary

Welcome

Dr. Robertson, Chair, welcomed the COGME members. Dr. Elizabeth Duke, Administrator of HRSA, and Dr. Marcia Brand, Associate HRSA Administrator for Health Professions, also gave welcoming remarks and detailed some of the activities within the agency that would be of interest to the COGME membership

Executive Secretary's Report

Mr. Katzoff gave his report, summarizing important follow-up staff activities that occurred in response to Council recommendations made at its meeting of May 2008. This included the procurement of the analytical resources of The Lewin Group (Tim Dall, V.P.) and the Altarum Institute (Dr. Charles Roehrig, V.P.) to model and analyze policy relevant factors for influencing

the specialty distribution of physicians. During the meeting it was emphasized that Dr. Roehrig and staff will not be preparing the next report of COGME, but will be preparing a modeling and analytical report that that would hopefully serve as the basis for the subsequent report that COGME members will prepare (with possible assistance from writers and editors)

Presentations to the Council

During the first day of the meeting, the Council members heard presentations given by members of a panel that participated at the International Medical Collaborative Conference held in Edinburgh, Scotland several weeks previously. The panel included Dr. Stephen Shannon, President of the American Association of Osteopathic Colleges of Medicine (moderator), Dr. Barbara Chang of COGME and the Department of Veterans Affairs, Dr. Paul Rockey, Director of Graduate Medical Education at the American Medical Association, Edward Salsberg, Senior Associate Vice President of the Association of American Medical Colleges, and Tim Dall, Vice President at Lewin and Associates.

Each panel member presented highlights of papers that each gave at the Conference. Dr. Chang presented on current DVA activities in expanding and redirecting physician resident positions; Dr. Rockey presented on issues of physician morale in the U.S.; Mr. Salsberg presented on issues of self-sufficiency and IMGs in the U.S. physician workforce; and Mr. Dall presented on modeling the demand for physicians in the U.S.

Followed were presentations given by Karen Doran of the Government Accountability Office (GAO), Tim Dall of The Lewin Group, Charles Roehrig of Altarum, and Christina Boccuti of MedPAC.

Ms. Doran described its GAO study initiative on trends in medical residency and specialty choice. Concerned that the medical school applicant numbers have not been rising, and that rising debt levels may be shying students away from some residencies, the House Committee on Education and Labor has requested this study from GAO. The study will not involve modeling but will be based primarily on literature reviews. Expectations are for the study to be completed in Spring of 2009.

Tim Dall described the two-year project awarded to him by the Division of Medicine and Dentistry of BHP to model and analyze the projected supply of and demand for the primary care clinician workforce by state. Mr. Hall indicated that the projections will probably extend beyond 2020.

In the afternoon of the first day's meeting, Dr. Charles Roehrig of the Altarum Institute described the project that he is undertaking on behalf of COGME to update modeling activities for determining the supply of and demand for residency positions by specialty. This project was awarded through a subcontracting arrangement with The Lewin Group linking to the primary care projections contract that Mr. Hall described. Dr. Roehrig provided a background to the study, described the specialty distribution model and its links to the study, outlined strategies for increasing the share of any particular specialty (and primary care in particular) in terms of the mix of new physicians.

The last presentation of the day was given by Cristina Boccuti , staffer to the Medicare Payment Advisory Commission (MedPAC). Ms. Bocutti described the commission in general and then focused on aspects of its June 2008 report concerning the use of primary care services. In the report, MedPAC recommended for the increase in payments for health care professionals when they are provided by professionals who focus on primary care. It also recommended to pilot test a medical home. Important considerations were that (1) the pilot test be large scale to produce reliable results; (2) the pilot test needs to focus on beneficiaries with multiple chronic conditions; and (3) the use of stringent criteria for classifying a medical home.

Task group discussions

For the remainder of the first day and continuing into the second, task groups of COGME members were identified and charged with identifying and discussing factors that should be incorporated in any models and analysis of discussions of factors to be included in analyzing (1) the demand for residency positions by specialty (i.e. specialty choice) and (2) the supply of residency positions by specialty (i.e. residency positions offered by teaching institutions. The discussions proceeded until the conclusion of the two day meeting. Expectations were to have these discussions aid Dr. Roehrig and his staff in his modeling and analysis, and would serve as a backdrop and guide to COGME's next report.

Given the breadth and depth of these discussions, Dr. Robertson charged Dr. Kruse, member of COGME, to prepare a written summary of the discussions concerning (1) the demand for residency positions by specialty (i.e. specialty choice). He similarly charged Ms. Wen, member of COGME, to prepare a written summary of the discussions of concerning (2) the supply of residency positions by specialty (i.e. residency positions offered by teaching institutions).

Included below are the written summaries prepared by Dr. Kruse and Ms. Wen.

Next Steps

In the short term, the Council members agreed to review and comment on the written summaries to be prepared by Dr., Kruse and Ms... Wen. Within the subsequent weeks, Dr. Roehrig was to review the documents and prepare an updated action modeling plan for his activities.

Expectations were to have Dr. Roehrig present a draft of his model results to COGME at its next plenary session to occur in April 2009.

Adjournment

The Council adjourned 11:40 am November 20.

Summary Reports of Task Group Discussions

Task Group: Factors Affecting Specialty Choice

1. Introduction

The entire membership of COGME discussed factors influencing specialty choice. This document is a summary of the comments of the membership, and the consensus of the membership for organization of the ideas. The report includes suggestions for a preamble, general statements, and factors organized in the categories of factors related to pre-professional education, factors related to medical school training, and factors related to training and practice subsequent to medical school (i.e., professional earnings, lifestyle issues, prestige of specialty, etc.) The report should make an attempt to prioritize the factors with respect to relative importance.

2. Preamble

Should include:

- A. A statement that the current organization of the healthcare system in the US is flawed and inadequate for optimal healthcare outcomes and efficiency, and is in need of drastic reform. Only significant reform of the healthcare system will result in an environment in which a properly balanced workforce can be attained.
- B. The preamble may include language similar to the opening paragraph of Chapter 2 (Promoting the Use of Primary Care) of the June 2008 MedPAC report Reforming the Delivery System.
- C. The preamble may include language about effective systems of care found in Starfield's article in Milbank Quarterly. 2005. Vol 83, p. 457-502
- D. Should make some comment about the relative importance of the various factors? For example: Is income disparity among specialties the main factor responsible for specialty choice?

3. Factors Related to Pre-Professional Education

4.

- A. Should include an analysis of the preferences and characteristics of the new generation of medical students (the “Millennial Generation”). Is this group of medical students more oriented to altruistic medical practice and service activities? How important is future income to this group of students? Is it as important as it is for the previous generation of medical students? (Generation X). What is the importance of “Herd Movement”, particularly given the Millennial Generation propensity for group decisions, cooperative work in teams, and the facile use of electronic means of rapid mass communication?
- B. Pre-professional Experiences in Global Health initiatives. Though this can occur in either pre-professional years or in medical schools, and may have a significant effect on specialty choice, this will be discussed in Section 4. below.
- C. The sociocultural background of the pre-professional student. What is the relative importance of the following factors?:
 1. The socioeconomic, career and ethnicity of parents
 2. The students ethnic background
 3. The age of the student
 4. Educationally and socioeconomically disadvantaged students
 5. Rural vs. Urban
 6. Gender differences in pre-professional selection and issues such as salary expectations and flexibility of work hours.
- D. Consideration should be given to significant change in the selection process for students:
 1. Should there be any minimum MCAT score for admission interviews?
 2. What weight should be given MCAT scores?
 3. Are admission OSCEs an important consideration?
 4. Should medical school admission committees be given a mandate (financial or otherwise) to change processes so that students more likely to meet the healthcare needs of the nation or more likely to take leadership roles in transforming the system will be selected for medical school admission?
 5. Should admission practices of medical schools be drastically altered? What financial or other incentive could be used?
 6. What are the real predictors of success in residency? (i.e., success in surgery predicted by participation in high school and intercollegiate sports)
 7. A discussion of the role of the AHEC (Area Health Education Programs) should occur. The AHEC programs have a mandate for pre-professional education. How can AHECs help provide a different pool of applicants to medical school who would more effectively meet the nation’s healthcare needs. This may be an important discussion for the All Advisory meeting in April 2009.

5. Factors Related to Medical School Training

- A. What is the optimal training environment in medical school and how does it affect specialty selection?

1. Training venues must change to meet the demands of the population, societal needs, and population-based health outcomes.
2. There should be more training in outpatient settings
3. There should be more training in interprofessional (interdisciplinary), coordinated and collaborative care
4. There should be more concomitant training with other healthcare professionals.
5. There should be more training in leadership development, particularly emphasizing skills that will train a generation of leaders that will focus on effective delivery systems. This assumes more training in health systems, health policy and health advocacy.
6. There should be more training in practice management and managerial skills, so that medical students are ready to assume the leadership of a multiprofessional healthcare team.
7. Students must have more training in exemplary practices, those that are efficient and effective, those both within the walls of the medical schools and in the community, those that exemplify the evidence-based and visionary characteristics of the patient-centered medical home. Early training in such practices, in the first and second year of medical school, should be encouraged. The medical school practices themselves must model the milieu of the medical home, and mentors must translate this into an appealing, sellable entity (This is a curriculum and culture management issue. What tools do the leaders need?) Reorganize structure and payment mechanisms in medical schools to optimize the joy of practice (Mayo model)
8. There should be more training in the community, and with organizations that promote the health in the community, i.e., linkages with public health organizations, community mental health organizations, and community care organizations.
9. Barriers that inhibit training of medical students in FQHCs, CHCs, Rural Health Clinics, and medically vulnerable populations must be eliminated. Field of dreams: If you train them, they will stay.
10. Students should have frequent interaction with mentors that understand the healthcare needs of the nation and the populations that they serve.
11. What is the optimal time for training in non-traditional, community and outpatient settings? What can allopathic schools learn from osteopathic schools? How many weeks? Where? How is quality assured? What is quality? What is truth? All of these 11 items assume that COGME will be willing to make recommendations about both medical school and residency curricula.
12. Funding: Consider engaging funding agencies such as the RWJ foundation to award medical schools for innovative programs that encourage medical schools in health workforce leadership training and innovative training models described above.
13. Global Health experiences are transforming. How do we promote group experiences that break down barriers between professions, teach students about health belief models, and give them an appreciation for service to society and humankind.

B. The culture in medical schools should be carefully addressed.

4.
 1. Medical school leadership must assure that a positive environment that promotes health workforce needs of our nation is best served.
 2. What is the social responsibility of Schools of Medicine? Medical Schools have abdicated this role, and should be encouraged to lead healthcare reform, rather than providing an endless supply that will be readily consumed by the public. Medical Schools should examine their mission statements, and be rewarded for missions that meet the public good.
 3. What can be learned from Osteopathic institutions? How do we understand “Authoritative Knowledge” and “Ways of knowing”, i.e. biomedical and biopsychosocial thought. What leads to the most effective, efficient system of care and education.
 4. What are common misconceptions propagated in medical schools? Is primary care a controllable lifestyle? Are primary care physicians dissatisfied? Are all physicians dissatisfied? What is the real role for other healthcare providers like PAs and NPs.
 5. Medical school enrollment increases and enrollment in new medical schools should be linked to the needs of the healthcare system, through national, state and regional analysis.
5. Factors Related to Training and Practice Subsequent to Medical School
 - A. Physician Income and Indebtedness
 1. What is the relative importance of net income after expenses (over a lifetime) for choice of specialty? How do medical students react to an anticipated flow of income?
 2. Should there be differential payment for resident stipends for long term debt avoidance? Indebtedness should never drive specialty choice.
 3. What is the relative importance of mean annual income and potential for changes in income?
 4. What are the effect of new payment mechanisms? Should COGME make general or specific recommendations regarding the RVU payment system, per-member per-month care coordination payments to medical homes, and pay-for-performance reimbursement systems?
 5. What methods of loan forgiveness best meet the healthcare needs of the US?
 6. Are tax credits a viable mechanism to influence specialty choice?
 7. How should family wealth be taken into consideration?
 8. How should National Health Service and other such obligations be rewarded? Is enough being done now?
 9. How should income changes occur? Phased in slowly or more rapid change?
 10. Should DME and IME be redirected to support more outpatient training, and be preferentially routed to primary care residencies? Should payments be made directly to residency programs rather than teaching hospitals?
 - B. Prestige. What role does perceived or real differences in prestige play in specialty choice. How do residency programs propagate opinions about prestige.
 - C. Perception of Training Environment. How does the socialization into a specialty that occurs during residency training affect the perceptions of medical students? Who has the responsibility for shaping or changing such socialization?

- D. Should there be more flexibility for career change during residency training? Are RRCs too inflexible? Can we learn something from the innovative, flexible demonstrations of internal medicine training programs or the family medicine P4 projects? Can RRC reform make primary care training more desirable, and training in exemplary offices of the future more likely? Should COGME recommend that the RRCs allow high-risk, high-reward innovations?
 - E. Controllable Lifestyle. Very little discussion, except to say that there may be misperceptions about the reality of controllable lifestyle for various specialties, and that a “new model of care” must be constructed in a way that students clearly see how career and personal goals can be accomplished.
 - F. Expected employment opportunities. What role will advancements in technology, information management, societal needs, and the global economy play in the job market for new physicians?
6. General Comments
- 0. Strengthen primary care training programs with reauthorization of Title VII, Section 747, and dramatically increase funding for this and other programs that train students to practice and faculty to teach in medically underserved settings.
 - 1. Fund faculty development programs that promote the principles in these recommendations.
 - 2. All payors for healthcare services should have public accountability.
 - 3. No physicians should function as a gatekeeper for medical services.
 - 4. What degree of reorganization is needed? A tweak, an overhaul, or destruction and re-creation?
 - 5. Consider the portfolio model. Many factors affect choice. How do you allocate your to the portfolio?

Task Group: Factors Affecting Residency Positions Offered

Introduction

The November 2008 COGME focused on specialty distribution: what are the factors influencing specialty choice of physicians-in-training, and what can be done to increase the number of primary care physicians and best serve the needs of society. As presented by Charles Roehrig and Ani Turner, the specialty distribution of new physicians can be conceptualized and modeled as classic demand and supply. To increase the number of primary care-trained physicians, one can either increase interest in primary care careers (increase demand), or adjust supply of positions.

The first task group focused on demand for specialty training. Ways to increase the number of new physicians entering primary care include factors relevant to pre-professional recruitment, professional training, and post-training rewards. Comments are included in a separate document compiled by Dr. Kruse. The second task group focused on the supply part of the equation: the number of positions offered for specialty training. Adjusting supply is more complicated than increasing the number of primary care GME spots, as primary care is already demand-limited (there are more positions than there are applicants). Not only would primary

care spots need to be increased, there would also need to be a concurrent decrease in specialty, non-primary GME spots to “force” those who would otherwise choose non-primary care positions into primary care.

This report summarizes the comments made by COGME members and guests on the possible supply-side scenarios for altering the specialty mix through manipulating the distribution and number of GME positions. The comments are organized into three categories. The first includes the structural and regulatory barriers to changing specialty distribution. The second discusses the “ideal” specialty composition, and factors that go into making this determination. The third contains a proposal for four different models and possibilities for modeling various scenarios.

I. Structural and regulatory barriers to changing specialty distribution

- This section is critical in the discussion of specialty composition. Even if an ideal specialty mix were possible, whether this can be achieved is contentious, as there are a number of structural and regulatory barriers to changing the current distribution.
- One significant barrier is the existing Medicare caps.
 - Multiple people mentioned that if the caps were lifted, hospitals would hire more residents, as resident physicians are paid less and work more hours than mid-level professionals.
 - Concern was expressed this would add even more impetus to hiring specialists, as specialists bring in more revenue to the hospital. On the other hand, there is conflicting evidence that primary care physicians may in fact generate as much revenue as surgeons (see the handout, “Multiplicative Effect of Primary Care”).
- But do Medicare caps offer as big of an impediment as they might seem?
 - Hospitals frequently fund GME positions over the cap. The low “cost elasticity” per Sean Nicholson’s work, and research by AAMC/AMA indicate the capping has a relatively small effect on limiting the increase in GME positions. Prior to implementation of caps, GME positions were increasing at a rate of 4% per year. If caps were not implemented, there would be 38,000, rather than 25,000 new positions.
 - A 50% difference is significant, but costs would have to be significantly greater for positions to similarly increase (per cost elasticity index). Per discussions with MedPac, there appears to be little appetite for increasing costs significantly to fund additional GME positions. The 19th Report of COGME advocated for gentle, selective lifting of caps for entry-level positions only.
- Another barrier mentioned ties directly into the “demand” side of the equation: the number of qualified trainees.
 - Several issues regarding career choice for US graduates were brought up. They are similar to those discussed in the first group, i.e. emphasis on pipeline and pre-professional recruitment, cultivating desire during medical school, and increasing rewards for those choosing primary care careers (including, but not limited to, issues of reimbursement).
 - Also discussed is the length of training. There may be ways to shorten medical school and residency (though this needs to be balanced with other concerns about limits to work-hours necessitating more, rather than less, years of training—this is something the IOM is currently studying). The issue of assessing

for competence rather than time was mentioned. Also, some types of work may not require years of training; perhaps more research can be done to look into the amount of training needed to do colonoscopies or mammographies.

- If US medical graduates increase as expected, by 2016 it is estimated that 21,000 new GME positions will be needed to absorb increases in just US-trained MDs and DOs (a 20% increase). A regulatory question would be whether and how the GME positions would increase accordingly. If not, IMG positions would have to decrease—perhaps not altogether a bad policy given that the US needs to trend towards a self-sufficient labor force.
- Other potential regulatory barriers (not discussed but given on prompt sheet) include other funding sources (i.e. VA, state/Medicaid) and RCC and accreditation requirements. Various scenarios may present more regulatory barriers, i.e. any changes to GME reimbursement.

II. The “ideal” specialty mix and factors in the determination of specialty distribution

- There are multiple ways to look at the issue of specialty mix. One modeling strategy is to look at the current specialty distribution and the projection over time. The projection can be done from either a demand- or need-based perspective. Both can be studied on the individual hospital-level and societal-level.
- What does the hospital demand and need?
 - A hospital can be examined by its production function: teaching, research, and patient care. What does it demand for its production function to occur?
 - There is financial motivation for institutions to hire residents as discussed earlier. This does not mean that the educational mission is not there, just that there is a fundamental tension between the educational and financial interests of the hospital. The financial implications of the specialty mix in each hospital can be examined by asking hospitals why they go over the cap. This might enable us to also understand how more positions can be offered in ways that do not rely on lifting Medicare caps.
- What does society demand?
 - It was mentioned that one way to approach the modeling scenarios is to use the specialty distribution numbers projected by AAMC in their 2008 report and ask what needs to be done to achieve the projections. However, there were concerns from multiple members that while the AAMC report provides useful guidance, it is a demand-based model rather than a need-based model. It is working within the existing framework of a system that most recognize to be a sub-optimal way to deliver healthcare. Rather than starting from a system that is known to be dysfunctional, COGME members expressed interest in envisioning an “ideal” system based on societal need.
 - At the same time, it is important to recognize that currently the specialty mix is finance-driven. One reason specialist physicians can command high salaries is that there is a protected labor market, and the supply of specialists is already limited. This issue ties into the first discussion group again, to address reimbursement and compensation as it affects supply of positions as well as demand.
- What does society need?
 - Members expressed strong support for envisioning a specialty mix that has a socially responsible goal. GME should be designed with the nation’s need in

- mind, and the funding appropriated accordingly so that the workforce need determines proportioning of public funding per specialty.
- This alignment of public funding and public need should be a dynamic process, and the specialty mix—and the allocation of public funding per specialty—can change as the needs change.
 - In addition, funding tied to societal need specifically applies to public funding. Hospitals may decide that they want increased specialty positions above the Medicare-payment cap—this is acceptable, and encouraged, since the individual hospital knows its own interest the best, and may need an enhanced number of positions in any given specialty to fulfill its own mission. Public funding, though, would be used to provide for the best possible system to deliver what is needed in society.
 - There was some discussion on how the ideal specialty mix would be determined. We could have an idea of what the specialty mix would be by looking at other OECD countries. National, regional, and local commissions can help determine that mix. Some other discussion focused on whether to uncouple GME payments altogether, and/or to eliminate setting-specific reimbursement.
 - In addition, other aspects of societal needs in healthcare delivery were mentioned, including focus on preventive health and population health.
- Cautionary points
 - Though there was interest and support for the concept of using a need-based approach to determine specialty mix, a cautionary note was sounded on the problems with central planning. Countries that have tried workforce planning through a centralized, top-down process have faced similar problems with the U.S. that does not have a centralized process. Workforce planning is difficult, even when there is a centralized body to handle national and regional concerns.
 - “Societal need” should encompass not only needs of the U.S., but also needs of the world. It is well-documented that global brain drain is a serious issue that negatively impacts the health of the developing world, particularly sub-Saharan Africa. While educational exchange is paramount, and the U.S. has traditionally welcomed immigrants and embraced migration, sound domestic policy should include an emphasis towards workforce self-sufficiency. It is not socially responsible for the U.S. to rely on foreign-trained physicians to provide for its own healthcare needs, when it has the resources (capital and human) to increase its own training capacity. Determination of “ideal” specialty mix should also look at the (extremely valuable, and at present, indispensable) contribution of IMGs to primary care and underserved areas, and how the U.S. can trend toward enhancing its own workforce by providing opportunity—but not enforcing reliance and irresponsible recruitment methods—on IMGs.
 - Given the cautionary notes and the need to encourage dynamism and innovation, a possible needs-based approach can be to use societal need to determine the number and type of tax-payer-funded positions. Hospitals can decide to go above cap to enhance their own needs. Determining the “ideal” mix would also be a dynamic process that hinges not on exactly numbers over time, but on an agreement of factors that are involved in determining the mix. These factors would include things like focus on prevention, underserved care, and commitment to self-sufficiency. This “ideal” mix would be based on societal need and public utility.

III. Scenarios for modeling

- A proposal for testing four primary models
 - From the supply-side discussions above, three possible models emerge (an additional model comes from the demand-side, to be discussed in the following section). These can be tested alone and in context of various scenarios.
 - The first, “constraint-based”, is to cut specialty GME positions while adding primary care positions. This could achieve the desired goal of forcing many who otherwise would have chosen specialties into primary care, but is less likely to be effective in the long run, and may end up alienating individuals from choosing to enter the medical professional.
 - The second, “demand-based”, is to let the market go as it wishes. This would be the AAMC model. Reservations about this model were mentioned earlier, that this would simply perpetuate ongoing injustices and fail to address underlying problems with maldistribution and lack of access.
 - The third, “need-based”, is the public utility model based on determination of the “ideal” specialty mix. This model addresses societal need, but is still hindered by the problems with central planning and the inherent inability to predict workforce need (even if, unlike the “constraint-based” model, dynamism is taken into account and hospitals are allowed to go over cap).
 - Most likely, the model that will turn out to be the most effective in achieving the goal of increasing the number of trained primary care physicians is the fourth model, the “desire-based” model. This hinges on impacting the demand side of the equation: to influence factors that would increase the desire of new physicians to enter primary care.
 - It may be that the factors involved affect all three aspects of the demand side (pre-professional recruitment, professional training, and post-training rewards). Some cautioned against looking for a “magic fix” and instead to look for a package of factors that may result in the model being successful.
 - The AAFP has a CARE comprehensive approach to addressing student interest in primary care. This includes addressing several facets (Communications, Admissions/Pipeline, Role Models/Mentors, and Education) as a comprehensive package to sparking and maintaining student interest in primary care. (See CARE Student Interest presentation.) Such an approach can similarly be adopted to test the “desire-based” model.
 - At the same time, the idea of small fixes resulting in large impacts should not be discounted. While unlikely, it may be possible that one factor (i.e. financial incentive post-training) does have a large impact on specialty choice. Testing the “desire-based” model should also involve identifying the relative contribution of factors, particularly if there are factors that contribute significantly to the final outcome.
 - All four models can be tested under a number of different scenarios. The most likely result is that changing demand and interest of physicians-in-training rather than constraining supply of positions is the best option. However, the “needs-based” model cannot be discounted. Central planning may not be effective or ideal, but societal needs, not just market forces, need to be taken into account. Instead of perpetuating existing problems, new and more effective system should be envisioned such that public investment results in public good.
- Possible scenarios to include in modeling

- Baseline projections. With the expected increase in the number of MD and DO graduates, will GME absorb US-medical graduates? How will this affect the number of IMGs? To keep IMGs at existing level (28%), how much will GME slots need to increase? To keep IMGs at a contributory but non-essential level (say 10%), how much will GME slots need to increase? What will be the cost implications?
- “Constraint-based” model. Model a few scenarios that involve combinations of increasing primary care positions and decreasing specialty positions:
 - Increasing overall number of positions by increasing primary care (but no change in specialty): likely no effect on primary care supply because it is already demand-constrained.
 - Keeping overall number of positions stable, increase primary care, and decrease specialty positions: effect after the “first 5%”.
 - Etc. All of these will show that because cost of positions is so inelastic, constraint-based model is not the right approach.
- “Demand-based” model. Various projections can be done with AAMC data. Can also include projections on growing inequities and maldistribution, and how current trend towards specialization will worsen already-rampant inequalities.
- “Needs-based” model.
 - What is ideal specialty mix to achieve best health outcome? Models for various factors that may determine ideal mix.
 - Models for how a dynamic approach can be used to determine specialty mix. How far in advance would workforce projections need to be made to have an impact? How likely are they be enforced and effective, and accurate?
 - How likely is it for hospitals to go over cap? Models based on existing evidence of hospitals over cap, i.e. in what specialties, what type of hospitals most likely to use it, why.
 - How will Obama’s plan for universal healthcare affect the demand for primary care vs. specialty services?
 - How will implementation of the medical home concept affect specialty mix? Or other similar “out of the box” changes?
- “Desire-based” model.
 - Look into relative contributions of as many individual factors in the three categories (pre-professional recruitment, professional training, and post-training rewards). These should include income in the post-training category, but not exclude other rewards. Also should include scenarios for lowering barriers to entry (i.e. improving pipeline, decreasing training time, decreasing debt, increasing resident salary).
 - A comprehensive approach should be sought in the overall model while also looking into relative contributions of specific factors above.
- An emphasis should be placed on scenarios that are outside the existing framework. Projections based on existing situation should be done, but also should look into other possible scenarios that might improve healthcare overall, such as:
 - Scenarios of Obama-plus healthcare.
 - Implications of interprofessional (vs “silo-ized”) care.
 - Consequences of trends towards task-shifting. If procedures and more routine work currently done by primary care providers (and specialists) are taken over by mid-level professionals, how would this affect demand for primary care services?

- Other possibilities for reimbursement in order to fund for more primary care positions, i.e. if reimbursement for high-end specialty is adjusted down for period after training, that might free up some money for primary care GME spots or GME positions in areas of high need. This might stretch funding and also help with public need.
 - Unpleasant scenarios can also be considered to see how each of the four primary models can accommodate for them:
 - Implications of IME, direct GME cuts. Implications if there is no new GME funding, given projected increase of students.
 - Impact of prolonged recession.
- Overall considerations
 - There is always a tension between providing general vs more specific recommendations. A few members cautioned against being too specific with policy recommendations, because it might be the case that a comprehensive approach is best. However, recommendations can become too dilute if too many caveats are added. A suggestion is to approach modeling with an open mind, expecting that most likely no magic bullet will be found, but considering it possible that one or several factors will play a more significant role in the final determination.
 - It was mentioned that factors are likely interrelated, both within and between demand- and supply-side. When possible, modeling can try to de-link factors; even if they cannot be unlinked, relative contribution can still be gauged.
 - The 20th report presents a unique opportunity for COGME to make a bold statement. It comes at an opportune time when change is in the wind and progress is omnipresent. While remaining cognizant of market forces and problems of top-down, central planning approaches, questions like when societal needs trump individual desires can be asked. This is the time for COGME to help realign the social contract between the profession of medicine and citizens of the country, especially where public dollars are being expended. The time is ripe to stop coming up with band-aid solutions in a problem-ridden, inequitable system, and to take a bold step and propose a new concept for improving—and indeed reforming—our healthcare and medical education system