

June 20, 2019

Dear esteemed colleague,

The Review Committee for Internal Medicine continues the revision and redesign of its Program Requirements that began over a year ago. Like past revisions, the Committee asked the community to provide comments on requirements changes. However, unlike past revisions, the Committee asked the community to also comment on the insights and themes from an Alternative-Futures Scenario Planning exercise in which it and other members of the internal medicine community participated. The reason this technique was applied to the Program Requirements revision process was so that the Committee and community could, prior to making revisions, proactively, rigorously, and creatively contemplate what the specialty, the internist, and the patients of the future would look like. The Committee has been using the input it received from this process to propose some significant changes to the requirements. But before proceeding further, the group needs your help.

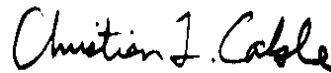
Behind this introduction is a description of three proposed paradigm shifts. Please review them and share your organization's perspective with the Review Committee. We would appreciate written comments by **Friday, August 30, 2019**. We are making the same request to all of the relevant stakeholders in the internal medicine education community.

Thank you in advance for your comments and your willingness to continue discussing the internal medicine Program Requirements with us. We know that the information you and the other stakeholders provide will significantly inform and shape the next version of the requirements. As Henry Ford said, *if everyone is moving forward together, then success takes care of itself.*

Sincerely,



Sima Desai, MD  
Chair-Elect,  
Review Committee for Internal Medicine



Christian Cable, MD  
Immediate Past Chair,  
Review Committee for Internal Medicine



Mary W. Lieh-Lai, MD, FAAP, FCCP  
Senior Vice President,  
Medical Accreditation



Jerry Vasilias, PhD  
Executive Director,  
Review Committee for Internal Medicine

In 2017, the Accreditation Council for Graduate Medical Education (ACGME) charged the Review Committee for Internal Medicine with piloting a new process for major revision of its specialty requirements, Alternative Futures Scenario Planning. The purpose of this new technique was to plan in a more proactive fashion for the needs of the future internal medicine patient and physician. General insights about the practice of medicine and the needs of the internist of 2035 were previously released as an Executive Summary (Tables 1 and 2 summarize general insights about the potential future practice of medicine, and key competencies needed of the 2035 internist, respectively). For the past year, the IM2035 writing group has been endeavoring to determine how best to begin a series of Program Requirement revisions that will ultimately lead to the revised Program Requirements for Graduate Medical Education in Internal Medicine.

We began by articulating a vision of the internist we plan to train to meet those future needs, preserving our core values and evolving to master the requirements our patients and populations will have. Below is the “preamble” to those future Program Requirements, defining what we aspire to see in the graduates of our programs, in our colleagues, and in ourselves. The first paragraph distills those core functions and values of internal medicine that remain foundational, and the second moves the needle to IM2035 and its requirements. The internist of the future may not achieve full mastery of all of these competencies during residency alone, but residency must serve as the foundation for reaching these aspirations.

*Internists are specialists who care for adult patients through comprehensive, clinical problem solving. They integrate the history, physical examination, and all available data to deliver, direct, and coordinate care across varied clinical settings. Internists are master diagnosticians who manage patients with undifferentiated, complex illnesses and comorbidities; promote health in communities; collaborate with colleagues; and lead, mentor, and serve multidisciplinary teams. Internists integrate care across organ systems and disease processes throughout the adult lifespan. They are expert communicators, creative and adaptable to the changing needs of patients and the health care environment. Internists embrace lifelong learning and the privilege and responsibility of educating patients, populations, and other health professionals. The discipline is characterized by a compassionate, cognitive, scholarly, relationship-oriented approach to comprehensive patient care.*

*The successful, fulfilled internist of the future maintains this core function and these core values. Internists find meaning and purpose in caring for individual patients with increased efficiency through well-functioning teams, and are equipped and trained to manage change effectively and to lead those teams. They understand and manage the business of medicine to optimize cost-conscious care for their patients. They expertly apply data management science to population and patient applications and solve the clinical problems of their patients and their community. Internists communicate fluently, and are able to educate and clearly explain complex data and concepts to all audiences, especially patients. They collaborate with patients to implement health care ethics in all aspects of their care. Internists display high emotional intelligence in their relationships with colleagues, team members, and patients, maximizing both their own and their teams’ well-being. They are committed professionals who have the knowledge, skills, and attitudes to effectively use all available resources, and they bring intellectual curiosity and human warmth to their patients and community.*

In addition, we recognize that to make these rather large-scale changes will require bold strokes and more than just curriculum changes or addition of faculty members who can teach bioinformatics and emotional intelligence. Frankly, a paradigm shift on how we view medical education and accreditation will be needed if we are to meet this

aspirational vision of the future as outlined above. The aim of the summit this fall and this request for information is as a navigation check with an eye towards feasibility and support from our stakeholders. We are interested in receiving your input on the strength, weaknesses, opportunities, and limitations of our currently proposed lines of effort outlined below.

### **Paradigm Shift #1: Competency-based medical education by 2035**

Though as a community we have been moving towards competency-based medical education (CBME) for decades, training remains largely dependent upon “dwell time,” with few substantive efforts made to design an individual resident’s education either toward their future professional goals or to what the local patient population requires. With few exceptions, curricular time counts toward one program or one certificate’s eligibility at a time, but not two, even when considerable overlap exists between the goals and objectives of a resident’s elective and a fellow’s required consult month. True CBME is often conflated with an abolition of time-based education and training, which presents many barriers outside a program’s control. However, what if CBME were more about best use of curricular time, rather than about graduating residents at 34 or 39 versus 36 months? Internal medicine residents begin to “terminally differentiate” well before graduation; what if we were able to use outcomes data in order to recognize this differentiation in our curricula?

- ***What are the strengths of this approach?***
- ***What are the weaknesses?***
- ***What opportunities would be gained by this?***
- ***What are the limitations of such an approach?***
- ***What could be the unintended consequences of such an approach?***

### **Paradigm Shift #2: From AIRE to There**

In order to prepare the internist of the future, we must use the strengths of the internal medicine education community to the fullest extent. We must design experiments to chart the path forward, learn from those experiments, and boldly redefine and refine our educational programs to produce the physicians we will need in the future. Fortunately, we have precedent for studying internal medicine GME systematically: the Educational Innovation Project (EIP). The EIP produced many significant and longstanding curricular and educational innovations and became the basis for the Next Accreditation System (NAS) model of accreditation. The ACGME continues to use excellence and innovation in accreditation to meet the health care needs of the American public, and provides us with a tool to launch this effort. The Accelerating Innovation in Residency Education (AIRE) pilot program currently exists, with the dual aims of: 1) enabling the exploration of novel approaches and pathways in GME; and 2) enhancing the attainment of educational and clinical outcomes through innovative structure and processes in resident and fellow education. AIRE proposals are submitted in partnership with the relevant certifying board and may include requests for waivers of required time in the educational program, or the granting of dual credit for educational experiences. Pilot programs focus on rigorous and intentional curricular design and thorough assessment of program effectiveness. The IM2035 working group considers the AIRE mechanism as critical infrastructure in the goal of advancing to CBME. However, to date, AIRE proposals have originated largely from the efforts of program directors as individuals or small groups; they are grassroots efforts requiring considerable energy and initiative on the part of program directors.

The IM2035 team proposes that the current AIRE model be supplemented by pilots conceived in partnership between professional societies and certifying boards. These pilots will be designed as multicenter educational trials with clear inclusion, exclusion, and outcomes measures. Programs will be able to participate in these trials much like clinician investigators can participate in industry-funded pharmaceutical trials—meaningfully contributing to the overall outcome by “enrolling subjects” without having to be responsible for the overall execution of the study. In this way, the community as a whole can also contribute to piloting those ideas, which, if successful, might quickly and

substantively meet the needs of the American public. Could co-certification in internal medicine-hospice and palliative medicine or internal medicine-geriatric medicine, for example, be achieved in three years instead of four, lowering the barrier to entry into these much-needed subspecialties? Instead of testing this question in single institutions, a multicenter approach could more powerfully and definitively answer the question for the broader community.

- ***What are the strengths of this approach?***
- ***What are the weaknesses?***
- ***What are the limitations of such an approach?***
- ***What could be the unintended consequences of such an approach?***

### **Paradigm Shift #3: NAS to LAS**

The NAS has advanced the idea of CBME using the Milestones system, and provided a more real-time view of programs' outcomes than the previous model. However, it is still a series of snapshots rather than a livestream, and generalizable data is still periodic rather than continuous. What if the accreditation model evolved to a Learning Accreditation System, relying on these multicenter AIRE pilots proposed above, in addition to the other data already provided by the existing accreditation process, and the flexibility inherent in the Common Program Requirements, in order to provide an ongoing, iterative approach to building more efficient and effective approaches to education and training. Each lesson learned will serve to inform and initiate the next cycle of CBME.

- ***What are the strengths of this approach?***
- ***What are the weaknesses?***
- ***What are the limitations of such an approach?***
- ***What could be unintended consequences of such an approach?***

Please provide any additional feedback on the major themes from the IM2035 report, the "Preamble" vision of the future internist, or reflections on this 30,000 foot view of where we are going and how we will plan for the journey.

---

Responses must be submitted via e-mail to [internal\\_medicine2035@acgme.org](mailto:internal_medicine2035@acgme.org) by **Friday, August 30, 2019**. Any questions related to the request should also be directed to the address above.

The Review Committee and/or the ACGME may publish some or all of the comments it receives on the ACGME website. By submitting your comments, the ACGME will consider your consent granted. If you or your organization do not consent to the publication of any comments, please indicate such in your response.

Table 1. General insights about the practice of medicine in the future, as summarized from the IM2035 Alternatives Futures Scenario-Planning Workshops

<ul style="list-style-type: none"> <li>• The “commoditization” of health care services will continue and accelerate. This will include increasingly price-driven services when the patient first seeks care, and shifting responsibilities and risks among health professionals in interprofessional team-based care. It will also affect specialized procedures that can be rigorously standardized and/or automated.</li> </ul>
<ul style="list-style-type: none"> <li>• Economic and technology factors are likely to blur distinct responsibilities and delineations between generalists and subspecialists, as well as among other members of interprofessional teams.</li> </ul>
<ul style="list-style-type: none"> <li>• There will be pressure on the vocation of medicine to de-professionalize in order to increase efficiency and practice value-based medicine.</li> </ul>
<ul style="list-style-type: none"> <li>• There will be a need for increased flexibility and process efficiency across the continuum of medical education, especially within graduate medical education.</li> </ul>
<ul style="list-style-type: none"> <li>• Patients will be shouldering more risk in terms of cost sharing, but also in terms of increasing personal responsibility for following therapy guidelines, and in some cases for lifestyle choices.</li> </ul>
<ul style="list-style-type: none"> <li>• Education, generally, will become modularized (competency-based rather than time-based) and divided into more discrete educational units that can be individualized, easily completed and updated.</li> </ul>
<ul style="list-style-type: none"> <li>• Significant disparities (from poverty, geography, technology, culture) in access to care will remain unresolved no matter the strength of the economy or the depth of the social contract.</li> </ul>
<ul style="list-style-type: none"> <li>• Information and knowledge networks, supported by artificial intelligence (AI), will disrupt and redefine patient care practice and business models. The ubiquity of information from competing sources will raise significant challenges to the verification and veracity of information.</li> </ul>
<ul style="list-style-type: none"> <li>• The combination of “big data” and AI will have a profound effect on how expertise is employed across many professions. Since automated data and analysis systems will provide answers to many issues, the true expert will be called upon only to solve the most complex issues, or those requiring judgment, experience, or fine distinctions of ethics after other approaches have failed.</li> </ul>
<ul style="list-style-type: none"> <li>• The ubiquity of data from wearable/embedded sensors will accelerate the social and political tendencies to “medicalize” societal problems (e.g., job stress, lifestyle choices) and exacerbate the tendency for medicine to be subject to public policy interventions.</li> </ul>

Table 2. Additional competencies required of the “IM2035” internist

<ul style="list-style-type: none"> <li>• Leadership and collaborative leadership</li> </ul>
<ul style="list-style-type: none"> <li>• Team dynamics and change management</li> </ul>
<ul style="list-style-type: none"> <li>• Business of medicine</li> </ul>
<ul style="list-style-type: none"> <li>• Population and patient data applications</li> </ul>
<ul style="list-style-type: none"> <li>• Data management science</li> </ul>
<ul style="list-style-type: none"> <li>• Communication skills that include working with and explaining complex data</li> </ul>
<ul style="list-style-type: none"> <li>• Health care ethics</li> </ul>
<ul style="list-style-type: none"> <li>• Emotional intelligence</li> </ul>
<ul style="list-style-type: none"> <li>• Personal and team well-being</li> </ul>
<ul style="list-style-type: none"> <li>• Cost-conscious care</li> </ul>