Association
of Pulmonary and Critical Care Medicine
Program Directors

**Board of Directors
2019-2020**

Peter Lenz, MD, MEd
President

Gabriel Bosslet, MD
President-Elect

Maryl Kreider, MD
Vice-President

Kristin M. Burkart, MD, MSc
Secretary-Treasurer

Jennifer McCallister, MD
Immediate Past President

Hugo Carmona, MD
Fellow Representative

Joyce Reitzner, MBA, MIPH
Executive Director

August 29, 2019

Accreditation Council on Graduate Medical Education
401 North Michigan Avenue
Suite 2000
Chicago, IL 60611

Dear Leaders at the ACGME,

On behalf of the Association of Pulmonary and Critical Care Medicine Program Directors (APCCMPD) Board of Directors and our membership, we thank you for the opportunity to provide input on the three proposed paradigms shifts being considered with IM2035. The APCCMPD is an independent organization representing 95% of all standalone pulmonary, standalone critical care medicine and combined pulmonary critical care medicine ACGME accredited fellowship programs.

To provide a response on behalf of our membership we surveyed our members to understand their perspectives on the strengths, weakness, opportunities and threats of the three paradigm shifts presented. Often times a narrative form of survey can lead to lower response rates and this was our experience for this survey. Overall, 9% of our members responded to the survey. To reduce survey burden, 1 paradigm was randomly assigned to each program director. Response rates specific to each paradigm are included in the enclosed survey response.

With that said, we did identify consistencies among the responses and have provided a summary of those consistencies below. Here is the executive summary of our member survey:

APCCMPD
2506 North Clark Street
Suite 431
Chicago, IL 60614
Phone: (877) 301-6800

Email: joycereitzner@apccmpd.org
www.apccmpd.org
@APCCMPD

- **The CBME by 2035 shift could lead to more expeditious training and would allow trainees to progress when ready, but would likely require significant faculty development and could have the unintended consequence of separating trainees into a 2 tier system where more rapidly progressing trainees could be favored.**

- **Going from AIRE to There could further multicenter collaborations and could lead to academic decision-making that is founded on more data obtained from rigorous scientific methods, but could lead to trainees being placed in to ineffective comparative arms and could discourage more local grass roots style innovation.**

- **Shifting from NAS to LAS with an emphasis on continuous data streams appeared to concern our members the most as strengths and opportunities were minimal. It was not clear how continuous data could be operationalized or supplied and our members were highly concerned this approach could significantly increase the administrative burden for program leadership without clear benefits.**

Additionally, we have listed a more narrative form of our summary below and have enclosed the complete results of the survey at the end of this letter as well.

Paradigm shift #1: Competency based medical education (CMBE) by 2035.

Strengths: Our responders consistently felt that CBME could lead to more productive opportunities for fast learners or place those learners on a rapid trajectory towards competency achievement. This approach could also allow slower learners or those on a less rapid competency achievement trajectory to have more opportunities to learn and gain experience without the threat of failing rotations. Some members also noted that it made sense to allow residents to progress as they are ready.

Weaknesses: Our members indicated numerous concerns about the staffing changes that may be required for CBME. The main concern being CBME could lead to early graduation resulting in a potential void in the workforce, which would require flex physicians or hospitalists to cover patients if too many residents graduate early. This approach would also require significant faculty

development, as many would lack the experience and knowledge necessary to implement this approach. It was also noted that subspecialty care and scheduling is based on starting at a specific time. Many programs are reluctant to take Fellows off cycle and this approach could lead to more off cycle graduates. Thus, it could create chaotic scheduling.

Opportunities: Decreasing the training time could increase the workforce of trained practicing physicians ready for independent practice. However, our members did not indicate any opportunities.

Limitations: Once again our members felt this would require significant faculty development and implementation to put into effect. Some questioned how we would be able to find the data to drive this change. Also some noted that our current system works pretty well and would be reluctant to change and that it would be difficult to study or analyze new approaches without having data first.

Unintended consequences: Our members felt the CBME approach could have the unintended consequence of separating trainees into a 2-tiered system where faster residents or those achieving competency sooner would be more competitive for Fellowships and that the slower track trainees could be looked down upon and not have the same opportunities for Fellowship or further professional training. Again, many members noted this could be a nightmare for scheduling.

Additional comments: Once again our members noted that many feel our current system is not broken and changing to a competence based medical education paradigm without significant data could lead to requirements that

Paradigm Shift #2: from AIRE to There.

Strengths:
Our respondents consistently mentioned that incorporating an AIRE model using a multicenter design for educational trials could lead to decision-making that is increasingly based on sound data from a rigorous scientific method, including hypothesis generation and testing. It would also allow for multicenter collaborations and could lead change focus with the change being informed by public need.

Weaknesses:
Our members are concerned that there is not clarity or a <u>guarantee</u> that proposals would be <u>uncomplicated</u> and <u>non-cumbersome</u>. There could be loss of grassroots idea generation and could stifle innovation at the local level.

Opportunities:
These changes could ultimately <u>benefit the public</u>, and <u>broaden involvement</u> with multicenter trials. This could lead to <u>improving the quality of training</u> using an approach that is <u>rich in the scientific method</u>.

Limitations:
Some respondents were concerned that this approach, particularly the transition period, <u>could lead to trainees being placed into ineffective arms</u> during innovation. This approach can also <u>require programs to carry burden to create initiatives</u>, unless professional societies and certifying boards are able to make good on generating ideas and proposals.

Unintended consequences:
Some of our respondents echoed the same concerns listed in the limitations section of paradigm 1, that essentially, this could temporarily lead to <u>exposure of residents to an inferior educational or training arm.</u> Further, there appears to be no guarantee for protection from the potential of inferior training. This could <u>discourage local innovation</u> and grassroots local initiatives for innovation.

Additional comments:
One respondent was concerned that <u>academic currency could be imbalanced</u> if innovation is more centrally driven.

Paradigm Shift #3: NAS to LAS

Strengths:
Many members noted that it is not clear what this proposed paradigm shift means and mentioned it was not clear how continuous data could be supplied or even attained. With that said, some mentioned there could be <u>improvements in efficiency</u> and if done effectively could help streamline accreditation.

Weaknesses:

Once again, our members commented that it is not at all clear what this proposed paradigm shift means. Our members were mainly concerned that a continuous NAS data stream <u>could significantly increase administrative strains and burden to program leadership</u>. One member noted this could just turn accreditation into multiple cycles that would be akin to filling out numerous WebADS continuously throughout the year.

Opportunities:
Some mentioned this could help with <u>flexibility</u> for individual programs.

Limitations:
Members were concerned about the <u>burden of time and effort required by program leadership to accomplish this</u> and that some members do not have data on their trainees as continuously as the proposal depicted.

Unintended Consequences:
The main concern remains that it would likely require more data to be entered by program directors, increasing paperwork, assessments, <u>increasing the administrative burden</u> on program leadership and program directors.

Additional Comments:
There were no additional comments on any of the three paradigm shifts presented. Of the 3 paradigm shifts proposed, this NAS to LAS shift appeared to be the least clear to our membership.

Again, we thank you for the opportunity to provide input and look forward to further collaborations as we move toward IM2035.

Sincerely,

Peter Lenz, MD, MEd
President
Association of Pulmonary and Critical Care Medicine Program Directors

ACGME Paradigm Shift
Survey Response
Results

- Sent to 219 Pulmonary, CCM and PCCM Program Directors; 1 paradigm was randomly assigned to each program director.
- In total, 9% (19) Completed the survey

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

- Sent to 71 Pulmonary, CCM and PCCM Program Directors
- 13% (9) Completed the survey

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?

1. What are the strengths of this approach?
- It makes sense to allow residents to progress when they are ready.
- Individualized goals of training Ability of developing new sets of skills beyond usual training Recognition of struggling resident that requires a different approach to acquire competency.
- They will be focused and more productive in terms of research and knowledge base in their desired area of expertise such as pulmonary hypertension for example.
- It might help some individuals become better rounded in their skills
- More focus on outcomes.
- Certainly it would be of benefit to "fast learners" to complete their training and obtain "competency" in a shorter period of time. This would allow them to go forward with additional specialty training if appropriate. It would also allow the "slow learners" to take longer to achieve competency without them having "failed" rotations.
- Trainee autonomy, perhaps increased focus and earlier differentiation.
- Ideally, training for any particular fellow would be focused on that person's development and skills on his or her own timeline rather than an arbitrary timeline

2. What are the weaknesses?
- Because of staffing needs this would require significant ability to flex hospitalist to cover patients if too many residents graduate early and thus are not available for patient care.
- Lack of experience and knowledge by faculty and programs with this approach
- It will be a huge challenge to programs I. Regards to staffing, coverage, etc. lack of senior resident leadership.
- It would leave the fellows vulnerable to deficiencies in knowledge/experience of their field overall. This might not be good for those wanting to go into

private practice.
- Deciding when a trainee has had enough of a certain type of training and should do something different seems quite difficult to me. It also seems likely that some programs would use this flexibility to simply fill man/woman power shortages
- Turns training into a series of checkboxes
- Currently subspecialty care is usually based on starting at a specific time and our program is reluctant to take fellows "off-cycle". With this approach, there would potentially be a constant "off-cycle" group. If they want to do additional specialty training, they would again potentially be off-cycle. Although in theory, trainees slower to achieve competence would still feel that they did not live up to colleagues.
- It would make scheduling for IM residency (and fellowship) very challenging as PDs would not be able to "depend" on a certain number of residents/fellows for coverage of services. This could be fluid each year and thus scheduling would be complex and very challenging. I could see situations where residents who are "undifferentiated" might be extending their training to get experiences they need and this could potentially be challenging. Also, although one might argue that an outpatient rheumatology clinic might not be "best use" of curricular time for a resident intending PCCM career, I would still argue that this experience might be QUITE helpful. I worry that residents perceptions about what is "best use" might be different - and how would we define "best use" across very diverse clinical training environments. I think the structure of CMS payment for trainees would have to be readdressed.
- It would create a chaotic scheduling.

3. What opportunities would be gained by this?
- It could allow residents to move forward sooner increasing the throughput and thus the workforce.
- More personalized treatment Better use of training time
- If there is a balance between say fellowship track, out patient and in patients tracks perhaps in patients would stay longer offering coverage for those pursing fellowship
- The fellows will be graduating with a niche in a particular area which will help them get a job suiting their interests
- I don't see much.
- Better trained providers, opportunities to speed up or delay
- Decreased training time for some. Trainees who finish early would have more time to study for boards.
- Perhaps this would help make up for some of the current loss of procedural and critical care training that this generation's incoming fellows have - people destined for PCCM might be more likely to be working in ICUs and doing procedures so it would better prepare them coming into fellowship.
- At first glance I do not see any particular opportunities

4. What are the limitations of such an approach?
- How do we assess when residents are ready and is this data driven.
- Need for specific coverage in hospitals Lack of experience by faculty/programs It may cause a more burocratic process
- As above
- If the fellow changes their mind during the terminal portion of the fellowship, they might end up with a longer than usual duration of training If the fellows changes their career plans post graduation, they might need more training again in the area they might have missed such as procedures.
- I think it would make it harder to be sure that trainees were receiving a core set of experiences. The logistics of implementing an approach like this would be very difficult - and disruptive to how a teaching hospital runs
- Logistically, I think this would be hard and would require flexibility of training dollars which we don't always have. Would board exams be flexible or would trainees that take more time to achieve competency have to wait another

year to take boards, start fellowships.
- See weaknesses above.
- The current system works relatively well. Trainees finished with a significant set of clinical skills and clinical knowledge. It would be quite difficult to do a study or an analysis which provides information to suggest a different approach would work better.

5. What could be the unintended consequences of such an approach?
- Significant differences in training experiences among residents
- There might be lack of clarity of the extent to which their competencies in certain areas are acceptable for graduation from the specialty as a whole
- Less well trained physicians
- Reduction in skills learned that are outside the checkboxes
- Possibly to a two-tiered system. Would the fast learners be more likely to get the best positions or best fellowship spots?
- Difficulty with consistent trainee numbers in resident and fellow rotations, which would be a nightmare for scheduling. Difficulty determining what is "best use" of time.
- The program's assessment of trainees might be inadequate, especially for shorter training periods. In addition, has some programs that might compete for applicants with subtle comments regarding shorter training.

6. Please provide additional comments here:
- It appears to provide more training/research opportunity to generate sub-specialists in the field which might or might not be desirable based on future healthcare needs
- While not perfect - I personally don't a serious problem with a time based training requirement- I think the likelihood of making things worse rather than better is quite high. Look at duty hrs for example - well intended but enacted without much supporting data - they have not improved anything in my opinion - and made education more difficult.
- Leave things alone

Paradigm Shift #2: From AIRE to There

- Sent to 74 Pulmonary, CCM and PCCM Program Directors
- 8% (6) Completed the survey

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.

1. What are the strengths of this approach?
- Allows for testing of hypotheses, promotes outcome based assessment measures for interventions, acknowledges the need/utility of novel approaches, focuses upon the American public as the group being served/impacted by these changes.
- Entertaining Hypothesis and Testing Hypothesis are the only way toward improvement. One can see if this approach works.
- Using evidence based curricula to maximize the residency/fellowship experience w
- Centralized activation energy, removing major barrier to overstretched local educators
- Multicenter initiatives
- Informed by public need, not program or institution need could greatly improve efficiency during the finite time period of training.
- Multi center in nature with the ability to enroll more participants quickly

2. What are the weaknesses?
- Is there the provision of any clear direction provided to programs to facilitate/focus the brainstorming of proposed ideas/changes?
  - Is there a simple uncomplicated and non-cumbersome mechanism in place to submit proposals?
  - Is there a common place to view accepted studies to allow programs to apply for enrollment in studies and view the progress of ongoing studies ?
  - Is there enough flexibility/leniency re considering approaches designed to individualize the duration and type of training for individuals instead of requiring the same length and type of training for all residents in a given speciality? (Maybe some crit care fellows can practice independently after 1.5 years and others require 2.5 years?)
- No weaknesses. One cannot learn without Providing Hypothesis and then testing them.
- Subjecting trainees to education trials during their training could potentially expose them to inferior arms thus weakening their education. Also needs to be a robust steering committee to avoid implementing strategies unlikely to be beneficial.
- Loss of grass-roots idea generation
  - Senior central leadership often miss important trees in the forest
  - Educators may feel as further relinquishing control
- Stifle innovation at the local level

3. What opportunities would be gained by this?
*   Potential increase in recruitment into these specialties.
*   Improve GME for residents and thus the quality and or efficiency of their training which would ultimately benefit the public.
*   New Knowledge even if it was proven that new approaches do not work.
*   Creation of a universal, evidence based approach of training that maximizes the experiences of others. Also would open areas of potential research in education for those who wish to pursue careers in medical education.
*   Potential for resource procurement
*   Accelerate pace
*   Broader involvement (more institutions, individual leaders) in implementation trials
*   Would enable more programs to participate

4. What are the limitations of such an approach?
*   Requires the programs to take the initiative it seems unless the supplemental aspect of professional societies and board certifying bodies have enough support and incentive to be very active in generating ideas/proposals and organizing directing overseeing them.
*   Time wasted. However, if the question asked I answered I do not see it as a downside.
*   Transition period could expose trainees to ineffective and potentially harmful training modalities.
*   Institutional resistance (unfunded mandate to participate)
*   One size might not fit all
*   Na

5. What could be the unintended consequences of such an approach?
*   People seeking credentialing in these fields simply for the title, even without interest in truly pursuing them for a career, simply because it doesn't add time to the learner's commitment.
*   Negative study outcomes where residents and potentially their patients receive inadequate training compared to the comparator group and how to handle that situation (standard method vs investigational and investigational is worse, then does the investigational group have to make up or remedy?)
*   Don't know of any.
*   Subjecting trainees to education trials during their training could potentially expose them to inferior arms thus weakening their education.
*   Discourage local innovation
*   Dominance of agenda of handful of people driving change centrally
*   Resistant to change if perception is that it is being imposed

6. Please provide additional comments here:
*   Need to consider academic currency and support for local implementors. Drug clinical trials can be career suicide, as individual puts in ton of work and has very little to show, and this could have similar effect.

Paradigm Shift #3: NAS to LAS

*   Sent to 74 Pulmonary, CCM and PCCM Program Directors
*   5% (4) Completed the survey

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.

1. What are the strengths of this approach?
- It is not clear from this short paragraph what this means or how it would be attained - perhaps there would be more flexibility for programs as well as an opportunity for programs to share the load (if there are multi center pilots)
- Innovative; learner centric; efficient; visionary
- Strengths inherent in the concept of continuous evaluation and real-time evaluation to inform/initiate the next cycle of CBME. Allows one to evaluate competency continuously rather than relying an year specific goals (ie first year resident should be able to do this versus a 3rd year resident?)
- If abbreviated and done effectively this could help streamline accreditation.

2. What are the weaknesses?
- Not at all clear what this means
- The unknown; no data or metrics yet to support this approach
- Increased administrative strains to program leadership (PD/EC/APDs) and faculty to retrain new assessments. Time and volume are not the only factors in competency.
- I worry that this could turn into "multiple" accreditation cycles that would be akin to filling out Web

3. What opportunities would be gained by this?
- Flexibility for individual programs
- Worth moving forward and trying it out
- another metric that may be more indicative of success as an internist
- Not sure - as I am not sure how more continuous data could help above and beyond the every 6 months milestones data we enter.

4. What are the limitations of such an approach?
- Less standardization
- Don't know much to know what the limitations might - probably time and money
- combining experiences / tracks helps decrease training time but would over specialization decrease core medical knowledge/practice of such knowledge
- I sometimes do not have data on my trainees as continuously as the picture above paints

5. What could be the unintended consequences of such an approach?
- Unsure
- Graduating someone before they are ready; consistency in the approach taken by programs without leading to favoritism.
- increased paperwork/assessments
- Likely more data requiring to be entered by PDs. This is a main concern.

6. Please provide additional comments here:
- *None*