

# Pediatric Pulmonary Milestones 2.0

## Development, Lessons Learned, and Future Directions

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### ABSTRACT

Pediatric pulmonology fellowship training programs are required by the Accreditation Council for Graduate Medical Education to report Pediatric Subspecialty Milestones biannually to track fellow progress. However, several issues, such as lack of subspecialty-specific context and ambiguous language, have raised concerns about their validity and applicability to use for fellow assessment and curriculum development. In this Perspective, we briefly share the process of the Pediatric Pulmonology Milestones 2.0 Work Group in creating new specialty-specific Milestones and tailoring information on the Harmonized Milestones to pediatric pulmonologists, with the goal of improving the Milestones' utility for stakeholders, including pulmonology fellows, faculty, program directors, and accrediting bodies. In addition, we created a supplemental guide to better link the Milestones to pulmonary-specific scenarios to create a shared mental model between stakeholders and

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remove a potential detriment to validity. Through the process, a number of guiding principles were clarified, including: 1) every Milestone should be able to be assessed independently, without overlap with other Milestones; 2) there should be clear developmental progression from one Milestone to the next; 3) Milestones should be based on the unique skills expected of pediatric pulmonologists; and 4) health equity should be a core component to highlight as a top priority to all stakeholders. In this Perspective, we describe these principles that guided formulation of the Pediatric Pulmonary Milestones to help familiarize the pediatric pulmonary community with the new Milestones. In addition, we share lessons learned and challenges in our process to inform other specialties that may soon participate in this process.

**Keywords:**

Milestones; medical education

## INTRODUCTION

The Accreditation Council for Graduate Medical Education (ACGME) Milestones provide a well-established foundation for trainee assessment in pediatric subspecialty fellowship programs, including pediatric pulmonology (1, 2). Although Milestone scales are the same for all subspecialties to improve generalizability, this leads to an assessment system that lacks specificity for the role of the pediatric subspecialty fellow (3, 4). Evaluation of subspecialty-specific medical knowledge and patient care aspects were noticeably absent, including performance of bronchoscopy, application of physiology, and interpretation of pulmonary function testing.

Such gaps in assessment made the Pediatric Subspecialty Milestones difficult to generalize and implement. In addition, the language of the Milestones could be somewhat loquacious, lacking clarity and differentiation or being too complex, with multiple skills assessed within a single Milestone, resulting in difficulty in assigning fellows a specific level within each subcompetency (3, 5, 6).

Furthermore, methodologies used to demonstrate fellow developmental

progression were inconsistent across Milestones (7).

In this Perspective, we briefly describe the process of creating new Milestones, including a description of the principles that guided formulation of the Pediatric Pulmonary Milestones, to help familiarize the pediatric pulmonary community. In addition, we share lessons learned and challenges in our process to inform other specialties that may soon participate in this process.

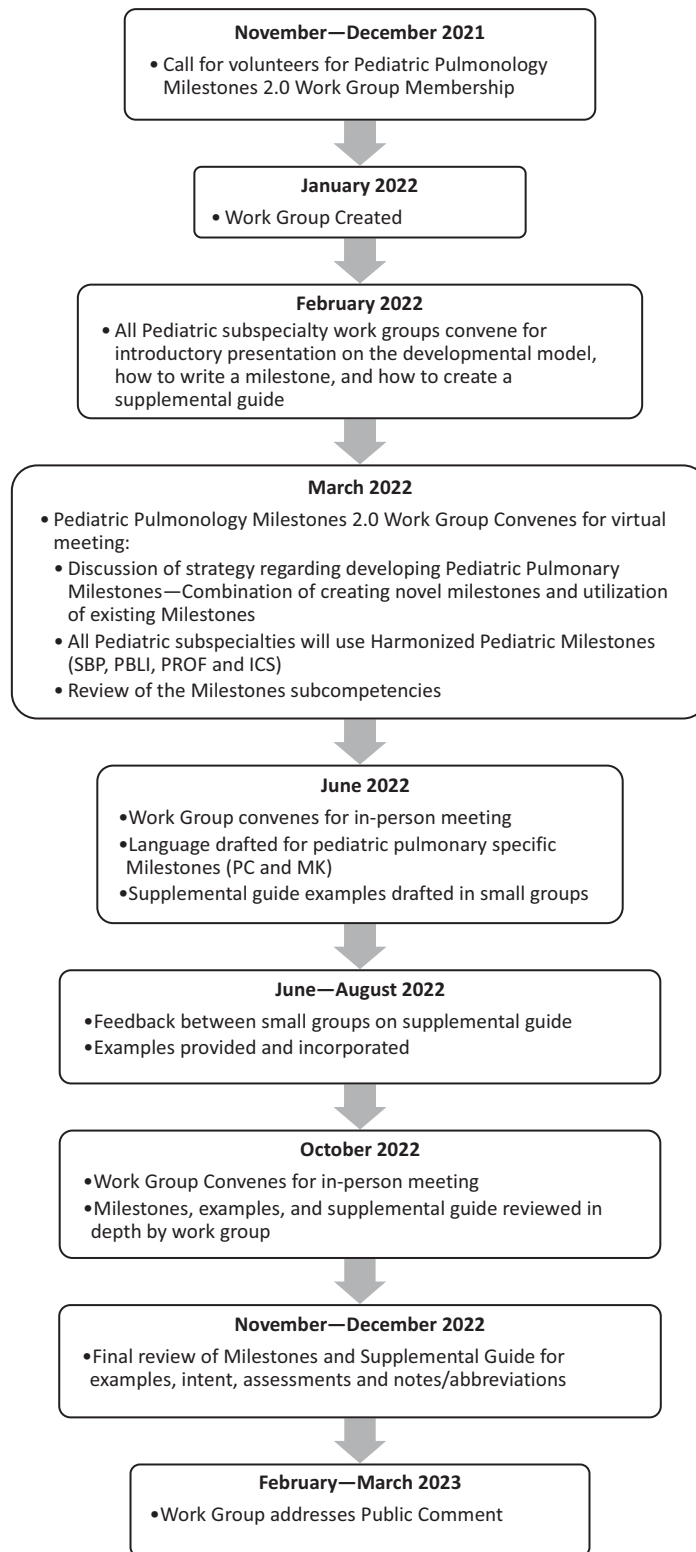
## COMMITTEE PROCESS AND TIMELINE

To tailor Milestones specifically to pediatric pulmonary fellows, The Pediatric Pulmonology Milestones 2.0 Work Group was formed in January 2022 after a call for nominations and for volunteers from the ACGME and other pediatric subspecialty organizations. The committee included members with a range of backgrounds and expertise and included a pediatric pulmonary fellow, program leaders, and medical education leaders (Table 1). The process of the Work Group is outlined in Figure 1. The group was tasked with: 1) writing pediatric

**Table 1.** Pediatric Pulmonology Milestones 2.0 Work Group members

Name	Role at Time of Group Formation, January 2022
Lara Bishay, M.D., M.P.H.	Program Director, Clinical Assistant Professor of Pediatrics, Children's Hospital Los Angeles, Keck School of Medicine of Southern California, Los Angeles, CA
Debra Boyer, M.D., M.H.P.E.	DIO, Chief Medical Education Officer; Professor, Pediatric Pulmonology; Nationwide Children's Hospital, The Ohio State University School of Medicine, Columbus, OH
Laura Chiel, M.D.	Fellow, Pediatric Pulmonology, Boston Children's Hospital, Harvard Medical School, Boston, MA
Melanie Sue Collins, M.D.	Program Director, Pediatric Pulmonology; Associate Clinical Professor, Pediatric Pulmonology; Connecticut Children's Hospital, University of Connecticut School of Medicine, Hartford, CT
Laura Edgar, Ed.D.	Vice President, Milestones Development, ACGME
B. Louise Giles M.D., F.R.C.P.C.	Associate Professor, Pediatric Pulmonology, Comer Children's Hospital, University of Chicago School of Medicine, Chicago, IL
Ida Haynes, M.S.H.C.	Milestones Project Specialist, ACGME
Sydney McLean, M.H.A.	Milestones Project Manager, ACGME
Hiren Muzumdar, M.D., M.B. B.S.	Program Director, Pediatric Pulmonology, Associate Professor of Pediatrics; Children's Hospital of Pittsburgh, University of Pittsburgh School of Medicine, Pittsburgh, PA
Jennifer Rama M.D., M.Ed.	Associate Professor of Pediatrics; Program Director, Pediatric Pulmonology, Texas Children's Hospital, Baylor College of Medicine, Houston, TX
Erica Stevens, M.D., M.P.H.	Associate Program Director, Assistant Professor, Pediatric Pulmonology, Norton Children's Hospital, University of Louisville School of Medicine, Louisville, KY
Pnina Weiss M.D., M.H.P.E.	Professor of Pediatrics, Vice Chair for Education, Yale New Haven Hospital; Yale University School of Medicine, New Haven, CT

*Definition of abbreviation:* ACGME = Accreditation Council for Graduate Medical Education.



**Figure 1.** Pediatric Pulmonology Milestones 2.0 Work Group process. ICS = Interpersonal and Communication Skills; MK = medical knowledge; PBLI = Practice-based Learning and Improvement; PC = patient care; PROF = Professionalism; SBP = Systems-based Practice.

pulmonary-specific Milestones; and 2) developing a supplemental guide. Supplemental guides are a new feature of Milestones 2.0, in which subspecific examples and scenarios are provided for each Milestone, to aid in understanding and application.

Initially, the Work Group was provided a Milestones orientation by ACGME leadership, which included the process of writing Milestones and of composing a supplemental guide. The group then convened over a series of virtual and in-person meetings to craft the new Milestones and the supplemental guide. In particular, the Work Group was tasked with writing Medical Knowledge (MK) and Patient Care (PC) Milestones. These pulmonary-specific Milestones were written by group consensus, after reviewing both the Pediatrics 2.0 Milestones and the Pulmonary Critical Care Milestones and their respective supplemental guides. We were encouraged to borrow and adapt from existing Milestones developed by the Pediatrics and the Pulmonary Critical Care Milestones teams that would be readily applicable to our specialty (1, 8, 9). For the Milestones within the other domains, including Interpersonal and Communication Skills, Professionalism (PROF), Practice-based Learning and Improvement (PBLI), and Systems-based Practice (SBP), we adopted the Pediatrics version that was based on the “Harmonized” Milestones. The Harmonized Milestones were developed to be applicable to all specialties (10). The Pediatric Milestones 2.0 Work Group, the ACGME, and stakeholders from key pediatric subspecialty groups decided that all Pediatric Subspecialties would be required to keep the Harmonized Milestones, as is, without the ability of Pediatric Subspecialty Work Groups to modify the language, with the

intent of improved uniformity of non-PC and non-MK evaluation (10).

## MILESTONES 2.0 PRODUCT

Our Work Group made significant changes to the Pediatric Subspecialty Milestones (1.0) in creating the Pediatric Pulmonology Milestones (2.0). The 1.0 Milestones consisted of four PC subcompetencies and one MK subcompetency, whereas Milestones (2.0) includes four PC and two MK subcompetencies. The MK and PC Milestones were tailored specifically to evaluate the essential skills and knowledge required within pediatric pulmonology, including the creation of a novel subcompetency, bronchoscopy.

For the remainder of the Milestones, the Work Group adopted the Harmonized Milestones and created examples relevant to pediatric pulmonologists in the supplemental guide. For example, PROF3 focuses on accountability/conscientiousness, with its overall intent being “to take responsibility for one’s own actions and the impact on patients and other members of the health care team.” This was made specific for pediatric pulmonology in the supplemental guide; for example, a trainee at level 5 “designs and implements a checklist for residents to utilize in the discharge of patients admitted with status asthmaticus to ensure: patients receive asthma education, medications are delivered to hospital room, and follow-up is made for pulmonary clinic prior to discharge.” Comparison and mapping of the revised (2.0) and previous (1.0) Pediatrics Subspecialty Milestones is published by the ACGME (data supplement). We set out to ensure that each Milestone was written clearly and concisely to ease interpretation for users.

## GUIDING PRINCIPLES

Together, the Work Group articulated and refined four key principles.

### **Every Milestone Should Be Able to Be Assessed Independently, without Overlap with Other Milestones**

The Work Group sought to ensure that each Milestone could stand alone (i.e., did not require the assessment of multiple competencies), was not redundant to other Milestones, and was written in a clear manner to simplify interpretation by end users. For example, PC2 (“Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment”) in Milestones 1.0 addressed several clinical components simultaneously, including history taking, physical exam findings, clinical reasoning, pathophysiology, overall assessment, and diagnostic testing and management. The compound nature of it left evaluators unable to reliably evaluate fellows at any given point in time, as individual fellows may fall into different levels for the various aspects included in this single subcompetency. The objectives of this single subcompetency were subdivided into four subcompetencies, PC1–3 and MK2 in Milestones 2.0 (data supplement), allowing for simplified language and separate evaluation of these clinical entities. PC1 (Clinical Reasoning) focuses on history taking and synthesis of exam findings, together with clinical facts to develop pulmonary differential diagnoses, whereas PC3 (Diagnostic and Management Plan) focuses on the ability to create diagnostic and management plans, with modification as necessary. Elements of the original PC3 (Develop and carry out management plans) were replaced by PC3, as above, and an additional subcompetency, PC2 (Organize and Prioritize Patient Care) was added. MK2 (Physiology and Pathophysiology) provides

evaluation of the physiologic and pathophysiologic knowledge base as well as integration of these concepts into diagnosis and management and was added because this was believed to be a key area of competency for a pediatric pulmonologist.

The Work Group approached Milestones 2.0 with an eye toward limiting redundancy. For example, subcompetency PC1 in the original Milestones (Provide transfer of care that ensures seamless transitions) was removed in Milestones 2.0, given that SBP4 (System Navigation for Patient-centered Care—Transitions in Care) contains the original elements in a more concise manner that places an emphasis on safety and more accurately provides a target for graduation (level 4). Additional verbiage was added to denote the importance of transition to adult care.

### **There Is a Need for Clear Developmental Progression from One Milestone to the Next**

The Work Group sought to ensure that that each Milestone represents stepwise stages of development to provide program leadership a clear method to evaluate fellows. For example, we removed the Milestones 1.0 MK1 (Locate, appraise, and assimilate evidence from scientific studies related to their patients’ health problems), as this subcompetency failed to demonstrate a linear progression in fellow development and lacked brevity. The 2.0 subcompetency PBLI1 (Evidence-based and Informed Practice) embodies both the appraisal and application of scientific evidence. The Milestones MK 1.0 and Milestones 2.0 PBLI1 and its accompanying supplemental guide are available in Figure 2. Compared with Milestones 1.0, this new Milestone has better readability and sets out a more typical pathway for advancement for an individual fellow.

A

MK1. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems					
Not yet Assessable	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Explains basic principles of Evidence-based Medicine (EBM), but relevance is limited by lack of clinical exposure</p> <p><i>Example:</i> The senior fellow asks each member of the inpatient team to answer a clinical question that he raised during rounds and to be prepared to discuss it the next morning. The learner goes to a more senior colleague for help, since he cannot work through a case or article using the critical appraisal approach, mainly due to lack of clinical context from which to work.</p>	<p>Recognizes the importance of using current information to care for patients and responds to external prompts to do so; is able to formulate questions with some difficulty, but is not yet efficient with online searching; is starting to learn critical appraisal skills</p> <p><i>Example:</i> In response to a clinical question raised during rounds and the senior fellow's request that everyone answer the question, the learner is able, with some difficulty, to frame the question in a Population-Intervention-Comparison-Outcome (PICO) format. He has searching capability, but the search and the steps of analyzing and applying the evidence are time-intensive, so he is not prepared to discuss his findings on rounds the next morning.</p>	<p>Able to identify knowledge gaps as learning opportunities; makes an effort to ask answerable questions on a regular basis and is becoming increasingly able to do so; understands varying levels of evidence and can utilize advanced search methods; is able to critically appraise a topic by analyzing the major outcomes, however, may need guidance in understanding the subtleties of the evidence; begins to seek and apply evidence when needed, not just when assigned to do so</p> <p><i>Example:</i> In response to the clinical question raised during rounds, the learner develops an answerable clinical question in PICO format and efficiently searches for best evidence. He volunteers to present on rounds the next day and demonstrates effective analytic skills and the ability to apply his findings to the current patient. He has a bit of difficulty interpreting and applying some of the secondary outcomes and, in the context of this discussion, another question is raised, which he volunteers to search and answer.</p>	<p>Is increasingly self-motivated to learn more, as exhibited by regularly formulating answerable questions; incorporates use of clinical evidence in rounds and teaches fellow learners; is quite capable with advanced searching; is able to critically appraise topics and does so regularly; shares findings with others to try to improve their abilities; practices EBM because of the benefit to the patient and the desire to learn more rather than in response to external prompts</p> <p><i>Example:</i> In response to the clinical question raised during rounds, presents a second question that he has already researched in a PICO format as well as a critique of the evidence and its applicability to the current patient. He was motivated to be proactive by his interest in learning, as well as the needs of his patient. He shares his tactics with team members by teaching them the steps he engaged in to learn and apply this information.</p>	<p>Teaches critical appraisal of topics to others; strives for change at the organizational level as dictated by best current information; is able to easily formulate answerable clinical questions and does so with majority of patients as a habit; is able to effectively and efficiently search and access the literature; is seen by others as a role model for practicing EBM</p> <p><i>Example:</i> Is an EBM practitioner, as observed by conversations during rounds, whom others try to emulate. He enjoys teaching colleagues how to become EBM practitioners by role modeling. He helps team members develop and refine their skills using his expertise to make a difficult task practical and doable.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops an answerable clinical question and demonstrates how to access available evidence, with guidance	Independently articulates clinical question and accesses available evidence	Locates and applies the evidence, integrated with patient preference, to the care of patients	Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence to guide care tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex patients
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
Not Yet Completed Level 1 <input type="checkbox"/>				

Figure 2. (A) Comparison of Milestones 1.0: subcompetency Medical Knowledge 1, and Harmonized Milestones 2.0: subcompetency Practice-based Learning and Improvement 1. Reprinted by permission from References 11 and 12. (B) Supplemental material as published by the Accreditation Council for Graduate Medical Education: supplemental guide with pediatric pulmonary-specific examples. EBM = evidence-based medicine. Reprinted by permission from Reference 13.

**B**

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice	
Overall Intent: To incorporate evidence and apply it to individual patients and patient populations	
Milestones	Examples
<p><b>Level 1</b> <i>Develops an answerable clinical question and demonstrates how to access available evidence, with guidance</i></p>	<ul style="list-style-type: none"> <li>• Identifies broad disease questions, but needs guidance to focus question on specific patient presentation</li> <li>• Accesses available evidence using unfiltered resources, retrieving a broad array of related information</li> </ul>
<p><b>Level 2</b> <i>Independently articulates clinical question and accesses available evidence</i></p>	<ul style="list-style-type: none"> <li>• Searches the question, “Does albuterol (or bronchodilator) decrease the length of hospitalization in infants with bronchiolitis?”</li> <li>• Uses PubMed to search for the answer to a clinical question and appropriately filters results</li> </ul>
<p><b>Level 3</b> <i>Locates and applies the evidence, integrated with patient preference, to the care of patients</i></p>	<ul style="list-style-type: none"> <li>• Obtains, appraises, and applies evidence for Global Initiative for Asthma (GINA)/National Heart, Lung, and Blood Institute (NHLBI) guidelines to a patient with asthma and utilizes shared decision making to incorporate the patient’s family’s preference of nebulizer versus metered-dose inhaler (MDI) inhaled therapy</li> <li>• Incorporates patients’ families’ values/cultural beliefs into developing a nutritional rehabilitation program for a toddler with CF and failure to thrive based on Cystic Fibrosis Foundation (CFF) standard of care nutritional guidelines</li> </ul>

Figure 2. (Continued).



<p><b>Level 4</b> <i>Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence to guide care tailored to the individual patient</i></p>	<ul style="list-style-type: none"> <li>• Elicits patient’s prior experiences regarding diversity, equity, and inclusion in the health care system to incorporate into search strategy</li> <li>• Based on recent guidelines, discusses with parents of children with spinal muscular atrophy alternatives for respiratory support, incorporating family preference</li> <li>• Appraises levels of evidence to weigh treatment options for the care of patients with CF</li> </ul>
<p><b>Level 5</b> <i>Coaches others to critically appraise and apply evidence for complex patients</i></p>	<ul style="list-style-type: none"> <li>• Leads the development of clinical guidelines/EHR pathways for patients hospitalized with asthma exacerbation</li> <li>• Coaches a learner to lead a journal club on management of a patient with CF-related diabetes</li> </ul>
<p>Assessment Models or Tools</p>	<ul style="list-style-type: none"> <li>• Direct observation</li> <li>• Multisource feedback</li> <li>• Presentation evaluation</li> </ul>
<p>Curriculum Mapping</p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>Notes or Resources</p>	<ul style="list-style-type: none"> <li>• ABP. “Entrustable Professional Activities for Subspecialties: Pulmonology.” <a href="https://www.abp.org/content/entrustable-professional-activities-subspecialties">https://www.abp.org/content/entrustable-professional-activities-subspecialties</a>. Accessed 2022.</li> <li>• Duke University. “Evidence-Based Practice.” <a href="https://guides.mclibrary.duke.edu/ebm">https://guides.mclibrary.duke.edu/ebm</a>. Accessed 2020.</li> </ul>

Figure 2. (Continued).

Notes or Resources	<ul style="list-style-type: none"> <li>• Guyatt, Gordon, Drummond Rennie, Maureen O. Meade, and Deborah Cook. 2015. <i>Users' Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice</i>, 3rd ed. USA: McGraw-Hill Education. <a href="https://jamaevidence.mhmedical.com/Book.aspx?bookId=847">https://jamaevidence.mhmedical.com/Book.aspx?bookId=847</a>. Accessed 2020.</li> <li>• US National Library of Medicine. "PubMed® Online Training." <a href="https://www.nlm.nih.gov/bsd/disted/pubmedtutorial/cover.html">https://www.nlm.nih.gov/bsd/disted/pubmedtutorial/cover.html</a>. Accessed 2020.</li> </ul>
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Figure 2. (Continued).

### Milestones Should Be Based on the Unique Skills Expected of Pediatric Pulmonologists

The Work Group created two novel subcompetencies to address important procedural and interpretation skills within pediatric pulmonary medicine previously absent from Milestones 1.0. PC4 (Bronchoscopy) focuses on skills demonstrated by exemplary bronchoscopists, including recognition of indications, alternatives, ability to obtain informed consent, mitigation of possible risks, and physically performing the procedure. MK1 (Diagnostic Evaluation) assesses varying levels of competency in interpretation of critical diagnostic testing, including pulmonary function testing, chest imaging, genetic testing, and laboratory testing.

### Health Equity Should Be a Core Component of Our Assessment Systems

The Work Group ensured that health equity was underscored in Milestones 2.0, to reflect that this is a priority of our subspecialty, particularly given specific racial and/or ethnic populations are disparately affected by pulmonary disease; for example, asthma is more prevalent

and causes more morbidity in certain racial and/or ethnic populations, especially when associated with lower socioeconomic status (14–16). In part, this was accomplished through adopting the Harmonized Milestones (e.g., SBP5 Population and Community Health) and creating pulmonary-specific examples in the supplemental guide. For example, SBP4 level 4 includes “Collaborates with social worker in clinic to ensure that all patients are screened for housing and food insecurity, as well as ensuring access to medications.” In addition, the Work Group created health equity–focused examples for the pulmonary-specific Milestones. The example in the supplemental guide for level 4 PC3 (Diagnostic and Management Plan) is “Realizing a patient’s mother is unable to read, labels the patient’s asthma action plan in a way the mother understands so she can administer medications correctly, eliciting teach-back to gauge understanding.”

### LESSONS LEARNED/ONGOING CHALLENGES

Although our Pediatric Pulmonology Milestones 2.0 Work Group successfully

created a new, unique set of Pediatric Pulmonology Milestones, we found the process challenging because of several factors and recognize potential difficulties with implementation. Our group obtained and addressed commentary from our colleagues via a public comment survey, although with only eight survey responses, this was unlikely a fair representation of programs across the nation. In the United States, there are currently 206 fellows training in 57 ACGME-accredited pediatric pulmonology fellowship programs (with 67.4% of fellowship positions filled in the 2022 National Resident Match [58 of 85 positions] and just over half of these programs matching in full) (17–19). The public comment data highlighted that within the Milestones, there tends to be a bias toward assuming that fellows rotate on a primary pulmonary service, whereas at many hospitals, pulmonologists and fellows primarily serve as consultants. Our group members have differing experiences at their respective programs of various sizes, which served as both a benefit and challenge. This provided our group with differing perspectives to assess how our Milestones could be implemented and interpreted at both larger and smaller programs. However, it also led to some initial disagreements in the wording of the subcompetencies and how broad or specific each level should be. We thus learned that it is important to leave enough ambiguity that the verbiage is applicable in differing situations without being imprecise. However, aligning with concerns of our colleagues on the public comment survey, and although we attempted to broaden the Milestones to be implemented regardless of whether fellows rotate on a primary pulmonary service based on the public comment, we recognize that some differences in implementation will likely exist between programs

of varying size and setting (academic vs. community, small vs. large, etc.).

We also became aware that some group members prioritized simplification by combining or “lumping” subcompetencies, whereas others preferred greater granularity of the Milestones with “splitting” of the subcompetencies, serving as another obstacle to overcome. Our Work Group strived to create concise but comprehensive Milestones. The Work Group is aware that with restructuring there may be some confusion, as certain Milestones were removed from the PC and MK Milestones because components of these subcompetencies were added to the Harmonized Milestones, as previously described. The implementation of the novel Well-being subcompetency, PROF4, will likely pose challenges to institutions as well, as this is a new field, which has not been previously assessed in many pediatric pulmonary training programs. The Work Group envisioned a Milestones set that accurately reflects the developmental trajectory of a Pediatric Pulmonology fellow from novice to expert levels in each of the subcompetencies. With creation of the PC and MK Milestones, we strove to depict a linear, logical progression from one level to the next. Level 4 is suggested as a goal for graduating fellows, although not a requirement, yet level 4 in multiple SBP subcompetencies would likely be unattainable by fellows and even attending physicians. For example, SBP5 Population and Community Health, level 4 states: “Adapts practice to provide for the needs of and reduce health disparities of a specific population.” It is unlikely that an individual fellow, or even an attending physician, would be able to meaningfully reduce health disparities of a specific population given the limitation of

resources. In addition, our colleagues, by way of public comment, believe that level 5 seemed unrealistic for fellows to attain. However, in line with other ACGME Milestones, we intend for level 5 to be aspirational and that many fellows will continue to work toward this level beyond fellowship, in line with principles of lifelong learning.

It proved challenging to provide a linear progression in all Milestones. Specifically, providing examples in the Supplemental Guide of differing levels of some of the Harmonized Milestones was not straightforward, given these subcompetencies were not written by the group. At times, the wording of the subcompetency levels appeared nonlinear in their progression. Unfortunately, we were unable to modify this wording.

Finally, subspecialty-specific Milestones may pose additional challenges in pediatric subspecialty educational research, given the lack of uniformity of MK and PC Milestones across subspecialties. Each subspecialty possesses its own unique set of skills and, as such, each Work Group developed distinctive MK and PC subcompetencies. However, the use of Harmonized SBP, PROF, PBLI, and Interpersonal and Communication Skills Milestones may facilitate study of these specific developmental Milestones across pediatric subspecialties.

## GOALS OF MILESTONES 2.0/ FUTURE DIRECTIONS

Here we have described the process of the Milestones 2.0 Work Group in developing pediatric pulmonary-specific Milestones, which were implemented in July 2023.

Through the work of multiple stakeholders, we were able to clarify the priorities in our field and ensure that our assessment systems reflected those, including incorporation of unique principles for pediatric pulmonary subspecialists as well as health equity. The Milestones were designed to be used in conjunction with the American Board of Pediatrics' Entrustable Professional Activities, which will become part of the decision-making process for initial certification by 2028 (20). A separate group, including several members from the Pediatric Pulmonary Milestones 2.0 Work Group, has been tasked with mapping Pediatric Pulmonary Milestones (2.0) to both the pulmonary and common subspecialty Entrustable Professional Activities. The ultimate goals of such mapping include ensuring the interrelationships of both assessment methods are studied thoroughly, connected systematically, and used both accurately and efficiently.

**Author disclosures are available with the text of this article at [www.atsjournals.org](http://www.atsjournals.org).**

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