The article by Bennett et al\(^1\) provides an update and current characterization of the pediatric emergency medicine (EM) workforce, highlighting geographic gaps in specialized pediatric emergency care. The authors found a total of 3525 physicians who self-identified as having pediatric EM as their primary or secondary specialty, of whom 2403 were clinically active. Clinically active pediatric EM physicians composed less than 5% of the total EM workforce, and they worked almost exclusively in urban areas. More than half of these physicians (68% \([n = 1639]\)) were board certified in pediatric EM, but 28% \((n = 671)\) of the pediatric EM physicians had no EM training and 4% \((n = 93)\) had no board certification. The authors found that pediatric EM physicians in rural areas tended to be significantly older than the pediatric EM physicians in urban areas, which has ramifications on the future of the workforce in underserved rural areas.\(^1\)

The growth of pediatric EM reflects many of the challenges of an evolving workforce, the changing geographic distribution of the US population, expanded health care delivery models, and the crucial need for experience and training in the delivery of high-quality pediatric care. More than 30 million children visit emergency departments (EDs) annually.\(^2\) Physicians with pediatric EM fellowship training are concentrated in larger urban areas with dedicated children's hospitals and medical centers, yet more than 85% of children seeking emergency care are seen in nonpediatric EDs.\(^3\) There are numerous challenges to distributing adequate resources and personnel with specific pediatric emergency training across the country to meet demand. This point is especially true in vast portions of rural America that are underpopulated or unpopulated and thus may have substantially fewer numbers of children.

Focused training in pediatric emergency care began in the 1980s, and the American Board of Pediatrics (ABP) and American Board of Emergency Medicine created guidelines to combine training in both specialties, eventually resulting in a fellowship training track and certification.\(^4\) There are different pathways by which a physician can receive specific pediatric EM fellowship training: a 3- to 4-year EM residency followed by a 2-year pediatric EM fellowship or a 3-year pediatric residency followed by a 3-year pediatric EM fellowship.\(^4\) This workforce study by Bennett et al\(^1\) demonstrated that most physicians with pediatric EM fellowship training continued to be primarily trained in pediatrics; only 4% \((n = 103)\) of the clinically active physicians who identified themselves as having a pediatric EM specialty were board certified in EM.\(^1\) Taking care of pediatric emergencies is within the scope of residency-trained emergency physicians, but few of these physicians are currently practicing in rural areas.\(^5\) A number of barriers remain for EM-trained physicians to pursue additional training in pediatric EM, including the opportunity costs of additional fellowship training and potential salary cut if working on a relative value unit or pediatric pay scale.\(^2\) Staffing rural EDs with pediatrics-trained EM physicians is challenging given lower pediatric volumes, the inconsistent demand for services, and the limited flexibility to care for adult patients. Such challenges may further exacerbate the unequal distribution of physicians with specialized pediatric EM training.

The study by Bennett et al\(^1\) built on a recently published EM workforce study\(^5\) that demonstrated that only 48 835 of the larger 67 357 emergency physician workforce were clinically active in 2020. The shortages of clinically active pediatric subspecialists have been attributed to attrition and increased nonclinical academic requirements (ie, teaching, administration, and research).\(^6\) Eighteen percent of the pediatric EM workforce was older than 60 years and was nearing...
Attrition that was associated with part-time status has been amplified by shifts in the proportion of men and women in the workforce and the disparities in household and other nonclinical responsibilities. The findings by Bennett et al highlighted that, although the numbers of pediatric EM physicians and fellowship training programs have increased, the numbers of pediatric EM subspecialists who are clinically active are nowhere near the quantity needed to staff every ED in the United States. Data from the ABP demonstrate that pediatric EM is growing faster than many other pediatric subspecialties, but the total number of first-year fellows in ABP-certified programs is modest, with an increase in first-year fellows of 80 in 2001 to 189 in 2018.

Health care access and availability, however, are about more than just geographic proximity to a pediatrician or emergency physician. Having a physician's office that is open only a few days a week does not necessarily provide access because it may take several weeks to get an appointment. Conversely, patients who live hundreds of miles away may gain access through telemedicine or remote consultation with a pediatric EM physician or pediatric subspecialist. It is not practical or a good use of resources to staff every ED with a pediatric EM physician.

Future models of health care delivery will need to embrace new ways of providing access, specialty consultation, and emergency care for pediatric patients. A number of solutions have been proposed to optimize the regionalization of care to enable the delivery of high-quality pediatric emergency care. The solutions may include providing telemedicine consultation in geographically remote areas or expanding the scope of practice of ABP-certified pediatric EM physicians to select adult ED patients. Other solutions may include increasing training for all physicians and nonphysicians who provide pediatric emergency care that will enable them to recognize and manage pediatric conditions with low frequency and high mortality. A hub-and-spoke model may better match resources with demand, allowing a centralized command to provide remote consultation to outlying sites and coordinate the transfer of patients who need a higher level of care. Access will need to evolve beyond geographic proximity as technology and delivery models adapt to current workforce limitations.

Workforce studies like the one performed by Bennett et al present an estimate of growth and a snapshot in time of the current supply of trained physicians. Future modeling of the EM workforce will need to take into account the dynamic changes of supply that are associated with growth of training programs and attrition from the workforce. Changes in demand will be driven by fluctuations in ED volumes; growth in nonphysician practitioners; and disruptions in technology, reimbursement, and health care delivery models. A multipronged solution is needed to address the gaps in availability of pediatric EM physicians to ensure the delivery of high-quality emergency pediatric care.

ARTICLE INFORMATION
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