

# Revisiting the Viability of the Developmental-Behavioral Health Care Workforce

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In their article entitled “2015 Developmental Behavioral Pediatrics Workforce Survey,” Bridgemohan et al<sup>1</sup> argue that the current system for managing US children with complex developmental-behavioral (DB) conditions is not viable. Despite high demand for services as measured by the increasing prevalence and complexity of childhood DB conditions, the provider supply remains limited. Results from their survey with general and subspecialty physicians and nurse practitioners, who self-identified as assessing and treating children with DB needs, suggest inadequate overall numbers of providers and overworked physicians; in addition, one-third of physician respondents reported planned retirement in 3 to 5 years.<sup>1</sup> Two critical questions arise: (1) given a 48% response rate across a convenience sample from 3 membership organizations, are the results generalizable to the larger DB workforce, and (2) if yes, what are the implications for the health care workforce caring for children with DB conditions?

Although it is difficult to determine the study’s generalizability by using publicly available information, additional data shed light on supply constraints. Certification data suggest the survey captured 261 of 775 (33.7%) of those certified in developmental-behavioral pediatrics (DBP) by the American Board of Pediatrics (ABP) and 36 of 337 (10.7%) of those certified in neurodevelopmental disabilities (NDD) by the ABP (2001–2009)<sup>2</sup> or the American Board of Psychiatry and

Neurology (ABPN; 2001 to date).<sup>3</sup> There are limited shared variables across the survey and ABP data; however, the proportion of female DBP- and/or NDD-trained physicians (61.5%) is similar to those board-certified in DBP (64.9%) and/or NDD,<sup>2</sup> and 45.6% (430) are  $\geq 60$  years old (Fig 1).<sup>2</sup> Supplementary analysis of the ABP’s 2016 Maintenance of Certification Enrollment Survey indicate that the most common expected age of retirement is 65 to 69 for DBP and NDD respondents (A.L. Turner, unpublished observations, 2017). Bridgemohan et al<sup>1</sup> appear to correctly argue that retirement is rapidly approaching for at least a third of physician respondents. ABP data on rates of trainees entering DB fellowships suggest trainees will not offset those retiring.<sup>2</sup> ABP data also delineate a geographic maldistribution of DBP- and/or NDD-trained US physicians (Fig 2), echoing recent perspectives on pediatric behavioral and/or mental health needs and the available workforce.<sup>4,5</sup> Comparisons with ABP data cannot be estimated for general pediatricians self-identifying as caring for children with DB conditions.

What about data on other health care professionals? Although the study’s findings regarding years since medical or professional school graduation were lower for nurse practitioners compared with physicians, the authors of a 2015 *Pediatrics* article forecast a shortage of pediatric nurse practitioners in the overall health care workforce over the next 13 years.<sup>6</sup> Bridgemohan et al<sup>1</sup> do not

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Dr Leslie contributed to the conception and design of the manuscript and interpretation of the data; Mr Turner contributed to the conception and design of the manuscript; coordinated the analysis and interpretation of the data; Dr Baum contributed to the conception and design of the manuscript; and all authors drafted, reviewed and revised the manuscript, and approve the final manuscript as submitted.

Opinions expressed in these commentaries are those of the authors and not necessarily those of the American Academy of Pediatrics or its Committees.

**DOI:** <https://doi.org/10.1542/peds.2017-4132>

Accepted for publication Dec 13, 2017

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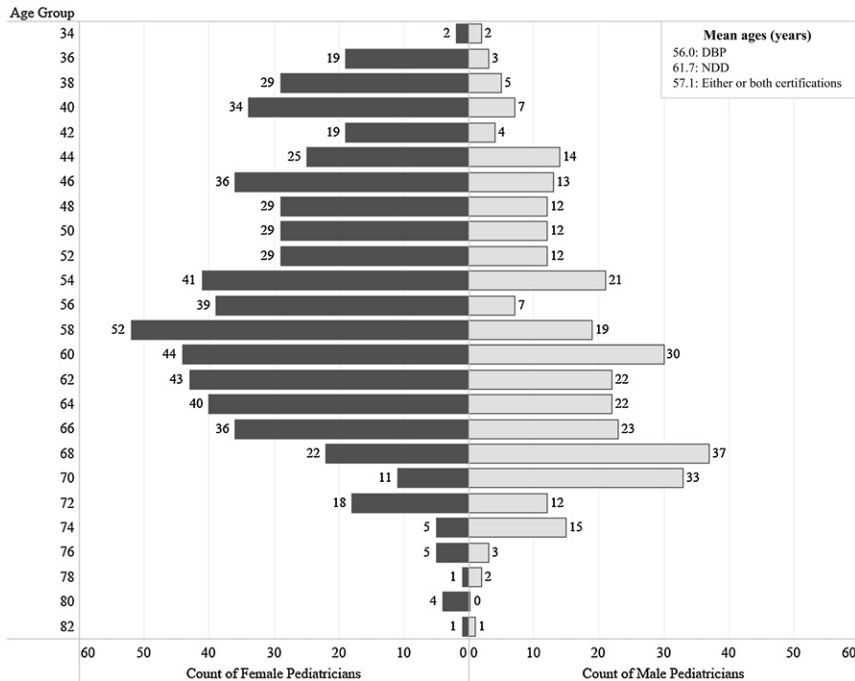
PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

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**FINANCIAL DISCLOSURE:** The authors have indicated they have no financial relationships relevant to this article to disclose.

**FUNDING:** No external funding.

**To cite:** Leslie LK, Baum R, Turner A. Revisiting the Viability of the Developmental-Behavioral Health Care Workforce. *Pediatrics*. 2018;141(3):e20174132



**FIGURE 1** Age and sex pyramid of DB and NDD pediatricians certified through 2016. This includes all pediatricians ever certified by the ABP in DBP ( $n = 659$ ) since 2002, in NDD ( $n = 158$ ) from 2001 to 2009, or those with both certifications ( $n = 83$ ) and with a zip code on file. Those certified by the ABPN for whom demographic data were not available ( $n = 84$ ) are excluded. Adapted from American Board of Pediatrics; American Board of Pediatrics. Pediatric Physicians Workforce Data Book, 2016–2017. Chapel Hill, NC: American Board of Pediatrics; 2017. Available at: <https://www.abp.org/sites/abp/files/pdf/pediatricphysiciansworkforcebook2016-2017.pdf>. Accessed December 7, 2017.

directly address child and adolescent psychiatrists, but the supply is estimated to be as low as 10% to 20% of the workforce needed.<sup>7</sup>

Both striking and persistent, the gap between the demand for DB pediatric care and the supply of DB providers will require innovation and perseverance to address. Bridgemohan et al<sup>1</sup> provide several recommendations, including improvements in residency training, clinical efficiency, novel practice models, and interprofessional collaboration in patient care and training. These recommendations have been echoed by others in the pediatric community.<sup>8,9</sup> Current reimbursement models and/or debt forgiveness programs, however, will need to change to attract trainees and retain those in practice.<sup>9</sup> Concerns about practitioner burnout further compound this issue. The shift from

volume- to value-based payment holds great promise for the field of DBP if relevant quality metrics can be developed, perhaps even providing financial support for traditionally nonbillable services such as care coordination for which improvements in care or reduction in avoidable care can be realized.

Quality improvement suggests that a focused burning platform can galvanize efforts for change. Unfortunately, DBP struggles with too many from which to choose, including training general pediatricians to address DB needs but also diagnosing and treating conditions as disparate as neonatal abstinence syndrome, toxic stress, the autism “epidemic,” childhood obesity, and adolescent depression. Amid this varied backdrop is the stark reality that the fields of DBP and NDD remain a mystery to many. Advocacy will be needed on the

part of both specialties to standardize and define their practice within the context of general pediatric care, subspecialty care, and community-based care so that their value can be communicated to potential trainees, educators, administrators, and payors.

The high demand, the shortage of most medical DB providers, the maldistribution of available providers, and the projected decrease in the numbers of DBP-trained specialists also cries out for a collaborative, shared vision of the overall DB workforce. The National Academies of Sciences, Engineering, and Medicine hosted a workshop in 2016 on training the DB and behavioral and mental health workforce, which called for clarity on scope of work, interdisciplinary models of care, and interdisciplinary training across professionals including health care providers, psychologists, social workers, community health workers, and parent peer navigators.<sup>10</sup>

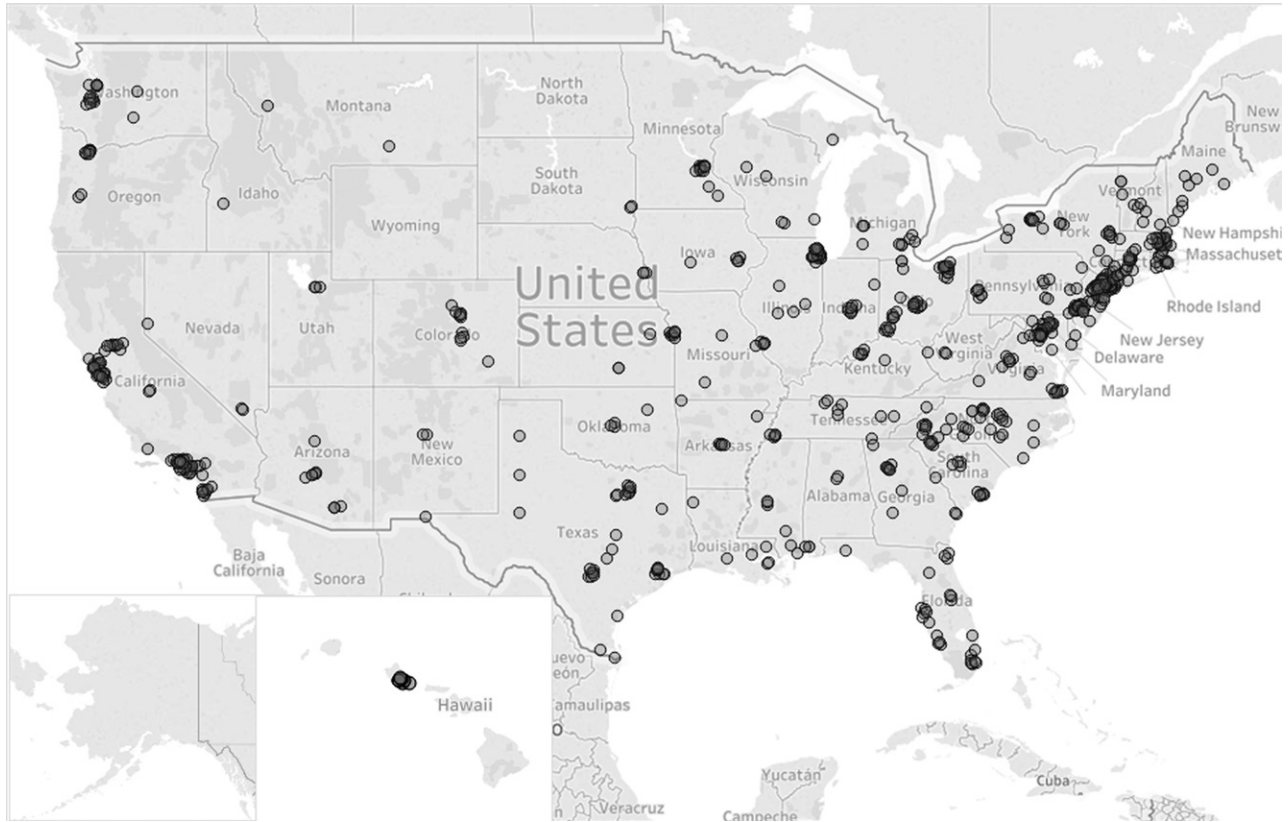
Albert Einstein said, “...in the middle of difficulty lies opportunity.” A shared vision and integrated workforce are sorely needed if we are to meet the needs of children and families.

#### ACKNOWLEDGMENT

We thank Ms Ashley Tucker for her editorial assistance with this manuscript.

#### ABBREVIATIONS

- ABP: American Board of Pediatrics
- ABPN: American Board of Psychiatry and Neurology
- DB: developmental-behavioral
- DBP: developmental-behavioral pediatrics
- NDD: neurodevelopmental disabilities



**FIGURE 2**  
 US distribution of DB and NDD pediatricians certified through 2016. This includes all pediatricians ever certified by the ABP in DBP ( $n = 659$ ) since 2002, in NDD ( $n = 158$ ) from 2001 to 2009, or those with both certifications ( $n = 83$ ) with a zip code on file. Those certified by the ABPN ( $n = 84$ ) for whom demographic data were not available are excluded. Adapted from Turner AL; American Board of Pediatrics. Pediatric Physicians Workforce Data Book, 2016–2017. Chapel Hill, NC: American Board of Pediatrics; 2017. Available at: <https://www.abp.org/sites/abp/files/pdf/pediatricphysiciansworkforcebook2016-2017.pdf>. Accessed December 7, 2017.

**POTENTIAL CONFLICT OF INTEREST:** The authors have indicated they have no potential conflicts of interest to disclose.

**COMPANION PAPER:** A companion to this article can be found online at [www.pediatrics.org/cgi/doi/10.1542/peds.2017-2164](http://www.pediatrics.org/cgi/doi/10.1542/peds.2017-2164).

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*Pediatrics* 2018;141;

DOI: 10.1542/peds.2017-4132 originally published online February 16, 2018;

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The online version of this article, along with updated information and services, is located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/141/3/e20174132>

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