

Pediatric Residency Education and the Behavioral and Mental Health Crisis: A Call to Action

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For at least 4 decades, the need for improved pediatric residency training in behavioral and mental health has been recognized. The prevalence of behavioral and mental health conditions in children, adolescents, and young adults has increased during that period. However, as recently as 2013, 65% of pediatricians surveyed by the American Academy of Pediatrics indicated that they lacked training in recognizing and treating mental health problems. Current pediatric residency training requirements do not stipulate curricular elements or assessment requirements in behavioral and mental health, and fewer than half of pediatric residents surveyed felt that their competence in dealing with mental health problems was good to excellent. It is time that pediatric residency programs develop the capacity to prepare their residents to meet the behavioral and mental health needs of their patients. Meeting this challenge will require a robust curriculum and effective assessment tools. Ideal training environments will include primary care ambulatory sites that encourage residents to work longitudinally in partnership with general pediatricians and behavioral and mental health trainees and providers; behavioral and mental health training must be integrated into both ambulatory and inpatient experiences. Faculty development will be needed, and in most programs it will be necessary to include nonpediatrician mental health providers to enhance pediatrician faculty expertise. The American Board of Pediatrics intends to partner with other organizations to ensure that pediatric trainees develop the competence needed to meet the behavioral and mental health needs of their patients.

Twice within the past 40 years, comprehensive reports from task forces on the Future of Pediatric Education (FOPE and FOPE2) have emphasized the need to enhance residency training in behavioral, developmental, and adolescent issues.^{1,2} Nevertheless, the challenges related to behavioral and mental health among the nation's children have only grown since the second report was issued in 2000.

THE BEHAVIORAL AND MENTAL HEALTH CRISIS

During the decade between 2001 and 2011, childhood disability related to developmental or mental health conditions increased by 20.9%, while the prevalence of disability attributable to physical health conditions declined by 11.85%.³ It is estimated that ~50% of Americans will experience a mental health concern at some point in their lives, and most will originate

abstract

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in childhood.⁴ More than 15% of US parents report a clinician-diagnosed mental, behavioral, or developmental disorder among 2- to 8-year-olds.⁵ One of every 13 high school students attempts suicide,⁴ the second leading cause of death among youth ages 10 to 14 and 15 to 24 after unintentional injury.⁶ Table 1 highlights specific data regarding these challenges. All of these conditions are more prevalent for children raised in poverty and exposed to environmental and community circumstances, often referred to as adverse childhood experiences.^{5,7}

Pediatricians are in a position to see and understand the toll behavioral and mental health problems take on individual children and on families. By virtue of their ongoing trusted relationship with families, their understanding of the context of their patients' development, and their familiarity with their available referral network, pediatricians have the opportunity to recognize behavioral and mental health problems, to intervene themselves in many cases, and to coordinate referral to specialists and other services when that is necessary.⁸

PERSISTENT INADEQUACIES IN BEHAVIORAL AND MENTAL HEALTH TRAINING AND PRACTICE

There is little evidence, however, that residency training prepares pediatricians to care for behavioral and mental health issues, the most common group of problems likely to affect their patients. In a recent periodic survey by the American Academy of Pediatrics (AAP), 65% of the 512 responding primary care and specialty pediatricians indicated they lacked training in the treatment of children and adolescents with mental health problems, almost 40% responded they lacked confidence in their ability to recognize those problems, and >50% lacked confidence in their ability to treat them.⁹ Insufficient time during office

TABLE 1 Lifetime Prevalence of Mental Health Diagnoses Among 18-Year-Olds

Total: 51.3%
Depression: 18.6%
Specific phobia: 19.9%
Obsessive compulsive disorder: 12.6%
Social phobia: 8.5%
Attention-deficit/hyperactivity disorder: 8.1%
Conduct disorder: 6.8%
Posttraumatic stress disorder: 4.7%
Panic disorder: 2.4%

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visits and inadequate reimbursement are reported as significant barriers to diagnosis and management of mental health problems, but inadequate preparation and confidence likely contributed to responses from 44% of those surveyed, who indicated they were not interested in treating, managing, or comanaging child mental health problems.⁹ Adding to inadequate reimbursement and incomplete preparation of pediatricians to provide care themselves is the lack of availability of mental health specialists in many localities and practice patterns that do not incorporate mental health professionals alongside pediatric medical providers or support effective collaboration.

The accreditation requirements for pediatric residency training programs have evolved over time in an attempt to address training and health care needs. It was not until 1990 that the program requirements for pediatric residency training in the United States included a requirement for "evidence of structured educational experiences in adolescent medicine, child development, child psychology, and the care of the handicapped child." Beginning in 2000, each program was required to include a 1-month block experience in behavioral and developmental aspects of pediatrics, as well as an integrated experience incorporating

child behavior and development, psychosocial screening and behavioral counseling, and referral as a part of ambulatory and inpatient experiences throughout the 3 years of training. These requirements, like all other Accreditation Council for Graduate Medical Education (ACGME) program requirements, did not stipulate competencies to be achieved or assessment methods to be used, and in the current version of the program requirements, even those general curricular descriptions have been omitted.¹⁰ The ACGME, which oversees the Pediatric Review Committee (PRC), has now moved away from stipulating specific curricular content for residency training. Instead the ACGME is encouraging programs to innovate to achieve overall competencies as described in the Pediatric Milestones Project.¹¹ Program requirements now mandate only that each program have at least 1 faculty member who is certified in developmental and behavioral pediatrics and that each resident complete a 1-month or 200-hour experience in developmental and behavioral pediatrics.¹⁰ In practice, the requirements, their interpretation, and their implementation have not resulted in an adequately trained pediatric workforce in the areas of developmental and behavioral health.

Subspecialty certification of developmental and behavioral pediatricians by the American Board of Pediatrics (ABP), first offered in 2002, was expected to provide well-trained faculty who would enhance the education of future pediatricians as well as to help foster research and clinical care. According to the ABP, there are now 775 board-certified pediatric developmental/behavioral subspecialists scattered unevenly throughout the country.¹² Availability of these subspecialists ranges from 1 for every 59 000 children in some states to 1 per 300 000 in others; there are no developmental/

behavioral pediatricians in 2 states. The degree to which these subspecialists interact with pediatric residents in their continuity clinics or inpatient experiences is limited by a variety of factors including (1) the need to generate clinical income, (2) large volumes of complex referral patients, and (3) pressure on faculty to generate research needed for academic promotion. As pointed out by Dr Ruth Stein in a commentary published last year, many of those developmental/behavioral faculty members are “sequestered and siloed off-campus and are increasingly seen only as people who take care of children who have special needs, children who are unfortunately undervalued by society, rather than as key faculty, essential to the central departmental educational mission and critical to the successful delivery of care in all venues.”¹³

In 2010 fewer than half of surveyed US pediatric residents rated their competence in mental health skills, such as diagnosing ADHD, depression, or anxiety, and managing or treating those conditions, as good to excellent; 28% reported that vacation time was permitted during their required 1-month developmental/behavioral pediatrics rotation.¹⁴ A 2014 survey of pediatric residency directors found that the majority of pediatric training programs did not emphasize mental health training and were unaware of the recently published mental health competencies for pediatricians developed by the AAP Committee on Psychosocial Aspects of Child and Family Health and the Task Force on Mental Health.¹⁵ The majority of program directors also rated their residents’ knowledge about psychosocial and pharmacological interventions as average or below average.

PROPOSED SOLUTIONS

It is time that pediatric residency programs develop the capacity to

prepare their residents to meet the behavioral and mental health needs of their patients. We must, as a profession, recognize the large gap between the needs of children, adolescents, and their families and the preparation of pediatricians to meet those needs. Our goal should be to train pediatricians who can counsel parents to prevent behavioral and mental health problems and promote physical and emotional wellness, to identify those problems when they occur, to treat many common problems, and to refer and coordinate care when additional expertise is needed. These pediatricians may serve as primary care clinicians or as subspecialists caring for children with chronic medical conditions who often have coexisting mental health needs. We can no longer deny that behavioral and mental health concerns are morbidities that threaten the health, and in some cases the lives, of large numbers of children, their families, and society. If the education of general pediatricians and subspecialists does not advance to meet this need, it will be difficult to assert, as the second Future of Pediatric Education Task Force did, that “the pediatrician is the best trained professional to provide quality health care services” for the nation’s children.²

Meeting this goal will not be easy. It will require a robust curriculum and effective assessment tools. Table 2 summarizes proposed solutions, participants, currently available resources, and a possible timeline. The mental health competencies for pediatric primary care developed under the auspices of the AAP¹⁶ should be adopted as a guide for an initial curriculum along with the residency curriculum on mental health that the AAP has already begun to post online.¹⁷ This curriculum could be used for building faculty capacity as well. Certain common, core, evidence-based skills

such as communication, motivational interviewing, and parent-mediated behavior training should be included in that curriculum. Medical students considering pediatrics as a career could also take advantage of this training, and they should be made aware that these foundational skills will be an important part of their anticipated career.

So, what opportunities currently exist to improve residency training in behavioral and mental health care? Recent efforts by the ACGME and the American Board of Medical Specialties have encouraged the use of preidentified milestones in each specialty to assess trainees’ attainment of fundamental competencies.¹¹ These behavioral milestones (eg, “gather essential and accurate information about the patient”; “communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds”) have been developed for pediatric trainees, and reporting of milestones assessment is now required by the ACGME. However, the context for assessment, that is, whether the milestones are assessed in an ICU, the emergency department, or the resident’s continuity clinic, is not specified.

Another recent assessment framework in medical education, which addresses this need for context, is the entrustable professional activity (EPA). EPAs presume that there are activities within a given specialty or subspecialty that a physician should be expected to be able to perform competently and without supervision. The concept of EPAs applies the general behavioral milestones to the context of each of those specialty-specific activities.¹⁸ The EPA should define the skills, knowledge, and other competencies that will be needed to achieve “entrustment,” or the ability to

TABLE 2 Proposed Approaches for Enhancing Residency Training in Behavioral and Mental Health

Proposed Solution	Necessary Participants	Existing Resources	Proposed Timeline
Robust behavioral and mental health curriculum	Residency program directors Faculty (eg, general academics, developmental/behavioral, adolescent medicine, other subspecialty) Community practitioners Child and adolescent psychiatrists Child psychologists Social workers Pediatric Review Committee of the ACGME ABP	AAP's Mental Health Competencies for Pediatric Primary Care ¹⁷ AAP Mental Health Curriculum ¹⁸ Existing curricula at local institutions	2 y and ongoing
Tools aimed at assessing entrustment for unsupervised practice as described in the EPAs	Residency program directors Faculty (eg, general academics, developmental/behavioral, adolescent medicine, other subspecialty) Child and adolescent psychiatrists Nonphysician mental health faculty ABP	Existing assessment instruments at local institutions	3–5 y and ongoing
Appropriate training environments	Department chairs Program directors Pediatrician and nonphysician faculty Community practitioners Child and adolescent psychiatrists	Continuity clinics ^{19,20} Adolescent medicine clinics Community pediatrician offices Behavioral and mental health services Schools Community mental health services Tele-mental health	2–3 y and ongoing
Faculty development for pediatrician faculty	Department chairs Residency program directors General pediatric faculty Subspecialty pediatricians Community pediatricians	Developmental/behavioral pediatrician faculty Child and adolescent psychiatry faculty Opportunities offered through the Association of Pediatric Program Directors, Society for Adolescent Health and Medicine, Society for Developmental and Behavioral Pediatrics, AACAP, AAP, and ABP Lifelong Learning and Self-Assessment Modules Psychologists Social workers	2–3 y and ongoing
Collaboration with nonpediatrician clinicians and trainees	Child and adolescent psychiatrists and trainees Child psychologists and trainees Social workers and trainees Other providers (eg, parent or peer mentor)	Colocated and integrated mental health services in some programs	2–3 y and ongoing

effectively carry out a given activity independently. The EPAs put goals for training into the context of the activity in which they are taught and assessed. In accordance with those goals, a curriculum would be created with appropriate functions and competencies in mind, and assessment would occur to ensure that the trainee or pediatrician is developing appropriate competence. One of the activities proposed as defining the competent pediatrician is “assessment and management of patients with common behavioral and mental health problems.” The goal of using EPAs in training would be for

each graduating pediatric resident to be competent in preventive counseling as well as the recognition of common behavioral and mental health problems. The graduating pediatric resident would then be able to provide knowledgeable, effective, efficient, coordinated care of common behavioral and mental health problems without need for supervision. This is a training goal that previously has not been articulated explicitly.

Future pediatricians will need immersion in environments where they will be taught by experienced

clinicians with expertise in the promotion of well-being and the identification and treatment of mental health risk factors and problems and who are also skilled in educating others. Ambulatory experiences, including resident continuity clinics, and rotations in developmental/behavioral pediatrics, adolescent medicine, and community pediatrics in patient-centered medical home sites will likely be the primary venues for training in behavioral and mental health. Ideal training environments will include primary care ambulatory sites that encourage residents to

work over extended periods of time in partnership with general pediatricians as well as behavioral and mental health trainees and providers. Community practices that integrate or colocate mental health providers into their practice would appear to be especially desirable training environments. Some examples of these combined and colocated clinics already exist in current residency training programs.^{19,21}

Because behavioral and mental health are interlinked with virtually every condition pediatricians treat, responsibility for identifying problems, counseling families, and coordinating needed care also must be integrated into inpatient, critical care, and subspecialty experiences. Children cared for in subspecialty clinics and inpatient units often have coexisting mental health problems, so training opportunities should not simply focus only on primary care. In fact, subspecialty clinics with integrated mental health providers may provide training opportunities for both residents and fellows. Subspecialty trainees, as well as pediatric residents, should understand that development of a communication strategy for building a therapeutic alliance with patients and families is critical, particularly for those with chronic diseases.

Resources, personnel, and available training sites vary greatly among programs, and innovation will be needed. To achieve the goals of providing collaborative or integrated care, some programs will likely need to include schools, telemental health, and experiences involving residents working with skilled community faculty. Clear documentation of behavioral and mental health curricular elements and assessment of resident acquisition of skill during these experiences should even allow for accumulation of the 200 hours of developmental and behavioral

pediatrics required by the PRC without need for, or in addition to, a block rotation. Some flexibility on the part of the PRC would be required, so that programs avoid penalties for including developmental/behavioral pediatrics curricular elements during other rotations. In most residency programs, faculty development will be needed, and it will be necessary to incorporate nonpediatrician mental health providers, including child psychiatrists, child psychologists, social workers, and counselors, to enhance pediatric faculty expertise and experience.

Recognition of behavioral and mental health problems cannot be the only goal in residency training. Prevention, through promotion of effective parenting and behavioral guidance, as well as development of confidence in treatment of many common mental health conditions, would be expected to reduce the need for referral to more specialized providers, who are often unavailable, have long waiting lists, and may not be adequately reimbursed. Communication training for pediatric providers has been shown to be effective in reducing mental health impairment among their minority patients as well as mental health symptoms suffered by their parents.²⁰ Similar skills training should be included in pediatric residency education and applied in all settings in which residents care for patients.

The American Academy of Child and Adolescent Psychiatry (AACAP) is well aware that the 8700 child and adolescent psychiatrists in the United States, many of whom do not engage in full-time clinical practice, are not able to meet all the mental health needs of America's children. They have expressed willingness to partner with pediatric organizations and training programs to enhance the capacity of pediatricians to provide mental health care for

common problems. In 2014, the AACAP issued its own Call to Action to promote collaborative mental health partnerships between child and adolescent psychiatrists and primary care providers, including ensuring that child and adolescent psychiatry trainees gain experience in collaborative care paradigms.²² Colocation of pediatric and child psychology trainees already exists in some primary care settings, enhancing the training of both groups of trainees, and serving as a model for other programs as well as for their future practice.¹⁹ Integration of behavioral health care within primary care is promoted by the Patient Protection and Affordable Care Act,²³ and research indicates that integrated care can improve behavioral health outcomes for pediatric patients.²⁴ Development of integrated care models for pediatric resident continuity clinics would make behavioral and mental health specialists available as educators and help prepare future pediatricians for the practice patterns they are likely to encounter in the future.

The ABP can create expectations for education and certification, but it cannot make these essential changes in training happen alone. The ABP intends to use its influence and to partner with other organizations, such as the AAP, the Association of Pediatric Program Directors, the Academic Pediatric Association, the Society for Developmental and Behavioral Pediatrics, the Society for Adolescent Health and Medicine, the Council of Pediatric Subspecialties, the Association of Medical School Pediatric Department Chairs, the National Academy of Medicine, the AACAP, and the ACGME, to catalyze current and future efforts to ensure that future residency graduates develop competence to address the cognitive and behavioral wellness dimensions of child health and development; to prevent, identify, and treat common behavioral and

mental health conditions; and to ensure that future pediatric residency graduates are trained to engage with mental health colleagues in consultation and referral of children and youth with more serious behavioral and mental health problems. A meeting convened by the ABP in April 2016, including representatives from all of these organizations, helped set the framework for needed efforts to achieve this goal and allowed participants to share information about current activities their organizations have initiated. The ABP will also collaborate with these organizations to foster Maintenance of Certification efforts to enhance the effectiveness of diplomates in preventing, identifying, and treating mental health needs of children, adolescents, and young adults. Recognizing that addressing these needs takes time, it will also be important to continue advocacy efforts, including those led by the AAP, for adequate reimbursement to support effective models of care.²⁵ For example, payers will need to be convinced that intervention helps even in the absence of a diagnosable disorder; dissemination of the burgeoning evidence base for children's behavioral and mental health and well-being will be needed to persuade insurers as well. To the degree that these ongoing efforts are successful, it will be important for pediatricians and pediatric practices to be prepared.

Pediatricians have responded to crises in child health care in the past. We again have an opportunity to define ourselves in relation to the needs of America's children. If we do not now ensure that graduates of our training programs are prepared to meet those needs, they will continue to be unmet, and the relevance of pediatric care to the health of children will be significantly diminished.

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ABBREVIATIONS

AAP: American Academy of Pediatrics
 AACAP: American Academy of Child and Adolescent Psychiatry
 ABP: American Board of Pediatrics
 ACGME: Accreditation Council for Graduate Medical Education
 EPA: entrustable professional activity
 PRC: Pediatric Review Committee

REFERENCES

1. American Academy of Pediatrics, Task Force on Pediatric Education. *The Future of Pediatric Education*. Evanston, IL: American Academy of Pediatrics; 1978
2. Leslie L, Rappo P, Abelson H, et al. Final report of the FOPE II Pediatric Generalists of the Future Workgroup. *Pediatrics*. 2000;106(suppl 5):1199–1223
3. Houtrow AJ, Larson K, Olson LM, Newacheck PW, Halfon N. Changing trends of childhood disability, 2001–2011. *Pediatrics*. 2014;134(3):530–538
4. Murphey D, Stratford B, Gooze R, et al. *Are the Children Well? A Model and Recommendations for Promoting the Mental Wellness of the Nation's Young People*. Princeton, NJ: Robert Wood Johnson Foundation; 2014. Available at: www.rwjf.org/en/library/research/2014/07/are-the-children-well.html. Accessed November 8, 2016

5. Bitsko RH, Holbrook JR, Robinson LR, et al, eds. Health Care, Family, and Community Factors Associated With Mental, Behavioral, and Developmental Disorders in Early Childhood - United States, 2011–2012. *MMWR Morb Mortal Wkly Rep*. 2016;65(9):221–226
6. Centers for Disease Control and Prevention. Injury prevention and control: data & statistics. Available at: www.cdc.gov/injury/wisqars/leadingcauses.html. Accessed August 18, 2016
7. National Research Council and Institute of Medicine. *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities*. Washington, DC: The National Academies Press; 2009
8. Perrin EC, Leslie LK, Boat T. Parenting as primary prevention. *JAMA Pediatr*. 2016;170(7):637–638
9. Horwitz SM, Storfer-Isser A, Kerker BD, et al. Barriers to the Identification and Management of Psychosocial Problems: Changes From 2004 to 2013. *Acad Pediatr*. 2015;15(6):613–620
10. Accreditation Council for Graduate Medical Education. ACGME Program Requirements for Graduate Medical Education in Pediatrics. Available at: www.acgme.org/Portals/0/PFAssets/ProgramRequirements/320_pediatrics_2016.pdf. Accessed August 18, 2016
11. Accreditation Council for Graduate Medical Education. *The Pediatric Milestones Project: A Joint Initiative of the Accreditation Council for Graduate Medical Education and the American Board of Pediatrics*. Available at: www.acgme.org/Portals/0/PDFs/Milestones/PediatricsMilestones.pdf. Accessed August 18, 2016
12. American Board of Pediatrics Inc. *2015–2016 Workforce Data*. Chapel Hill, NC: American Board of Pediatrics; 2016
13. Stein RE. Are we on the right track? Examining the role of developmental behavioral pediatrics. *Pediatrics*. 2015;135(4):589–591
14. Horwitz SM, Caspary G, Storfer-Isser A, et al. Is developmental and behavioral pediatrics training related to perceived responsibility for treating

- mental health problems? *Acad Pediatr*. 2010;10(4):252–259
15. Green C, Hampton E, Ward MJ, Shao H, Bostwick S. The current and ideal state of mental health training: pediatric program director perspectives. *Acad Pediatr*. 2014;14(5):526–532
 16. Committee on Psychosocial Aspects of Child and Family Health and Task Force on Mental Health. Policy statement—the future of pediatrics: mental health competencies for pediatric primary care. *Pediatrics*. 2009;124(1):410–421
 17. American Academy of Pediatrics. Mental health initiatives. Available at: www.aap.org/mentalhealth. Accessed August 18, 2016
 18. ten Cate O, Scheele F. Competency-based postgraduate training: can we bridge the gap between theory and clinical practice? *Acad Med*. 2007;82(6):542–547
 19. Pisani AR, leRoux P, Siegel DM. Educating residents in behavioral health care and collaboration: integrated clinical training of pediatric residents and psychology fellows. *Acad Med*. 2011;86(2):166–173
 20. Wissow LS, Gadomski A, Roter D, et al. Improving child and parent mental health in primary care: a cluster-randomized trial of communication skills training. *Pediatrics*. 2008;121(2):266–275
 21. Bunik M, Talmi A, Stafford B, et al. Integrating mental health services in primary care continuity clinics: a national CORNET study. *Acad Pediatr*. 2013;13(6):551–557
 22. AACAP Committee on Collaboration with Medical Professionals. *Call to Action: Collaborative Care Training*. Available at: www.aacap.org/AACAP/Clinical_Practice_Center/Systems_of_Care/Collaboration_with_Primary_Care.aspx?hkey=4bab0731-cc26-48d9-b3be-062a3bab4250. Accessed August 18, 2016
 23. Croft B, Parish SL. Care integration in the Patient Protection and Affordable Care Act: implications for behavioral health. *Adm Policy Ment Health*. 2013;40(4):258–263
 24. Asarnow JR, Rozenman M, Wiblin J, Zeltzer L. Integrated medical-behavioral care compared with usual primary care for child and adolescent behavioral health: a meta-analysis. *JAMA Pediatr*. 2015;169(10):929–937
 25. American Academy of Pediatrics. *Improving Mental Health Services in Primary Care—A Call to Action for the Payer Community*. August 2016. Available at: www.aap.org/en-s/Documents/payeradvocacy_business_case.pdf. Accessed August 18, 2016

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