

Universal Mental Health Screening in Pediatrics: Toward Better Knowing, Treating, or Referring

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Screening for treatable conditions has long been a hallmark of pediatrics.¹ Screening starts before birth with in utero ultrasounds looking for congenital abnormalities, after birth with a heel prick for metabolic disorders, and in the primary care office with growth charts, specific developmental questions, hematocrits, urine dipsticks, and vision and hearing tests. Although psychosocial screening is far less common, the rate of positive findings is usually much higher than with any of the aforementioned traditional tests. I use the broader term psychosocial disorders or dysfunction rather than psychiatric disorder because pediatricians routinely face many questions that are not specifically defined in the *DSM-5* and are defined quite differently in primary care in more everyday terms, such as problems in school, parenting, peer relationships, activities, or mood. These concerns might meet criteria for formal psychiatric diagnoses or they might not because they are framed as descriptions of dysfunction in day-to-day life that impairs the trajectory of the child's development. Many issues with considerable impact—divorce, school failure, intense sibling rivalry, and poverty—may result in a positive screen result or parental concern and are important to explore before focusing on a formal psychiatric diagnosis.

How common is psychosocial dysfunction? Of course this depends on the definition and threshold for dysfunction. Mild anxiety and depression are common but often result in little or no impairment over time. A rigorous definition of severity or dysfunction requires information and subjective judgment based on an interview. The literature typically cites 10% or 12% of children as having psychosocial issues sufficient to impair functioning.^{2,3} I suggest this could be several percentages lower if the level of

dysfunction were defined as moderate to severe or move up or down several percentages based on the influences of poverty and culture.

Thus, for a pediatrician with 1,500 middle-class patients old enough for at least kindergarten, approximately 150 will meet the criteria for substantial psychosocial dysfunction at any one time. Of these 150, the typical pediatrician might generally be aware of one third in terms of specific history and treatment. The pediatrician will feel that possibly another third may have elicited the pediatrician's (often unspoken) suspicions at an annual physical, with no further questioning, details, or referral. The psychosocial dysfunctions of the remaining third are not on the pediatrician's radar.⁴ Thus, a primary care pediatrician will be dealing with known psychosocial issues and a newly recognized problem every day. Translating these numbers to a national level, probably 4 to 8 million of the country's 80 million children have substantial psychosocial dysfunction, and for one to two thirds of these children, the child's pediatrician does not know, treat, or refer for care.^{3,4}

It is not surprising that the call for psychosocial screening is coming from many quarters. The Surgeon General's national goals,⁵ Early and Periodic Screening, Diagnostic, and Treatment,⁶ Head Start,⁷ and the Academy of Pediatrics⁸ guidelines recommend screening. In Massachusetts, the federal courts ordered (as a remedy for a class action law suit) a specific set of screening tests—for autism, general psychosocial functioning, substance use, and adolescent depression—and these are now reimbursed by Medicaid and by private insurers.⁹ With this mandate through Medicaid alone, more than 1 million children have been screened since the program began in 2008.¹⁰ More than 100,000 of these

children have screened positive and a recent review of billing data showed that about 40% of all positively screened children were newly found.¹¹ I expect as class action lawsuits, Accountable Care Organizations, Meaningful Use, and National Committee for Quality Assurance medical home standards are applied to pediatrics, screening for psychosocial disorders will be built into requirements for comprehensive care. Further, registries and follow-up for positive screens will encourage and in turn be enhanced by quality assurance programs.

The efforts at psychosocial screening to date have been aimed at the very broad goal of increasing the pediatrician's recognition of the patient's and family's emotional difficulties. Many pediatricians rely completely on the family to raise any psychosocial issue, which often occurs late in the progression of the difficulties. Referral rates are often less than half of expected.¹² Screening acts directly to yield a meaningful score and communicates an interest in the child's psychosocial functioning, much like a growth chart may prompt a discussion of nutrition or a blood pressure elicit a discussion of a family's medical history. The original goals of screening were to increase the referral rate to mental health services from the typical 1% to 4%.¹² However, as the health care system evolves and we advance the science of psychosocial screening, many of the issues raised by this review become highly relevant.

This review by Wissow *et al.*¹ in this issue of the *Journal* rightly points out that developers of screening measures have not focused on engaging as many families as possible, including how the screen is presented, issues of confidentiality, best approach to gaining completion (computer based, face to face, parent completed), and much more attention to literacy and cultural issues. Other relevant questions include the frequency of screening and how screening, even when negative, may prompt appropriate questions that elicit guidance or even referral. There are administrative and information system questions about how to integrate screening into the workflow and the evolving electronic medical record. Much work remains to be done!

Another strong point in the review by Wissow *et al.*¹ is the call for quality assurance efforts. Electronic medical records and registries in population health management settings would encourage tracking of pediatricians' decisions in light of positive or negative screen results. Do

they agree with the screen, make a judgment on the severity of the concerns, provide guidance, or decide to refer? What actually happened and what automated reminders or reviews might be helpful? What is the role for patient portals and handheld computers in facilitating care? What can we learn that will enhance residency and postgraduate training?

The authors raise other questions that will be much harder to answer. They note the "black box" of clinical judgment. Clearly offering guidance on how to approach positive screen results and assessing those approaches in the context of a quality assurance or research programs will add to the effectiveness of the screening. However, I do have some concerns about calling this a black box. I worry that to replace the black box, "evidence" will require a structure that leads to a *DSM-5* diagnosis with high reliability and somewhat circular validity. Will these really be helpful to pediatricians? I worry that no one will talk to the patient or family in a broad and meaningful manner. I worry that the science of diagnosis, medication use, and manual-based treatment is not sufficiently developed to roll out in primary care offices at a population level. At this moment, I trust the very imperfect process of clinicians interviewing, choosing questions, and developing a relationship with patients and families.

Our field longs for objective tools, such as magnetic resonance imaging. I fully support the quest. However, an experience I had with my knee helped me appreciate that psychiatry is not so different than or inferior to other medical specialties as we might think. Last year, after my usual workout, my right knee hurt. The orthopedist examined it and told me to get a magnetic resonance image. I sat with the radiologist as he looked at the image and fully expected him to make a specific diagnosis. He noted my knees were those of a 64-year-old former runner with a minor tear of the meniscus, 1 small cyst, some cartilage thinning, and mild arthritis in the patellar femoral joint. The knee that hurt looked essentially no different than the knee that was pain free. After I recovered from hearing (and grieving) the 4 possible sources of my pain, I asked, "So what is wrong with my knee?" The radiologist said it looked pretty normal for my age and history. I went back to the orthopedist who said, "Just as I thought, mild patellar femoral arthritis. I will give you an injection, a rehabilitation plan, but I do not know how you

will respond after the initial relief from the anesthetic." I asked for any studies of recovery, measurable impact of physical therapy, or guidelines for resuming exercise. He replied that it was hard to study these subjective areas and suggested I exercise after 1 week of rest ... and stop exercising if it hurts. My knee gradually got better over 6 months; I am back to vigorous exercise, although a bit less than before I stressed it to the point of inflammation. Even with a high-resolution image, treating patellar femoral arthritis is not so different than diagnosing and treating adolescent depression!

We are about to enter a new era of population health management with information systems that will yield opportunities to improve quality, calculate cost, distribute materials directly to patients' computers, track adherence to medications and recommendations, and support easy, real-time communication between families and providers. These new tools, combined with clinical expertise and good relationships, will enable us to find more effective ways to treat the common

medical and mental illnesses of our patients. I hope the combination of high-quality services and making families aware of their children's mental health needs will push our evolving health care system to allocate sufficient resources to meet these needs. Screening, enhanced by heeding the recommendations of this review, should be an integral part of this journey. &

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