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Cite this article as:  
John H. Straus and Barry Sarvet  
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Project

*Health Affairs*, 33, no.12 (2014):2153-2161

doi: 10.1377/hlthaff.2014.0896

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# Behavioral Health Care For Children: The Massachusetts Child Psychiatry Access Project

DOI: 10.1377/hlthaff.2014.0896  
HEALTH AFFAIRS 33,  
NO. 12 (2014): 2153–2161  
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**ABSTRACT** Access to behavioral health care for children is essential to achieving good health care outcomes. Pediatric primary care providers have an essential role to play in identifying and treating behavioral health problems in children. However, they lack adequate training and resources and thus have generally been unable to meet children's need for behavioral health care. The Massachusetts Child Psychiatry Access Project has addressed this problem by delivering telephone child psychiatry consultations and specialized care coordination support to over 95 percent of the pediatric primary care providers in Massachusetts. Established in 2004, the project consists of six regional hubs, each of which has one full-time-equivalent child psychiatrist, licensed therapist, and care coordinator. Collectively, the hubs are available to over 95 percent of the 1.5 million children in Massachusetts. In fiscal year 2013 the Massachusetts Child Psychiatry Access Project served 10,553 children. Pediatric primary care providers enrolled in the project reported a dramatic improvement in their ability to meet the psychiatric needs of their patients. Telephone child psychiatry consultation programs for pediatric primary care providers, many modeled after the Massachusetts project, have spread across the United States.

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**A**ccess to behavioral health care for children in the United States has been a problem, as was well documented in the surgeon general's report of 2000.<sup>1</sup> Multiple reports have documented the increasing prevalence of behavioral health problems, including attention deficit disorders, conduct problems, substance use disorders, and autism spectrum disorders.<sup>2</sup> Parallel to the increase in behavioral health disorders, the prescribing of psychotropic medications has dramatically increased.<sup>3</sup>

At the same time, the workforce of child psychiatrists has not grown significantly and is not projected to do so. Furthermore, child psychiatrists are not evenly distributed across the country in relation to population: As of 2001 there was a high of 21.3 child psychiatrists per 100,000

children in Massachusetts and a low of 3.1 per 100,000 children in Alaska.<sup>4</sup> Many counties in the United States have no child psychiatrists.

No significant increase in the workforce through the use of alternative providers—advanced-practice nurses or psychologists who have been trained and licensed to prescribe psychotropic medications—is projected to occur. Addressing the workforce shortage by having pediatric primary care providers manage more behavioral health problems is unlikely to happen because pediatricians perceive their lack of knowledge and training and their inability to access psychiatrists for consultation as major barriers.<sup>5</sup>

Several reports have documented the resulting lack of access to treatment for children with conditions severe enough to impair functioning.<sup>6</sup>

Poor access also has resulted in complaints from families not able to obtain care.

In Massachusetts the Parent/Professional Advocacy League conducted a survey in 2002 of parents whose children needed behavioral health services. Among the respondents, 33 percent had waited more than a year for an appointment with a pediatric behavioral health provider, 50 percent reported that their pediatrician never asked about their child's behavioral health, and 77 percent reported that their pediatrician was not helpful in connecting them to resources.<sup>7</sup>

Consumers are often left to fend for themselves when they need to find a behavioral health provider. Many consult provider directories or seek advice from friends. However, this often is a futile exercise, as parents contact providers whose practices are full, who won't accept their insurance, or who lack specific expertise.

The inadequate treatment of a child's behavioral health conditions has an immediate effect on his or her safety, school performance, and family functioning. The Adverse Childhood Experiences study showed that early adverse childhood experiences, often accompanied by behavioral problems, are also associated with markedly elevated long-term risk of chronic physical illnesses in adulthood.<sup>8</sup>

Access problems reached a crisis point in Massachusetts between 2001 and 2003. The commonwealth's chapters of the American Academy of Pediatrics and the American Academy of Child and Adolescent Psychiatry formed the Child Mental Health Task Force, with stakeholder members that included pediatric and behavioral health providers, consumer advocates for children with behavioral health problems, insurers, and representatives of state agencies. The task force supported a novel solution, the Massachusetts Child Psychiatry Access Project, which was based in part on a pilot project at the University of Massachusetts Medical School.

The Massachusetts Child Psychiatry Access Project is a statewide system of child psychiatry consultation teams that guide pediatricians and family physicians in the diagnosis and treatment of pediatric behavioral and mental health conditions. This article describes the project's formation, its implementation, how it works, how it has improved pediatric behavioral health care, its strengths and weaknesses, and its expansion to other states.

### **The Massachusetts Child Psychiatry Access Project Model**

The Massachusetts Child Psychiatry Access Project—often known by its acronym, MCPAP—is a statewide system of six regional children's be-

havioral health consultation hubs.<sup>9</sup> It is designed to help primary care providers meet the needs of children with any behavioral health problem.

Each hub is located at an academic medical center and consists of a full-time-equivalent each of a child psychiatrist, a licensed therapist, and a care coordinator. The child psychiatrist position is covered by several different people, and on two teams, part of the coverage is by an advanced-practice nurse. The members of the hub provide collaborative support to primary care providers in the surrounding region.

Each hub operates a dedicated hotline that serves as the entry point to the program for pediatric primary care providers enrolled in the project. Services may include one or more of the following: immediate clinical consultation over the telephone, expedited face-to-face psychiatric consultation, care coordination for assistance with referrals to community behavioral health services, and continuing professional education specifically designed for primary care providers. Every telephone consultation is considered a "teachable moment" that helps increase pediatric primary care providers' knowledge about child psychiatry.

Face-to-face consultations occur after about 18 percent of telephone consultations, usually to clarify diagnoses for ambiguous clinical presentations or to help the primary care provider with management decisions about children who are not responding favorably to treatment. The hub is available during usual office hours Monday through Friday to answer any behavioral health question from a primary care provider within thirty minutes, often while the child and family are still in the provider's office. The care coordinators keep track of available resources in their region and get to know gatekeepers at behavioral health practices.

Even with the coordinators' personal connections with community behavioral health providers, a pilot study in 2012 by the Tufts/Boston Children's Hospital hub revealed that half of referrals were not completed. The reasons that family members gave to the hub care coordinator included the following categories: "expected appointment no longer available," "family never called," "family did not like the provider," and "the child's problem was better." To address this problem, care coordinators now call each family to ascertain the status of the referral, continue to help the family if wanted, and report the outcome back to the primary care provider. The results of this effort are not yet known.

The Massachusetts Child Psychiatry Access Project offers consultations to any provider in a primary care practice, including pediatricians, family physicians, nurse practitioners, physician

assistants, behavioral health clinicians, and care coordinators. It can be used for all children, regardless of insurance status.

The Massachusetts Department of Mental Health receives a \$3.1 million annual appropriation from the commonwealth to fund the project. The department has contracted with the Massachusetts Behavioral Health Partnership, the Medicaid behavioral health vendor for Massachusetts, to serve as the project's administrator.

The Massachusetts Child Psychiatry Access Project uses an individualized, educational mentoring model that begins with the hub formally enrolling a practice in the project.<sup>10</sup> During a meeting at the practice, a hub psychiatrist explains the project, meets the primary care providers, reviews behavioral health specialty resources available for the major insurers in the region, initiates collegial discussions regarding children in the practice with behavioral problems, and may begin to provide education about specific disorders.

Each party gains an understanding of the other's expectations, and the project learns what providers' current level of comfort is with behavioral health. For example, primary care providers need to understand that when a project consultant sees someone for a face-to-face visit, the consultant will not write any prescriptions. The primary care provider and the consultant will jointly decide if the provider can be the ongoing prescriber or if the patient requires a referral to a child psychiatrist. This decision may change, as the primary care provider often becomes more comfortable with prescribing a greater range of psychotropic agents.

Primary care providers are encouraged to refer patients who require complex psychiatric medication regimens, such as antipsychotic and mood stabilizing medication, to child psychiatrists. The care coordinator is available to assist with these referrals.

All MCPAP consultations strive to provide individualized, case-based education. The project also creates educational opportunities through traditional regionally based sessions of continuing medical education, a website (<http://MCPAP.org>), a newsletter sent to all enrolled primary care providers, and practice-based educational sessions. The newsletter contains information about new developments, best-practice guidelines, and clinical alerts related to children's behavioral health disorders.

## Design Features

The fields of psychiatry and behavioral health overlap with many other clinical disciplines. Nonetheless, the medical community often as-

sumes that only those with specialized training can assess and treat patients with behavioral health conditions. The belief that mental health professionals are the only ones who can treat pediatric behavioral health conditions that primary care providers face, coupled with the severe shortage of child psychiatrists, prevents many children from getting the treatment they desperately need.

**SUITABILITY OF PEDIATRIC PRIMARY CARE PROVIDERS** In the MCPAP model, pediatricians and other pediatric primary care providers are considered to be the most suitable providers to assume responsibility for pediatric behavioral health. Despite limitations such as a lack of behavioral health training and limited time, pediatric primary care providers have the following advantages: They generally enjoy very positive and trusting relationships with children and families; are in a unique position to screen for behavioral health problems; are accustomed to coordinating complex care plans for children with special health care needs; have extensive practical knowledge of normal development, which allows them to detect behavioral health problems at an early stage; and may reduce the stigma associated with behavioral health issues by addressing these issues as part of regular well-child care.<sup>11</sup>

An explicit project goal is to promote a clinical field of primary care child psychiatry consisting of the prevention of behavioral disorders, through screening and early identification and treatment of emerging psychiatric problems; and the assessment of, treatment planning for, and monitoring of common psychiatric illnesses of mild-to-moderate severity and complexity. Patients whose needs fall outside the scope of primary care child psychiatry—notably, those with severe and complex psychiatric illnesses—require direct treatment by child psychiatrists. Even so, primary care providers can monitor any effects of the psychiatric illness or medication on the patient's overall health.

**THE NETWORKED PEDIATRICIAN** For pediatric primary care providers to successfully perform their role as providers of primary care child psychiatry, they need resources that do not currently exist within their practices. Those resources include consultations and collaborations with child psychiatrists and other behavioral health specialists, training, the coordination of behavioral health referrals, and information sharing—resources that may be difficult to access because of the formidable gulf between the primary care and behavioral health systems.

Clinical correspondence from child psychiatrists to pediatricians is rare because of psychiatrists' lack of availability and, reputedly, confi-

dentiality concerns. The Massachusetts Child Psychiatry Access Project was specifically designed to create relationships between pediatric primary care providers and behavioral health teams, including child psychiatrists, that are exclusively devoted to providing the resources needed by pediatric primary care providers.

**CHALLENGES AND LIMITATIONS OF THE PRIMARY CARE SETTING** Prevailing forces in health care reform, including the implementation of the patient-centered medical home, have placed enormous pressure on primary care providers. They generally see a high volume of patients and strive to rapidly and efficiently assess their conditions and manage their care. Many providers believe that assessing a behavioral health problem takes much longer than assessing a physical health complaint. However, with the accumulation of experience and the use of standardized instruments, primary care providers can assess straightforward presentations of common problems such as depression, anxiety, and hyperactivity in roughly the same amount of time as they need to assess a physical complaint.

The Massachusetts Child Psychiatry Access Project is designed to promote efficiency at the level of the primary care provider. It requires minimal time and effort to access, and thus it does not increase the provider's workload.

**PROVIDE A PUBLIC HEALTH INFRASTRUCTURE FOR CHILDREN'S BEHAVIORAL HEALTH** To give primary care providers greater opportunity to focus on behavioral health prevention, the Massachusetts Child Psychiatry Access Project is designed to be a systematic resource for a population across a defined geographic area and to be universally accessible, regardless of the patient's insurance status. The collaborative relationships created by the project enable pediatric primary care practices to function as an infrastructure to support public health initiatives in children's behavioral health, including universal pediatric behavioral health screening.

**IMPROVE THE APPROPRIATE PRESCRIBING OF PSYCHIATRIC MEDICATIONS** Because of the growth in use of psychotropic medicines noted above, and because the majority of these medications are prescribed by primary care providers, children's behavioral health advocates and parents are understandably concerned that encouraging primary care providers to address behavioral health conditions could exacerbate the problem of overreliance on psychiatric medication. Yet there is evidence that a significant proportion of children who clearly need treatment, including psychiatric medication for severe psychiatric conditions, are not receiving it.<sup>12</sup> The challenge for the Massachusetts Child Psychiatry Access Project thus is to ensure that the behav-

ioral health needs of all children are appropriately identified, thoroughly understood, and addressed through treatment that often consists of psychotherapy instead of medication.

## Study Data And Methods

To document performance, the Massachusetts Child Psychiatry Access Project collects data from two sources: encounters between the hub consultant and the primary care provider, and satisfaction surveys of primary care providers. A project consultant, clinician, or care coordinator enters information about each encounter into an online database that is compliant with the Health Insurance Portability and Accountability Act (HIPAA) of 1986. The encounter data fields are patient demographic information (age, sex, insurance plan, and deidentified member number), primary care practice and provider, encounter type, response time, reason for contact, diagnosis, medication, and outcome. All identifiable patient information, including any notes, is encrypted and available only to the hub.

A brief baseline and annual follow-up survey of primary care providers measures respondents' perceptions of access to care, ability to meet the needs of patients with mental health problems, timeliness of access to a child psychiatrist, and satisfaction with the project's consultative services.

## Study Results

Within three years of the 2004 start of the Massachusetts Child Psychiatry Access Project, more than 95 percent of the primary care providers in the commonwealth were enrolled. They cared for more than 95 percent of the 1.5 million children under age nineteen in Massachusetts.

The most recent data available at the time this article was written were from fiscal year 2013. In that year the project recorded 20,641 encounters for 10,553 youth. A project consultant responded within thirty minutes to 89 percent of requests from primary care providers. As of June 30, 2014, 455 practices—collectively employing 2,915 primary care providers—were enrolled in the project.

Exhibit 1 displays the reasons why primary care providers call the Massachusetts Child Psychiatry Access Project, based on data from encounters. Diagnostic questions and the identification of resources and community access were the most common reasons, followed by medication evaluations and medication questions.

We expected that primary care providers would make fewer calls as they learned how to manage common problems. However, the Mas-

sachusetts Child Psychiatry Access Project has not seen a decrease in call volume. This may be related to the anecdotal impression that as primary care providers become more skilled, their questions and problems become more sophisticated, resulting in the continued need for consultation.

Exhibit 2 shows the diagnoses resulting from the telephone consultations. Diagnoses that would be expected, such as attention deficit hyperactivity disorder (ADHD), anxiety, and depression, were common. Although percentages of diagnostic categories have remained similar over time, consultants report that the sophistication of providers' questions has increased.

Exhibit 3 presents the medications either already being prescribed by the provider or recommended during telephone consultations, in which ADHD and depression and medications to treat those conditions predominated. Following 47 percent of the calls in fiscal year 2013, the consultant and the primary care provider agreed that no medication was needed.

Primary care providers might have felt in the past that the easiest course of treatment was to prescribe psychotropic medications. In contrast, the Massachusetts Child Psychiatry Access Project has been able to promote referrals for counseling and the use of evidence-based treatments such as cognitive behavioral therapy and community-based outreach services.

The cost in fiscal year 2014 of administration and supporting all the functions of the project's six hubs was \$3.3 million dollars, or \$2.20 per child. Of that amount, \$200,000 was offset by money that the project received from billing insurers for face-to-face visits.

In the same year, 58 percent of the encounters were for patients with commercial insurance, and 42 percent were for those with Medicaid. This pattern is similar to the distribution of commercial and Medicaid insurance coverage in the population of Massachusetts, where Medicaid insures about 36 percent of children.

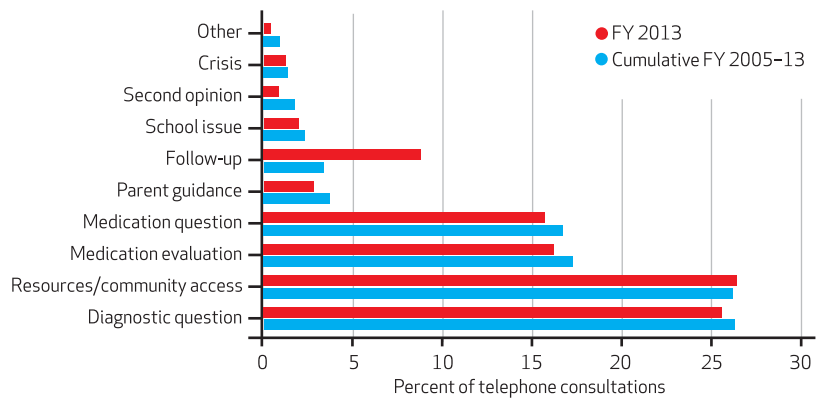
A principal goal of the Massachusetts Child Psychiatry Access Project is to improve children's access to behavioral health care by strengthening primary care providers' ability to address behavioral health problems. The project has conducted primary care provider satisfaction surveys both before enrollment and annually. Exhibit 4 shows the results of those surveys.

Before enrollment in the project, 8 percent of respondents said they agreed or agreed strongly that they could meet the needs of children with behavioral health problems (data not shown). The figure in fiscal year 2012 was 64 percent of respondents.

The number of child psychiatrists in Massa-

**EXHIBIT 1**

**Reasons For Telephone Consultations In The Massachusetts Child Psychiatry Access Project**

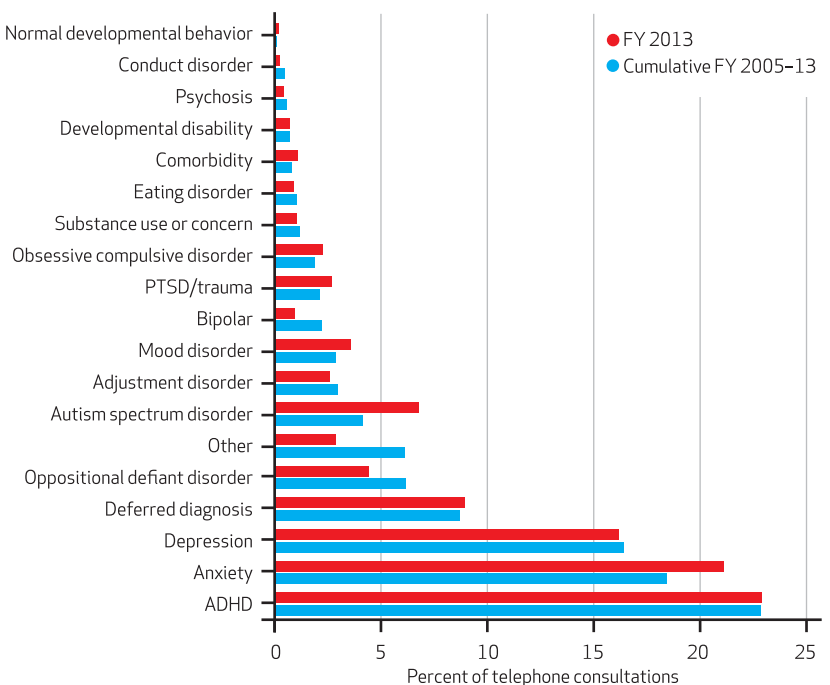


**SOURCE** Authors' analysis of data from the Massachusetts Child Psychiatry Access Project encounter database. **NOTES** In fiscal year 2013 there were 11,569 telephone consultations. From FY 2005 through FY 2013 there were 53,966. "Resources/community access" denotes the identification of resources and community access.

achusetts has not changed significantly, but primary care providers perceive that access to them has improved. The situation has also improved from the perspective of families. For example,

**EXHIBIT 2**

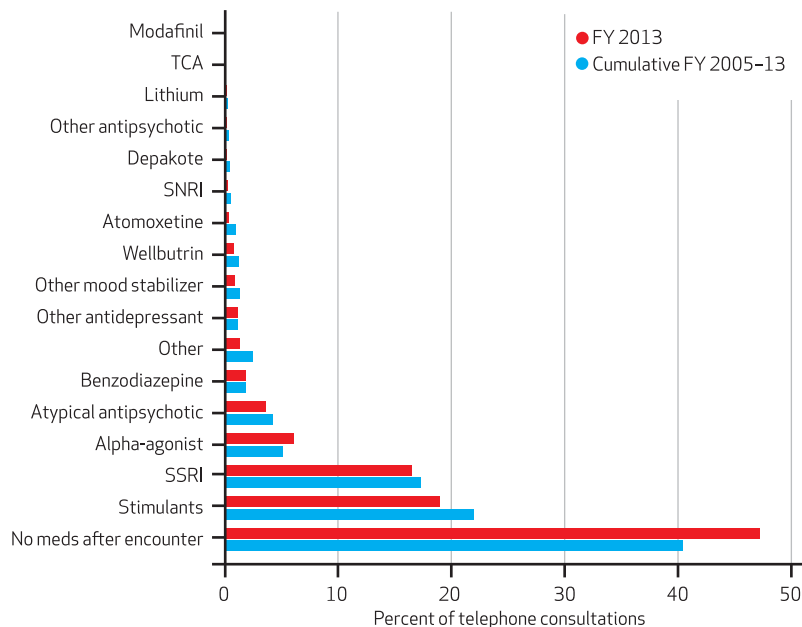
**Disorders Discussed In Telephone Consultations In The Massachusetts Child Psychiatry Access Project**



**SOURCE** Authors' analysis of data from the Massachusetts Child Psychiatry Access Project encounter database. **NOTES** In fiscal year 2013 there were 13,365 diagnoses. From FY 2005 through FY 2013 there were 75,166. PTSD is post-traumatic stress disorder. ADHD is attention deficit hyperactivity disorder.

EXHIBIT 3

Medications Prescribed By Providers Or Recommended During Telephone Consultations In The Massachusetts Child Psychiatry Access Project



**SOURCE** Authors' analysis of data from the Massachusetts Child Psychiatry Access Project encounter database. **NOTES** In fiscal year 2013, 10,091 medications were discussed. For FY 2005 through FY 2013, 50,618 were. TCA is tricyclic antidepressant. SNRI is serotonin and norepinephrine reuptake inhibitor. SSRI is selective serotonin reuptake inhibitor.

the Parent/Professional Advocacy League reports that few families now call its access line to complain that their primary care provider will not address their child's behavioral health issue (Lisa Lambert, executive director, Parent/Professional Advocacy League, personal communication, October 27, 2014).

In addition, the Massachusetts Child Psychiatry Access Project has reduced the demand for

child psychiatrists by increasing primary care providers' ability to manage less complex behavioral health issues. The project categorizes each call according to whether ongoing care will be provided by the primary care provider or a child psychiatrist. In fiscal year 2014, following a consultation, primary care providers reported managing 67 percent of the types of patients' problems that they usually would have needed to refer to a child psychiatrist before they enrolled in the program. As a result, primary care providers report that they have less demand for routine outpatient child psychiatry.

**Strengths And Weaknesses Of The Project**

The Massachusetts Child Psychiatry Access Project's main strength is that over nearly ten years, it has developed and sustained a highly accessible and widely used platform that supports primary care providers' management of the behavioral health needs of their patients. The project's individualized approach allows its consultants to meet each primary care provider at his or her level of expertise and interest.

In fiscal year 2012, 1,243 primary care providers used the project's services. They represented 92 percent of the practices in Massachusetts that serve over 2,000 children. This level of utilization is dramatically higher than that of other state programs with fewer resources than the Massachusetts Child Psychiatry Access Project (six full-time equivalents each of child psychiatrists, licensed therapists, and care coordinators designed for 1.5 million youth). The project has taken a population-based approach that seeks to support all pediatric primary care providers. Thus, it is able to support the entire population of children in the commonwealth.

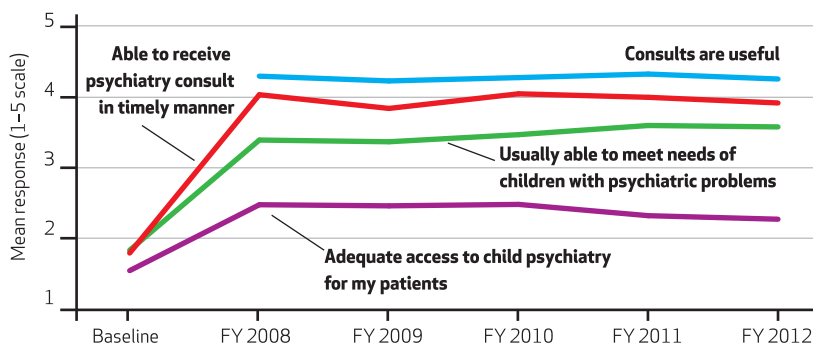
Each regional hub receives a quarterly report listing practices and individual primary care providers who have not used the project's services in the past quarter. Based on this report, the hub reaches out to primary care providers to ask whether any of their patients have behavioral health issues and, if so, how the project can be helpful. This process keeps primary care providers engaged, aware of the project, and attentive to their patients' behavioral health needs.

The Massachusetts Child Psychiatry Access Project's full coverage of the commonwealth has allowed the project to implement system-wide improvements, as described in the following two examples.

First, in 2009 the project helped implement a state mandate for universal pediatric behavioral health screening of Medicaid patients at all well-child visits, hiring consultants to train primary

EXHIBIT 4

Mean Responses Of Primary Care Providers On Annual Satisfaction Surveys By The Massachusetts Child Psychiatry Access Project, Baseline And Fiscal Years 2008-12



**SOURCE** Authors' analysis of data from the Massachusetts Child Psychiatry Access Project survey database. **NOTE** "Baseline" is the score on the survey before enrollment.

# The project's individualized approach allows its consultants to meet each primary care provider at his or her level of expertise and interest.

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care providers to screen their patients. The screening rate for youth with Medicaid has increased from 17 percent to 80 percent (Emily Sherwood, director, Massachusetts Child Behavioral Health Initiative, personal communication, July 31, 2014). Most commercial insurers in Massachusetts also pay for screening.

Second, in 2010 a special legislative commission on postpartum depression was established in response to the unmet needs of women with this condition. Recommendations included universal screening by obstetricians and primary care providers during the perinatal period.

To ensure the availability of providers who could treat depression and other mental health conditions in women who are pregnant or nursing, the Massachusetts Child Psychiatry Access Project developed MCPAP for Moms. This provides a model of collaborative support for adult providers such as obstetricians, internists, family physicians, and psychiatrists that is similar to the one already available for children's providers.<sup>13</sup> MCPAP for Moms started with one full-time-equivalent perinatal psychiatrist and two care coordinators spread over three of the six existing hubs.

A notable limitation of the Massachusetts Child Psychiatry Access Project is that it focuses on improving behavioral health service delivery in the primary care setting through early identification, assessment, and treatment of relatively uncomplicated behavioral health issues. Children still need access to a full continuum of behavioral health services, including mobile crisis services, acute inpatient and residential treatment, robust outpatient and substance use disorder services, home-based treatment services, and highly specialized community-based systems of care. The project's care coordinators fa-

ilitate access to these resources, but frequently either such services are not covered by the child's insurance or there is inadequate capacity.

Additionally, the prevention of behavioral health problems requires a robust array of community-based systems and services for children that includes preventive school programs, early intervention home visiting programs, preschool programs, special education, after-school programs, and child state agency programs. Any of these may be in short supply in some regions.

The Massachusetts Child Psychiatry Access Project is an on-demand resource, relying upon primary care providers to request service. Not all pediatric providers are equally motivated to use the project. Patients of providers who rarely use its services may continue to face significant barriers to obtaining behavioral health services. The project continues its outreach efforts aimed at those primary care providers. However, having measures of behavioral health quality to use in holding those providers accountable would help ensure their appropriate engagement in the program and their provision of high-quality behavioral health care.

The six MCPAP hubs are distributed across the commonwealth's regions. However, they still operate at some geographic distance from the practices. Aside from intermittent outreach activities and some face-to-face consultations, interactions between the project and primary care providers are not in person. Integrated behavioral health models, such as the patient-centered medical home, that employ co-located behavioral health clinicians (clinical social workers and psychologists) offer more immediate and direct interactions, as well as greater convenience, for patients and families.

However, the small number of child psychiatrists cannot be deployed to work within primary care practices because they are needed in specialty behavioral health services. In fact, a number of pediatric primary care practices in Massachusetts have begun to incorporate integrated behavioral health clinicians. As a result, the Massachusetts Child Psychiatry Access Project is able to perform a complementary function, working collaboratively with both the integrated clinician and the primary care provider to address questions that require the medical expertise of a child psychiatrist.

## The National Network Of Child Psychiatry Access Programs

Poor access to behavioral health services, particularly child psychiatry, is not unique to Massachusetts. During the past ten years increasing numbers of states have developed access pro-



grams, and others are now developing them. Most of the programs are modeled after the Massachusetts Child Psychiatry Access Project but are tailored to local geography and funding. In fiscal year 2014, Connecticut, the District of Columbia, New Jersey, Oregon, and Wisconsin passed budgets with funding for new child psychiatry access programs.

Thirty-two states (including the four listed above and the District of Columbia) and other interested parties have formed the National Network of Child Psychiatry Access Programs. The network strives to promote the development of access programs by providing a forum for participants to learn from each other, engage in collaborative research, develop standards of practice, and maintain a website (<http://nncpap.org>). It convenes an annual meeting and holds four to six conference calls per year to share experiences and brainstorm about solutions to common problems.

A discussion at one meeting of the National Network of Child Psychiatry Access Programs resulted in a plan to conduct an analysis of malpractice risk associated with psychiatric telephone consultation programs. The analysis found that six state programs that had provided telephone consultation to 4,465 patients between 2004 and 2010 had had no malpractice claims.<sup>14</sup> This finding was expected because a telephone consultation to a primary care provider does not start a doctor-patient relationship, which is a requirement for a malpractice claim.

In the aggregate, the programs represented by the National Network of Child Psychiatry Access Programs are available to primary care providers for approximately twenty-three million children, or 32 percent of the children in the United States.

Members of the network use varied consultation models. For example, programs in Colorado, Minnesota, and New York incorporate a very structured educational component created by the REACH Institute.<sup>15</sup> Programs in Alaska, Washington, and Wyoming created a manual of recommended guidelines for managing common behavioral health problems.<sup>16</sup>

### Sustainability Of Access Programs

At the current point in the evolution of child psychiatry access programs, funding depends not on commercial insurance but on grants from state legislatures, private foundations, or Medicaid funding. All of these funds depend on budgetary decisions, which are fraught with uncertainty. The Massachusetts legislature has added budgetary language that, beginning in fiscal year 2015, will charge each commercial insurer a share of the cost of the Massachusetts Child

## The Massachusetts Child Psychiatry Access Project is an on-demand resource, relying upon primary care providers to request service.

Psychiatry Access Project that is proportional to the insurer's use of outpatient health services. A statute to make this permanent, which would make the project's funding more stable and secure, is pending.

Several programs tried to support their funding through fee-for-service billing for each consultation. This mechanism failed because the volume was too variable, the billing was too cumbersome, and a doctor-patient relationship was created—which brought with it unacceptable medical and legal risk.

Other programs have tried using a practicing child psychiatrist to support a group of primary care practices, often with the psychiatrist going to each practice on a rotating basis. This arrangement does not bring financial support to the psychiatrist, who is often busy with patients when the primary care provider wants help. In the MCPAP model, the child psychiatrist is always available for telephonic consultation, which results in excellent response times.

Another funding model is to have an insurer provide the consultation service. Primary care providers rarely use this model, presumably because they do not ordinarily see insurance company representatives as colleagues, and because the protocol for consultation would apply only to the subset of patients covered by the insurance company sponsoring the program.

With the movement of health care funding to an accountable care model, some accountable care organizations (ACOs) may want to fund their own hubs, similar to the MCPAP model. Because a hub can serve as many as 250,000 children, few ACOs in one geographic region will be large enough to fund a full hub. Additionally, pediatric practices may be part of more than one ACO and would prefer a regionally based team.

We think that coordinating the funding at the state level is most efficient, even if funding for a

particular hub goes to one ACO. In Massachusetts six full-time-equivalent child psychiatrists are able to cover 1.5 million children.

## Conclusion

We believe that the Massachusetts Child Psychiatry Access Project demonstrates a collaborative, scalable, and cost-effective model for optimizing the impact of scarce, highly specialized medical experts on significant population health needs. As health care systems reorganize themselves to improve the quality and efficiency of care delivery for populations, according to principles articulated in the patient-centered medical home model, relationships between primary care providers and specialists will need to be redefined.

Newly envisioned roles for specialists within these relationships include the types of collabo-

rative services provided by the project, many of which are designed to improve the capacity of primary care providers to meet the needs of patients instead of encouraging referrals to specialists. The project provides a model for the systematic distribution of specialists to meet the needs of a population across a large geographic area.

For children to have adequate access to behavioral health care, pediatric primary care providers must manage behavioral health conditions in the primary care office. To accomplish this, providers require timely access to child psychiatry consultation and care coordination. Because of the shortage of child psychiatrists, a telephone model, such as the Massachusetts Child Psychiatry Access Project, efficiently addresses this problem. States across the country are recognizing this need and creating similar programs. ■

The authors acknowledge the support of the Massachusetts Department of Mental Health to the Massachusetts Child Psychiatry Access Project (MCPAP); the contribution of the institutions that host the MCPAP hubs

(the University of Massachusetts Medical Center, Baystate Medical Center, McLean Hospital, Massachusetts General Hospital, Tufts Medical Center, NorthShore Children's Hospital, and Boston Children's Hospital); and the

assistance of Marcy Ravech, program director of MCPAP, and Andrew Scearce, data analyst for MCPAP, in the preparation of the data for this article.

## NOTES

- 1 Department of Health and Human Services. Report of the Surgeon General's Conference on Children's Mental Health: a national action agenda [Internet]. Washington (DC): HHS; 2000 [cited 2014 Oct 20]. Available from: <http://www.ncbi.nlm.nih.gov/books/NBK44233/>
- 2 Kelleher KJ, McInerney TK, Gardner WP, Childs GE, Wasserman RC. Increasing identification of psychosocial problems: 1979–1996. *Pediatrics*. 2000;105(6):1313–21.
- 3 Olfson M, Marcus SC, Weissman MM, Jensen PS. National trends in the use of psychotropic medications in children. *J Am Acad Child Adolesc Psychiatry*. 2002;41(5):514–21.
- 4 Thomas CR, Holzer CE 3rd. The continuing shortage of child and adolescent psychiatrists. *J Am Acad Child Adolesc Psychiatry*. 2006;45(9):1023–31.
- 5 Davis DW, Honaker SM, Jones VF, Williams PG, Stocker F, Martin E. Identification and management of behavioral/mental health problems in primary care pediatrics: perceived strengths, challenges, and new delivery models. *Clin Pediatr (Phila)*. 2012;51(10):978–82.
- 6 Leaf PJ, Alegria M, Cohen P, Goodman SH, Horwitz SM, Hoven CW, et al. Mental health service use in the schools: results from the four-community MECA study. *Methods for the Epidemiology of Child and Adolescent Mental Disorders Study*. *J Am Acad Child Adolesc Psychiatry*. 1996;35(7):889–97.
- 7 Frank A, Greenberg J, Lambert L. Speak out for access: the experiences of Massachusetts families in obtaining mental health care for their children [Internet]. Boston (MA): Health Care For All, Parent/Professional Advocacy League; 2002 Oct [cited 2014 Oct 20]. Available from: <http://ppal.net/wp-content/uploads/2011/01/Speak-out-for-Access.pdf>
- 8 Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med*. 1998;14(4):245–58.
- 9 Sarvet B, Gold J, Bostic JQ, Masek BJ, Prince JB, Jeffers-Terry M, et al. Improving access to mental health care for children: the Massachusetts Child Psychiatry Access Project. *Pediatrics*. 2010;126(6):1191–200.
- 10 Sarvet B, Gold J, Straus JH. Bridging the divide between child psychiatry and primary care: the use of telephone consultation within a population-based collaborative system. *Child Adolesc Psychiatr Clin N Am*. 2011;20(1):41–53.
- 11 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):410–21.
- 12 Owens PL, Hoagwood K, Horwitz SM, Leaf PJ, Poduska KM, Kellam SG, et al. Barriers to children's mental health services. *J Am Acad Child Adolesc Psychiatry*. 2002;41(6):731–8.
- 13 Massachusetts Child Psychiatry Access Project. MCPAP for Moms [home page on the Internet]. Boston (MA): MCPAP; c2014 [cited 2014 Oct 21]. Available from: <http://www.mcpapformoms.org>
- 14 Hobbs Knutson K, Wei MH, Straus JH, Sarvet B, Masek BJ, Stein BD. Medico-legal risk associated with pediatric mental health telephone consultation programs. *Adm Policy Ment Health*. 2014;41(2):215–9.
- 15 REACH Institute [home page on the Internet]. New York (NY): The Institute; [cited 2014 Oct 21]. Available from: <http://www.thereachinstitute.org>
- 16 Hilt R. Primary care principles for child mental health, version 5.0 [Internet]. Seattle (WA): Partnership Access Line Mental Health Consultation Outreach for Children; 2014 [cited 2014 Oct 21]. Available from: [http://www.palforkids.org/docs/Care\\_Guide/2014/Care\\_Guide\\_5.0\\_WA\\_Online\\_Version.pdf](http://www.palforkids.org/docs/Care_Guide/2014/Care_Guide_5.0_WA_Online_Version.pdf)