Pediatric Response to Court-Mandated Medicaid Behavioral Screening in Massachusetts

The Harvard community has made this article openly available. Please share how this access benefits you. Your story matters.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Published Version</td>
<td>doi:10.1097/DBP.0b013e318290566f</td>
</tr>
<tr>
<td>Citable link</td>
<td><a href="http://nrs.harvard.edu/urn-3:HUL.InstRepos:30207918">http://nrs.harvard.edu/urn-3:HUL.InstRepos:30207918</a></td>
</tr>
<tr>
<td>Terms of Use</td>
<td>This article was downloaded from Harvard University’s DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <a href="http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA">http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA</a></td>
</tr>
</tbody>
</table>

Pediatric Response to Court-Mandated Medicaid Behavioral Screening in Massachusetts

Jeanne Van Cleave, MD1,2, Dianali Rivera Morales, MS3, and James M. Perrin, MD1,2
1Center for Child & Adolescent Health Research and Policy, MassGeneral Hospital for Children, Boston, MA
2Department of Pediatrics, Harvard Medical School, Boston, MA
3Partners Asthma Center, Brigham and Women’s Hospital, Boston, MA

Abstract

Objective—In 2007 in Massachusetts, a settlement of a class-action lawsuit on behalf of Medicaid beneficiaries mandated that primary care practices perform developmental, behavioral and mental health screening using formal tools. We aimed to assess perspectives from providers and practice staff about implementing developmental and mental health screening in response to the judicial ruling.

Methods—In this qualitative study, we conducted semi-structured interviews with eighteen physicians and staff from eleven pediatric and medicine-pediatric primary care practices in Eastern Massachusetts between April 2009–November 2010. Using an interview guide we asked about barriers and facilitators to implementing developmental and mental health screening, how practices selected tools and what processes or changes made screening routine. Clinicians were asked how screening changed the quality and/or content of well-child care visits. Interviews were transcribed and coded. Using thematic analysis, we generated overarching themes.

Results—Participants were motivated to comply with the mandate, and most practices reported implementing routine screening for developmental and mental health problems over several months. While certain aspects of screening were endorsed, many perceived that screening added little to quality of care, primarily because tools lacked sensitivity and specialty resources were too scarce to address concerns adequately. Practices’ receptivity to change and physicians’ sense of duty to comply facilitated implementation. No practice developed processes specifically to track and follow up abnormal results.

Conclusions—Implementation of mandated developmental and mental health screening could be facilitated by providing assistance with practice change, improving the quality of screening tools, and assuring adequate referral resources.

Keywords

screening tools; developmental assessment; behavior disorders/problems; mental health; primary care

Address correspondence to: Jeanne Van Cleave, Center for Child & Adolescent Health Research and Policy, 15th Floor C100, 100 Cambridge St., Boston, MA 02114, jvancleave@partners.org; phone 617-726-6653, fax 617-726-1886.
INTRODUCTION

Screening for developmental, behavioral and mental health problems using questionnaire-based, validated tools is recommended by the American Academy of Pediatrics (AAP), Bright Futures, and others.\textsuperscript{1–3} Several clinical and policy efforts to implement such screening broadly in pediatric primary care have included quality improvement initiatives,\textsuperscript{4–6} educational sessions for physicians,\textsuperscript{5, 7, 8} and advocacy around reimbursing for developmental and mental health services.\textsuperscript{9} These efforts have led to some change in care delivery, but have not achieved broad-scale screening.\textsuperscript{10} In Massachusetts, a court-order went into effect on December 31, 2007, that required providers to perform developmental, behavioral or mental health screening for Medicaid-insured children and youth at all well-child visits.\textsuperscript{11} This mandate led to dramatic increases in the proportion of children and adolescents screened over time, such that in 2009, screening was performed at about one-half of eligible visits.\textsuperscript{12}

Rosie D. v. Romney (later Rosie D. v. Patrick) was a class action lawsuit filed in 2001 on behalf of Massachusetts children with severe emotional and mental health conditions, enrolled in Medicaid, alleging inadequate community-based services. The judgment issued in 2006 in favor of Rosie D. led to a remedial plan in July 2007 that instituted changes to the delivery of mental health services for children, including creation of “mobile crisis teams” of mental health professionals that could provide timely, community-based care in lieu of hospitalization for children enrolled in Medicaid.

The lawsuit cited delay in detection of mental health problems, and therefore, the remedial plan enacted a new requirement for developmental, behavioral and mental health screening for Medicaid-enrolled children and youth (age 0–21 years) at all well-child visits. Modifiers of Current Procedural Terminology (CPT) code 96110 were constructed to monitor compliance. Pediatricians could choose from a list of approved screening tools (see Box 1) for various ages, including the Parents’ Evaluation of Developmental Status (PEDS),\textsuperscript{13} the Modified Checklist for Autism in Toddlers (M-CHAT),\textsuperscript{14} and the Pediatric Symptom Checklist (PSC).\textsuperscript{15} Physicians received information about the mandate through letters, emails, in-person training programs, and website postings from state officials, the state chapter of the AAP, and others. Medicaid reimbursed approximately $10 per screening test performed. Some private insurance companies had started to reimburse for screening at the time of the mandate or shortly thereafter.

### Box 1

**Approved tools for developmental, behavioral, and mental health screening of children with Medicaid in Massachusetts**

- Ages and Stages Questionnaire: Social-Emotional (ASQ-SE)
- Brief Infant-Toddler Social & Emotional Assessment (BITSEA)
- Modified Checklist for Autism in Toddlers (M-CHAT)
- Parents’ Evaluation of Developmental Status (PEDS)
- Pediatric Symptom Checklist (PSC)
- Pediatric Symptom Checklist – Youth Report (Y-PSC)
- Strengths & Difficulties Questionnaires (SDQ)
- CRAFFT (Screen for substance abuse)
- Patient Health Questionnaire 9: Depression Screener (PHQ-9)
Previous studies examining barriers and facilitators of implementing developmental and mental health screening have focused on practices that were doing so voluntarily. For example, King and colleagues examined implementation of developmental screening in practices that had enrolled in a national learning collaborative program. The authors found that division of workflow, active monitoring of progress, whole-practice approaches, and reduced staff turnover facilitated implementation. However, how pediatricians perceive implementation of developmental and mental health screening under a directive and what the specific barriers and facilitators to implementation of screening in practices that may not be motivated by a perceived clinical need are not known. With upcoming health care reforms, practices will increasingly be exposed to exogenous incentives to meet certain quality goals. Perspectives from those enacting changes under this paradigm may differ from those who seek opportunities to change, and understanding these differences could inform the design of certain quality improvement programs and programs that aim to implement change using “top-down” directives.

The objective of this study was to explore qualitatively the perspectives of primary care pediatricians and office staff regarding the implementation of developmental and mental health screening under a mandate to do so. Our specific research questions were: what were the experiences of the clinicians and staff in response to the mandate? What were the barriers and facilitators to implementing screening? And for these clinicians, how did screening affect early detection of developmental and behavior problems?

METHODS

Design

We conducted a qualitative study using semi-structured, one-on-one interviews with 18 pediatricians, nurse practitioners, nurses and other office staff from 11 pediatric practices in Massachusetts following the legal decision on Rosie D. v. Patrick, which required screening for developmental, behavioral and mental health problems at all health supervision visits for Medicaid-enrolled children using selected screening instruments. This study was deemed exempt from review by our Institutional Review Board.

Selection of practices and subjects interviewed

We purposively sampled from one network of primary care practices affiliated with an urban academic medical center (AMC) in Eastern Massachusetts. We aimed to obtain experiences of these nine practices as perceived by providers and staff, and sampling from a single network allowed us to control for larger institutional factors that might influence screening. Also, we aimed to reduce participation bias by focusing on achieving a high rate of participation within one network, which was achieved with the support of project by the AMC administration. All practices participated. This approach ensured that those particularly motivated to participate by strong views would not be over-represented. To enrich our data and compare/contrast views from within the AMC’s practice network, we interviewed clinicians and staff from two additional practices belonging to an independent practice association of 18 pediatric practices in suburban Boston.

Participating practices included 1 urban, not inner-city, hospital-based primary care practice; 5 urban community health centers; and 5 suburban practices. Self-reported payer mix was ranged from 5% to >50% of patients with Medicaid. Practice size ranged from 3 to 12 physicians. Eight practices hosted residents for continuity clinic experiences. Two were medicine-pediatric practices. All practices used electronic medical record (EMR) systems and accepted Medicaid plans. In the AMC network, departmental leadership discussed the mandate and encouraged compliance at periodic meetings with practices’ medical directors.
The financial relationship between practices and the AMC varied such that some practices did not directly see revenue from screening procedures.

To recruit within the AMC network, with support from AMC administration, we contacted medical directors of 9 pediatric or medicine-pediatric practices, representing each primary care site within the network. Practices outside of the AMC were recruited via email to medical directors from the president of the practice association. Medical directors were asked which provider in their practice was most involved with implementing screening. For some practices, this was the medical director. If not, we received permission from the medical director to contact this provider. Each identified provider—all were physicians—agreed to participate and was interviewed. We asked medical directors to also identify who among their staff was most knowledgeable about logistical aspects of implementing developmental and mental health screening. Eight providers could identify such a person, and 7 were interviewed. One person was not interviewed because of scheduling difficulties. Three providers stated that no one else was involved in implementing screening. Of the 7 staff interviewed, 1 was a nurse practitioner who also saw primary care patients, 5 were nurses or practice managers, and 1 was a billing specialist.

Prior to the mandate, one practice had made plans to implement screening with the Child Health & Development Interactive System (CHADIS). Another practice had used a questionnaire developed by the practice about behavioral and mental health concerns. In another practice, clinicians had discussed implementing developmental screening, but had not taken further action. Two practices had been involved in validating the PSC several years ago but were not using it routinely. In all others, no plans had been made prior to the mandate to use structured tools routinely.

**Interview guide**

An interview guide (Table 1) was developed based on a conceptual model hypothesized from a literature review around factors associated with implementing physician and practice-level behavior change. The conceptual model considered system (e.g., legal settlement, referral resources), practice (e.g., leadership, workflow) and physician (e.g., views on screening generally) factors in implementation of screening. Ongoing perception of screening and organizational issues were also considered as factors in sustained screening. Questions therefore centered on the value of mandated screening, the ease or difficulty encountered during implementation, and how it affected quality of care. Prompts asked about specific barriers and facilitators, such as office organization, staff training and practice leadership. While we used the guide for all participants, some prompts (e.g., front desk workflow) were designed to be more applicable to non-clinical staff, and other prompts (e.g., changes to the content of well-child visits) were more applicable to clinicians.

**Procedures**

Interviews were conducted from April 2008–February 2009. By conducting interviews 1–2 years following the start of mandated screening, some time had elapsed to explore the implementation process and providers’ perception of screening’s effect on practice. Interviews were on-site at 8 practices and off-site or by phone at 3 practices. Interviews were conducted by one author (JV), a general pediatrician trained in health services research, including qualitative methods, and lasted 20–75 minutes. Providers and staff were offered honoraria of $40–70 for each interview.

**Analysis**

Interviews were transcribed, and 2 authors (JV and DRM, a masters-level research assistant) coded each interview. Coders developed a coding guide from line-by-line reviews of three
interviews and then refined the coding structure iteratively as new concepts arose. All coding discrepancies were adjudicated by one author (JV) and discussed with the other coder as needed. We used qualitative software (NVIVO version 9) to assign codes, detect patterns, and generate themes from the interviews.

Because participants reported a variety of experiences, opinions and practices, a constant comparative approach was taken when analyzing the coded data. Where general patterns were seen, some practices were considered outliers or exceptions with particular aspects of screening (e.g., one had decided not to screen at all, one had tried to implement screening and failed, and one had already decided to implement screening prior to the mandate), and we focused on differences between these practices and others to explain this variation.

RESULTS

Screening procedures following the mandate

Ten of 11 practices had attempted to implement screening, and one practice decided not to implement screening. Practices reported variable success. In one office, implementation had all but failed, and screening was sporadic. However, nine practices reported screening became systematized for at least one subset of patients (e.g., Medicaid patients or a specific age group) with most planning to extend screening to all patients eventually. Few practices routinely measured the proportion of children screened, but most offered a positive assessment of their efforts, based on personal experience (e.g., “now I rarely have a visit where the screener is missing”).

Major themes (Table 2)

Motivation to implement screening—A general sense that one should obey laws, a directive from health system leadership, and desire to avoid negative consequences were the primary drivers to implement screening. Eight physicians reported that since it was now a law, complying was the only option, particularly since, for AMC practices, it was reinforced in meetings with hospital leadership. No one knew the specific negative consequences of failing to screen but practices generally did not want to be noticeably out of compliance. Non-clinical staff generally reported that screening was simply another duty added to their practice (e.g., “I don’t think we’ve ever looked at the mandate as a project. We’ve looked at it as something that is expected of us to do as part of patient care.”)

Perceived effectiveness of screening—Pediatricians had varying perceptions of whether routine screening increased overall quality of care. Some stated that broad screening had the potential to detect important problems that would have been missed, particularly clinicians in the three practices who had discussed or decided to implement screening before the mandate, but few could recall specific patients for whom this was the case. Many noted that open-ended questions about parental concerns on the PEDS helped shape their visit. The MCHAT was felt to be the most useful tool, with clinicians endorsing it as an efficient way to screen for autism spectrum disorders and, with normal results, to reassure parents. However, most clinicians expressed some concern that screening as required by the mandate either made no change in or detracted from well-child care, due to reallocated resources, and seven stated that they would cease or significantly alter their screening procedures if the mandate were lifted. The primary reasons for this sense of ineffectiveness were perceived quality of the screening tools and lack of specialty services. A minor reason was that the mandate required screening at all well-child visits, which is more frequent and includes ages outside of AAP recommendations. This detracted from the “face validity” of the mandate. In contrast to clinicians, non-clinical staff generally did not express opinions about the effect of
screening on detecting problems, but instead focused on the practice’s ability to carry out the screening.

**Quality of the screening tools:** Clinicians endorsed the importance of detecting developmental and mental health problems, but questioned the added value of the screening tools (e.g., “Well, developmental screening is an important part of the pediatric visit. But what we’re debating about is the forms.”) Except for the MCHAT, the quality of the screening tools was generally viewed as no better than surveillance questions asked of families whom clinicians knew well. Some relayed experiences where screening tool scores were normal but problems were unearthed later in the visit. Many physicians also expressed frustration with trying to screen parents who primarily spoke languages not covered by the tools. Clinicians relayed that in certain situations, screening with tools was or could be helpful, namely, screening for autistic spectrum disorders, visits with new patients, and visits with adolescents who were reluctant to speak openly about mental health issues.

**Availability of specialty services:** Specialty services that had long waits for appointments or were difficult to arrange meant that problems could be detected but not adequately treated. Such a situation was frustrating for physicians and devalued efforts to screen. This was especially true for those patients who needed mental health referrals and referrals to developmental pediatricians.

**Frequent screenings for all ages:** Clinicians felt that screening at all well child visits, rather than selected visits, was unreasonable and redundant when well child visits are 3 months apart, such as for infants up to age 18 months. Clinicians noted that tools were not validated for newborns and young infants, and using them appeared impractical to parents.

**Implementation process**

**Choosing the screening tools:** The specific screening tools were chosen based on convenience, cost, perceived value, and applicability to patient populations. A combination of the PEDS, MCHAT and the PSC was commonly chosen because collectively the tools covered all required age ranges; the PEDS is short and in multiple languages; the MCHAT was perceived as clinically valuable; and the PSC is in the public domain and covers a wide age range. One practice sought training from a local expert; others attended a session arranged by the state chapter of the AAP or self-trained with online materials.

**Barriers and facilitators to implementation:** Ease of implementation appeared to be related to a practice’s ability to change or adopt initiatives overall, and the two practices with sporadic or no screening cited this as a key factor. Continued attention to adherence and iterative troubleshooting were helpful in achieving higher quality screening. Strong clinician leadership, a sense of teamwork, messages to all staff to convey the purpose of screening, and a focus on routinization facilitated implementation for the other nine practices.

**Extending screening to all patients:** Although the judicial ruling was specific to Medicaid-enrolled patients, eight practices extended screening to all children. This was done for three reasons: practices felt patients should receive the same care, regardless of insurance; in practices with more patients with Medicaid, compliance was easier to achieve when staff did not have to separate patients by insurance; and some other insurances reimbursed for or were suspected to soon require the same screening.

**Lack of strategies to track referrals and ensuring follow-up**—One practice had the ability to enter the screener score into an EMR module used for tracking vital signs, but
other practices had neither created a registry nor developed a way to systematically track those with positive screens for easier follow-up. Most practices included screening results and follow-up plan narratively in the EMR template or scanned the paper questionnaire into the EMR. Reviewing previous notes at visits was typically the only means of tracking abnormal scores.

DISCUSSION

We conducted a qualitative study to explore responses to a mandate for developmental, behavioral and mental health screening at well-child visits for children enrolled in Medicaid. While most practices implemented screening to comply with the mandate, few perceived it as highly valuable or necessary for high-quality well-child care. Except for autism screening with the MCHAT, many clinicians questioned the utility of formal screening over attentive surveillance, and the value when referral resources are scarce. Implementation was facilitated by a practice’s innate ability to change generally. Expanding screening to all children was facilitated by practices’ belief that children should receive the same care universally and office workflow situations where screening all children regardless of payer was easier.

Our study is unique in that we investigated the perceptions and motivations of practice change that was mandated and required universal participation. Few studies have examined practice change in response to legislative or judicial mandates. One qualitative study examined perceptions following a legislative mandate for methicillin-resistant Staphylococcus aureus (MRSA) screening in intensive care units in Illinois. As in our study, perceptions of whether screening increased quality of care varied. Challenges were similar to those in our study, particularly regarding resources needed to comply, general resistance to change, and difficulties with addressing positive results once found (e.g., finding isolation rooms for MRSA-positive patients).

Other studies have examined a mixture of required and incentivized practice change. Physicians are now required to participate in practice quality improvement to maintain professional certification (termed “MOC credit”) but are free to choose the area of improvement. For participants in the Assuring Better Child Health and Development learning collaborative, MOC credit was a driver for improvement for those not otherwise motivated to initiate the use of developmental assessment tools.

There was a disconnect in our study between the ability of practices to implement screening and screening’s perceived effectiveness. Many physicians felt that screening did not lead to earlier detection of developmental and mental health problems for most patients, even though, as some participants acknowledged, such screening is recommended by the AAP. For participants in an AAP-sponsored national learning collaborative studied by King and colleagues, perceived value of developmental screening increased over time, so perhaps this perception is not static.

One reason for perceived lack of effectiveness was the sense that conscientious clinicians were already adept at detecting problems among patients and families familiar to them, and the screening tools added little. Although surveillance lacks sensitivity, our participants felt delays were not missed when the patient and family are well-known to them. Screening tools are known to be imperfect but are recommended because they enhance detection. Developing better tools and reporting in aggregate to physicians instances where screening was key to detecting problems may lead to broader endorsement of screening practices. The MCHAT was regarded as particularly valuable and trustworthy, reflecting the importance of
diagnosing autism early and the need to reassure anxious parents of children with normal scores.

Our results reinforce the connection between capacity for specialty care and perceived value of screening. Increasing the availability of referral resources, streamlining the referral process, and defragmenting the system of developmental and mental health specialty care would likely facilitate implementing screening. Previous work in other types of screening has shown scarcity of referral resources to be a barrier to screening.\textsuperscript{24,25} When resources are limited, developmental and mental health screening may be unethical.\textsuperscript{26} For this mandate, the settlement created a program to improve community-based services for mental health care for children with serious emotional disturbances enrolled in Medicaid, but this program was implemented one year after screening was mandated and was not available to patients with private insurance plans. No additional services were created for children with developmental problems alone.

Implementation of screening was facilitated by a practice’s ability to change generally, and several factors contributed. Consistent with findings from meta-analysis by Greenhalgh and colleagues,\textsuperscript{27} change was easier when clinician leadership supported the change, workflow issues were addressed and accommodated, non-clinician staff understood the reason for the change, and practices had a history of successful quality improvement efforts. Participants reported troubleshooting organizational barriers case-by-case. Perhaps greater automation of screening, such as having patients complete the screening tools online prior to the visit, decision support for scoring and referrals, and incorporation of results into the EMR would ease implementation. Pairing mandated screening with organized quality improvement strategies, such as plan-do-study-act cycles, may also promote implementation and sustainability.

Few practices had considered the issue of ensuring follow-up of abnormal results, and participants generally did not express the need to create mechanisms to do so. King and colleagues reported that practices found this task time-consuming and difficult to sustain.\textsuperscript{4} Given poor adherence to mental health referrals\textsuperscript{28} and fragmented mental health and developmental services, developing a system such as a registry based on screening results and proactively contacting patients and agencies may be one way to improve acquisition of services. The legal settlement calls for tracking the care of patients with abnormal screening results,\textsuperscript{11} so further efforts may be required of pediatricians as the state’s program evolves.

This study has several limitations. First, we were unable to confirm practices’ screening or referral activities with billing or medical record data, and previous research has documented a lack of correlation between self-assessed and actual practice.\textsuperscript{29,30} Second, recollection of implementing screening is subject to recall bias. Third, because of the financial relationship between practices and the AMC, the practices did not directly receive reimbursement for screening. Therefore, we were unable to assess reimbursement as a motivating factor, and findings may not apply to practices with different incentive arrangements. Rural practices and practices not affiliated with a practice network were not included in this study; such practices may have implemented screening differently. The first and senior authors are active members of the AAP, which endorses periodic developmental screening using formal tools, and may be biased toward this practice. Lastly, based on pilot tests of our interview guide, we did not ask questions specific to patients’ age group, so we are unable to compare perceptions of screening one group versus another.
CONCLUSION

Mandates may be one way to effect practice change, as demonstrated here for developmental and mental health screening in pediatric primary care, but caution should be exercised. Many factors supported implementation of screening—encouragement from AMC leadership, the desire to comply with mandates or regulations, and attention to practice-wide training and office workflow issues. However, endorsement of screening by the majority of providers was lackluster, even after implementation, which, our data suggest, could be ameliorated by expanding specialty services and reports to physicians on effectiveness of their screening efforts. The AAP’s toolkit for addressing mental health issues in primary care acknowledges screening as but one tenet of a multi-faceted approach to managing chronic conditions that includes registries, clinical decision support, and adequate supply of and coordination with specialty services. Programs in the future that rely on top-down incentive structures to achieve comprehensive care for children with developmental and mental health conditions may benefit from also addressing the capacity of primary care practices and the larger healthcare system to manage such conditions, in addition to requiring screening.

Acknowledgments

Sources of support: Academic Pediatric Association Young Investigator Award/Commonwealth Fund

The authors thank the Commonwealth Fund and the Academic Pediatric Association for funding this study. Dr. Van Cleave also received support from the National Institute of Mental Health (5R25MH080916, Principle Investigator: Dr. Enola Proctor; and 5K23MH083885).

Abbreviations

- AAP: American Academy of Pediatrics
- AMC: Academic Medical Center
- CHADIS: Child Health & Development Interactive System
- EMR: Electronic medical record
- MCHAT: Modified Checklist for Autism in Toddlers
- MRSA: Methicillin-resistant Staphylococcus aureus
- PEDS: Parents’ Evaluation of Developmental Status
- PSC: Pediatric Symptom Checklist

References


J Dev Behav Pediatr. Author manuscript; available in PMC 2014 June 01.


### Table 1

**Interview guide**

<table>
<thead>
<tr>
<th>Domain addressed</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background</strong></td>
<td>How did you find out about the new mandate? How did you learn what specifically was required?</td>
</tr>
<tr>
<td></td>
<td>What was your method of assessing development in young children prior to this mandate? What about psychosocial problems in older patients?</td>
</tr>
<tr>
<td><strong>Impressions of the mandate</strong></td>
<td>What did you think about the mandate when you first heard of it? What do you think now?</td>
</tr>
<tr>
<td></td>
<td>How has it affected your practice generally, and especially your well child visits?</td>
</tr>
<tr>
<td><strong>Implementation</strong></td>
<td>How, would you say, has implementing the use of these tools gone?</td>
</tr>
<tr>
<td></td>
<td>What were the biggest problems in implementing formal screening? How did you solve them?</td>
</tr>
<tr>
<td></td>
<td>What made it easier in your practice?</td>
</tr>
</tbody>
</table>
### Table 2

Domains, themes and example quotes from clinicians and office staff following a legal ruling to screen for developmental, behavioral and mental health conditions at well-child visits for children and youth with Medicaid in Massachusetts.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Theme</th>
<th>Quote(s) from interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motivation to implement screening</strong></td>
<td>Desire to comply with the mandate because it was the law and endorsed by health system leadership</td>
<td>“But knowing it was mandated to get done was definitely what motivated us to get it done, rather than talking about what we should be doing.” “This was a mandate that we needed to implement, that there was no point in discussing whether we agreed or disagreed with the mandate.”</td>
</tr>
<tr>
<td><strong>Perceived effectiveness of screening with formal tools</strong></td>
<td>Screening was most helpful for detecting autistic spectrum disorders, eliciting parents’ concerns, visits with unfamiliar patients, and reticent adolescents.</td>
<td>“We actually had been looking at that just because of the increase in autism and the increase of concern about it. So that was something that we were thinking about anyway. So that was actually one of the first things that we implemented was the MCHAT at 15 and 18 months.” “On the PEDS, one of the questions that’s very open-ended, you know, “Do you have any concerns about your child?” And, people sometimes, you know, wrote a list. Well, I could look at that list and say, “Okay, I’m answering their concerns.”” “I do think if it’s a new patient or a new concern, it’s helpful.” “And I would say that it might pick up more—not developmental issues, but some behavioral issues, anti-social behaviors and other stuff. It might pick up that in the older children that you might not pick up otherwise.”</td>
</tr>
<tr>
<td><strong>Screening is less helpful for patients whom clinician knows well, for infants, and at all visits (versus selected visits).</strong></td>
<td>“My impression is that there aren’t too many patients that we’re picking up that we wouldn’t have just from a general conversation.” “We also just made an executive decision that it was totally absurd to give this [the PEDS] to the mother of a two-month-old or a two-week-old.” “This seemed kind of unreasonable, the fact that we would screen every child at every visit, rather than targeting when screening would probably be most useful, either at 15 months or 18 months.”</td>
<td></td>
</tr>
<tr>
<td><strong>Screening tools lack sensitivity, are vague, and take time to explain to parents.</strong></td>
<td>“A lot of times, we find that the patients just have misinterpreted questions… And so the test which is supposed to take us no time at all is now taking an extra several minutes to—end up explaining his answers.”</td>
<td></td>
</tr>
<tr>
<td><strong>Developmental and mental health services were difficult to arrange and access, which detracts from the value of identifying problems.</strong></td>
<td>“It would be much simpler if you identify a problem and say, “Well, let’s check this out. I’m going to send you to here.” But you can’t send them to point A because point A may be booked up for six months. Point A may not accept their insurance. Or, there may be no place that accepts their insurance. And so I think perhaps—I would suppose there would be less frustration if you were— it’s very frustrating to raise a problem to which you can’t offer a solution. Or a solution that eats up the entire afternoon trying to do it.” “Once you get beyond Early Intervention, the whole access to mental health stuff falls into a dark abyss.”</td>
<td></td>
</tr>
<tr>
<td><strong>Barriers and facilitators to implementation</strong></td>
<td>Decisions about how to screen were driven largely by practical issues, especially since many steps are involved with screening.</td>
<td>“So the way we did it was, the fewer number of tools, less confusion for the front desk, who was going to have to pull the appropriate screening tool… we wanted to keep it simple, so as not to add work and inefficiencies along the chain.”</td>
</tr>
<tr>
<td><strong>Practices that generally adapt to change more easily found screening easier to implement.</strong></td>
<td>“I mean, looking at H1N1, and all the different vaccines that are coming out and rules about this and that—I think we need to react quickly, and I would think most practices do. But I think ours does.” “I think there are a bunch of things in the practice that we could be doing with a concerted effort if we came together and agreed on the necessity for doing X, Y or Z, or at least the desirability. And that’s a systemic issue in the practice. So, not doing this [screening], this is not an isolated issue in the practice. There are other things that are similar to this in the quality area that we could be doing, that we don’t do.”</td>
<td></td>
</tr>
<tr>
<td><strong>Real-time troubleshooting helped uncover and fix screening process problems</strong></td>
<td>“The providers knew to look for them, the medical assistants knew to look for them, and the secretaries knew to give them out at the beginning. And then the providers need to match that up with the encounter [billing] forms. So the encounter forms tend to be done the last. So you sort of backtrack from there, and you try to figure out where the problem is [when a screening tool is missing].”</td>
<td></td>
</tr>
<tr>
<td><strong>Making screening routine for staff and clinicians was gradual, but facilitated implementation.</strong></td>
<td>It’s just people were forgetting. They had to sort of ingrain it into their workflow. You know, how to set it up to make it work most easily for them.</td>
<td></td>
</tr>
<tr>
<td>Domain</td>
<td>Theme</td>
<td>Quote(s) from interviews</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Extending screening to patients not enrolled in Medicaid</td>
<td>Practice-level decision to deliver same care regardless of insurance</td>
<td>“We try not to do anything different for one group of people based on their insurance than another group of people.”</td>
</tr>
<tr>
<td></td>
<td>It is easier to screen all patients rather than a subset, and practices foresaw this as being required for all insurances eventually.</td>
<td>“It was simply too complicated to start looking at what somebody’s insurance was before deciding were we going to give them the screen.”、“It’s going to come down the pipe with other insurances, more than likely. So why not just screen everybody.”</td>
</tr>
</tbody>
</table>