ORIGINAL RESERACH

Mental Health, Substance Abuse, and Health Behavior Services in Patient-Centered Medical Homes

Rodger Kessler, PhD, Benjamin F. Miller, PsyD, Mark Kelly, BA, Debbie Graham, MPH, Amanda Kennedy, PharmD, Benjamin Littenberg, MD, Charles D. MacLean, MD, Constance van Eeghen, DrPH, Sarah Hudson Scholle, MPH, DrPH, Manasi Tirodkar, PhD, Suzanne Morton, MBA, MPH, and Wilson D. Pace, MD

Purpose: **The purpose of this study was to understand mental health, substance use, and health behavior activities within primary care practices recognized by the National Committee for Quality Assurance as patient-centered medical homes (PCMHs).**

Methods: **We identified 447 practices with all levels of National Committee for Quality Assurance PCMH recognition as of March 1, 2010. We selected the largest practice from multisite groups, and 238 practices were contacted. We received 123 responses, for a 52% response rate. A 40-item web-based survey was collected.**

Results: **Of PCMH practices, 42% have a behavioral health clinician on site; social workers were the most frequent category of provider delivering behavioral services. There are also were care managers—distinct from behavioral health clinician—at 62% of practices. Surveyed practices were less likely to have procedures for referrals, communication, and patient scheduling for responding to mental health and substance use services than for other medical subspecialties (50% compared with 73% for cardiology and 69% for endocrinology). More than half of practices (62%) reported using electronic, standardized depression screening and monitoring; practices were less likely to screen for substance use than mental health. Among the practices, 54% used evidence-based health behavior protocols for mental health and substance use conditions. Practices reported that lack of reimbursement, time, and sufficient knowledge were obstacles. Practices serving a higher proportion of low-income patients performed more mental health organizational and clinical activities.**

Conclusions: **In PCMHs, practice organization and response to behavioral issues seem to be less well developed than other types of medical care. These results support further efforts to develop whole-person care in the PCMH, with greater emphasis on access to and coordination of mental health, substance abuse, and health behavior services. Focusing primary care practices on this aspect of whole-person care will benefit from program sponsors' support and rewarding better integration with behavioral health. (J Am Board Fam Med 2014;27:637–644.)**

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Even though primary care is the setting for a large portion of care for behavioral health problems (defined here as care for mental health, substance use disorders, and health behaviors), these problems are often inadequately addressed in primary care.[1–3] Little has been written about current behavioral health clinician capacity in primary care. It has been suggested that less than 10% of psychologists practicing work in primary care settings.[4]

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From the Department of Family Medicine (RK, MK), Department of General Internal Medicine (AK, BL, CDM, CVE), University of Vermont College of Medicine, Burlington; the University of Colorado, Denver, School of Medicine, Denver (BFM, WP); the National Committee for Quality Assurance, Washington, DC (SHS, MT, SM); and the American Academy of Family Physicians, Leawood, KS (DG, WDP).

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Corresponding author: Rodger Kessler, PhD, CCTS, University of Vermont College of Medicine, 89 Beaumont Ct, Given Courtyard 4th Fl., Burlington, VT 05405 (E-mail: Rodger.Kessler@uvm.edu).

Kathol[5] estimates that less than 10% of the behavioral health workforce practices in primary care. Data concerning the percentage of primary care practices with integrated behavioral health are unavailable, except about services in federally qualified health centers (FQHCs). Lardiere et al[6] report 70% of FQHCs provide behavioral services, 20% provide substance abuse services, and 20% provide both.

The growing adoption of the patient-centered medical home (PCMH) model of care offers the potential for improving how primary care practices address the behavioral health needs of their patients. The PCMH model calls for practices to reorganize to improve whole-patient care.[7] Yet there are still concerns that barriers and changes at multiple levels that need to occur for the potential to be recognized.[8]

A recent complimentary set of joint principles for the PCMH specify that behavioral health should be fully integrated into the PCMH.[9] The principles align closely with the categories agreed on in the initial PCMH joint principles published in 2007.[9] This position has been endorsed by the following organizations: the American Academy of Family Physicians (AAFP), the AAFP Foundation, the American Board of Family Medicine, the Society of Teachers of Family Medicine, the North American Primary Care Research Group, the Association of Departments of Family Medicine, and the Association of Family Medicine Residency Directors. There is a great deal of planning and implementation of mental health substance abuse and health behavior services into PCMHs,[10,11] seemingly in response to a number of factors, including increased recognition of need[7] and provider frustration with the established lack of access to behavioral health services for primary care patients.

There is little information to help gauge the effect of these efforts on how PCMH practices address the behavioral health needs of their patients. The purpose of this study was to explore how early adopters of the PCMH model address behavioral health care.

The Collaborative Care Research Network, a subnetwork of the AAFP National Research Network, worked with the National Committee for Quality Assurance (NCQA) to survey NCQA-recognized PCMH practices to assess current clinical and organizational response to patients' behavioral health issues, identify barriers to implementation of the services, and compare these to care for general medical needs.

Methods

Participants

All practices that received recognition under NCQA's 2008 Physician Practice Connections–PCMH program as of March 1, 2010, were eligible (n = 447). When an organization contained multiple practice sites, only the site that had the most providers received the survey. Because we wanted responses to generate a sense of how practices organized care, we were concerned that including multiple sites within the same larger organization would introduce bias. We therefore selected the largest practice in each organization as an exemplar of the entire practice organization. As a result, 238 practice sites were surveyed. The survey was addressed to a physician or administrative contact at the practice.

To be considered for recognition by the NCQA, practices voluntarily complete a web-based survey and attach documentation to support their responses. Trained surveyors review the documentation, and 5% of applications receive an on-site audit. All applications undergo 3 rounds of internal review. In the 2008 version of the standards, practices could achieve 3 levels of recognition based on the total score as well as their performance on 10 "must pass" elements. The NCQA recognizes practices as level 1, 2, or 3; increasing level corresponds to increasing levels of implementation of PCMH processes. While the 2008 version of NCQA's standards for the PCMH did not explicitly address mental health and substance use and health behavior elements, subsequent versions of the standards presented in 2011 and 2014 place more emphasis on mental health and substance abuse and raise expectations for how practices should integrate behavioral health interventions into routine care.

Measures

The research team, with members from the Collaborative Care Research Network and NCQA, constructed a survey with 48 items in 4 categories: clinical activity, organizational responses, patient engagement, and identified barriers. Patient engagement data are reported in another article.[12] The research team, headed by the University of

Vermont, initially developed the survey tool, and then it was reviewed by members of the senior research team at the AAFP's National Research Network and the research team at NCQA. The survey was field tested with clinical leaders in 8 primary care practices and then revised.

Mental Health Organization and Clinical Index

Based on Peek's[13] observation that care is multidimensional and is both a clinical and organizational activity, the research team constructed 2 indices from items contained in the survey (Online Appendix 1). We categorized items as related to the organization of care delivery or to clinical care. This resulted in a 12-question mental health organizational index (Online Appendix 2) with a maximum score of 24 points and a second, 9-item mental health clinical index (Online Appendix 3) with a maximum score of 18 points. Question responses of "yes, works well" received 2 points, a response of "yes, needs improvement" received 1 point, and a "no" response received 0 points. For questions with only 2 options, "yes" responses received 2 points and "no," 0 points.

Other Dimensions Surveyed and Reported

The survey asked a set of questions (questions 2 to 6 in Online Appendix 1) that contrasted operational procedures concerning referral, scheduling, and communication used when focusing on behavioral health issues with the same procedures for endocrinology and cardiology, which were selected because of their high frequency of referral and communication with primary care practices. Respondents also were asked to rate the degree to which 4 barriers were problems concerning implementing behavioral health in primary care using a 4-point scale (question 13 in Online Appendix 1; full measure).

Survey Procedures

Before conducting the survey, NCQA E-mailed each practice leader to announce the forthcoming survey. The identified respondents were contacted by E-mail with an invitation to complete the survey online. The E-mail contained a link directing them to the survey and instructions for completing the survey. Two weeks following the E-mail invitation, a paper version of the survey was sent to nonrespondents. The paper version was accompanied by a cover letter explaining the purpose of the survey and a postage-paid return envelope. The cover letter also included instructions for how to complete the online version of the survey if participants chose to do so. The research team subsequently attempted to contact nonrespondent practices' contact person identified from the NCQA database by phone to request their participation or to obtain survey results over the phone, which generated 5 additional responses.

Analytical Plan

SAS software version 9.2 (SAS, Inc., Cary, NC) was used for data analysis. Participants who did not complete all the questions within an index were eliminated from the index analysis because they could not achieve full scoring. We present descriptive statistics for practice demographic characteristics and individual questions. χ^2 Tests were used to determine whether any significant differences existed between respondents and nonrespondents on any practice demographic characteristics. To compare referrals and communication for mental health specialties versus cardiology and endocrinology specialties, we used a repeated measures logistic regression analysis. We used analysis of variance to test for differences in the mental health organization and clinical indices by practice demographic characteristics. Because of the small number of level 2 NCQA-certified practices, levels 1 and 2 were collapsed into a single variable and compared with level 3 practices. Significance level of $P = 0.05$ was used for all analyses.

Results

We received 123 responses, for a 52% response rate. A total of 115 surveys were collected electronically and the rest by phone and mail. The practices were located in 24 states, and the highest concentration came from states with active PCMH demonstration programs (New York, Pennsylvania, and New Jersey).

Responders did not differ significantly from nonrespondents in recognition level, practice size, specialty, or location (Table 1). About half of the responding practices were small (<5 physicians, 55%), and 12 (10%) were FQHCs or community health centers. Over half had the highest level of NCQA 2008 PCMH recognition (level 3, 56%); 7% had level 2 recognition and 37% had level 1. Of practices, 42% reported the presence of a behav-

Table 1. Practice Demographic Characteristics of the Sample (n = 123)

Characteristics	Practices (%)
<5 Physicians	55
NCQA recognition level	
1 or 2	44
3	56
Ownership	
Physician owned	50
Other	40
>20% of patients with Medicaid or other public insurance or no insurance	33
Practices with more than one location	37
Specialty	
Internal medicine only	22
Family practice only	40
Pediatrics only	6
Combination	25
Other specialty	6

NCQA, National Committee for Quality Assurance.

ioral health clinician—a psychiatrist, psychologist, counselor, social worker, or certified substance use counselor—on site as part of the practice staff; 63% had a care manager. Table 2 summarizes the frequencies of behavioral providers in the practices and engagement in clinical and organizational practice activities.

Less than half of surveyed practices had behavioral health practitioners. Practices were more likely to have care managers than psychiatrists, psychologists, and social workers combined; substance abuse clinicians were less than half as frequent as psychologists and social workers. Scheduling processes for the behavioral health clinicians are the same as other practice providers only a third of the time (36%), and same-day appointments are available less than 30% of the time (28%). The availability of evidence-based protocols for mental health, substance abuse, and health behavior presentations was identified in 54% of practices. Protocols for smoking cessation were present in 71% of practices, obesity in 59%, insomnia in 38%, and headaches in 34%. About 62% of practices reported recording results of depression screening and monitoring in an electronic data system.

Table 3 compares practice processes between behavioral health and endocrinology and cardiology. Questions 6 through 12 in Online Appendix 1 identify the questions used as comparison. Fewer practices report having standardized referral processes for mental health and substance use issues compared with cardiology and endocrinology. In addition, two thirds of practices report using a formal depression screening tool, and 62% report recording those data in an electronic data system. Of those practices that used behavioral health screening, practices were more likely to screen for depression (80%) than for alcohol (71%) or substance use (65%). Insurance status was related to both the mental health organizational and clinical indices (Tables 4 and 5). Practices serving >20% of patients with Medicaid, other public insurance, or no insurance were more likely to perform these activities.

Respondents also were presented a list of potential barriers. The greatest barriers were lack of time (92%), reimbursement issues (91%), and lack of expertise (74%) (Table 6).

Discussion

Among the first group of practices recognized under NCQA's PCMH program, >40% had behavioral health clinicians on site, and half reported using evidence-based guidelines for mental health/substance abuse conditions. Practices reported more frequent processes for coordination and referral and that they work better for medical specialists than for behavioral health. Thus this survey shows that the PCMH's promise for better integration of behavioral health with general medical care is partially fulfilled. There are limited data concerning the prevalence of behavioral health providers in primary care organizations and clinics. The only available estimates focus on FQHCs, where there is a mandate to provide behavioral health care. As noted earlier, Lardiere et al[6] report that 70% of FQHCs provide behavioral services, 20% provide substance abuse services, and 20% provide both. Therefore, this survey seems to be

Table 2. Frequency of Behavioral Health Providers in Patient-Centered Medical Home Practices

Behavioral Health Provider	Practices (%)
Any behavioral health clinician on site	42
Case manager	62
Psychiatrist	16
Psychologist	22
Social Worker	25
Substance abuse clinician	9

Table 3. Comparison of Referral Processes for Behavioral Health versus Other Medical Subspecialty among Patient-Centered Medical Home practices

Process	Practices Reporting That They Have a Standardized Process (%)				
	MH/SA	Cardiology	*P* Value (MH/SA vs Cardiology)	Endocrinology	*P* Value (MH/SA vs Endocrinology)
Processing referrals	84	91	.006	90	.01
Tracking referrals	75	85	.001	83	.003
Providing patient history and other information to specialists	83	96	.0006	96	.0006
Receiving consultation reports from specialists	77	96	<.0001	96	.0001
Helping patients schedule appointments with specialists outside the practice	78	87	.04	84	.24

MH/SA, mental health/substance abuse.

the first published report of the characteristics of practices focused on behavioral health across multiple primary care settings. Our results also raise questions about who should be providing the variety of behavioral services needed in primary care. Among these PCMH practices, care managers are much more likely to provide support for behavioral health care than behavioral health specialty clinicians. There is a debate in the field about the competencies needed to provide behavioral services within primary care.[14] Often, primary care patients need behavioral interventions to optimize clinical effect and reduce costs,[15] but these types of interventions are frequently outside the training and experience of most behavioral health clinicians. More research on the best way to meet needs in these settings is needed.

Of particular concern is the finding that practices do not apply the same structure for organizing care for behavioral health conditions as they do for

Table 4. Results for Mental Health Organization Index

Organizational Items	Practices Reporting Each Organizational Item (%)		
	Yes, Works Well	Yes, Needs Improvement	No
Use of formal screening tool for:			
Depression and/or other mental health problems	46	34	20
Alcohol problems	39	32	29
Substance use problems	33	32	36
ADHD in children or adults	34	24	42
Standardized process to make referrals to MH/substance use providers	50	33	16
Standardized process to track referrals to MH/substance use providers	33	41	25
Regularly provide patient history and other information to MH/substance use providers	59	25	16
Regularly receive consultation reports from MH/substance use providers	34	43	23
Help patients schedule outside appointments with MH/substance use providers	41	37	22
	Yes (2 points)		No (0 points)
Has at least one mental health clinician at the practice	42		58
Scheduling of appointments with mental health clinicians at the practice in same manner as medical appointments	36		64
Availability of same-day appointments with a mental health clinician	28		72
Mental Health Organizational Index, mean (SD)	12.3 (5.6)		

ADHD, attention deficit hyperactivity disorder; MH, mental health; SD, standard deviation.

Table 5. Reporting on Mental Health Organizational Index and Mental Health Clinical Index By Practice Characteristics

	Mental Health Organizational Index		Mental Health Clinical Index	
	Mean (SD)	*P* Value (Difference across Categories	Mean (SD)	*P* Value (Difference across Categories)
Ownership/affiliation		.07		.75
Physician owned (n = 61,61)	11.4 (5.5)		7.8 (5.0)	
Other (n = 49,49)	13.4 (5.9)		7.5 (5.4)	
Practice size		.30		.95
<5 Physicians (n = 66,65)	11.9 (5.3)		7.6 (5.3)	
≥5 Physicians (n = 53,51)	12.9 (5.7)		7.5 (5.1)	
NCQA patient-centered medical home recognition		.86		.11
Level 1 or 2 (n = 53,51)	12.2 (5.6)		6.7 (5.8)	
Level 3 (n = 66,65)	12.4 (5.4)		8.2 (4.6)	
Insurance mix		<.0001		.003
≤20% of patients with Medicaid or other public insurance or no insurance (n = 63,63)	10.4 (5.4)		6.6 (4.7)	
>20% of patients with Medicaid or other public insurance or no insurance (n = 41,41)	14.9 (5.4)		9.7 (5.4)	

NCQA, National Committee for Quality Assurance.

general medical conditions. Core practice flow issues such as scheduling, communication, and use of electronic health records in behavioral health are not treated in the same way as other medical subspecialties. This suggests that there is still a need for a fundamental change if care for mental health, substance abuse, and health behavior is to be included in the ongoing evolution of primary care. Furthermore, efforts to identify patients with mental health/substance abuse/behavioral health problems are limited. It is also concerning that within behavioral health, the focus on substance abuse and health behavior issues lag behind mental health. To achieve "triple aim" outcomes, primary care needs to change the current state of affairs, where mental health and substance abuse and health behavior providers and services are largely independent and separated. The evidence shows that the need for substance abuse and health behavior services focusing on lifestyle change and active participation in care is just as great a problem as mental health issues and has as much an effect on health status and function.[16]

Table 6. Obstacles That Limit Mental Health, Substance Abuse, and Health Behavior Implementation Somewhat or a Lot

Obstacles	Practices (%)
Lack of time	92
Lack of reimbursement	91
Lack of expertise	74
Lack of space	51

Limitations

These findings are from the first iteration of NCQA PCMH standards; based in part on these results, NCQA's more recent standards have increased expectations for practices to focus organization on behavioral health conditions. We cannot ensure the representativeness of the sample even among NCQA PCMHs; within multisite practices we sampled the largest practice, leaving the impact of the nonselected practices on overall response unknown. PCMHs are not generalizable to all primary care. The survey, though it had face validity across 3 different research groups involved in primary care and integration, has not been sufficiently validated. A lack of survey results from non-PCMH practice settings and the maturing of earlier certified practices, as well as changing expectations in more recent levels of NCQA standards, limit the ability to put these results into larger context. In addition, this is the first survey to generate a snapshot of behavioral health in a sample of primary are practices.

Our findings suggest that there is substantial opportunity to improve how PCMHs and other primary care practices address the behavioral health needs of their patients. Respondents indicated that barriers of time, resources, and lack of expertise affect their ability to adequately address behavioral health needs. Research and demonstration efforts are needed to understand which models of behavioral health integration are most effective. Sponsors such as the National Institutes of Health and Agency for Healthcare Research and Quality, other research supporters, as well as Medicaid, Medicare, other insurers, and policy makers need to make work in these areas of primary care reform and provide support (including successful models) and tools to make it happen. Changes in health care financing are especially needed. Practices reported that lack of reimbursement was the greatest barrier to mental health and substance use care. Payment models, including accountable care organizations that specifically call for better integration with behavioral health and that measure this particular aspect of care delivery are needed to provide the incentive for practices to make investments in better integration.

Nonetheless, it is increasingly clear that lack of access and inattention to mental health, substance abuse, and health behavior needs of primary care patients is costly in medical outcomes as well as dollars,[17] and, as of yet, we are not prepared to deal with these issues at the practice or larger systems level. Increasing expectations for PCMH implementation is an important step in highlighting the need for better systems to support behavioral health care. The increased expectations for addressing behavioral health needs in NCQA's PCMH program, including greater focus on integration of care and care management for people with behavioral health needs, are a move in the right direction.

Our results suggest a series of next steps, some of which are in development. We need to survey a larger, more representative set of primary care practices including both PCMH and non-PCMH practices. Before we do so we need a validated measure of integration. The lead author (RK) and colleagues are currently validating a measure of integration drawn both from this initial survey and from Peek's[18] paradigm case of collaborative care. Initial analyses from that measure suggest considerable interpractice variation, even in practices that identify themselves as integrated.

Conclusion

Currently, there are multiple experiments in different clinical and financial models of behavioral health in primary care. Despite the plethora of novel models of behavioral health interventions, there are few data to indicate whether they are effective or what elements of the models affect triple aim outcomes. There are emerging opportunities for that investigation. While many have determined that integrated care is a good idea, we need to go beyond the good idea and respond to various issues: What does integration look like in practices? Which patients use it? What elements and models are most effective? Does the cost of the transformation justify the investment? This survey is really the first step toward responding to these questions.

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Appendix 1
The Complete Survey

1. Does your practice regularly use a formal screening tool to identify the following conditions?

	Yes, works well	Yes, needs improvement	No
a. Depression and/or other mental health problems	☐	☐	☐
b. Alcohol problems	☐	☐	☐
c. Substance use problems	☐	☐	☐
d. ADHD in children or adults	☐	☐	☐

2. Does your practice regularly use a standardized process to **make** referrals to the following specialties:

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

3. Does your practice regularly use a standardized process to **track** referrals to the following specialties:

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

4. Does your practice regularly provide patient history and other information to the following kinds of specialists when they are involved in your patients' care?

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

5. Does your practice regularly receive consultation reports from the following specialties?

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

6. Does your practice help patients schedule appointments with specialists outside the practice for the following specialties?

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

7. Which of the following clinicians or staff work in your practice? Yes to *any* of the below choices constituted 2 points (2 points maximum).

	Yes	No
a. Psychiatrists	☐	☐
b. Psychologist (doctoral level)	☐	☐
c. Therapist/counselor (master's level)	☐	☐
d. Social worker	☐	☐
e. Certified substance use counselor	☐	☐
f. Care manager (any discipline)	☐	☐

8. If you have mental health clinicians working in your practice:

	Yes	No	N/A
a. Is scheduling handled in the same manner as patient medical appointments?	☐	☐	☐
b. Are same-day appointments regularly available?	☐	☐	☐

	Yes, it works well	Yes, but it needs improvement	No
9. Has your practice adopted evidence-based treatment protocols for mental health or substance use conditions (eg, stepped care for depression)?	☐	☐	☐
10. For patients with depression, does your practice:			
a. Use a standardized tool to monitor depression symptoms, severity or response to treatment?	☐	☐	☐
b. Does your practice regularly record results from depression screening and monitoring tool(s) in an electronic data system?	☐	☐	☐
11. Does your practice regularly use structured health behavior change protocols for treating the following symptoms:	Yes, it works well	Yes, but it needs improvement	No
a. Insomnia (eg, consistency training)	☐	☐	☐
b. Headaches (eg, relaxation response)	☐	☐	☐
c. Obesity (eg, exercise adherence)	☐	☐	☐
d. Smoking cessation (eg, nicotine replacement therapy)	☐	☐	☐

12. In the past 12 months, has your practice:	Yes	No
a. Collected clinical process and outcome measures for one or more mental health or substance use conditions?	☐	☐
b. Used mental health or substance use performance data as part of a practice quality improvement initiative?	☐	☐

13. Thinking about mental health and substance use care for your patients, how much of a barrier to your practice are the following?

	A lot	Somewhat	Not at all
a. Lack of time	☐	☐	☐
b. Lack of reimbursement/funding	☐	☐	☐
c. Lack of expertise/knowledge in effective approaches	☐	☐	☐
d. Lack of space	☐	☐	☐

14. We are interested in how your practice learns about the needs and experiences of your patients and their families. Please tell us about how often you use the following methods for patient/family input.	More than once in the past year	Once in the past year	At least once but not in the past year	Have not done but plan to do so	Do not plan to do
a. Conducted a patient/family survey	☐	☐	☐	☐	☐
b. Asked for patient/family input through interview, meeting, or focus group	☐	☐	☐	☐	☐
c. Conducted a "walk-through" of the practice to get patient/family view of how the practice works	☐	☐	☐	☐	☐
d. Asked patients/families for input on written documents such as patient materials or website	☐	☐	☐	☐	☐
e. Obtained comments through a "suggestion box" or other ad hoc approach	☐	☐	☐	☐	☐
f. Convened a patient/family advisory council	☐	☐	☐	☐	☐
g. Included patients/family members on a quality improvement or practice redesign team	☐	☐	☐	☐	☐
h. Appointed individual patient/family advisors	☐	☐	☐	☐	☐
i. Other? (Please describe)	☐	☐	☐	☐	☐

15. What patient/family survey tool has your practice used? (check all that apply):

☐ CAHPS
☐ Another standardized survey
☐ A tool your practice developed
☐ Do not know which tool was used
☐ Our practice has not participated in a patient/family survey (please skip to question 16)

15a. How was patient/family survey data collected?

☐ My practice collected data
☐ External organization collected data
☐ Don't know

15b. Did your survey include questions about mental health or emotional concerns?

☐ Yes
☐ No
☐ Don't know

16. At how many locations does your organization see patients? _____

17. What is the total number of each of the following personnel employed at your practice? If unsure, provide your best estimate.

	# of FTEs	# of individuals
a. Primary care physicians	_____	_____
b. Specialty care physicians	_____	_____
c. Other clinicians who have their own panel of patients (NPs, PAs)	_____	_____

18. Please give your best estimate of the percentage of primary care patients in your practice whose care is covered by (primary payer only).

	% of patients
a. Commercial or private insurance	_____
b. Medicare	_____
c. Medicaid or other public insurance	_____
d. Uninsured	_____
e. Other	_____

19. Who owns your practice?

☐ Physicians in the organization
☐ Hospital/hospital system/health system
☐ HMO or other insurance entity
☐ Jointly owned (please specify): _____
☐ Government (federal/state/local)
☐ Other (please specify):

20. Who completed this survey?

☐ Physician
☐ Practice manager
☐ Nurse manager
☐ Other (please specify):

We would like to talk with some practices to get more information on their activities in areas discussed above. Please check if you would NOT want to be contacted.
☐ Do NOT contact
Contact:

Appendix 2

Questions in the Mental Health Organizational Index

1. Does your practice regularly use a formal screening tool to identify the following conditions?

	Yes, works well	Yes, needs improvement	No
a. Depression and/or other mental health problems	☐	☐	☐
b. Alcohol problems	☐	☐	☐
c. Substance use problems	☐	☐	☐
d. ADHD in children or adults	☐	☐	☐

2. Does your practice regularly use a standardized process to **make** referrals to the following specialties:

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

3. Does your practice regularly use a standardized process to **track** referrals to the following specialties:

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

4. Does your practice regularly provide patient history and other information to the following kinds of specialists when they are involved in your patients' care?

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

5. Does your practice regularly receive consultation reports from the following specialties?

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

6. Does your practice help patients schedule appointments with specialists outside the practice for the following specialties?

	Yes, works well	Yes, needs improvement	No
c. Mental health and substance use providers	☐	☐	☐

7. Which of the following clinicians or staff work in your practice? Yes to *any* of the below choices constituted 2 points (2 points maximum).

	Yes	No
g. Psychiatrists	☐	☐
h. Psychologist (doctoral level)	☐	☐
i. Therapist/counselor (master's level)	☐	☐
j. Social worker	☐	☐
k. Certified substance use counselor	☐	☐
l. Care manager (any discipline)	☐	☐

8. If you have mental health clinicians working in your practice:

	Yes	No	N/A
c. Is scheduling handled in the same manner as patient medical appointments?	☐	☐	☐
d. Are same-day appointments regularly available?	☐	☐	☐

Appendix 3

Results for Mental Health Clinical Index

	Practices Reporting Each Organizational Item (%)		
	Yes, Works Well	Yes, Needs Improvement	No
Use of evidence-based treatment protocols for mental health or substance use conditions	20	34	46
Use of standardized tool for monitoring depression symptoms, severity, or response to treatment	35	40	25
Regular recording of depression screening and monitoring tools in an electronic data system	35	27	38
Use of structured health behavior change protocols for			
Insomnia	13	25	62
Headaches	10	24	66
Obesity	23	36	41
Smoking	37	34	29
	% Yes (2 points)		% No (0 points)
Collected clinical measures for one or more mental health/substance use conditions in past 12 months	32		68
Used mental health or substance use performance data in practice quality improvement in past 12 months	32		68
Mental Health Clinical Index, mean (SD)		7.6 (5.1)	

Questions in Mental Health Treatment Index

	Yes, It Works Well	Yes, But It Needs Improvement	No
9. Has your practice adopted evidence-based treatment protocols for mental health or substance use conditions (eg, stepped care for depression)?	☐	☐	☐
10. For patients with depression, does your practice			
c. Use a standardized tool to monitor depression symptoms, severity, or response to treatment?	☐	☐	☐
d. Does your practice regularly record results from depression screening and monitoring tool(s) in an electronic data system?	☐	☐	☐
11. Does your practice regularly use structured health behavior change protocols for treating the following symptoms?	Yes, it works well	Yes, but it needs improvement	No
e. Insomnia (eg, consistency training)	☐	☐	☐
f. Headaches (eg, relaxation response)	☐	☐	☐
g. Obesity (eg, exercise adherence)	☐	☐	☐
h. Smoking cessation (eg, nicotine replacement therapy)	☐	☐	☐
12. In the last 12 months, has your practice:		Yes	No
a. Collected clinical process and outcome measures for one or more mental health or substance use conditions?		☐	☐
b. Used mental health or substance use performance data as part of a practice quality improvement initiative?		☐	☐