SYNCHRONICITY

A Framework for Family Medicine Leaders to Advocate for a Mental Health Collaborative Care Model in Their Health Systems

Lauren K. Turich, MPH, MS
Kevin Chang, MD
Daniel Bester
Raj C. Shah, MD

Lauren K. Turich, MPH, MS is a fourth-year medical student and public health committee extern for the Illinois Academy of Family Physicians. She aspires to match as a full-spectrum family medicine resident in 2021.

Kevin Chang, MD is a family medicine resident at University of Chicago (NorthShore) in Chicago.

Daniel Bester is a fourth-year medical student and public health committee extern for the Illinois Academy of Family Physicians, and will be applying for family medicine residency positions in 2021.

Raj C. Shah, MD is co-director of the Center for Community Health Equity and associate professor in the Department of Family Medicine and Rush Alzheimer's Disease Center at Rush University Medical Center in Chicago. Address correspondence to Raj_C_Shah@rush.edu.

Suggested citation:
Turich LK, Chang K, Bester D, Shah RC. Synchronicity: A Framework for Family Medicine Leaders to Advocate for a Mental Health Collaborative Care Model in Their Health Systems. 2020 November. Available from www.healthequitychicago.org.

Synchronicity is a valuable tool for health system leaders trained in family medicine to use in advocating for the development and implementation of system-based collaborative care models.

Mental health has a significant impact on overall health. In our roles as family physicians, we see the effect on patients daily; we also see the results in our leadership positions. As highlighted in the report, the Mental Health Collaborative Care Model:

- is clinically significant and cost-efficient because it reduces productivity loss and health care utilization.
- improves patients' quality-adjusted life years.
- integrates mental health service delivery into the primary care setting to reduce barriers to access, improve service quality and lower health care expenditures.

We must all work together to reconfigure Illinois' health ecosystem to be more responsive to people's needs, through trusted relationships with their family physicians and other primary care providers.

Fortunately, we do not need to start from the beginning. The model shows significant evidence of impact, demonstrated by patients who self-report "excellent" or "very good" satisfaction within three months of receiving care. Even with this high-quality evidence, barriers to health systems' sustained implementation of the model still exist. *Synchronicity* provides a road map, with key recommendations and examples of how some Illinois health systems are putting the model into action.

Momentum is increasing for statewide implementation of the model. While challenges will always exist, some barriers are falling; for instance, a 2020 Illinois law supports payment for the collaborative care model.

We hope that family physician system leaders will reflect on this report's findings and that it will be a useful tool to start conversations with clinician champions and health system leaders. As health systems work to develop sustainable models, we also hope that sharing experiences will lead to support for people who seek holistic physical and mental care through partnerships fostered by programs such as the Mental Health Collaborative Care Model.

Sincerely,

Michael Hanak, MD, FAAFP
President, Illinois Academy of Family Physicians

Kiran Joshi, MD, MPH
Medical Director and Co-Lead, Cook County Department of Public Health

Gary Stuck, DO, FAAFP
Chief Medical Officer, Advocate Aurora Health

Millions of Americans suffer from untreated mental health and substance use issues and often simply don't know where to turn for help. Left unaddressed early, these issues lead to extremely expensive and inefficient care in areas such as Emergency Departments, hospital admissions, and even incarceration.

Accessing traditional psychiatric services can be extremely confusing. For much of my career, I served as a psychiatrist in an Emergency Department of a large hospital in Chicago — and even as a psychiatrist I struggled with the complicated nature of navigating public and private insurance networks to establish appropriate services and lengthy waiting times.

Consider when a person notices the onset of mild bodily symptoms such as new aches and pains, troubles breathing, or perhaps flu-like symptoms, it is widely accepted the best plan of action is to first contact his or her trusted primary care physician. Early detection and management of illness has been long established as the best course of action for both patient outcomes and cost. Mental Health needs are no different. The primary care physician provides an established long-term and nurturing relationship developed through routine visits as well as more difficult times such as illness and pain. Thus, when a primary care physician works together with a consulting psychiatrist, a team approach provides evidence-based mental health treatment with dramatically improved access to care, significant cost savings, and is potentially less stigmatizing for patients.

Thanks to Illinois legislators (Senate Sponsors: Sen. Laura Fine, Laura M. Murphy, Julie A. Morrison, Laura Ellman, and Elgie R. Sims, Jr. and House Sponsors: Rep. Deb Conroy, Jonathan Carroll, Robyn Gabel, Terra Costa Howard, Justin Slaughter, Kelly M. Cassidy, Yehiel M. Kalish, Jennifer Gong-Gershowitz, Sara Feingenholtz, and Elizabeth Hernandez) and efforts of many advocacy organizations including the Illinois Academy of Family Physicians and the Illinois Psychiatric Society, the Illinois Collaborative Care Model became law, January 2020.

As our country now finds itself hunkered down in the midst of a world pandemic, the demand for coming mental health services is predicted to be unprecedented. The Illinois Collaborative Care Model is ready to meet this challenge as Illinois psychiatrists and primary care physicians proudly stand together for the wellbeing of the citizens of Illinois.

Sincerely,

James G. MacKenzie, DO
Past President, Illinois Psychiatric Society

CHICAGO OFFICE
5051 W. CHICAGO AVE.
CHICAGO, IL 60651
repford@lashawnford.com

CAPITOL OFFICE
247-E STRATTON BUILDING
SPRINGFIELD, IL 62706
217.782.5962 OFFICE
217.557.4502 FAX

La Shawn K. Ford
State Representative 8th District

November 20, 2020

To Whom It May Concern,

Many families on Chicago's West Side are disproportionately burdened with ongoing violence, opioid use disorder and poverty. This community deserves an evidence-based solution to address mental health needs, potentially prevent opioid use disorder and allow for healthier, fuller lives.

As advocates for mental health service delivery, lawmakers and Illinois family physician leaders have a responsibility to disrupt the current inadequate system and implement an evidence-based framework to meet the mental health needs of their communities.

I commend the work by the IAFP and Center for Community Health Equity in creating this solution-focused report, and look forward to hearing more stories of how Illinois health systems implement the Mental Health Collaborative Care Model.

Sincerely,

La Shawn K. Ford
State Representative – Eighth District

Abstract

In the United States, more than 40 million adults live with a mental health condition; astonishingly, more than half of them are untreated.[1] About 4.5 million children ages 3 to 17 have a diagnosed behavior problem, 4.4 million have a diagnosed anxiety problem and 1.9 million have diagnosed depression.[2] Inadequate capacity in the United States health care system has resulted in expensive, fragmented access to care for these patients in need.[3]

The Mental Health Collaborative Care Model is a multifaceted solution to this issue that focuses on reducing barriers to access, improving service quality and lowering expenses for mental health services.

The model is based around a collaborative care team led by a primary care provider and including behavioral health care managers, psychiatrists and other mental health professionals. The team implements a care plan, collaborates seamlessly and measures patient progress consistently. The model has been shown to boost productivity, reduce health care utilization and improve cost-effectiveness based on quality-adjusted life years.[4]

In 2008, Unützer and colleagues published the IMPACT study (Improving Mood — Promoting Access to Collaborative Treatment for Late-Life Depression), a randomized controlled trial that analyzed the outcomes of 1,801 older adult patients with depression. Patients who received mental health services under the guidance of the Mental Health Collaborative Care Model were twice as likely to self-report "excellent" or "very good" satisfaction within three months of model implementation.[5] And these same patients saved the health system $3,363 each in total health care costs.[6,7]

Family physicians with leadership roles in their health systems are in a unique position to influence the development and implementation of the Mental Health Collaborative Care Model within their communities, institutions and individual practices to improve mental health outcomes.

You cannot be in family medicine for long without understanding how mental health is integrated into chronic illness. ...Mental health enters into every chronic illness. It needs to be addressed — maybe not at every visit, but periodically it'll enter in.[87]

Corinne Kohler, MD, a family medicine physician at the Frances Nelson Health Center, a federally qualified health center in Champaign, Ill.

Introduction

In the United States, more than 40 million adults have a mental health condition; more than half of those conditions remain untreated.[8] Additionally, 4.5 million children ages 3 to 17 have a diagnosed behavior problem, 4.4 million have a diagnosed anxiety problem, and 1.9 million have diagnosed depression.[9] And inadequate mental health care in the United States has resulted in expensive and fragmented access to care for patients in need.[10]

While the U.S. is experiencing a crippling physician shortage across all disciplines, the lack of psychiatrists is especially alarming. As of 2017, 77% of United States counties had a "severe shortage" of psychiatrists and other behavioral health providers,[11] and 55% reported having no psychiatrists at all.[12] These gaps often leave mental illness ignored and untreated, to the detriment of all: In 2020, the American Psychiatric Association reported that untreated depression alone leads to a total economic burden of $210.5 billion per year.[13]

Mental health and physical health are inextricably linked. As advocates for their patients and their communities, family physician leaders have a responsibility to disrupt the current system and implement the Mental Health Collaborative Care Model: an evidence-based framework that truly meets the needs of those affected by mental illness.

The model integrates mental health service delivery into the primary care setting to reduce barriers to access, improve service quality and lower health care expenditures. A collaborative care team is led by the primary care provider and includes behavioral health care managers,

psychiatrists and other mental health professionals. The model is clinically effective; cost-efficient, because it reduces productivity loss[14] and health care utilization;[15] and shown to improve patients' quality-adjusted life years.[16]

In 2008, Unützer and colleagues published the IMPACT study (Improving Mood — Promoting Access to Collaborative Treatment for Late-Life Depression), a randomized controlled trial that analyzed the outcomes of 1,801 older adult patients with depression. Patients who received mental health services under the model were twice as likely to self-report "excellent" or "very good" satisfaction within three months of intervention implementation[17] — and they saved the health system $3,363 each in total care costs.[18,19]

The model has yet to be widely implemented in the United States for several reasons:

- Lack of understanding of the model[20,21]
- Time pressure and competing priorities in primary care
- Lack of comfort in diagnosing and treating mental health issues[22]
- Uncertainties about cost-effectiveness and funding[23]
- Lack of motivation for implementation[24]

To implement the Mental Health Collaborative Care Model sustainably, we offer nine recommendations:

1. Engage health care system administrators and decision makers on the benefits and effectiveness of the model[25]
2. Secure adequate funding
3. Enlist professional opinion leaders or physician champions to facilitate implementation[26,27]
4. Develop training methods to prepare care managers
5. Engage primary care practitioners on mental health care and understanding of the model
6. Enable co-location and regular interaction between behavioral health care managers and physicians[28,29,30,31]
7. Use standardized instruments to include patients in collaborative care and track their progress
8. Organize clinicians' and teams' work days efficiently
9. Assess the work continually to analyze its benefits[32,33]

A review of the evidence suggests that implementing the Mental Health Collaborative Care Model is the best way to address the staggering rate of mental illness in the United States.[34] Family physicians and other primary care providers can lead the implementation of the model with support from care managers, psychiatrists and others.[35]

A proven solution

The Mental Health Collaborative Care Model brings mental health services into the primary care setting via a team, headed by a primary care clinician, that includes other mental health professionals such as psychiatrists and care managers.[36] Measurement-guided care, using standardized screening tools, directs evidence-based treatment to maximize good patient outcomes.[37]

The model is effective for patients. The Cochrane Collaborative's meta-analysis of 79 randomized controlled trials found small- to medium-effect sizes for both short- and longer-term clinical outcomes.[38] And the IMPACT study of 1,801 older adult patients with depression showed that participants receiving treatment under the guidelines of the model were twice as likely to have significant improvement as compared to those participants in usual care.[39]

The model is cost-efficient for health systems. While up-front costs for space, training, tools and compensation can be a barrier to implementation, the model has repeatedly demonstrated its cost-effectiveness by reducing health care utilization.[40] After 12 months, the IMPACT study showed that implementation costs of approximately $522 per patient resulted in total health care cost savings of $3,363 per patient.[41]

Not only can the model save health systems money, it can also provide significant financial resources. Centers for Medicare and Medicaid Services, private payers and private insurance companies like Aetna, Blue Cross Blue Shield and United HealthCare provide reimbursement for depression screening,[42] which can vary from $15 to $18 per 15-minute session.[43] Long-term management of patients will also yield payment (which, of course, will vary based on the care provided).[44]

A series of 11 interviews in 2019 and 2020 with patients, behavioral health providers and primary care providers in Illinois enabled us to distill the following nine recommendations for implementing the Mental Health Collaborative Care Model in three phases.

The patient has realized that her physical health and her mental health are treated as two entirely different entities, although she thinks of them as one and the same. While her primary care provider has refilled her prescription for sertraline, she has felt that a discussion about her mental health does not seem to fit in during her "physical health" appointments, as she knows her doctor has a waiting room full of patients. She is used to going to her appointments, having labs drawn and then leaving. She would engage in conversations about mental health if they were offered.[88]

From a patient interview conducted in 2020

PHASE I

Recommendation 1
Engage health care system administrators and decision makers on the benefits and effectiveness of the model

Recommendation 2
Secure adequate funding

Recommendation 3
Enlist professional opinion leaders or physician champions to facilitate implementation

PHASE II

Recommendation 4
Develop training methods to prepare care managers

Recommendation 5
Engage primary care practitioners on mental health care and understanding of the model

Recommendation 6
Enable co-location and regular interaction between behavioral health care managers and physicians

PHASE III

Recommendation 7
Use standardized instruments to include patients in collaborative care and track their progress

Recommendation 8
Organize clinicians' and teams' work days efficiently

Recommendation 9
Assess the work continually to analyze its benefits

PHASE I

Recommendation 1

Engage health care system administrators and decision makers on the benefits and effectiveness of the model

Implementing the Mental Health Collaborative Care Model requires support from hospital system administrators — so the first step is to present administrators with evidence demonstrating the cost-benefit of the model.[45,46] If leaders hesitate, a small pilot program can demonstrate the real-world benefits.

SNAPSHOT

Cook County Health and Hospital Systems, Cook County, Ill.[89]

Key to implementation: CEO support of the model from the beginning

What the model looks like: Cook County Health and Hospital Systems (CCHHS) psychiatrists estimated that 50% of their consults could have been handled by primary care physicians. With funds allotted through the Illinois Medicaid managed care plan (County Care) and a strong commitment from the systems' CEO, CCHHS implemented a collaborative behavioral health model in its 12 primary care clinics, placing social workers in the clinics and increasing the availability of on-site counseling, therapy groups and case management. Every patient is screened annually for depression, substance use, domestic violence and other social determinants of health; each clinic has psychiatry consults available, with plans underway to provide telepsychiatry.

Successes:

- Fewer patients needed referrals to psychiatry.
- Clinic staff reported that additional social work engagement brought significant value.
- Financial savings were realized through lower costs from stress-related illnesses and prevention of emergency room visits for cardiac workups for psychiatry issues.

Challenges:

- CCHHS clinics demonstrated varying uptake of the model, with sites hosting medical residents being more likely to implement.
- Some primary care clinicians felt uncomfortable managing psychiatric medications; in response, more in-service trainings are being offered to the primary care team.

Recommendation 2

Secure adequate funding

Adequate funding is essential for sustainable implementation of the Mental Health Collaborative Care Model.[47,48] Data show that the model improves patient outcomes and reduces health care utilization, especially in the emergency department, and that the long-term financial benefits of the model far outweigh its costs.[49]

Sharing data from systematic reviews may make decision makers more amenable to implementation. Perhaps even more effective would be analysis of actual patient data from within the health system, showing the potential positive financial impact. To implement the model, several health systems in Illinois have secured funding from grants or reallocated financial resources from other budgets.[50,51]

SNAPSHOT

Rush University System for Health, Chicago[90]

Key to implementation: Leveraging payer-sponsored quality programs to fund universal depression screening

What the model looks like: Rush's value-based care design model rewards providers for meeting specific quality measures, so leaders recognized an opportunity to take advantage of payer-sponsored quality programs for depression screening. Insurance providers' funding supports staff to screen patients across specialties (e.g., family medicine, neurology, OB/GYN, psychiatry) and provide interventions: Within seven days, a social worker follows up with all patients who screen positive and connects them with the appropriate level of care.[91] The program's psychiatrist does not share space with the primary care clinicians, but often provides virtual consults and is readily available to fit urgent patients in quickly when needed.

Successes:

- Psychiatrist and family medicine champions helped pilot the collaboration.
- Universal screening uses the simple, streamlined PHQ-2 followed by the PHQ-9 (if indicated).
- Screening is integrated into the electronic health record, and Rush's screening rates for depression now exceed the Tier Two national average.

Challenges:

- Some primary care clinicians were reluctant to be the providers initiating mental health therapy — but most reported being comfortable continuing the treatment set forth by a psychiatrist previously.
- The psychiatrist is not co-located with primary care, so must make an extra effort to be responsive and available.

Recommendation 3

Enlist professional opinion leaders or physician champions to facilitate implementation

Physician champions are key to helping decision-makers and the primary care team understand the Mental Health Collaborative Care Model. Eghaneyan and colleagues reported that a barrier to implementation was that many leaders did not know how collaborative care models work and that some were surprised how many changes were required for implementation.[52] A physician champion familiar with the model can fluently discuss its details with administration while also ensuring proper execution on the front lines.[53]

SNAPSHOT

Mount Sinai Hospital Medical Center, Chicago[92]

Key to implementation: An effective, passionate champion

What the model looked like: Mount Sinai's psychiatric department shares a history of collaboration with family medicine physicians, as many patients with mental health issues do not have access to a primary care doctor before they seek psychiatry services at Mount Sinai. A family medicine champion leading this collaboration provided primary care services in the hospital's psychiatric clinic. Unfortunately, this collaborative program dissolved when the champion left Mount Sinai.

Successes:

- The collaboration resulted in high usage of primary care services.
- Family physicians provide mental health services daily in the inpatient setting.

Challenges:

- Mount Sinai needs to attract a new, interested family physician (or physicians) invested in the program and the community, to provide primary and behavioral care within the clinic.
- Family medicine and psychiatry faculty need to create a plan demonstrating how the collaborative care model can ease emergency department congestion, reduce admitted patients' length of stay, boost use of outpatient mental health services and reduce readmissions.

PHASE II

Recommendation 4

Develop training methods to prepare care managers

In 2016, the Clinical Effectiveness and Cost-Effectiveness of Collaborative Care for Depression in United Kingdom Primary Care (CADET) cluster randomized controlled trial aimed to assess the effectiveness of the collaborative care model in the United Kingdom.[54] The study revealed that the model improved depression symptoms among patients within 12 months of model initiation, was cost-effective and was preferred by patients.[55]

The CADET study ensured that care managers were trained in the collaborative care model with a five-day program that included protocols and exercises with modeling and role play. Care managers reported that the training helped them understand the model and their roles in it.

SNAPSHOT

Heartland Health Centers, Chicago[93]

Keys to implementation: Training behavioral health consultants and retooling responsibilities; partnerships with behavioral health providers; strong CEO support

What the model looks like: Heartland Health Centers is a federally qualified health center with 17 locations serving more than 26,000 people. Using funding from the Substance Abuse and Mental Health Services Administration (SAMHSA), Heartland partnered with Trilogy Behavioral Healthcare to create a Heartland facility at Trilogy's location that integrates primary care and psychiatry providers. Trilogy providers also began offering care at Heartland locations and school-based health clinics. Heartland now brings primary care into other community mental health centers' facilities as well.

Successes:

- New job descriptions and training for behavioral health consultants ensured that licensed clinical social workers had the skill set needed to move beyond traditional counseling roles.
- The CEO of Heartland was a vocal champion of the effort and has made integrated care part of Heartland's mission.

Challenges:

- Attracting family providers and psychiatrists to join the program has not been an issue because so many clinicians believe in the model, but the pay is lower than they would earn elsewhere.
- Heartland was a site for the Erie Family Medicine Residency program, but only one month of behavioral health training was available.

Recommendation 5

Engage primary care practitioners on mental health care and understanding of the model

Primary care providers have varying levels of comfort with the management of mental health issues. Eghaneyan and colleagues reported that training and preparation was essential to the implementation of the Mental Health Collaborative Care Model; without adequate training, primary care providers often defaulted to routine care, which negated the benefits of the model and interfered with implementation of the model.[56,57]

The solution to this knowledge deficit is to provide primary care providers with training before implementing the model, perhaps conducted by trained care managers who demonstrate significant understanding of the model.[58]

The 2012 Coordinated Anxiety Learning and Management (CALM) intervention documented the importance of provider acceptance of collaborative care. Authors of this study reported that the most important factor in implementation of this model was a positive attitude about the model among providers.[59]

A psychiatrist should be available to collaborate in patient care, either in person or virtually, and in some cases may function as the primary provider for complex patients.

SNAPSHOT

Advocate Illinois Masonic Medical Center, Chicago[94]

Keys to implementation: Psychiatry and psychology services provided at a comprehensive family health center where family medicine residents are trained in behavioral health

What the model looks like: Advocate Illinois Masonic provides collaboration-based care at the Advocate Medical Group Family HealthCenter-Ravenswood via a psychiatrist on site once weekly for consultation, and psychologist fellows who embed at the center to provide therapy. The center is a training site for the Advocate Illinois Masonic family medicine residency program.

Successes:

- Family medicine providers and residents are comfortable providing behavioral health care.
- Psychologists at the center specialize in family dynamics and how chronic illness affects families.

Challenges:

- Securing reliable, consistent funding is an issue: The center was initially awarded a grant to supplement fellows' salaries; when the grant ran out, Advocate had to reallocate funds from other budgets (e.g., teaching expenses).
- Patient care depends on what insurance covers. For example, private insurance usually covers medication management, but many not cover weekly therapy.
- Other Advocate Medical Group clinics are interested in replicating the model — but the need for financial support is a limiting factor, so other Advocate clinic providers refer out for mental health services.

Most [of the interviewees] did not recall a primary care physician addressing or screening for their mental health needs. They all recognized the cultural stigmas associated with mental health issues and said that the younger generation who grew up in the United States was more willing to speak up about mental health. Mr. Y said, "If you mentioned mental health needs, you would be viewed as 'less' of a Korean. However, I am not the regular Korean."[95]

From a summary of an interview with members of Chicago's Korean-American community

Recommendation 6

Enable co-location and regular interaction between behavioral health care managers and physicians

The behavioral health care manager and primary care clinician co-locating in the primary care clinic is an important driver for the model, according to several studies.[60] A 2014 qualitative study in the United Kingdom in 2014 found that co-location was helpful in establishing professional relationships between practitioners.[61] Another study, which focused on anxiety interventions, also found that implementation was aided by a "reliable and proximate location of the anxiety clinical specialist's workspace... [f]or anxiety clinical specialists to interact frequently with providers."[62] These studies show that co-location supports face-to-face interaction between the primary provider and the care manager, which helps to fully optimize the model.

If lack of space, funds or time prevents co-location, suggestions that may help facilitate collaboration include multi-site access to medical records, and creating a vehicle for informal and formal communication between primary care providers and care managers. This strategy will not only help with patient care, but will also help increase the clinicians' understanding of the model.[63]

SNAPSHOT

AMITA Health Adventist Medical Center Hinsdale, Hinsdale, Ill.[96]

Keys to implementation: Primary care providers travel to psychiatry patients

What the model looks like: An attending physician, a nurse practitioner and two family medicine residents go to Hinsdale's psychiatry clinic for a half-day each week to help patients with their non-psychiatric medical issues, which had often gone unaddressed in the past. This model is different from collaborative care models in which an integrated mental health professional works in the primary care clinic. The model was implemented in 2015 when the family medicine residency program's behaviorist approached the medical center's leadership to develop a collaborative approach; partial funding came from a federal grant.

Successes:

- Patients are able to get non-psychiatric, co-morbid problems managed.
- Family medicine program staff say the clinic prevents unnecessary emergency department visits.

Challenges:

- Space constraints mean that the attending precepts fewer patients at the mental health clinic.
- Insufficient financial stability and lack of available time have prevented the creation of a fully integrated clinic.
- A cost-efficiency analysis and additional funding sources are needed to keep the clinic running.

PHASE III

Recommendation 7

Use standardized instruments to include patients in collaborative care and track their progress

Systematic monitoring of Mental Health Collaborative Care Model outcomes not only provides data about individual patient progress, but can also provide information about the implementing health system as a whole. Data can help secure funding by providing evidence about whether patient goals and the health system's goals have been met, and can help justify additional financial support.

Standardized screening tools, which are evidence-based and universally interpreted by mental health clinicians, increase cost-effectiveness of the model, improve patient outcomes and boost efficiency.[64,65,66] The tools are familiar, simple and flexible enough to be used in a variety of communities.[67] For example, the standardized depression screening tools PHQ-9 and PHQ-2 are available in a number of languages and as low-literacy visual aids.[68]

Patient answers to the PHQ-9's nine questions are quantified with a value ranging from zero to three. The responses are added for a total score that translates to depression severity ranging from "minimal" to "severe." The total score is used to measure a patient's depression at baseline and serves as a measurement for assessing treatment effectiveness.[69]

SNAPSHOT

Loyola University Medical Center, Chicago[97]

Keys to implementation: Behavioral health providers integrated into primary health clinics build close, collaborative relationships with primary care providers

What the model looks like: Three of Loyola's 20 primary care clinic sites, overseen by the Department of Family Medicine, are spearheading the integration of the Mental Health Collaborative Care Model into the Loyola system. All patients are screened with behavioral health tools (PHQ-2 and PHQ-9) plus other drug and alcohol screenings. Because social workers, psychiatrists and psychologists are integrated into the clinic sites, patients can begin treatment as soon as they need it, rather than waiting weeks for an appointment with a specialist.[98] Loyola hopes that its next step will be the development of "behavioral health pods" — each including a psychologist, advanced practice RNs, and one to two social workers — that will be responsible for a number of designated clinics.

Successes:

- Universal screening has led to more patients being seen for behavioral health concerns.
- Employee champions added screening tools to the electronic health record and trained staff on their use.
- Grant dollars fund the salaries of social workers, psychiatrists and psychologists.
- Rolling out first in a clinic that was enthusiastic to participate meant that the model was implemented quickly, and the physicians shared their experiences with peers, which promoted the model.
- Integration has built close relationships among primary care and behavioral health providers.

Challenges:

- Significant turnover in administrative positions has led to difficulty in some behavioral health administrators' understanding the needs of primary care providers and patients.
- Resistance by some existing primary care providers had to be overcome.
- The program's future depends on creative funding.

Physicians screen for high cholesterol; they should screen for depression. If patients are already comfortable with their primary care provider, they'll be more accepting of mental health services, like counseling.[99]

Corinne Kohler, MD

It can be challenging to integrate standardized screening tools into the electronic health record, but integration is key to implementation of the Mental Health Collaborative Care Model, and to the systematic monitoring that increases patients' adherence to treatment regimens.[70] When partnering clinicians have easy access to goal-directed outcomes, they're better able to tailor treatment; they can assess the patient's progress and collaborate based on the feedback received.[71] At every patient intake encounter, it's recommended to monitor the measurements against baseline.[72,73] Just as the outcomes of chronic medical conditions are monitored objectively, mental health outcomes should be as well.[74,75]

Standardized instruments like the PHQ allow for successful diagnosis, regular monitoring of symptoms and goal-oriented management.[76] In addition, they help monitor and prove the efficacy of the model: Analysis of electronic health records that incorporate the screening tools can demonstrate trends in patient outcomes, and can be presented to potential funders to demonstrate the value of the model.

Recommendation 8

Organize clinicians' and teams' work days efficiently

Competing priorities can be a barrier when implementing the Mental Health Collaborative Care Model: If a clinical team is already overscheduled or providing care for a large patient population, adding the model can be overwhelming.[77] Extra time may be required for training to ensure that all clinicians understand their roles and are able to practice confidently under the model.[78,79] To motivate clinicians in the face of potential challenges, health systems should consider financial compensation alongside communication from local champions.[80]

> Every family physician is capable of functioning within this model; there is help each step of the way.[100]
>
> **Loren Hughes, MD, family physician and hospital administrator, Hillsboro Area Hospital, Hillsboro, Ill.**

SNAPSHOT

Hillsboro Area Hospital, Hillsboro, Ill.[101]

Keys to implementation: Clinicians, administrators and a board of directors who provided financial and administrative resources

What the model looks like: Sheila Thomas, MD, is both a psychiatrist and a family physician, and is the medical director of integrated behavioral health at Hillsboro Area Hospital (HAH). She serves as the consulting psychiatrist in the HAH program, collaborating with 11 primary care providers and two care managers who are part of the integrated behavioral health department. Primary care providers identify patients who might benefit from the program; once a patient agrees, they meet with the care managers nearly immediately. The care managers are social workers who gather the patient's medical history and assess for challenges the patient is facing.

Thomas meets with care managers frequently to review cases and provide treatment recommendations, which are sent to the primary care provider to ensure they're in agreement. The care manager then follows up with the patient to assess symptoms with universal screening tools and check in on how medications, if prescribed, are working. Ultimately, "prescribing is the responsibility of the primary care provider, as they have the best overall picture of the patient," says Thomas.

Successes:

- Care managers can see a patient on the same day a primary care provider recommends it; consultations with the psychiatrist occurs within one week.
- Both patients and providers report higher satisfaction.

Challenges:

- New policies had to be designed for the practice, leading to the hiring of a psychiatric nurse manager.
- New treatment plans and discharge criteria had to be developed.
- Medicaid reimburses poorly, and private insurance companies often delay payment.

Reliable, flexible two-way communication is also key to maximizing clinicians' time; multiple modes of communication between clinicians (e.g., text, e-mail and telephone) may be necessary.[81] Finally, building rapport and collaboration is crucial to efficiency, with co-location being the best approach.[82] When clinicians have an opportunity to engage with their colleagues in person, they collaborate more smoothly and frequently; build rapport and share knowledge; and establish consistent routines that help improve workflow.[83]

Early detection in the easily accessible and stigma-free environment of the primary care physician's office holds tremendous potential benefit to both the health of the patient and the cost savings to a payor.[102]

James MacKenzie, MD, child and adolescent psychiatrist and collaborative care advocate, Ann & Robert H. Lurie Children's Hospital, Chicago

Recommendation 9

Assess the work continually to analyze its benefits

Every evidence-based program implemented in a health system requires continuous evaluation. In the case of the Mental Health Collaborative Care Model, it's important to monitor and evaluate not only the implementation of the program, but also its influence on population health and individual patient outcomes, through evidence-based quality improvement strategies and interventions.[84]

Foreman-Hoffman and colleagues (2017) recommend evaluating the intermediate outcomes of mental health care by assessing the patient, the practitioner and the system:

- Patient access to care, satisfaction, adherence and therapeutic alliance
- Clinician adherence to program and clinical competence
- System feasibility, uptake, timeliness, penetration, sustainability and costs

At HAH, care managers collect patients' medical and medication history during the first visit, assess for other behavioral health challenges and monitor patients' progress using universal screening tools like the PHQ. PHQ scores enable the team to evaluate overall trends as well as each patient's individual progress; a survey of patients and providers currently in development will help the hospital understand the length of time it takes patients to feel better and make improvements to its model.

The patient population can be evaluated as well. Orpana and colleagues (2016) recommend their framework for comprehensive mental health measurement, which assesses five positive mental health outcomes and 25 determinant indicators pertinent to the patient's family, community and society.[85] They suggest that this framework can inform and influence programs and policies related to mental health status among the population that uses it.[86]

APPENDIX A

Summary of interview with Mark Loafman, MD, MPH, and Thomas Gavigan, MD, Cook County Health Systems, Cook County, Ill.

Beginning in 2018, Cook County Health Systems in Illinois used funds available through the state's Medicaid managed care plan, County Care, to budget for additional social workers in primary care clinics. The program enabled on-site counseling, therapy groups and case management at 12 Cook County Hospital and satellite sites. All sites implemented a yearly patient screening via an intake questionnaire that covers depression, substance use, violence and other social determinants. Each clinic has psychiatry available on consult, with future plans for telepsychiatry.

The response has been positive, with probable savings due to decreased costs from issues such as stress-related illnesses, prevention of emergency room visits (e.g., fewer cardiac workups for psychiatry issues). Before the new system was implemented, according to psychiatry team members at Cook County, 50% of consults could have been taken care of by primary care (this is what initially drove the initiative to begin the program). Ultimately, as a result of the program, referrals to psychiatry decreased and clinic staff members feel that the program has provided great positive value. Previously, Cook County had attempted to bring in an outside consultant to help, but this approach was not successful. Staff say that a contributing factor to successful implementation was the supportiveness of the hospital system's CEO.

One limitation has been the model's varying uptake by the different clinics; sites with medical residents were more likely to implement these changes. Another contributing problem initially was that some primary care providers felt uncomfortable managing psychiatric medications. In response, the system has implemented in-service trainings to educate the primary care team.

APPENDIX B

Summary of interview with Kate Gunnell, MD, AMITA Health Adventist Medical Center Hinsdale, Hinsdale, Ill.

AMITA Health Adventist Medical Center Hinsdale implemented its collaborative care model four to five years ago, when its family medicine residency program's behaviorist approached DuPage County Hospital to collaborate. The medical center's board and administration supported the proposal, and some funding came through a federal grant.

In contrast to other collaborative care models in which a mental health professional is integrated into the primary care clinic, in this program an attending, a nurse practitioner and two family medicine residents go to DuPage County Hospital's psychiatry clinic one half-day per week to help patients with their non-psychiatric medical issues such as blood draws, EKGs and blood pressure and diabetes control.

Family medicine program staff members feel that the clinic has been useful in keeping patients out of the emergency department for medical issues. However, space constraints mean that the attending is able to precept fewer patients at the psychiatry health clinic. Furthermore, the staff has concerns about the program's financial sustainability; insufficient time was also cited as a potential issue. Additional funding sources would possibly be helpful in keeping the clinic running, and a cost-efficiency analysis might be useful in securing additional support.

APPENDIX C

Summary of interview with Ihab Aziz, MD, Mount Sinai Hospital Medical Center, Chicago

Mount Sinai Hospital Medical Center provides comprehensive, patient-centered services to Chicago's West and South sides. The hospital is home to a family medicine residency that provides mental health training to residents during their first-year rotation in the community medicine clinic, and again in the inpatient and outpatient settings during their third year.

Mount Sinai is home to a strong psychiatric department that shares a history of collaboration with family medicine physicians, including one who provided primary care services in its psychiatric clinic. The collaboration resulted in high usage of primary care services, as many patients with mental health issues did not have access to a primary care doctor before seeking psychiatry services at Mount Sinai. Unfortunately, this collaborative program dissolved when that primary care physician left the hospital. Since the program ended in early 2019, psychiatric patients have been asking about how to see a primary care physician, and psychiatrists are encouraging resumption of the collaboration.

In any system, the ability to provide comprehensive primary care and mental health services is limited by manpower and financial resources. Ideally, Mount Sinai needs an interested and invested family physician (or physicians, for stability and continuity) who will commit to providing primary care within the clinic for many years. This is not a position that can be filled temporarily — the primary care physician must be invested in the program and the community. This provider will be busy from day one, as there is not a need to build a practice; the need already exists.

Mount Sinai family physicians provide mental health services daily in the inpatient setting. Inpatient family physicians are often tasked with diagnosing patients' mental health conditions, organizing their management with care coordinators and outsourcing long-term psychiatric care. Hospitalists see a great need for mental health care to begin before a patient is hospitalized, and for a clear way to transition patients into comprehensive mental health care post-discharge.

Mount Sinai's family medicine and psychiatry faculty have been discussing future collaboration and how to best address their community's mental health needs. There is a call to create a plan that will demonstrate how this collaborative care model can decompress the emergency department; reduce admitted patients' length of stay; increase utilization of outpatient services; and reduce readmission rates.

APPENDIX D

Summary of interview with Aaron Michelfelder, MD, Loyola University Medical Center, Chicago

Loyola University Medical Center is a large health system that hosts 20 primary care clinic sites. These clinics are overseen by Loyola's Department of Family Medicine and staffed by more than 100 physicians and family medicine advanced practice RNs. Three of the clinics, which develop new ideas and disseminate best practices to their peers and other Loyola primary care clinics, are spearheading the integration of the Mental Health Collaborative Care Model into the Loyola system.

Within these three clinics, primary care teams have integrated universal screening for behavioral health (e.g., PHQ-2 and PHQ-9) plus other drug and alcohol screening tools. The next step, they hope, will be the development of behavioral health pods that will include a psychologist, advanced practice registered nurses and one to two social workers. Each pod will be responsible for a number of designated Loyola primary care clinics.

Primary care providers in Loyola's clinics are comfortable managing many behavioral health issues and can refer to specialists as needed — although specialist care for their patient population is largely payer-dependent. Patients with Medicare receive different care from those with Medicaid: Patients on Medicaid are sometimes referred to community organizations for further services, which can make it difficult to follow up with them.

To avoid this complication, Loyola has used grant money to fund the salaries of social workers, psychiatrists and psychologists who are integrated into the clinic sites. This integration builds close relationships among primary care providers, social workers, psychiatrists and psychologists, enabling more collaborative care.

Developing this model required reliable funding sources and individual champions to push it forward. Loyola primary care teams had individual champions offer to develop their own skills and share them with the staff; for example, an RN clinical coordinator trained all staff on the use of screening tools and how to respond to high scores. Another champion of the Mental Health Collaborative Care Model included an RN with extensive knowledge and training in information technology, who worked to integrate behavioral health screening tools into the clinics' electronic health record; Loyola's school of nursing secured a grant to pay this RN's salary. Faculty at the school of nursing also provide knowledge and experience, as its faculty has used the Mental Health Collaborative Care Model in Loyola's school-based health center for 25 years.

Administrator turnover at Loyola has created a challenge: Administrators who are not involved in the day-to-day implementation of mental health services in the clinics have had difficulty understanding patient and provider needs. An additional barrier in some cases has been resistance by existing providers at the clinic sites, who have voiced concerns about other providers' credentials or about other providers "taking patients away" from them. Starting implementation with a clinic that is enthusiastic about participating is an effective way to eliminate this barrier: That clinic's staff will become champions by testing the model and sharing their experiences.

Universal screening has led to more patients being seen for behavioral health concerns and has fostered the development of collaborative relationships between psychiatrists and primary care providers. The model has helped to remove the perceived stigma of seeking mental health services; when patients are in the primary care clinic waiting room, everyone is simply there to see the doctor. Primary care providers can ensure that their patients begin mental health treatment as soon as they need it rather than waiting weeks for an appointment with a specialist, and the family medicine residency faculty has started to prime residents to be a part of the Mental Health Collaborative Care Model by embedding behavioral health in their education and practice.

The future of this program depends on funding, as Loyola relies on philanthropy and grants for resources and training. The team advocates a call for action to encourage major insurance providers to emphasize value-based care, which supports the Mental Health Collaborative Care Model. The money saved with the model can provide financial support for behavioral health services.

APPENDIX E

Summary of patient interview

The patient reports that she lived with untreated mental illness for 25 years and survived chronic homelessness, incarceration and self-medication. For a time, she was in and out of hospitals.

On and off the street, she used medication to manage her illness. Clinicians often prescribed medications that did not always seem to help; one prescription sent her into mania, while others had horrible side effects. Misinformation from peers persuaded her that the medications she was prescribed would make her crazy; she said she thought she knew what she was getting on the street and could control those drugs better, so she self-medicated.

In 2011, she decided to seek mental health services in order to regain stability. Her recovery journey began at a local shelter in Chicago, where she received behavioral therapy in group sessions because of funding limitations. While in the shelter, she researched additional mental health resources and learned about Heartland Alliance Health, whose name and reputation she recognized. She used Heartland's resource center, attended group and individual therapy regularly and received help finding housing. She saw the same therapist for five years and reports that she has been stable and thriving since 2013.

Unfortunately, financial limitations strained the services available for patients at Heartland. Heartland has shut down its drop-in and resource centers, and the patient reports high turnover among mental health providers. Her initial therapist left the practice; she still has access to a case worker and a therapist but says that newer patients may have access to a caseworker only.

Some Heartland services are available only to Medicaid beneficiaries, but since the patient's mental health has stabilized she no longer qualifies for Medicaid. She has Medicare and Humana coverage and believes that neither covers mental health services. If Medicare or Humana offered mental health services, she says that she would use them regularly, but she is convinced that no one, including her primary care provider, offers mental health services to Medicare beneficiaries because providers will not get paid.

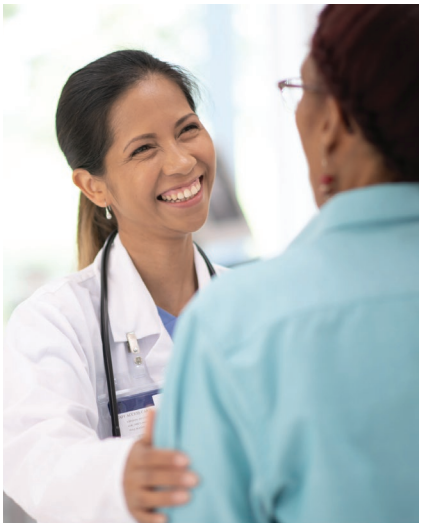
Overall, she is happy with the primary care services she currently receives through NorthShore University HealthSystem. She has become capable in navigating the health care system and appreciates the tools NorthShore provides, such as a patient portal that enables her to access her own medical information.

She was also impressed with the pain clinic at John H. Stroger, Jr. Hospital of Cook County, which provided a therapist who met with her and her pain doctor. At Beloved Community Clinic in Saint Bernard Hospital, she appreciated the fact that a social worker would meet with her before her doctor visits. Although she is happy that she's no longer in mental health crisis, she no longer has access to the comprehensive services provided by these institutions.

The patient has realized that her physical health and her mental health are treated as two entirely different entities, although she thinks of them as one and the same. While her primary care provider has refilled her prescription for sertraline, she has felt that a discussion about her mental health does not seem to fit in during her "physical health" appointments, as she knows her doctor has a waiting room full of patients. She is used to going to her appointments, having labs drawn and then leaving. She would engage in conversations about mental health if they were offered. She has never been referred to a psychiatrist and does not know whether NorthShore has psychiatrists available.

She reports that when she has energy, she feels healthy, and does not feel healthy when she is tired. Her fatigue is often caused by stress, which interferes with sleep and sometimes leads to comfort eating, which also keeps her awake because of acid reflux. She is aware of a spiral effect and knows that her mental health influences her physical health.

She does not think mental health is a priority in the United States health care system, and says that unless she has Medicaid or no insurance at all, she cannot receive the care she needs. If given the opportunity to speak directly with a hospital CEO, she would inform them that patients need the ability to meet with a psychiatrist or psychologist, because mental health is as important as physical health. She wants to know what mental health services are available to her, including medication as well as someone to talk to, and would appreciate seeing her primary care provider collaborate with her mental health service provider. She would like to know they are talking to each other, she says, because sometimes it feels like they never talk to each other.



APPENDIX F

Summary of interview with Corrine Kohler, MD, Frances Nelson Health Center, Champaign, Ill.

The Frances Nelson Health Center is a federally qualified health center that provides comprehensive care for patients of all ages. This outpatient-based health center has two full-time counselors, a psychiatrist and a licensed clinical social worker on staff to provide collaboration-based mental health services to adults and children.

Corinne Kohler, MD, a family medicine physician based in the clinic since 1998, says, "You cannot be in family medicine for long without understanding how mental health is integrated into chronic illness. ... Mental health enters into every chronic illness. It needs to be addressed — maybe not at every visit, but periodically it'll enter in."

In general, Kohler says, access to mental health services is challenging in downstate Illinois. Before the center expanded to include three counselors, patients had to book appointments two to three weeks ahead, a factor that has contributed to a 25% no-show rate.

Kohler reports that over the years the health center has implemented a variety of methods to try to eliminate no-shows, including appointment reminder calls and making sure that appointment times are convenient for patients. Patients often experience transportation issues, stemming from the need to book several appointments to access care: Centers for Medicare and Medicaid Services' billing policy limits the number of appointments a patient can have in a single day, and patients cannot be seen for concurrent physical and mental health appointments. The health center has opened evening bookings one day a week, but those hours are not highly used.

Unfortunately, the collaborative care model is not financially sustainable for the health center, which depends on funding from grants, the local mental health board, SAMHSA and other sources. The high no-show rate leaves gaps in care and reimbursement, so many mental health care providers are assigned additional tasks to complete during a no-show event.

A nearby psychiatry residency program has provided the clinic with residents, which has increased access for patients in need of emergency care. The center's double-boarded psychiatrist and family medicine physician is a particular asset; in addition to providing mental health services, this physician provides education to the residents.

Kohler says it would be ideal for all new adult patients to have a counseling intake, including PHQ screening and a social determinants of health assessment, as part of their comprehensive care. “Physicians screen for high cholesterol; they should screen for depression,” she suggests. “If patients are already comfortable with their primary care provider, they’ll be more accepting of mental health services, like counseling.”

APPENDIX G

Summary of interview with José Elizondo, MD, Advocate Illinois Masonic Medical Center, Chicago

Advocate Illinois Masonic Medical Center is home to a behavioral health center with a strong complement of providers delivering comprehensive mental health services, and also provides mental health crisis services in its emergency department and walk-in office sites. Patients have access to individual counseling as well as group meetings for addiction and grief and loss.

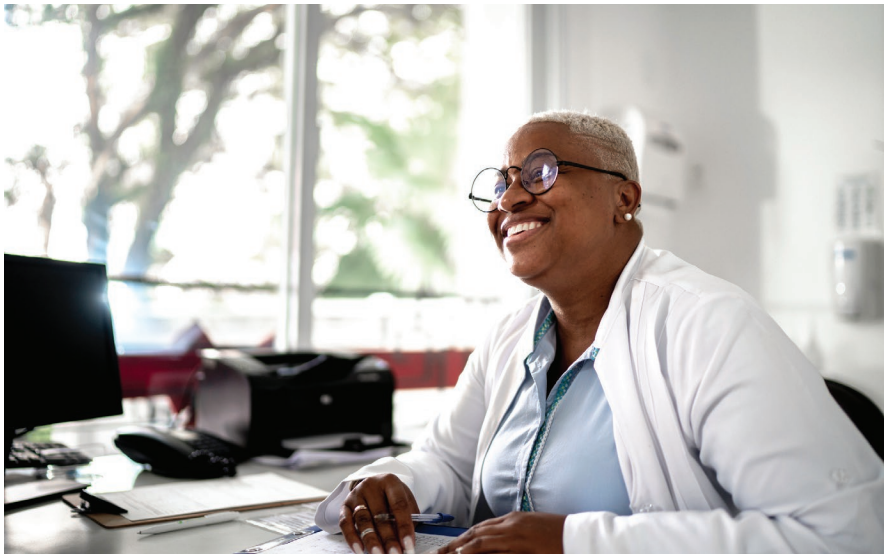
Advocate also provides collaboration-based care at the Advocate Medical Group Family HealthCenter-Ravenswood, an office that provides family-focused, community-oriented health care for patients of all ages. The center hosts a psychiatrist for consultation once a week to identify patient issues, review medications and create a treatment plan; many of the patients seeking this service are there via internal referrals. After their consultation, patients can follow up with family medicine residents for continued care. Advocate Masonic family medicine faculty emphasize behavioral health training for family medicine residents at this health center; residents also spend a required month of service in the behavioral health center, where they learn from primary behavioral health faculty, fellows and child psychiatrists.

The Family HealthCenter also has psychologist services available, provided by one or two fellows who embed there annually to provide therapy for one year. These psychologists have a special focus on family dynamics and how chronic illness affects the family. They see patients, teach residents and provide suggestions to preceptors as needed.

A major challenge facing the Family HealthCenter is its ability to secure reliable, consistent funding. The center was initially awarded a grant that allowed it to supplement fellows' salaries. When the grant ran out, the residency program had to reallocate funds from other budgets, such as teaching expenses. Other Advocate Medical Group clinics are interested in replicating the collaborative care model, but the need for financial support is a limiting factor: The clinics would need to secure additional funding or have patients be willing to pay for the services provided. Currently, these clinic providers refer out for mental health services.

The care received by patients who are referred out depends on their insurance plans. For example, private insurance usually covers medication management, but may not cover weekly therapy services. This varying coverage leads to more patients depending solely on medication management instead of a combination of medication management and therapy. Mental health services are frequently minimally reimbursed, and reimbursement can be difficult to secure at all.

Advocate Illinois Masonic Medical Center family medicine and psychiatric department faculty continue to meet to discuss the benefits of a collaboration-based model, because they see how the model can benefit patients, mental health clinicians and the overall finances of the institution.



APPENDIX H

Summary of interview with Laurie Carrier, MD, and Denise Fuentes, LCSW, Heartland Health Centers, Chicago

Heartland Health Centers (a different organization than Heartland Alliance Health, referenced in Appendix E) is a federally qualified health center with 17 locations serving Chicago's north side and nearby suburbs, providing more than 26,000 people with a medical home for affordable, comprehensive primary care, oral health care and mental health services. Heartland aims to be a national leader in community-based health care by advancing innovative service models and patient-centered best practices to improve the well-being of the communities served.

Heartland began offering collaborative primary care and mental health care services in the late 2000s but lacked enough psychiatrists and social workers to serve all of its patients. After securing four years of funding from SAMHSA, Heartland embarked on a partnership with Trilogy Behavioral Healthcare — a clinic serving people with serious mental illness — to integrate primary care and mental health services. First, the partnership integrated two full-time primary care and psychiatry providers into a Heartland facility at Trilogy's location. The next step was integration of Trilogy mental health resources into Heartland, and the final step was to integrate child psychiatry services into school-based health clinics. More recently, Heartland has partnered with community mental health centers such as Thresholds and Turning Pointe to bring primary care services into those centers' spaces.

A key point of innovation was retooling the responsibilities of behavioral health consultants. Most of Heartland's licensed clinical social workers were used to a traditional counseling role, but integration into these new settings required a different skill set. With the help of a 2015 Institute for Health Care Improvement grant, Heartland developed job descriptions and training for eight behavioral health consultants.

The work has been championed by Heartland's current CEO, who has an extensive background in mental health administration and has made integrated care part of Heartland's mission, thereby attracting providers who share the same interest and commitments. Heartland is moving toward more integrated practices — for example, combining family medicine with integrative medicine — and has recently begun hiring geriatric social workers to serve older community members.

APPENDIX I

Summary of Interview with Korean-American community members in Chicago

Ms. U, Ms. L, Mr. L and Mr. Y attend line dancing classes on Wednesdays at Hanul Family Alliance and agreed to be interviewed about their experiences with health systems.

All are older adults who have insurance either through Medicare with a secondary insurer (e.g., Blue Cross/Blue Shield), a Medicare Advantage program (e.g., Humana Gold) or an employer-sponsored program (e.g., United Healthcare). Most receive their care through primary care physicians associated with NorthShore University Health System or Alexian Brothers (now part of AMITA Health).

All of them said that they had easy access to health care and that the United States system was better than what they experienced in other countries, but all acknowledged that access for their children and younger generations in the Korean community is more difficult. Most of the interviewees see a primary care physician mainly for routine care of physical conditions such as diabetes, high blood pressure or high cholesterol, and tend to favor a primary care physician from their own culture and heritage.

Most did not recall a primary care physician addressing or screening for their mental health needs. They all recognized the cultural stigmas associated with mental health issues and said that the younger generation who grew up in the United States was more willing to speak up about mental health. Mr. Y said, "if you mentioned mental health needs, you would be viewed as 'less' of a Korean. However, I am not the regular Korean." Mr. and Ms. L said that they each acknowledged concerns about how much alcohol Mr. L was drinking each day. When Mr. L wanted to approach the issue with his primary care doctor, he asked about bloodwork to check his liver function rather than addressing his concern directly.

When another interviewee felt depressed after retiring from a long sales career, he mentioned seeing multiple psychiatrists. Relationships with the first two psychiatrists did not start out well, and he felt that the number of antidepressants prescribed and the suggested two to three appointments per week were too much. When he finally connected with a psychiatrist of Korean heritage, communication was better, the number of medications was reduced and the interviewee has taken the initiative to engage in socialization and physical activity to improve his mood. However, he does not recall being queried about his mood when seen by his primary care physician.

At the end of the interview, all interviewees mentioned that they would like health system leaders to enable primary care physicians to spend more time on all of their health concerns and to provide better, more culturally competent care.

APPENDIX J

Summary of Interview with Michael Hanak, MD, and Neha Gupta, MD, Rush University System for Health, Chicago

Although Rush University System for Health (Rush) is a major health system in the Chicago region with large departments of primary care physicians, psychiatrists and behavioralists, the screening rate for depression across the health system before 2016 was close to zero. Leaders in Rush's accountable care organization were eager to seek better solutions for providing mental health services, beginning with a pilot study of universal depression screening in primary care practices.

In 2016, Rush implemented a team-based depression screening program called the Collaborative Care Team. Rush provides quality preventive care through value-based care design that rewards providers for meeting specific quality measures, as opposed to the traditional fee-for-service model, so leaders recognized an opportunity to leverage payer-sponsored quality programs aimed at depression screening. Funding from insurance providers would support staff to screen and provide interventions, while supplementing its own investments in expanding access to behavioral health services.

A psychiatrist who was interested in the Mental Health Collaborative Care Model worked with a family medicine champion to pilot Rush's collaboration-based approach to mental health service delivery. A double-certified internal medicine/psychiatry specialist was recruited as the sole psychiatry consultant for the program, which was implemented at two clinical sites where 10 other physicians contributed to help make the model functional. This specialist works with three social workers, who follow up within seven days on any patient who has a positive PHQ-9 screening.

Rush now provides depression screening for every patient during their intake in primary care, family medicine, OB/GYN, neurology and oncology. Patients are screened first with the PHQ-2, followed by the PHQ-9 if the responses indicate a potential for major depression. If the PHQ-9 score is >9, a best practice advisory is triggered in the electronic health record, and — after the primary provider asks the patient for consent to proceed with a referral — the patient is added to the population-based registry in the EHR. The social worker calls the patient within seven days to perform an assessment and connect the patient to the appropriate resources, including the consultant psychiatrist, who meets with the social work team weekly. This model has raised Rush's screening rates for depression above the Tier Two national average.

Some clinicians were initially reluctant to adopt the collaboration-based model, with some reporting that they were not comfortable being the first provider to initiate mental health therapy. Because the psychiatrist is not co-located with other clinicians, the psychiatrist has to be responsive and available, often providing ad hoc consultations to primary providers to increase their comfort in prescribing and to act as a dedicated support to the system. The psychiatrist has also implemented an access clinic, reserving in-person consultations for those requiring appointments within seven to 14 days, and often triages patients to expedited appointments at Rush Psychiatry when indicated. After four years, the program has built robust referral counts, and primary care providers have expressed appreciation for the team's support of their patients. Primary care providers have also voiced feeling more comfortable continuing the treatment set forth by a psychiatrist; they appreciate their additional interactions with mental health service providers.

APPENDIX K

Summary of Interview with Loren Hughes, MD, and Sheila Thomas, MD, Hillsboro Area Hospital, Hillsboro, Ill.

Loren Hughes, MD, family physician and hospital administrator at Hillsboro Area Hospital (HAH) in Hillsboro, Ill., was keen to implement the collaborative care model in his community, about 250 miles southwest of Chicago. His motto: "Prove to me we can't do this." He brought experience as an elected official, emergency room director and administrator to work alongside Sheila Thomas, MD, to develop and implement the Mental Health Collaborative Care Model.

Thomas, a psychiatrist and family medicine physician who is currently HAH's medical director of integrated behavioral health, was compelled to pursue psychiatry while practicing family medicine in rural southern Illinois. Her patients with behavioral health diagnoses needed care immediately, but were unable to see a psychiatrist for six to nine months due to lack of capacity. She became a psychiatrist to learn how to create an innovative, sustainable solution to address the behavioral health needs in her community.

When Hughes and Thomas presented the model at a local town hall meeting to see if there was any interest, residents' enthusiasm and demand for more information were overwhelming. Thomas went on to study the collaborative care model created by the University of Washington AIMS Center, and visited other programs to learn about their approach to collaborative care. To ensure that the care provided at HAH truly met patients' needs, Thomas modified the AIMS Center's recommendations, broadening them to address most of the behavioral health conditions that are likely to come into the primary care office.

Currently, Thomas functions as the consulting psychiatrist in the program at HAH, where she collaborates with 11 primary care providers and two behavioral health care managers in the integrated behavioral health department. Although she communicates mainly with the care managers, she is willing and available to speak directly with primary care providers as needed.

Primary care providers identify patients who might benefit from the program. Once a patient agrees to participate, they meet right away with a care manager: a social worker who gathers the patient's medical history and assesses for behavioral health issues. Thomas meets with care managers frequently to review cases and provide treatment recommendations, which are sent to the primary care provider to ensure they're in agreement. The care manager then follows up with the patient to assess symptoms with universal screening tools and check in on how medications, if prescribed, are working. Ultimately, "prescribing is the responsibility of the primary care provider, as they have the best overall picture of the patient," says Thomas.

To help with the administrative side of implementing the model, Hughes familiarized Thomas with billing and coding, and HAH installed Epic software to enable easier documentation and communication between providers. Thomas has hired a psychiatric nurse administrator to help develop program policies, e.g., criteria for patients' treatment and discharge.

Both Hughes and Thomas agree that the model has increased providers' satisfaction. Thomas suggests that under the traditional care model, primary care providers would make a referral, sometimes to a psychiatrist in a different city, and very seldom receive notes or any communication. Patients often dropped out of care, leaving the primary care provider with no information on the patient's treatment plan or medications. This team-based approach makes it much easier for providers to communicate and share notes with each other.

Thomas also reports that this model reduces stress among primary care providers and their staff, who know that their patients are being well taken care of by the behavioral health team. "Worried well" patients are also managed more effectively; they can schedule a weekly standing appointment with their primary care provider to manage their anxiety or simply check in. As a result, they call less frequently during the week and take up less of their primary care providers' time. "When you manage their mental health issues, their other issues are much better managed," says Hughes.

Hughes also says, "there are many light green dollars to be saved [by implementing this model]." Behavioral health diagnoses add value to Medicare Advantage patients: Their risk adjustment factor (RAF) score increases, so reimbursement per member per month is higher, reflecting additional value that might not have been captured without the collaborative model. Unfortunately, Medicaid reimburses poorly, and private insurers often delay payment.

Many primary care providers in rural communities have no behavioral health help within the traditional model, so the collaborative care model reassures the primary care provider and helps them better manage patient care. "Every family physician is capable of functioning within this model; there is help each step of the way," says Hughes.

References

Blasinsky M, Goldman HH, Unützer J. Project IMPACT: a report on barriers and facilitators to sustainability. Admin Pol Ment Health. 2006;33(6):718-29.

Byng R, Norman I, Redfern S, Jones R. Exposing the key functions of a complex intervention for shared care in mental health: case study of a process evaluation. BMC Health Serv Res. 2008;8:274.

Christa DL et al. "Zero Suicide" – A model for reducing suicide in United States behavioral health care. Suicidology. 2018;23(1):22-30.

Coupe N, Anderson E, Gask L, Sykes P, Richards DA, Chew-Graham C. Facilitating professional liaison in collaborative care for depression in United Kingdom primary care: a qualitative study utilizing normalization process theory. BMC Fam Pract. 2014;15:78.

Curran GM, Sullivan G, Mendel P, Craske MG, Sherbourne CD, Stein MB et al. Implementation of the CALM intervention for anxiety disorders: a qualitative study. Implement Sci. 2012;7:14.

Data and Statistics on Children's Mental Health (2020, March 30). Retrieved May 7, 2020, from www.cdc.gov/childrensmentalhealth/data.html.

Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Health. 2014;7:503-13.

Fisher E et al. Telementoring Primary Care Clinicians to Improve Geriatric Mental Health Care. Popul Health Manag. 2017 Oct;20(5):342-347.

Foreman-Hoffman VL et al. Quality improvement, implementation, and dissemination strategies to improve mental health care for children and adolescents: a systematic review. Implement Sci. 2017 Jul 24;12(1):93.

German RE et al. Testing a Web-Based, Trained-Peer Model to Build Capacity for Evidence-Based Practices in Community Mental Health Systems. Psychiatr Serv. 2018 Mar 1;69(3):286-292.

Ghoncheh R et al. Efficacy of Adolescent Suicide Prevention E-Learning Modules for Gatekeepers: A Randomized Controlled Trial. JMIR Ment Health. 2016 Jan 29;3(1):e8.

Goodrich DE et al. Mental health collaborative care and its role in primary care settings. Curr Psychiatry Rep. 2013 Aug;15(8):383.

Hoagwood KE et al. A Response to Proposed Budget Cuts Affecting Children's Mental Health: Protecting Policies and Programs That Promote Collective Efficacy. Psychiatr Serv. 2018 Mar 1;69(3):268-273.

Huang H, Bauer AM, Wasse JK, Ratzliff A, Chan YF, Harrison D et al. Care managers' experiences in a collaborative care program for high risk mothers with depression. Psychosomatics. 2013;54(3):272-6.

Jabbour M et al. Improving mental health care transitions for children and youth: a protocol to implement and evaluate an emergency department clinical pathway. Implement Sci. 2016 Jul 7;11(1):90.

Kessler, RC (2012). The costs of depression. Psychiatric Clinics of North America, 35, 1-14. doi:10.1016/j.psc.2011.11.005.

Knowles SE, Chew-Graham C, Adeyemi I, Coupe N, Coventry PA. Managing depression in people with multimorbidity: a qualitative evaluation of an integrated collaborative care model. BMC Fam Pract. 2015;16:32.

Kverno K. Promoting Access Through Integrated Mental Health Care Education. Open Nurs J. 2016 Apr 30;10:73-7.

Lyon AR et al. A Digital Feedback System to Support Implementation of Measurement-Based Care by School-Based Mental Health Clinicians. J Clin Child Adolesc Psychol. 2017 Mar 2:1-12.

"Mental Health By the Numbers." *NAMI*, National Alliance of Mental Illness, 2020, www.nami.org/mhstats.

Nutting PA, Gallagher KM, Riley K, White S, Dietrich AJ, Dickinson WP. Implementing a depression improvement intervention in five health care organizations: experience from the RESPECT-depression trial. Adm Policy Ment Health. 2007;34(2):127-37.

O'Donnell AN, Williams BC, Eisenberg D, Kilbourne AM (2013). Mental health in ACOs: missed opportunities and low-hanging fruit. *The American journal of managed care*, *19*(3):180-184.

Oishi SM, Shoai R, Katon W, Callahan C, Unützer J et al. Impacting late life depression: integrating a depression intervention into primary care. Psychiat Quart. 2003;74(1):75-89.

Oppenheim J et al. Launching forward: The integration of behavioral health in primary care as a key strategy for promoting young child wellness. Am J Orthopsychiatry. 2016 Mar;86(2):124-31.

Orpana H et al. Monitoring positive mental health and its determinants in Canada: the development of the Positive Mental Health Surveillance Indicator Framework. Health Promot Chronic Dis Prev Can. 2016 Jan;36(1):1-10.

Palinkas LA, Ell K, Hansen M, Cabassa L, Wells A. Sustainability of collaborative care interventions in primary care settings. J Soc Work. 2011;11(1):99-117.

Pelletier JF et al. Feasibility and acceptability of patient partnership to improve access to primary care for the physical health of patients with severe mental illnesses: an interactive guide. Int J Equity Health. 2015 Sep 14;14:78.

Quantifying the Cost of Depression (2020). Retrieved May 7, 2020, from www.workplacementalhealth.org/Mental-Health-Topics/Depression/Quantifying-the-Cost-of-Depression.

Sanchez K, Adorno G. "It's like being a well-loved child": reflections from a collaborative care team. Prim Care Companion CNS Disorders. 2013;15(6).

Savic M et al. Strategies to facilitate integrated care for people with alcohol and other drug problems: a systematic review. Subst Abuse Treat Prev Policy. 2017 Apr 7;12(1):19.

Savoy ML, O'Gurek DT. Screening Your Adult Patients for Depression. Fam Pract Manag. 2016 Mar-Apr;23(2):16-20. PMID: 26977984.

Stewart RE et al. State Adoption of Incentives to Promote Evidence-Based Practices in Behavioral Health Systems. Psychiatr Serv. 2018 Jun 1;69(6): 685-688.

Tai-Seale M, Kunik ME, Shepherd A, Kirchner J, Gottumukkala A. A case study of early experience with implementation of collaborative care in the veterans health administration. Popul Health Manag. 2010;13(6):331-7.

Tambuyzer E et al. Patient involvement in mental health care: one size does not fit all. Health Expect. 2014 Feb;17(1):138-50.

The Psychiatric Shortage Causes and Solutions. PDF (2017). Washington, DC.

Unutzer J, Katon WJ, Fan MY, Schoenbaum MC, Lin EH, Della Penna RD, Powers D. Long-term cost effects of collaborative care for late-life depression. The American journal of managed care. 2008;14(2), 95-100.

Whitebird RR, Solberg LI, Jaeckels NA, Pietruszewski PB, Hadzic S, Unützer J et al. Effective implementation of collaborative care for depression: what is needed? Am J Manag Care. 2014;20(9):699-707.

Wozniak L, Soprovich A, Rees S, Al Sayah F, Majumdar SR, Johnson JA. Contextualizing the effectiveness of a collaborative care model for primary care patients with diabetes and depression (teamcare): a qualitative assessment using RE-AIM. Can J Diabetes. 2015;39 Suppl 3:S83-91.

Endnotes

1 Mental Health By the Numbers. National Alliance of Mental Illness website. www.nami.org/mhstats. Accessed May 7, 2020.

2 Data and Statistics on Children's Mental Health. Centers for Disease Control website. www.cdc.gov/childrensmentalhealth/data.html Updated March 30, 2020. Accessed May 7, 2020.

3 BS (2020, February 7). Personal interview.

4 Unützer J, Katon WJ, Fan MY, Schoenbaum MC, Lin EH, Della Penna RD, Powers D (2008). Long-term cost effects of collaborative care for late-life depression. *The American journal of managed care*, *14*(2):95-100.

5 Unützer J, Katon WJ, Fan MY, Schoenbaum MC, Lin EH, Della Penna RD, Powers D (2008). Long-term cost effects of collaborative care for late-life depression. *The American journal of managed care*, *14*(2):95-100.

6 Unützer J, Katon WJ, Fan MY, Schoenbaum MC, Lin EH, Della Penna RD, Powers D (2008). Long-term cost effects of collaborative care for late-life depression. *The American journal of managed care*, *14*(2):95-100.

7 Palinkas L et al. Sustainability of collaborative care interventions in primary care settings. Journal of Social Work. 11(1):99-117.

8 Mental Health By the Numbers. The National Alliance on Mental Illness website. www.nami.org/Learn-More/Mental-Health-By-the-Numbers.

9 Data and Statistics on Children's Mental Health. Centers for Disease Control website. www.cdc.gov/childrensmentalhealth/data.html Updated March 30, 2020. Accessed May 7, 2020.

10 BS (2020, February 7). Personal interview.

11 *The Psychiatric Shortage Causes and Solutions*. PDF (2017). Washington, DC.

12 *The Psychiatric Shortage Causes and Solutions*. PDF (2017). Washington, DC.

13 Kessler RC (2012). The costs of depression. Psychiatric Clinics of North America, 35, 1-14. doi:10.1016/j.psc.2011.11.005

14 Grochtdreis T et al (2015). *Cost-Effectiveness of Collaborative Care for the Treatment of Depressive Disorders in Primary Care: A Systematic Review*. PLoS ONE 10(5):e0123078. doi:10.1371/journal.pone.0123078.

15 Jacob V et al. *Economics of collaborative care for management of depressive disorders: a community guide systematic review.* Am J Prev Med. 2012 May;42(5):539-49. doi:10.1016/j.amepre.2012.01.011.

16 Grochtdreis T et al (2015). *Cost-Effectiveness of Collaborative Care for the Treatment of Depressive Disorders in Primary Care: A Systematic Review*. PLoS ONE 10(5):e0123078. doi:10.1371/journal.pone.0123078.

17 Unützer J, Katon WJ, Fan MY, Schoenbaum MC, Lin EH, Della Penna RD, Powers D (2008). Long-term cost effects of collaborative care for late-life depression. *The American journal of managed care*, *14*(2):95-100.

18 Unützer J, Katon WJ, Fan MY, Schoenbaum MC, Lin EH, Della Penna RD, Powers D (2008). Long-term cost effects of collaborative care for late-life depression. *The American journal of managed care*, *14*(2):95-100.

19 Palinkas L et al. Sustainability of collaborative care interventions in primary care settings. Journal of Social Work. 11(1):99-117.

20 Overbeck G, Davidsen AS, Kousgaard MB (2016). Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. *Implementation Science*, *11*(1). doi:10.1186/s13012-016-0519-y.

21 Coupe N, Anderson E, Gask L, Sykes P, Richards DA, Chew-Graham C. Facilitating professional liaison in collaborative care for depression in United Kingdom primary care: a qualitative study utilizing normalization process theory. BMC Fam Pract. 2014;15:78.

22 Michelfelder A (2020, January 22). Personal interview.

23 Elizondo J (2020, January 27). Personal interview.

24 Overbeck G et al. *Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review.* Implementation Science (2016). 11:165 DOI 10.1186/s13012-016-0519-y.

25 Michelfelder A (2020, January 22). Personal interview.

26 Aziz I (2020, January 31). Personal interview.

27 Carrier L, Fuentes D (2020, February 7). Personal interview.

28 Aziz I (2020, January 31). Personal interview.

29 Michelfelder A (2020, January 22). Personal interview.

30 Kohler C (2020, April 14). Personal interview.

31 Elizondo J (2020, January 27). Personal interview.

32 Iragorri N, Spackman E. Assessing the value of screening tools: reviewing the challenges and opportunities of cost-effectiveness analysis. *Public Health Rev 39,* 17 (2018). doi.org/10.1186/s40985-018-0093-8.

33 Iragorri N, Spackman E. Assessing the value of screening tools: reviewing the challenges and opportunities of cost-effectiveness analysis. *Public Health Rev 39,* 17 (2018). doi.org/10.1186/s40985-018-0093-8.

34 Unützer J, Katon WJ, Fan MY, Schoenbaum MC, Lin EH, Della Penna RD, Powers D (2008). Long-term cost effects of collaborative care for late-life depression. *The American journal of managed care*, *14*(2):95-100.

35 American Psychiatry Association (2020). Learn About the Collaborative Care Model. www.psychiatry.org/psychiatrists/practice/professional-interests/integrated-care/learn.

36 American Psychiatric Association. *What is the Collaborative Care Model?* www.psychiatry.org/psychiatrists/practice/professional-interests/integrated-care/get-trained/about-collaborative-care.

37 American Psychiatric Association. *What is the Collaborative Care Model?* www.psychiatry.org/psychiatrists/practice/professional-interests/integrated-care/get-trained/about-collaborative-care.

38 Archer J et al. *Collaborative Care for People with Depression and Anxiety.* www.cochrane.org/CD006525/DEPRESSN_collaborative-care-for-people-with-depression-and-anxiety. October 2012.

39 Palinkas L et al. Sustainability of collaborative care interventions in primary care settings. Journal of Social Work. 11(1):99-117.

40 Jacob V et al. Economics of collaborative care for management of depressive disorders: a community guide systematic review. Am J Prev Med. 2012 May;42(5):539-49. doi:10.1016/j.amepre.2012.01.011.

41 Palinkas L et al. Sustainability of collaborative care interventions in primary care settings. Journal of Social Work. 11(1):99-117.

42 Savoy M, O'Gurek D. *Fam Practice Management*. 2016 Mar-Apr;23(2):16-20.

43 Savoy M, O'Gurek D. *Fam Practice Management*. 2016 Mar-Apr;23(2):16-20.

44 Savoy M, O'Gurek D. *Fam Practice Management*. 2016 Mar-Apr;23(2):16-20.

45 AMITA Health Adventist Medical Center Hinsdale (2019). Personal interview.

46 Cook County Health and Hospital Systems (2019). Personal interview.

47 Palinkas L et al. Sustainability of collaborative care interventions in primary care settings. Journal of Social Work. 11(1):99-117.

48 Palinkas L et al. Sustainability of collaborative care interventions in primary care settings. Journal of Social Work. 11(1):99-117.

49 Jacob V et al. Economics of collaborative care for management of depressive disorders: a community guide systematic review. Am J Prev Med. 2012 May;42(5):539-49. doi:10.1016/j.amepre.2012.01.011.

50 Elizondo J (2020, January 27). Personal interview.

51 Cook County Health and Hospital Systems (2019). Personal interview.

52 Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Health. 2014;7:503-13.

53 Overbeck G, Davidsen AS, Kousgaard MB (2016). Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. *Implementation Science*, *11*(1). doi:10.1186/s13012-016-0519-y.

54 Richards DA et al. Clinical effectiveness and cost-effectiveness of collaborative care for depression in United Kingdom primary care (CADET): a cluster randomised controlled trial. Health Technol Assess. 2016 Feb;20(14):1-192. doi:10.3310/hta20140.

55 Richards DA et al. Clinical effectiveness and cost-effectiveness of collaborative care for depression in United Kingdom primary care (CADET): a cluster randomised controlled trial. Health Technol Assess. 2016 Feb;20(14):1-192. doi:10.3310/hta20140.

56 Coupe N, Anderson E, Gask L, Sykes P, Richards DA, Chew-Graham C. Facilitating professional liaison in collaborative care for depression in United Kingdom primary care: a qualitative study utilizing normalization process theory. BMC Fam Pract. 2014;15:78.

57 Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Health. 2014;7:503-13.

58 Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Health. 2014;7:503-13.

59 Curran GM, Sullivan G, Mendel P, Craske MG, Sherbourne CD, Stein MB et al. Implementation of the CALM intervention for anxiety disorders: a qualitative study. Implement Sci. 2012;7:14.

60 Overbeck G et al. Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. Implementation Science (2016). 11:165 DOI 10.1186/s13012-016-0519-y

61 Coupe N, Anderson E, Gask L, Sykes P, Richards DA, Chew-Graham C. Facilitating professional liaison in collaborative care for depression in United Kingdom primary care; a qualitative study utilising normalisation process theory. BMC Fam Pract. 2014;15:78

62 Curran GM, Sullivan G, Mendel P, Craske MG, Sherbourne CD, Stein MB et al. Implementation of the CALM intervention for anxiety disorders: a qualitative study. Implement Sci. 2012;7:14.

63 Coupe N, Anderson E, Gask L, Sykes P, Richards DA, Chew-Graham C. Facilitating professional liaison in collaborative care for depression in United Kingdom primary care; a qualitative study utilising normalisation process theory. BMC Fam Pract. 2014;15:78.

64 Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Health. 2014;7:503-13.

65 Oishi SM, Shoai R, Katon W, Callahan C, Unützer J et al. Impacting late life depression: integrating a depression intervention into primary care. Psychiat Quart. 2003;74(1):75-89.

66 Iragorri N, Spackman E. Assessing the value of screening tools: reviewing the challenges and opportunities of cost-effectiveness analysis. *Public Health Rev 39*, 17 (2018). doi.org/10.1186/s40985-018-0093-8.

67 PHQ-9 Depression Scale (2020). Retrieved April 29, 2020, from aims.uw.edu/resource-library/phq-9-depression-scale.

68 Patient Health Questionnaire-9 (PHQ-9) (2019). Retrieved April 29, 2020, from aims.uw.edu/care-partners/content/patient-health-questionnaire-9-phq-9.

69 PHQ-9 Depression Scale (2020). Retrieved April 29, 2020, from aims.uw.edu/resource-library/phq-9-depression-scale.

70 Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Health. 2014;7:503-13.

71 Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Health. 2014;7:503-13.

72 Kohler C (2020, April 14). Personal interview.

73 Lyon AR et al. A Digital Feedback System to Support Implementation of Measurement-Based Care by School-Based Mental Health Clinicians. J Clin Child Adolesc Psychol. 2017 Mar 2:1-12.

74 Kohler C (2020, April 14). Personal interview.

75 Eghaneyan BH, Sanchez K, Mitschke DB. Implementation of a collaborative care model for the treatment of depression and anxiety in a community health center: results from a qualitative case study. J Multidiscip Health. 2014;7:503-13.

76 Lyon AR et al. A Digital Feedback System to Support Implementation of Measurement-Based Care by School-Based Mental Health Clinicians. J Clin Child Adolesc Psychol. 2017 Mar 2:1-12.

77 Overbeck G, Davidsen AS, Kousgaard MB (2016). Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. *Implementation Science*, *11*(1). doi:10.1186/s13012-016-0519-y.

78 McAlpine L (2019, November 21). Personal interview.

79 Overbeck G, Davidsen AS, Kousgaard MB (2016). Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. *Implementation Science*, *11*(1). doi:10.1186/s13012-016-0519-y.

80 Overbeck G, Davidsen AS, Kousgaard MB (2016). Enablers and barriers to implementing collaborative care for anxiety and depression: a systematic qualitative review. *Implementation Science*, *11*(1). doi:10.1186/s13012-016-0519-y.

81 Coupe N, Anderson E, Gask L, Sykes P, Richards DA, Chew-Graham C. Facilitating professional liaison in collaborative care for depression in United Kingdom primary care: a qualitative study utilizing normalization process theory. BMC Fam Pract. 2014;15:78.

82 Coupe N, Anderson E, Gask L, Sykes P, Richards DA, Chew-Graham C. Facilitating professional liaison in collaborative care for depression in United Kingdom primary care: a qualitative study utilizing normalization process theory. BMC Fam Pract. 2014;15:78.

83 McAlpine L (2019, November 21). Personal interview.

84 Foreman-Hoffman VL et al. Quality improvement, implementation, and dissemination strategies to improve mental health care for children and adolescents: a systematic review. Implement Sci. 2017 Jul 24;12(1):93.

85 Orpana H et al. Monitoring positive mental health and its determinants in Canada: the development of the Positive Mental Health Surveillance Indicator Framework. Health Promot Chronic Dis Prev Can. 2016 Jan;36(1):1-10.

86 Orpana H et al. Monitoring positive mental health and its determinants in Canada: the development of the Positive Mental Health Surveillance Indicator Framework. Health Promot Chronic Dis Prev Can. 2016 Jan;36(1):1-10.

87 Kohler C (2020, April 14). Personal interview.

88 BS (2020, February 7). Personal Interview.

89 Cook County Health and Hospital Systems (2019). Personal interview.

90 Hanak M (2020, May 22). Personal interview.

91 Hanak M (2020, May 22). Personal interview.

92 Aziz I (2020, January 31). Personal Interview.

93 Carrier L, Fuentes D (2020, February 7). Personal interview.

94 Elizondo J (2020, January 27). Personal interview.

95 U, L, L, Y (2020, March 4). Personal interview.

96 AMITA Health Adventist Medical Center Hinsdale (2019). Personal interview.

97 Michelfelder A (2020, January 22). Personal interview.

98 Michelfelder A (2020, January 22). Personal interview.

99 Kohler C (2020, April 14). Personal interview.

100 Hughes L (2020, August 21). Personal Interview.

101 Thomas S (2020, September 8). Personal Interview.

102 MacKenzie J (2020, June 19). Personal Interview.

CENTER FOR COMMUNITY HEALTH EQUITY

DePaul University Rush University

The goal of the Center for Community Health Equity is to improve community health outcomes and contribute to the elimination of health inequities in Chicago. Co-founded by DePaul University and Rush University in 2015, the center links sociologists, geographers and other social scientists with health care professionals and other stakeholders, including students and community partners, to conduct meaningful research that contributes to social justice in our communities.

Illinois Academy of Family Physicians
Devoted to Advocacy, Education & Action

Founded in 1947, The Illinois Academy of Family Physicians (IAFP) is a professional medical society dedicated to maintaining high standards of family medicine and representing more than 5,000 family physicians, residents and medical students. IAFP provides continuing medical education programming, advocacy through all levels of government and opportunities for member engagement and interaction.