Implementing Collaborative Care and Telepsychiatry in Community Health Centers: Patient Outcomes, Fidelity Monitoring, and Sustainability Planning

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Background

Access to high-quality, affordable behavioral health care is a significant challenge for Michigan residents, especially publicly insured individuals facing insurance limitations and unaffordable costs.[1] The shortage and geographically unequal distribution of mental health providers exacerbates this challenge,[2] leading many residents to seek behavioral health care in the primary care setting.[1]

Collaborative Care (CoCM) and telehealth services are promising strategies to improve access to behavioral health care in the primary care setting, particularly for rural communities.[3] These models reduce cost, improve clinical outcomes, and facilitate access to treatment.[4]

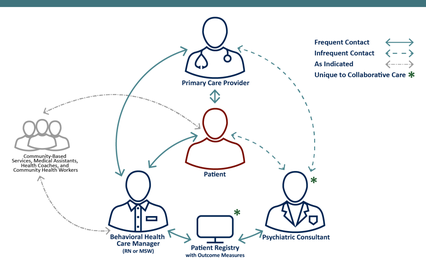
The Michigan Medicine Department of Psychiatry is partnered with the Michigan Primary Care Association and a multisite health system to implement and evaluate CoCM and telehealth models to expand access to behavioral health services in community health centers throughout Michigan.

What is Collaborative Care?

CoCM is an integrated behavioral health care model that leverages limited psychiatric time while improving behavioral health outcomes, specifically depression and anxiety, with growing evidence for comorbid physical conditions, post-traumatic stress disorder (PTSD), and bipolar disorder.[5,6,7]

The model is a population health approach in which a behavioral health care manager and psychiatric consultant utilize a patient registry and proactive monitoring to manage patients with behavioral health needs.

The Collaborative Care Treatment Team



Population Health Patient Registry

Patient Information		Contact Information					Depression Outcomes					Anxiety Outcomes				Panel Review	
Name	Treatment Status	Date of Initial Contact	Date of Most Recent Contact	Number of Patient Contacts Completed	Weeks in Treatment	Date Next Contact Due	Initial PHQ-9	Most Recent PHQ-9	Difference in Most Recent PHQ-9	Most Recent PHQ-9 #9	Date of Most Recent PHQ-9	Initial GAD-7	Most Recent GAD-7	Difference in Most Recent GAD-7	Date of Most Recent GAD-7	Date of Most Recent Panel Review	Flag to Discuss
Bond, James	Active	7/23/18	3/14/19	18	34	4/13/19	11	7	-6	0	1/7/19	14	6	-8	1/7/19	3/11/19	
Doe, Jane	Active	9/13/18	3/13/19	15	27	4/12/19	12	6	-8	0	3/12/19	10	1	-3	3/12/19	2/4/19	
Smith, John	Active	11/2/18	3/13/19	14	19	4/12/19	16	16	2	1	2/7/19	11	9	-2	2/7/19	2/11/19	
Michigan, Cherry	Active	7/11/18	3/11/19	12	36	4/10/19	25	21	3	0	3/5/19	10	12	2	3/5/19	3/11/19	
Jupiter, Mars	Active	10/18/18	3/13/19	11	22	4/12/19	23	12	-1	0	3/13/19	11	7	-1	3/13/19	2/18/19	
Johnson, Matthew	Active	11/23/18	3/12/19	11	16	3/26/19	12	18	4	1	3/12/19	11	10	1	3/12/19	2/18/19	
Three, Test	Active	11/8/18	3/1/19	10	19	3/31/19	14	14	9	1	1/31/19	4	12	4	1/31/19	3/4/19	
Smile, Big	Active	9/21/18	3/13/19	9	25	4/12/19	11	7	-9	0	12/31/18	14	7	-8	12/31/18	2/4/19	Flag to Discuss

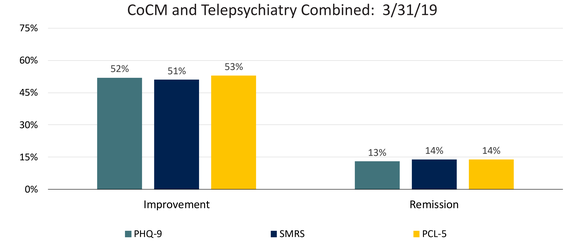
SPIRIT

The Study to Promote Innovation in Rural Integrated Telepsychiatry (SPIRIT) is a Patient-Centered Outcomes Research Institute (PCORI) funded comparative effectiveness trial that compares telepsychiatry versus CoCM in rural health centers to treat patients with PTSD and bipolar disorder. SPIRIT is being conducted in 25 clinics across three states, including Arkansas and Washington, with 12 health centers in Michigan. SPIRIT has enrolled a total of 981 patients, with 350 patients in Michigan.

Patient Outcomes: CoCM and Telehealth

Combined patient outcomes show that these models of care are effective in treating patients with PTSD and bipolar disorder. Outcomes are only shown for patients participating in the Michigan clinics.

Improvement and Remission Rates in Michigan Clinics: CoCM and Telepsychiatry Combined: 3/31/19



Patients only included in this metric if their PHQ-9 and SMRS were initially ≥10 and their PCL5 was ≥31.

Improvement: PHQ-9/SMRS: % of active patients achieving ≥5 point improvement between first and last scores
PCL-5: % of active patients achieving ≥10 point improvement between first and last scores

Remission: PHQ-9/SMRS: % of active patients that have been in treatment for ≥10 weeks and have a score <5
PCL-5: % of active patients that have been in treatment for ≥10 weeks and have a score <19

Fidelity Measures: CoCM

Measure	Description	Overall	CH	FMC	GLB	IC	UGL
Psychiatric Consultant Note	Patients who have completed an initial assessment that have at least one psychiatric consultant note documented	87 (91%)	19 (100%)	17 (85%)	9 (100%)	10 (83%)	32 (86%)
Identified Need for Psychiatric Consultant Review	Active patients who are improving or patients not improvign that have a psychiatric consultation note within the past 30 days	86 (83%)	20 (100%)	18 (67%)	8 (89%)	6 (43%)	34 (89%)
Treatment Changes	Mean number of changes in treatment plan per patient	3.1	2.8	3.5	3.3	3.3	2.8

SPIRIT will end recruitment in June 2019 and complete treatment provision by July 2020. Further analysis will be conducted when treatment outcomes are unblinded at the end of the study.

Many of the participating health centers have the infrastructure and resources to continue providing telepsychiatry services following the end of the study. However, CoCM programs will be challenged to continue as the state policy to support reimbursement for these services has not yet been established in Michigan.

MCCIST

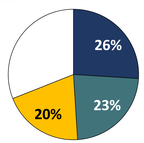
The Michigan Collaborative Care Implementation Support Team (MCCIST) has partnered with three Michigan health centers and one multicenter health system to implement CoCM. These five clinics, including an obstetrics team, have been successfully delivering CoCM services with fidelity to the model, enrolling a total of 182 patients. Patient outcomes and fidelity measures are monitored on a monthly to quarterly basis. In discussion with health center staff, resulting quality improvement interventions are implemented if data suggests they are necessary.

Patient Outcomes

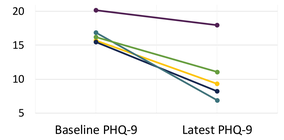
Early patient outcomes align with the evidence base, suggesting these programs will demonstrate long-term clinical success. Data only includes patients (n=51) who have a baseline score (PHQ-9/ GAD-7) greater than 9 and have been enrolled for 3–6 months.

Depression Outcomes

69% of Patients Demonstrate Improved Depression Outcomes at 6 Months

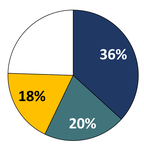


Reduction in Depression Symptoms by Clinic

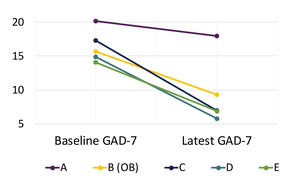


Anxiety Outcomes

74% of Patients Demonstrate Improved Anxiety Outcomes at 6 Months



Reduction in Anxiety Symptoms by Clinic



Fidelity Measures

Measure	Description	Overall	A	B (OB)	C	D	E
Early Outcome Measure Completion (Target: 75%)	Patients completing at least two outcome measures within the first 12 weeks of their enrollment	78 (98%)	9 (90%)	12 (100%)	9 (100%)	23 (100%)	25 (96%)
Early Panel Review (Target: 90%)	Patients discussed with a psychiatric consultant in panel review within their first 2 weeks of enrollment	151 (95%)	11 (69%)	24 (96%)	30 (97%)	45 (100%)	41 (98%)
Critical Treatment Period: 50% Reduction (Target 75%)	Patients who are not improving at 8 weeks that are discussed in panel review within 4–12 weeks of their enrollment	47 (96%)	8 (80%)	11 (100%)	5 (100%)	7 (100%)	16 (100%)
Recommendation Implementation (Target: 80%)	Psychiatric recommendations that have been implemented (This does not include pending recommendations)	317 (92%)	35 (92%)	31 (82%)	42 (84%)	131 (99%)	78 (76%)

Sustainability Planning

Operational Sustainability

MCCIST is working to ensure its partner clinics have the knowledge and resources to independently sustain their CoCM programs. Ongoing consultation activities will prepare clinics to:

- Establish and maintain ongoing program oversight, including adapting to population and staffing needs.
- Evaluate program delivery using fidelity measures and patient outcome reports.
- Monitor program drift to previous model of care.
- Strategize necessary quality improvement interventions.
- Develop billing protocols.

Establishing a Revenue Stream: Policy Initiatives

In Michigan, Medicare, several commercial payers, and some individual Medicaid Health Plans have begun reimbursing for CoCM; however, reimbursement is not yet universal. To encourage widespread adoption of CoCM and sustainability of current programs at these health centers, MCCIST has been advocating for the activation of the CoCM codes with various state entities. In Spring 2019, the Michigan Department of Health and Human Services (MDHHS) began working through the policy development process.

Billing Codes		Timeframe	Time Requirements
CPT Codes	99492	Initial Month	36–70 minutes
	99393	Subsequent Months	31–60 minutes
	99494	Add-on (initial or subsequent)	16–30 additional minutes
G Code (FQHC/RHC)	G0512	Initial Month	>70 minutes
		Subsequent Months	>60 minutes

MDHHS has been working with the Centers for Medicare and Medicaid Services to receive state-specific guidance to update geographical restrictions at the distant site for FQHCs. At this time, Michigan is working internally to develop policy and hopes to promulgate in 2020.

Statewide support is vital to ensuring the prosperity of CoCM and telehealth services, and, ultimately, securing access to affordable, effective, and high-quality behavioral health care for every Michigan resident.

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Funders

MDHHS Michigan Department of Health & Human Services
MICHIGAN HEALTH ENDOWMENT FUND
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