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Large Reductions in Suicide Risk, Attempts and Deaths

Demonstrated by Three "Real World" Studies in Primary Care

Motivation for the studies

A large majority of patients who die by suicide have visited a primary care provider in the prior year, with almost half having done so in the prior month. **Clearly, primary care providers are positioned to play a pivotal role in reducing suicide rates—but they must be properly supported in order to identify and address suicide risk.**

Providers in these studies used the Collaborative Care Model (CoCM) or key elements of it:

Concert Health	University of Pennsylvania Health System	Kaiser Permanente
3,809 “at risk” patients	**368** “at risk” patients	**228,255** patients in treatment group
56% achieved reduced risk	**52%** achieved reduced risk	**25%** reduction in suicide attempts and death (combined)

Conclusion

Implementing CoCM in primary care can substantially reduce nationwide suicide rates.

Executive Summary

In all three studies, mental health and substance use (MHSU) treatment was integrated into primary care:

- The studies by Concert Health and the University of Pennsylvania Health System incorporated CoCM—all four elements developed at the University of Washington that are required for reimbursement using the CoCM codes.
- The study by Kaiser Permanente involved some, but not all, of the elements of CoCM; however, Kaiser Permanente is now implementing CoCM (all elements) throughout its 8 markets.

> **"Kaiser Permanente has embraced CoCM not only for its proven efficacy in improving outcomes and alleviating disease burden, but also for its ability to do so equitably across diverse populations."**
>
> — Patricia deSa, MS
> Senior Director, Clinical Consulting
> National Mental Health, Wellness and Addiction Care
> National Implementation Lead, Collaborative Care Management
> Kaiser Permanente

Results

In the Concert and Penn studies, suicide risk declined in more than 50% of "at risk" patients, most often resulting in no detectable risk. In the Kaiser Permanente study, suicide attempts and deaths (combined) declined by 25% among the 228,255 treatment patients vs. a large control group.

Implications

"Treatment as Usual" in Primary Care is Not Effective for Identifying and Addressing Suicide Risk—Broad-scale Implementation of CoCM is Essential to Drive Down Suicide Rates, given that:

- A large majority of patients who die by suicide have visited a primary care provider in the prior year, with almost half having done so in the prior month.[1-6]
- The risk of suicide is closely related to the severity of depression and suicidal ideation.[7-14]

Implications (continued)

- Systematic screening for depression[15], suicidal ideation and other MHSU conditions in primary care is rare and, when these conditions are identified, primary care providers often have inadequate support to effectively treat them.
- In contrast, CoCM improves outcomes for a range of MHSU conditions and non-acute suicidal ideation.

Recommendations

Steps to Generate Broad-scale Use of CoCM:

- **Medicaid:** Adequate Medicaid CoCM reimbursement is a key determinant of whether providers utilize CoCM for any patients. Medicaid in all states should:
  - Set fee-for-service (FFS) CoCM reimbursement at a level equal to at least 100%–130% of Medicare FFS reimbursement (as done in several states). and use codes 99492-99494 and G2214 for FQHCs/RHCs.
  - Require Medicaid MCOs to do the same.
- **Employer and other Commercial Plans** should:
  - Set CoCM reimbursement at a level equal to at least 130%–150% of Medicare FFS reimbursement.
  - Eliminate all patient OOP expenses for CoCM.
- **All Payers** should:
  - Allow providers to use add-on code 99494 as frequently as justified by patients' clinical needs.
  - Reimburse CoCM separate from, and in addition to, any care management fees, primary care capitation, or other global payments (unless such payments are increased specifically to account for CoCM being provided).
- **Regulators and Accreditation Organizations** should, when assessing parity compliance and network adequacy, allow in-network CoCM services—if delivered per CMS billing requirements—to count as in-network MHSU specialist services.
- **Providers** should implement CoCM and consider using entities such as those in the Directory of CoCM Service Organizations for advice, training, billing support, patient registries, and ongoing CoCM staff.

Advantages of CoCM

What is CoCM

CoCM is the gold standard method to integrate MHSU treatment into primary care settings. It was developed at the University of Washington's AIMS Center. The four elements of CoCM that enable primary care clinicians to provide effective MHSU care in their offices for patients with a range of non-acute MHSU conditions are:

(i) Support by Behavioral Care Managers (in-person or virtual).

(ii) Support by Psychiatric Consultants (typically virtual, i.e., not co-located), who advise primary care providers and Behavioral Care Managers—reducing patients' reliance on the availability of in-network MHSU specialists. Psychiatric Consultants are able to help many more patients under CoCM than would be possible under traditional "one-on-one" MHSU care models.[16-17]

(iii) Use of Measurement-Based Care (standardized clinical assessment tools) for patient screening and ongoing clinical status assessment.

(iv) Use of a Patient Registry.

"The Collaborative Care Model is one of very few specific interventions in medicine that have been shown via multiple RCTs to reduce disparities by race/ethnicity and/or socioeconomic status in patients' access to care, quality of care, and outcomes."

— Michael Schoenbaum, PhD
Senior Advisor for Mental Health Services [C]
National Institute of Mental Health

"A recent review concluded that the evidence supporting the effectiveness of CoCM for mental health treatment among patients identifying as racial or ethnic minorities is larger than for any other intervention."

— Gabriela Kattan Khazanov et al.
University of Pennsylvania Health System

Improved Clinical Outcomes

In more than 90 randomized controlled trials and in day-to-day practice, CoCM has been shown to positively impact clinical outcomes for mild-to-moderate depression and anxiety, non-acute suicidal ideation[18], and a growing list of other non-acute MHSU conditions.

Health Equity

CoCM has also been shown to **improve health equity.**

Lower Total Healthcare Costs

There is mounting evidence in large-scale studies that CoCM is associated with **reductions in total healthcare costs**, driven by **reductions in medical costs.**

Reimbursement Codes Exist

Medicare, most commercial insurers, and more than 30 state Medicaid programs reimburse primary care providers for delivering CoCM, using payment codes developed by CMS. These codes, which **require that all four elements of CoCM listed above be used,** enable primary care providers to be reimbursed for delivering CoCM services **as well as** for the time spent to effectively refer patients not suitable for CoCM (e.g., those with the most serious conditions) to MHSU specialists.

More Details: Three Studies – Key Data

Study Sponsor	Number of Patients Screened / "At Risk"	Key Outcome Measure	Reduction of Risk and Deaths	
Concert Health 52 providers (health systems or practices) 16 states	**29,507** screened and included in CoCM analyses **3,809** identified as "at risk"	Suicidal ideation	**% of "at risk" patients with *reduced risk***	
			Avg. all doses[a]	**56%**
			High dose[b]	**76%**
			Percent of "at risk" patients who achieved remission[c]	**49%**
University of Pennsylvania Health System 19 practices 2 states	**3,487** screened and included in CoCM analyses **368** identified as "at risk"	Suicidal ideation	**% of "at risk" patients with *reduced risk***	
			Avg. all doses[d]	**52%**
			Percent of "at risk" patients who achieved remission[c]	**37%**
Kaiser Permanente[e] 19 practices 1 state	**228,255** screened and included in integrated care analyses[f]	Suicide attempts and deaths (combined)	**Reduction of attempts and deaths**	**25%**[g]

a Dose = Length of Collaborative Care Model (CoCM) treatment, between 8 days and 6+ months.

b 6+ months of treatment.

c Remission is defined here as the absence of detectable suicide risk, based on the assessment tool used (C-SSRS in the case of Concert Health; PHQ-9 in the case of the University of Pennsylvania). Note: Patients who had detectable risk at one point, but currently have no detectable risk, are still considered to have a higher risk of suicide than patients who have never had a detectable risk.

d Dose = Length of CoCM treatment, between 15 days and 6+ months.

e Conducted in primary care. Included systematic screening of patients for depression/suicide risk, integration of a behavioral health clinician, and referral of "at risk" patients to the behavioral health clinician for prompt safety planning.

f The number of "at risk" patients is not available.

g In comparison to a control group of 255,789 patients.

Concert Health Study

"Addressing Suicide Risk: A Study of Dose Response in Collaborative Care"

Virna Little et al.

STUDY PERIOD: 11/21 – 11/23

RESULTS RELEASED: 8/24

EXCERPTS:

"The impact of "dose" is a key finding—patients enrolled for one month or less were most likely to see no change in their risk flag. On the other hand, patients enrolled in care for at least half a year were far more likely to see an improvement in their risk flag—76% of such patients experienced an improvement."

"Similar to months enrolled, patients that received more clinical touchpoints were more likely to see an improvement in their suicide risk score—83% of patients who received 15 or more touchpoints demonstrated improvement."

"The analysis revealed no statistical association between age category and treatment outcome. This finding suggests that the Concert Suicide Care Pathway may be effective across all age groups, indicating its broad applicability and potential effectiveness regardless of age."

University of Pennsylvania Health System Study

"Change in suicidal ideation, depression, and anxiety following collaborative care in the community"

Gabriela Kattan Khazanov et al.

STUDY PERIOD: 2018-2022

RESULTS RELEASED: 7/24

EXCERPTS:

"…PIC [CoCM at Penn] has since expanded to more than 35 urban and suburban primary care practices…"

"Among both patient groups, length of time in CoCM and number of sessions were each associated with greater declines in depression severity, except when patients were treated for over six months."

"Importantly, we found that among patients with suicidal ideation at baseline, those identifying as Hispanic/ Latinx…had greater declines in depression and anxiety severity. Additionally, among patients without suicidal ideation at baseline, those identifying as Black…had significantly greater declines in depression severity. These findings complement a burgeoning literature showing that patients identifying as racial or ethnic minorities, including those identifying as Black or Latinx, show improved access to mental health care and clinical outcomes in CoCM. A recent review concluded that the evidence supporting the effectiveness of CoCM for mental health treatment among patients identifying as racial or ethnic minorities is larger than for any other intervention."

Kaiser Permanente Study

"Effectiveness of Integrating Suicide Care in Primary Care"

Julie Angerhofer Richards et al.

STUDY PERIOD: 1/15 – 7/18

RESULTS RELEASED: 9/24

EXCERPTS:

"…the objective of this study was to analyze the outcomes of integrating SC [suicide care] in primary care, beginning with population-based screening for depression, followed by suicide risk assessment and collaborative safety planning."

"…population-based SC was implemented at the same time as care for substance use (alcohol, cannabis, and other drug use) as part of a behavioral health integration initiative (detailed below). Before this initiative, the health system had no population-based screening or systematic follow-up for these conditions in primary care."

"When patients reported some level of prior month intent or planning for a suicide attempt on the C-SSRS, primary care clinicians were instructed to connect patients with designated members of the care team for same-day safety planning. Licensed independent clinical social workers…were trained to function as

integrated mental health clinicians, specifically to prioritize engaging at-risk patients in safety planning, as well as provide short-term counseling and linkage to specialty mental health and substance use treatment."

"Suicide attempts within 90 days were lower in the SC group than in the UC [usual care] group (4.5 vs. 6.0 per 10,000 patients; rate difference, -1.5 [CI, -2.6 to -0.4])."

Presentation Describing Kaiser Permanente's Transition to CoCM Over Time and Current Implementation in All 8 Markets

"The Collaborative Care Journey at Kaiser Permanente"

Patricia deSa, MS
Senior Director, Clinical Consulting
National Mental Health, Wellness and Addiction Care
National Implementation Lead, Collaborative Care Management

PRESENTATION DATE: May 10, 2024

EXCERPTS:

"Continuing the Journey: Expansion from DCM to Collaborative Care, 2021 – present...

WHY?

- Increased demand for mental health services
- Further evidence (90+ RCTs)
  - Significantly better treatment outcomes (2x) compared to usual care.
  - Reduces total cost of care (6:1 ROI).
- Effective for youth and adults
- Alleviates outcomes disparities in minority and underserved populations.
- ***It's the right thing to do!..."***

Conclusion

There is now strong, real-world evidence that broadscale implementation of CoCM in primary care would drive a national reduction of suicide risk. Using approved payment codes for CoCM, **implementation is feasible wherever payers are providing adequate reimbursement for CoCM services.**

While there is also evidence that other methods of integrating MHSU care into primary care (i.e., those which involve systematic screening of all patients and integration of behavioral health clinicians) can reduce suicide risk, these other methods:

- Do not typically incorporate a Psychiatric Consultant into the primary care team.
- Do not require a Patient Registry.
- Have more limited evidence of their clinical efficiency across a range of MHSU conditions.
- Unlike CoCM, do not expand the number of patients who benefit from the expertise of psychiatrists and psychiatric nurse practitioners.
- Do not, to our knowledge, have evidence of an association with reduced total healthcare costs.
- Do not qualify for reimbursement using the CoCM billing codes.

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