

Massa, Cody

From: Paul Bebee <paul@flmanagingentities.com>
Sent: Friday, June 3, 2022 4:45 PM
To: solicitation.questions
Cc: John Newcomer; Silvia Quintana (squintana@bbhcflorida.org); Natalie Kelly; Christine Cauffield
Subject: Agency for Healthcare Administration Request for Information ((RFI) 014-21/22) By the Florida Association of Managing Entities
Attachments: RFI Response.pdf; RFI Response redacted.pdf

See attached document for the response and corresponding documents by the Florida Association of Managing Entities. If you have any questions, please let me know. Thanks.

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Agency for Healthcare Administration Request for Information By the Florida Association of Managing Entities

Florida Association of Managing Entities
122 S Calhoun St.
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3 June 2022

Cody Massa
Procurement Officer
solicitation.questions@ahca.myflorida.com

Dear Mr. Massa:

Per Request for Information (RFI) 014-21/22, the Florida Association of Managing Entities submit the following recommendations to the Agency for Healthcare Administration (AHCA):

- Require Managed Medical Assistance (MMA) Plans to contract with Managing Entities for Systems Care Coordination for High-Need High-Utilizers (HNHU) adults, adolescents, and children to ensure sustainable engagement in needed services which will result in decreasing readmissions rates and reducing traumatic experiences. Systems Level Care Coordination has demonstrated significant reductions in re-admissions to CSU/Detox. Recent analysis demonstrated a >91% reduction in HNHU over the ensuing 6 months after enrollment in Systems Level Care Coordination. (See attached documents supporting Managing Entities' successful approach).
- Expand the array of services offered by MMA Plans to match with Centers for Medicare and Medicaid Services allowable array of services.
- Create an expedited mechanism for Managing Entities to contest MMA denials of payment to providers supporting individuals in need of continued services, where Managing Entities are asked to pay for those services.
- Reduce unwieldily documentation audits, that as a result, cause cash flow issues for providers while they contest the audit findings.
- Require AHCA to provide the MMA's and the Managing Entities claims or encounter data, including pharmacy data. This is to assure appropriate payment, improve care, and provide positive outcomes for the individuals served.
- Require managed care plans to contract with Managing Entities for implementation of their innovative, best practice programs that have proven to generate successful outcomes, and cost effectiveness. Populations include: pregnant and postpartum women, special prenatal care to SUD mothers, children/adolescent, families, adults and senior models, homeless, veterans, diversion and hospital bridge, respite, integrated care, smart justice, to name a few.

Below are a few examples of aforementioned models of care:

1. CARE COORDINATION (Adults and Children)

Managing Entities contract with behavioral health providers to provide a Systems Care Coordination model. This model includes a care coordination specialist who acts as the single point of contact, coordinating all needs of the member served. Care Coordination serves to assist individuals who are not effectively connected with the services and supports they need to transition successfully from higher levels of care to effective community-based care. This includes services and supports that affect a person's overall well-being, such as primary physical health care, housing, and social connectedness. Care Coordination connects systems including behavioral health, primary care, peer and natural supports, housing, education, vocation and the justice systems. It is time-limited, with a heavy concentration on educating and empowering the person served and provides a single point of contact until a person is adequately connected to the care that meets their needs. Managing Entities have a robust housing and benefits department for members who need assistance in those areas. Managing Entities blend funding streams to apply the rights treatment method at the right time and through the most appropriate funding stream.

This Model addresses the following AHCA areas of innovation and best practice:

- Leverage the managed care delivery system, either through expanded benefits or other mechanisms, to promote sustainable economic self-sufficiency among Medicaid recipients in the short and long term.
- Decrease mortality rates for recipients with complex chronic diseases and address payment strategies for high-cost therapies and prescription drugs in development.
- Consider innovative delivery methods, including care bundling, that empower recipients in making more informed health care decisions.
- Improve integration of dental and primary care services for children and adolescents.
- Align quality metrics and outcomes with the Florida State Health Improvement Plan.

2. Family Crisis Coordination Team

Family Crisis Coordination is a care coordination team that utilizes the wraparound model to work with the entire family. The goal is to empower the family and to help with next steps. The team does not subscribe to the traditional 9:00 am - 5:00 pm schedule, but instead works with the family to best serve their needs. The Family Crisis Teams focus on high utilizers of children's Baker Act receiving facilities. Telehealth is utilized for medication management and therapeutic appointments as needed and desired by the family.

3. Expanded Children's Act Teams (Baby CAT)

Telehealth is utilized for medication management and therapeutic appointments as needed and desired by the family.

This Model addresses the following AHCA areas of innovation and best practice:

- Leverage the managed care delivery system, either through expanded benefits or other mechanisms, to promote sustainable economic self-sufficiency among Medicaid recipients in the short and long term.

- Improve integration of dental and primary care services for children and adolescents.
- Align quality metrics and outcomes with the Florida State Health Improvement Plan.
- Improve mental health outcomes for children and adolescents.
- Improve coordination of care for individuals enrolled in both the Medicare and Medicaid programs.
- Improve recipients' experience with the SMMC Program.
- Increase timely access to providers and services.

4. Community Paramedicine Program Model

The Community Paramedicine Model is a home visiting program that works in collaboration with primary and specialty care providers. Referrals are generated from EMS/ First Responders based on observations made during 911 response calls. The target audience are those who need support with medical, social, or mental health supports (rather than emergency medicine warranting a call to 911). Once a referral is generated, needs are evaluated during an initial home visit by a care manager through a series of assessments. All clients are connected to appropriate primary and specialty care providers as needed if they are not already in place. Additional resources are connected to assist clients in becoming more independent (food pantry, transportation, disease care education etc). Initial data of similar programs being implemented in our catchment area have demonstrated that the program reduced clients' hospital visits by 28% and hospital admissions by 62%.

This Model addresses the following AHCA areas of innovation and best practice:

- Leverage the managed care delivery system, either through expanded benefits or other mechanisms, to promote sustainable economic self-sufficiency among Medicaid recipients in the short and long term.
- Decrease mortality rates for recipients with complex chronic diseases and address payment strategies for high-cost therapies and prescription drugs in development.
- Consider innovative delivery methods, including care bundling, that empower recipients in making more informed health care decisions.

5. SBIRT Screening Program

Embedding SBIRT services in clinic settings (Health Department Family Planning Clinic/ OBGYN Clinic/ Labor and Delivery Settings/ FQHCs) to engage expecting mothers in the screening process to identify substance use behaviors or depression/ suicidal thoughts as early as possible in pregnancy and in the post-partum coverage period. Provide Brief Intervention, Brief Treatment or Referral to Treatment as needed based on screening results. Provide warm hand offs for all participants who screen positive and agree to next level services via the grant funded Treatment Navigator. Follow up with all participants who screened positive, and rescreen at 6 months and one year to assess for behavioral change. SBIRT data shows that the delivery of a Brief Intervention or series of Brief Treatment education sessions shows statistically significant changes in behavior related to substance use.

Project Model:

Title: Project Screen, Engage, and Treat for Success (SETS) Program

Summary: The goal of Project Screen Engage and Treat for Success (SETS) is to increase access to person-centered and culturally/linguistically appropriate screening, early identification, intervention and treatment for substance use problems in youth ages 13-17 and their families, and adults in primary care and a variety of community health clinic settings.

This Model addresses the following AHCA areas of innovation and best practice:

- Improve birth outcomes for mothers and infants through and beyond 12-month postpartum coverage period.

6. Comprehensive Services Center

Comprehensive Services Center is based on an open access/urgent care model. The CSC offer the following services:

- Mental Health screening, assessment and therapy, substance abuse screening, assessment and therapy, psychiatric evaluations, medication management, SOAR services, assistance in obtaining benefits, such as Social Security income, Social Security disability income, Medicaid, food stamps, and housing, Care Coordination, community resource support.

The CSC's have several unique features that distinguish them from other MH programs. The CSC offers services on an immediate, walk-in basis, as well as by appointment. The availability of services every day, on a walk-in basis, will provide quick and easy access to care. The convenience of having these services offered in one place eliminates barriers individuals experience when attempting to access treatment.

7. Senior Co-Responder

Managing Entities partner with EMS and Sheriff's department to respond to senior calls (behavioral health, falls, etc). The team is responsible for diverting seniors from Baker Acts, arrests, ER's and assessing home for necessary resources (grab bars, food, safety risks, caregiver stress). The goal is to have senior age in place with compliance for physician visits, medication compliance to avoid costly admissions to nursing homes, ER's, etc.


For more information, please contact me. My contact information is located at the bottom of this document.

Sincerely,

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Payer-Level Care Coordination and Re-admission to Acute Mental Health Care for Uninsured Individuals



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Abstract

This study determined the short- and long-term outcomes associated with payer-level care coordination, compared with care-as-usual in “high-utilizers” of acute care services in a large, publicly funded safety net system. Administrative claims data (2016–2020) were analyzed. All patients were “high-utilizers,” defined by the State of Florida as either (a) 3 + more acute care episodes in a 6-month period or (b) 1 + acute care episodes in the past 6 months lasting 16 + days. Patients enrolled in care coordination (n = 178) were compared to usual care (n = 1,127) on rates of re-admission and post-discharge engagement in outpatient/residential services. Care coordination was associated with reduced rates of re-admission, significant cost savings, and enhanced engagement in post-discharge non-crisis services. In light of the observed clinical and economic benefits associated with care coordination, payers, policymakers, and administrators of acute care settings should consider potential return on investment for allocation of resources to support specialty care coordination programs.

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Short-term hospitalization in crisis stabilization or detoxification units often represents the first episode of care for individuals with serious mental illness or substance use disorder (SUD). Many acute care patients are not successfully linked to appropriate outpatient or residential care post-discharge. Estimates of adherence to initial follow-up care on discharge from inpatient or crisis stabilization units range from 25 to 36%,¹⁻³ and as few as 13 to 15% of detoxification patients go on to receive treatment at a lower level of care.^{4,5} Lack of post-discharge outpatient care is associated with a shorter time to psychiatric emergency visits,⁶ and detoxification in the absence of transition to post-discharge SUD treatment is associated with a number of serious adverse outcomes, including increased risk of mortality.⁷ These reports underscore the opportunity for acute care facilities and payers to adopt innovative strategies to improve care by facilitating engagement in post-discharge services.

One solution to enhance engagement and improve outcomes for acute care patients is care coordination, which involves organizing care activities among different services and providers, and across organizations, to achieve more effective and efficient integrated care. Care coordination requires a shared understanding of goals and roles, frequent and timely communication, and shared decision-making.⁸ The concept of care coordination has come to underlie many of these efforts to improve quality of care and reduce costs by preventing avoidable acute care re-admissions for those with chronic health conditions. One subgroup most appropriate for care coordination involves individuals with multiple prior acute care admissions and/or those with extended acute care episodes. These repeat acute care patients or frequent users of the health care system, sometimes referred to within systems as “high-utilizers,” tend to have poorer prognosis, worse outcomes (e.g., higher rates of relapse, re-admission), and higher medical spend.⁹⁻¹³ However, given that care coordination has been applied so widely in numerous forms, often with unmeasured or uncertain effect, a consensus on the key elements of a successful care coordination model remains elusive.^{11,14,15}

One highly acclaimed care transition program, the “Camden Core Model” by the Camden Coalition of Healthcare Providers in New Jersey, targets “superutilizers” of the health care system;¹⁶ that is, individuals with medically and socially complex needs who have frequent hospital admissions defined as at least one admission in the past 6 months. The Camden Core Model intervention arranges close medical follow-up and social services following hospital discharge for patients with two or more chronic medical conditions (e.g., heart failure, diabetes) and at least two of the following criteria: “use of at least five active outpatient medications, difficulty accessing services, lack of social support, a coexisting mental health condition, an active drug habit, and homelessness.”¹⁷ The program initially appeared to reduce utilization, though subsequent rigorous evaluation in a randomized controlled trial failed to confirm this, finding no statistically significant difference in 6-month re-admission rates between intervention and control groups.¹⁷ An important limitation, as described in a commentary by Dr. Jeffrey Brenner, the developer of the studied care coordination intervention, was the observed difficulty of connecting their high-risk population—carrying a mental health or SUD diagnosis at a rate upwards of 44%—with mental health, addiction, and housing services post-discharge.¹⁸

The positive impact of care coordination within behavioral health care is generally well-established. A Cochrane review of 79 randomized controlled trials involving over 24,000 patients demonstrated that care coordination is an effective intervention associated with significant short- and long-term benefits in mental health outcomes and functioning (e.g., depression, quality of life, anxiety, medication use, patient satisfaction) compared with usual care.¹⁹ Success has also been achieved with the use of care coordination in reducing unmet social needs in those with severe and persistent mental illness.²⁰ Despite the substantial economic and emotional

burden that repeat behavioral health acute care episodes pose on health insurers/payers, patients, and their families, there has been limited naturalistic research examining the impact of care coordination for this high-risk subgroup on post-discharge outcomes. To bridge this gap and contribute to the extant care coordination knowledge base, the current naturalistic retrospective study sought to examine the impact of payer-level care coordination on acute care re-admission rates and engagement in outpatient or residential services among a sample of uninsured patients discharged from acute care facilities in a large state-funded network of behavioral health care provider organizations.

Methods

Data were derived from administrative claims information for patients ($N = 1,305$) receiving services from Thriving Mind South Florida, a large, non-profit, publicly funded network of mental health and substance use treatment provider organizations, between July 11, 2016, and July 16, 2020. Thriving Mind South Florida is a non-profit “Managing Entity” (one of seven) contracted by the State of Florida to allocate resources and maintain contract and quality control for locally contracted treatment services. Thriving Mind is responsible for the administration of \$90 million in safety net funding from the Florida Department of Children and Families for mental health and SUD treatment and prevention services for uninsured residents of Miami-Dade and Monroe Counties. Thriving Mind manages a network of approximately 40 health care provider organizations, applying payer-level care coordination.

All patients in the current study were considered “high-utilizers,” defined by the State of Florida as the presence of either (a) 3 + more acute care episodes in a 6-month period or (b) 1 + acute care episodes in the past 6 months with a duration of 16 + days. All adults identified as high-utilizers of acute care services comprised the study sample. Patients were classified into one of two groups based on whether or not they received care coordination. A total of 178 patients were enrolled in care coordination during the study period. The usual care comparison group consisted of patients eligible for—but not enrolled in—care coordination ($n = 1,127$). Patients in the usual care group declined care coordination or were unable to be contacted for enrollment. Psychiatric and SUD diagnoses were derived from International Classification of Diseases, Tenth Revision codes.²¹ This secondary analysis of existing, de-identified administrative claims data does not meet the definition of human subject research.

Participants

Several analyses were conducted to determine whether there were preliminary descriptive differences on demographic and clinical characteristics between the two study groups. Independent samples t tests and Pearson’s chi-squared tests were conducted to determine group differences on continuous and categorical variables, respectively. Study groups were comparable on all demographic characteristics in that there were no significant differences between patients in the care coordination group and usual care group on age, gender, ethnicity, race, employment status, education level, or marital status (Table 1). There were no significant group differences with respect to the prevalence of any of the primary psychiatric disorder diagnoses (Table 2). Care coordination patients had a significantly higher prevalence of any SUD compared to usual care patients [$X^2(1) = 4.240, \phi = 0.057, p = 0.039$]. Specifically, 29.8% of care coordination patients had a SUD diagnosis, compared to 22.7% of usual care patients.

Table 1

Demographic characteristics of study sample, stratified by care coordination status

Demographic variable	Study group		X^2/t	<i>p</i>
	Care coordination (<i>n</i> = 178)	Usual care (<i>n</i> = 1,127)		
Age ^{M (SD)}	40.55 (12.66)	40.25 (13.05)	0.289	.773
Gender			2.110	.146
Male	69.1%	74.3%		
Female	30.9%	25.7%		
Ethnicity			0.023	.880
Hispanic	42.7%	43.3%		
Non-Hispanic	57.3%	56.7%		
Race			9.615	.142
White	59.0%	59.9%		
Black	32.0%	33.3%		
Multi-racial	4.5%	2.9%		
Other	4.5%	3.9%		
Employment status			10.003	.125
Unemployed	78.7%	70.1%		
Employed (full/part time)	5.6%	5.7%		
Disabled	10.1%	14.6%		
Retired	1.7%	1.2%		
Student	1.1%	0.9%		
Unreported	2.8%	7.5%		
Marital status			5.739	.332
Never married/single	69.1%	73.0%		
Married	6.2%	6.6%		
Divorced	11.8%	11.0%		
Separated	5.6%	2.6%		
Widowed	1.7%	1.1%		
Unreported	5.6%	5.8%		
Education level			10.120	.182
<High school diploma/GED	29.8%	35.6%		
High school diploma/GED	57.3%	55.0%		
Associate degree	4.5%	4.7%		
Bachelor's degree	5.6%	3.3%		
Graduate degree	1.7%	1.3%		
Unreported	1.1%	0.2%		

There were no significant differences between groups on any demographics

Intervention

Payer-level care coordination, as defined by the Florida Department of Children and Families, involves the implementation of organizational relationships and services that serve to improve the

Table 2

Clinical characteristics of study sample, stratified by care coordination status

Clinical variable	Study group		χ^2/t	<i>p</i>
	Care coordination (<i>n</i> = 178)	Usual care (<i>n</i> = 1,127)		
Primary psychiatric disorder			13.259	.351
Schizophrenia	32.6%	40.2%		
Schizoaffective	10.7%	7.7%		
Other psychotic disorder	3.9%	3.0%		
Major depressive disorder	19.7%	16.5%		
Bipolar disorder	8.4%	10.2%		
Anxiety disorder (panic, GAD)	1.7%	0.9%		
Mental disorder NOS	4.5%	3.3%		
Personality disorder	0%	0.6%		
Unspecified mood disorder	2.8%	1.2%		
Adjustment disorder	0.6%	1.3%		
Posttraumatic stress disorder	0.6%	0.2%		
Other	14.6%	14.9%		
Primary substance use disorder*			16.833	.032
Alcohol	14.6%	12.6%		
Cocaine	4.5%	3.3%		
Opioid	1.7%	2.0%		
Cannabis	6.2%	2.0%		
Stimulant	0.6%	0.8%		
Sedative	0.6%	0.1%		
Hallucinogen	0.6%	0.2%		
Other substance use disorder	1.1%	1.8%		
None	70.2%	77.3%		

GAD, generalized anxiety disorder; NOS, not otherwise specified

* *p* < .05

effectiveness and efficiency of the behavioral health system by engaging high-priority patients who are not yet connected with services to ensure appropriate linkage. The primary goal of care coordination is to reduce acute care re-admissions by improving transitions from acute care settings (i.e., crisis stabilization and detoxification units) to less-restrictive community-based levels of care (e.g., outpatient treatment) and facilitating linkage to appropriate supportive community services post-discharge. It is important to note that care coordination, when delivered at the payer-level, is not a clinical service per se. Rather, it is a collaborative effort at the funder level to efficiently target treatment resources in an effort to best serve patient needs and ultimately manage and reduce risk through data surveillance, information sharing across regional and system partners, partnerships with community stakeholders (housing providers, judiciary, primary care, etc.), and the purchase of needed services and supports.

Care Coordination Specialists, housed centrally at the payer-level, remotely ensure continuity of care by facilitating linkage to necessary supportive services as needed (mental health/substance use

treatment, housing, disability benefits, assistance with criminal justice interactions, etc.). Individuals eligible for, but not enrolled in, care coordination receive “usual care” involving provider-level referrals only, when indicated. The distinction between the two groups, therefore, is that patients receiving care coordination have the added benefit of a single point of contact and system-level advocate—with access to a network of approximately 40 health care providers and established relationships with community agencies (Miami-Dade Homeless Trust, etc.)—to help navigate the complex system and connect them to appropriate services. In the context of the current study, the intervention was delivered by four Care Coordination Specialists with education/training in social work or psychology (three Master’s level and one Bachelor’s). All Care Coordination Specialists received weekly group and individual supervision to discuss and staff cases.

Data Analyses

The primary study outcome was acute care re-admission at 30 days and 6 months, and the secondary study outcome was post-discharge engagement in mental health or substance use treatment services at 30, 60, and 90 days. Inclusion of multiple follow-up intervals allowed for the examination of both the proximal and distal effects of care coordination. Re-admission was defined as the presence of one or more subsequent acute care episodes after the qualifying acute care episode. Engagement was defined as the receipt of any non-acute care services (i.e., outpatient or residential) post-discharge. Crosstabulations were examined to determine differences between care coordination and usual care groups on primary and secondary outcomes. In addition to between-group differences, within-group differences were examined regarding the mean number of acute care episodes in the 6-month period prior to enrollment/identification and the mean number of acute care episodes in the 6-month period after enrollment/identification. Service utilization and financial reimbursement data allowed for the determination of estimated cost savings. Separate hierarchical binary logistic regression models were fitted to the data to test the general hypothesis that care coordination would be associated with better short- and long-term outcomes relative to usual care after controlling for relevant demographic and clinical characteristics (i.e., age, gender, race, ethnicity, and SUD diagnosis). Goodness-of-fit statistics were examined to assess the fit of each respective logistic model against actual outcome. One inferential test (i.e., Hosmer–Lemeshow) and two additional descriptive measures of goodness-of-fit (i.e., R^2 indices defined by Cox & Snell and Nagelkerke) were utilized to determine whether the various models fit to the data well.

Results

Descriptive data for the primary and secondary outcomes at the various follow-up intervals, stratified by care coordination status, are presented in Table 3. Relative to the usual care group, the care coordination group had a significantly lower re-admission rate at 30 days [$X^2 = 20.127$ (1), $\phi = -0.124$, $p = 0.001$] and 6 months [$X^2 = 20.213$ (1), $\phi = -0.124$, $p = 0.001$]. In terms of the secondary study outcome regarding post-discharge engagement, the care coordination group demonstrated significantly higher rates of engagement in outpatient or residential treatment services compared to the usual care group at all three follow-up intervals: 30 days [$X^2 = 14.287$ (1), $\phi = 0.105$, $p = 0.001$], 60 days [$X^2 = 15.158$ (1), $\phi = 0.108$, $p = 0.001$], and 90 days [$X^2 = 13.168$ (1), $\phi = 0.100$, $p = 0.001$].

Next, between- and within-group mean differences in acute care episodes were examined (Table 4). High-utilizer patients enrolled in care coordination experienced a statistically significant mean reduction of 2.04 ($SD = 1.40$) acute care episodes in the 6-month period post-enrollment compared to the 6-month period pre-enrollment [$t = 19.384$ (177), Cohen’s $d = 1.45$, $p = 0.001$]. This pre/post difference translated to an 84% reduction in acute care episodes for the care coordination

Table 3

Rates of Re-admission and post-discharge engagement by care coordination status

Outcome	Study group	
	Care coordination	Usual care
Re-admission to acute care		
30 days (1–30 days) ^{***}	9.0%	24.0%
6 months (1–180 days) ^{***}	24.2%	41.9%
Post-discharge engagement in services		
30-day outpatient/residential (1–30 days) ^{***}	75.8%	61.1%
60-day outpatient/residential (31–60 days) ^{***}	65.7%	50.0%
90-day outpatient/residential (61–90 days) ^{***}	60.7%	46.1%

* $p < .05$. ** $p \leq .01$. *** $p \leq .001$ **Table 4**

Between- and within-group mean differences in acute care episodes

Study group	# of acute care episodes		Difference <i>M (SD)</i>
	6 months before <i>M (SD)</i>	6 months after <i>M (SD)</i>	
Care coordination ^{***}	2.44 (1.31)	0.40 (0.85)	2.04 (1.40) ^{***}
Usual care	2.39 (1.05)	0.83 (1.41)	1.56 (1.49) ^{***}

* $p < .05$. ** $p \leq .01$. *** $p \leq .001$

group. High-utilizer patients in the usual care group experienced a statistically significant mean reduction of 1.56 ($SD = 1.49$) acute care episodes in the 6-month period after being identified as a high-utilizer compared to the 6-month period prior to identification [$t = 35.167$ (1,126), Cohen's $d = 1.05$, $p = 0.001$]; a 65% reduction in acute care episodes. Although both groups evidenced significant reductions in acute care episodes, the mean reduction in acute care episodes for the care coordination group was significantly greater than the mean reduction for the usual care group [$t = 3.994$ (1,303), Cohen's $d = 0.322$, $p = 0.001$]. Based on network service utilization data, it was possible to determine the estimated cost savings of care coordination. With an average length of stay for acute care episodes across the provider network of 8.2 days and an average cost of \$361.84 per day, the average cost for each acute care episode was \$2,967.09. Enrollment in care coordination resulted in a significantly greater average 6-month cost savings estimate for each high-utilizer patient relative to usual care (\$6,052.86 vs. \$4,628.66 per patient).

Results from the logistic regressions revealed that care coordination status was a significant independent predictor of 30-day and 6-month re-admission after controlling for relevant demographic and clinical covariates (i.e., age, gender, race, ethnicity, and SUD diagnosis). Care coordination status was a significant independent predictor of 6-month re-admission after controlling for covariates [Wald's X^2 (1) = 16.934, $p = 0.001$, Model $R^2 = 0.03$ (Cox & Snell), Model $R^2 = 0.04$ (Nagelkerke)]. Furthermore, the Hosmer–Lemeshow goodness-of-fit test was insignificant [X^2 (8) = 7.279, $p = 0.507$], suggesting that the model was fit to the data well. Usual care patients were 2.24 times (95% CI: 1.55–3.24) more likely to be re-admitted for an acute care episode within 6 months compared to care coordination patients. Care coordination status was also a significant independent predictor of 30-day re-admission after controlling for covariates [Wald's X^2 (1) = 18.033, $p = 0.001$, Model $R^2 = 0.03$ (Cox & Snell), Model $R^2 = 0.04$ (Nagelkerke)]. The Hosmer–Lemeshow

goodness-of-fit test was insignificant [$X^2(8) = 3.595, p = 0.892$]. Usual care patients were 3.18 times (95% CI: 1.86–5.42) more likely to be re-admitted for an acute care episode within 30 days compared to care coordination patients.

Care coordination status was a significant independent predictor of engagement in outpatient or residential treatment services post-discharge from acute care at all three of the engagement follow-up intervals after controlling for relevant demographic and clinical covariates (i.e., age, gender, race, ethnicity, and SUD diagnosis). Care coordination status was a significant independent predictor of 30-day engagement in outpatient or residential treatment services post-discharge from acute care after controlling for covariates [Wald's $X^2(1) = 13.181, p = 0.001$, Model $R^2 = 0.03$ (Cox & Snell), Model $R^2 = 0.04$ (Nagelkerke)]. The Hosmer–Lemeshow goodness-of-fit test was insignificant [$X^2(8) = 8.519, p = 0.384$]. Care coordination patients were 1.97 times (95% CI: 1.37–2.85) more likely to be engaged in outpatient or residential treatment services within 30 days of discharge from acute care compared to usual care patients. Care coordination status was also a significant independent predictor of 60-day engagement in outpatient or residential treatment services post-discharge from acute care after controlling for covariates [Wald's $X^2(1) = 14.094, p = 0.001$, Model $R^2 = 0.02$ (Cox & Snell), Model $R^2 = 0.03$ (Nagelkerke)]. The Hosmer–Lemeshow goodness-of-fit test was insignificant [$X^2(8) = 9.975, p = 0.267$]. Care coordination patients were 1.89 times (95% CI: 1.36–2.64) more likely to be engaged in outpatient or residential treatment services within 60 days of discharge from acute care compared to usual care patients. Finally, care coordination status was a significant independent predictor of 90-day engagement in outpatient or residential treatment services post-discharge from acute care after controlling for covariates [Wald's $X^2(1) = 13.061, p = 0.001$, Model $R^2 = 0.02$ (Cox & Snell), Model $R^2 = 0.02$ (Nagelkerke)]. The Hosmer–Lemeshow goodness-of-fit test was insignificant [$X^2(8) = 9.671, p = 0.289$]. Care coordination patients were 1.82 times (95% CI: 1.32–2.53) more likely to be engaged in outpatient or residential treatment services within 90 days of discharge from acute care compared to usual care patients.

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Discussion

The observed findings extend prior work regarding the effectiveness of care coordination, documenting both short- and long-term benefits on re-admission, with post-discharge engagement in non-crisis services as a potential mechanism of action. The current study had several strengths, including a “real-world” naturalistic design, uninsured safety net population, and a diverse sample (43% Hispanic) which allows for greater generalizability of results. Clinical research conducted in real-world settings offers the potential to provide important evidence about intervention effectiveness not readily available from randomized clinical trials.^{22,23} With respect to the primary study outcome of re-admission, patients who received care coordination evidenced a significantly lower 30-day re-admission rate. While approximately one-quarter of patients in the usual care group were re-admitted within 30 days of discharge, only 9% of patients receiving care coordination were re-admitted within 30 days of discharge. Results from logistic regression showed that patients in the usual care group were over three times more likely to be re-admitted to acute care within 30 days of discharge compared to patients receiving care coordination after adjustment for relevant demographic and clinical covariates.

Importantly, the observed short-term (i.e., 30 days) benefits were sustained at 6 months. Care coordination patients demonstrated a significantly lower 6-month re-admission rate relative to usual care (24.2% vs. 41.9%, respectively). After controlling for age, gender, race, ethnicity, and the presence of a SUD diagnosis, care coordination status was an independent predictor of outcome. Patients who did not receive care coordination (i.e., usual care group) were over two times more likely to be re-admitted within 6 months compared to patients receiving care

coordination. Examination of the mean difference in acute care episodes from the 6-month period before enrollment to the 6-month period after enrollment revealed several notable findings, both between and within groups. Patients receiving care coordination experienced, on average, a reduction of approximately two acute care episodes in the first 6 months following enrollment. Also noteworthy was the large observed effect size for the reduction in acute care episodes for the care coordination group (Cohen's $d = 1.45$). Although the usual care group also experienced a significant reduction in acute care episodes ($M = 1.56$), the mean difference for the care coordination group ($M = 2.04$) was significantly greater. These findings suggest that while high-utilizers of acute care services may experience a reduction in acute care re-admissions over time, irrespective of intervention, the magnitude of reduction in re-admissions for individuals receiving care coordination is more pronounced.

The current findings are inconsistent with a recent rigorous, randomized controlled trial conducted by Finkelstein et al.,¹⁷ which showed that care coordination was not associated with differential outcomes at 6 months compared to usual care. Potential reasons for disparate findings include notable methodological differences between Finkelstein et al. and the current study. Unlike Finkelstein et al., the current study sample was comprised solely of behavioral health high-utilizers. Although 30.2% and 44.0% of Finkelstein et al.'s sample had a depressive or substance use disorder, respectively, the presence of a behavioral health condition was not an inclusionary criterion. Patients admitted to the hospital for mental health care in the absence of a co-occurring physical health condition were excluded from the Finkelstein et al. study. Conversely, the current study focused exclusively on individuals with behavioral health issues (predominately serious mental illness). In addition, care coordination, as studied by Finkelstein et al., primarily involved care coordination at the provider-level only without linkage to relevant supportive services (e.g., mental health, substance use, housing), whereas the current study examined the impact of care coordination when delivered at both the provider- and payer-level in combination. Finally, differences in how high-utilizers (or "superutilizers" per Finkelstein et al.) were defined may partially explain the disparate findings. Finkelstein et al. targeted individuals with at least one hospital admission in the past 6 months, while the current study targeted high-utilizers, as defined by the State of Florida as individuals with three or more acute care episodes in a 6-month period or one episode lasting 16 days or longer. Thus, the current study served a different patient population—one that is arguably more clinically severe.

In addition to short- and long-term reductions in acute care re-admissions, care coordination had a marked impact on the secondary study outcome involving post-discharge engagement in outpatient or residential care. Consistent with prior work in this area,^{24,25} patients receiving care coordination were significantly more likely to be engaged in mental health or substance use treatment services following discharge from acute care settings (i.e., crisis stabilization or detoxification units). In fact, care coordination patients were about two times more likely to be engaged in outpatient or residential services at 30, 60, and 90 days post-discharge compared to patients not receiving care coordination. Care coordination was also associated with relatively high rates of engagement through the first 3 months following discharge from acute care facilities. Approximately three-quarters of care coordination patients were successfully linked to treatment services within the first 30 days after discharge, and nearly two-thirds were engaged in care at 90 days. These high rates of post-discharge engagement are relevant to previous reports of favorable long-term outcomes when patients are linked to lower intensity outpatient care following discharge from the primary treatment episode.²⁶ The current findings suggest that engagement in outpatient or residential treatment services post-discharge may play an important role in the reductions in acute care episodes observed for the care coordination group. Further research is necessary to examine the potential mediating role of enhanced engagement on subsequent acute care admissions.

Limitations

The findings from the current study should be considered in light of some limitations. First, all data were derived from administrative claims information for uninsured patients receiving publicly funded safety net services. Further research involving patients with commercial insurance or Medicaid populations is warranted. Second, the current study design consisted of a quasi-experimental, retrospective review of administrative claims data and therefore, warrants further investigation and replication in a prospective randomized controlled trial. The observed findings, although promising, are predictive associations and as such, causal interpretations cannot be assumed. Third, although the logistic regression models were statistically significant, the goodness-of-fit measures (i.e., R^2 indices defined by Cox & Snell and Nagelkerke) indicate that a number of factors beyond those studied here in the current models may contribute to the observed differences in outcomes. Fourth, measures of meaningful, patient-reported outcomes (quality of life, employment, etc.) were absent from the current investigation. Although re-admission and post-discharge engagement rates are important outcomes from the perspective of providers and payers, further research is necessary regarding the potential benefits of care coordination in terms of additional areas of particular interest to patients and their families.

Implications for Behavioral Health

Observational findings from studies with a naturalistic design allow for immediate applications that can have important implications for routine practice in acute care settings. Individuals with serious mental illness or substance use disorders receiving publicly funded treatment often have multiple unmet needs beyond their presenting medical or behavioral health care concerns.^{27,28} Ancillary services are often required to address homelessness, legal assistance, criminal justice system involvement, government benefits, vocational training, childcare, education, and transportation, thereby necessitating additional levels of care coordination.²⁹ Policymakers and community leaders can intervene by enacting strategies and advocating for policies that help engage individuals in non-crisis services post-acute care discharge. Collaboration at the funder level and/or partnership with an agency with established relationships with relevant supportive services in the patient's home community is of paramount importance if improved outcomes and reduced costs are desired for systems serving this high-need, high-utilizer population.

Of particular interest, given that payer-level care coordination is not a billable direct clinical service, none of the specialists responsible for delivering the intervention in the current study were licensed mental health professionals; although they all had graduate or undergraduate degrees in social work or a related health sciences field. A critical qualification, however, is that care coordination staff have an extensive knowledge of available services and resources in their community, and are able to navigate the complex—and often fragmented—care delivery systems for behavioral health, medical, and social services needs. In addition, in light of the observed clinical and economic benefits associated with care coordination in the current study, payers and administrators of acute care settings should consider potential return on investment for allocation of resources to support specialty care coordination programs.

Conclusions

The current study results demonstrate that payer-level care coordination provided to high-need, high-utilizers of acute care services in a public sector, safety net population is associated with reduced re-admissions to acute care settings, along with increased post-discharge engagement in

non-crisis treatment services (e.g., outpatient) and significant cost savings. Care coordination—when delivered with the ability to link patients to appropriate treatment and supportive services—demonstrated both short- and long-term benefits in this high-risk population of uninsured individuals.

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Declarations

Competing Interests Unrelated to this project, Dr. Newcomer has served as a consultant to Sunovion, Intra-Cellular Therapies, Otsuka, Optum/United Healthcare, and Alkermes; has been a consultant to patent litigation on behalf of Sunovion; and served on a data safety monitoring board for Amgen. All other authors declare no competing interests.

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A network of exceptional mental health and substance use providers.

Payer-level Care Coordination to Reduce Re-admission & Increase Treatment Engagement

1

Crossing the Quality Chasm: A New Health System for the 21st Century

"One of the greatest challenges facing the mental health system is care coordination... too many times, service providers do not work together. It is an approach that includes coordination at the funder level, through data surveillance, information sharing across regional and system partners, partnerships with community stakeholders (i.e. housing providers, judiciary, primary care, etc.)."

Payer-Level Care Coordination

2

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Provider-Level Care Coordination Study

THE NEW ENGLAND JOURNAL OF MEDICINE

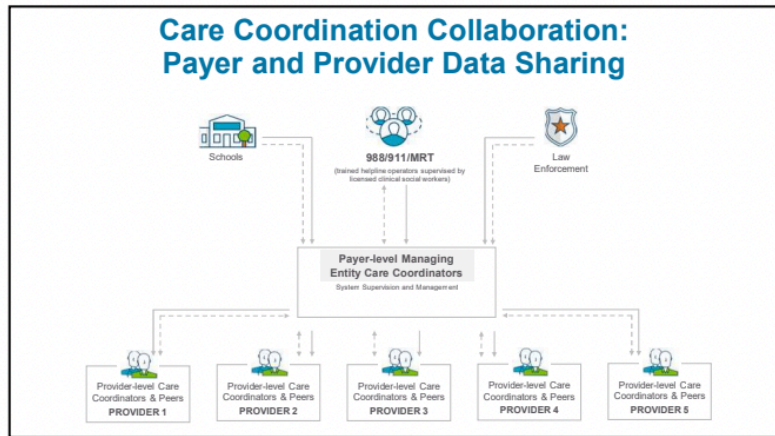
SPECIAL ARTICLE

Health Care Hotspotting — A Randomized, Controlled Trial

Amy Finkelstein, Ph.D., Annetta Zhou, Ph.D., Sarah Taubman, Sc.D., and Joseph Doyle, Ph.D.

- Program effects on hospital re-admission were not statistically significant
- Primary outcome measure was 180-day re-admission rate
- **Commentary (Dr. Jeffrey Brenner - Camden Coalition)**
 - "Largely lacking housing, addiction, and mental health services"
 - "The bottom line is, we built a brilliant intervention to navigate people to nowhere"

3



4

Effectiveness of Statewide Managing Entity Payer-level Care Coordination

Measuring change in High Need High Utilizer (HNHU) status

- Method: Pre-post analysis using individuals as their own control
- Population: DCF definition of HNHU (3+ CSU or detox admits or 16 days in past 6 months); enrollments from July 1, 2018 to January 2, 2021 with follow up to June 30, 2021.
- Outcome: With 100% of the study population meeting criteria for HNHU at enrollment, primary outcome is % who meet HNHU criteria at any point within 6 months post enrollment.

Effectiveness of Statewide Managing Entity Payer-level Care Coordination

Payer-level Care Coordination enrollment associated with >91% reduction in High Need High Utilizer (HNHU) status

- N=3,235 enrolled over the period, 100% met DCF-defined criteria for HNHU status over the prior 6 months (100%)
- Over the 6 months following enrollment (ITT) only 280 of those enrolled still met DCF criteria for HNHU (8.7%)

This and other study methodologies (e.g., case-control) can be used to measure outcomes, including time to onset of benefits, mechanisms of action and cost savings.

Evidence based Care Coordination remains underutilized.

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Payer-Level Care Coordination and Re-admission to Acute Mental Health Care for Uninsured Individuals

Steven L. Proctor, PhD
Brittany Gursky-Landa, MS
Jacob T. Kannarkat, MD
Johnny Guimaraes, MS
John W. Newcomer, MD

Abstract

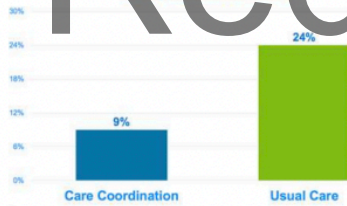
This study determined the short- and long-term outcomes associated with payer-level care coordination, compared with care as usual in “high utilizers” of acute care services in a large, publicly funded safety net system. Administrative claims data (2016–2020) were analyzed. All patients were “high utilizers,” defined by the State of Florida as either (a) 3+ acute care episodes in a 6-month period or (b) 1+ acute care episode in the past 6 months lasting 16+ days. Postacute residential care, rehabilitation (n = 178) were compared to usual care (n = 1,127) on rates of re-admission and post-discharge engagement in comprehensive residential services. Care coordination was associated with reduced rates of re-admission, significant cost savings, and increased engagement in post-discharge care services. In light of the observed clinical and economic benefits associated with care coordination, greater policy and administrative attention to acute care settings should consider potential return on investment for allocation of resources to support specialty care coordination programs.

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Payer-Level Care Coordination Proctor et al.

30-Day Re-admission Rate



Proctor SL, Gursky-Landa B, Kannarkat JT, Guimaraes J, Newcomer JW. Payer-Level Care Coordination and Re-admission to Acute Mental Health Care for Uninsured Individuals. *J Behav Health Serv Res.* 2022 Jul;49(3):385-396. doi: 10.1007/s11414-022-09789-1. Epub 2022 Feb 22. PMID: 35194730.

South Florida Study Methodology

- Administrative claims data

- Study period: July 2016 – July 2020

- N = 1,305

Care Coordination (n = 178)

Usual Care (n = 1,127)

- All patients were “High-Utilizers” defined by Florida Department of Children & Families as either: (a) 3+ more acute care episodes in a 6-month period, or (b) 1+ acute care episodes in the past 6 months with a duration of 16+ days.



Proctor SL, Gursky-Landa B, Kannarkat JT, Guimaraes J, Newcomer JW. Payer-Level Care Coordination and Re-admission to Acute Mental Health Care for Uninsured Individuals. *J Behav Health Serv Res.* 2022 Jul;49(3):385-396. doi: 10.1007/s11414-022-09789-1. Epub 2022 Feb 22. PMID: 35194730.

Re-admission Rates among High-Utilizers

	Care Coordination (n = 178)	Usual Care (n = 1,127)
30-day***	9%	24%
60-day*	6%	11%
90-day	7%	9%
6-month***	24%	42%

*p < .05. **p < .01. ***p < .001

Post-Discharge Engagement in Mental Health/Substance Use Services

	Care Coordination (n = 178)	Usual Care (n = 1,127)
30-day Outpatient/Residential***	76%	61%
60-day Outpatient/Residential***	66%	50%
90-day Outpatient/Residential***	61%	46%

***p < .001

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Cost Savings

- Avg cost per patient for each acute care episode was \$2,967.
- **Care Coordination** was associated with a Mean reduction of 2.04 episodes per patient.
- 6-month estimated cost savings of **\$6,052** for every patient enrolled in **Care Coordination**.

Proctor SL, Gursky-Landa B, Kannarkat JT, Guimaraes J, Newcomer JW. Payer-Level Care Coordination and Re-admission to Acute Mental Health Care for Uninsured Individuals. J Behav Health Serv Res. 2022 Jul;49(3):385-396. doi: 10.1007/s11414-022-09789-1. Epub 2022 Feb 22. PMID: 35194730.

Current vs. Future Workflow

Current State

- Care Coordinator assigned
- Work collaboratively with provider level staff, especially case manager
- Manual Process
- Hours spent in multiple systems finding data

Future State

- Care Coordinator assigned
- Work collaboratively with provider level staff, especially case manager
- Data from Electronic Health Records, Hospitals and other sources into *CareManager* Platform
- Real-time rules-based alerts
- Analytics to drive clinical focus areas