

“Embedding care coordination within psychiatric emergency services: An overview of the impact and supporting literature”

1	Executive Summary of Findings
1	Background
2	Methods
4	Discussion
5	References

Suggested Citation: LeGrice K, Suleta K, Davis, JM, Beckwith K. Embedding care coordination within psychiatric emergency services: An overview of the impact and supporting literature. February, 2019. Colorado Access.

Executive Summary of Findings

- This partnership and type of partnership seem beneficial to all involved: the psychiatric emergency services unit, the entity providing the care coordinator, and the members.
- Although data were incomplete for instances when a care coordinator was unable to see a patient face-to-face, those who did receive face-to-face care coordination services potentially had a 50% (52% vs. 2%) higher frequency of assistance and 31% (55% vs. 24%) higher frequency of follow up care scheduled.

Background

Individuals living with one or more behavioral health conditions may have higher hospital readmission rates than those without behavioral health conditions.^{1,2,3} Behavioral health conditions are a critical component of an individual’s health and include mental disorders, substance use disorders, co-occurring disorders (e.g., both a mental and a substance use disorder), and co-existing disorders (e.g. both a behavioral and physical health condition). Behavioral health conditions are a leading cause of hospital readmissions among those on Medicaid and are important cost drivers in the emergency department (ED).⁴ On average, patients in the ED who present with a behavioral condition cost \$1,198 - \$2,264 per visit.⁵

In an analysis of all Medicaid hospital readmissions in 19 states, 1 in 12 adults were readmitted within 30 days of their initial hospitalization.⁴ Of these readmissions,



coaccess.com
800-511-5010
customer.service@coaccess.com
11100 East Bethany Drive
Aurora, CO 80014



the top diagnostic category was behavioral health conditions.⁴ All-cause readmissions led to an additional \$16 billion in health care costs⁶ – or an average of \$77 million per state.⁴ As the leading cause for readmission, behavioral health conditions accounted for \$1.97 billion (12.3%) of those overall payments.⁴

Care coordination provided within the ED may reduce ED costs and ED readmissions.^{6,7,8} This may be especially true of those living with behavioral health conditions.⁹ Specifically, care coordination may help patients access primary care after a visit to the ED for behavioral health conditions.¹⁰

Colorado Access is a nonprofit health plan based in Aurora, Colorado. Colorado Access partnered with the psychiatric emergency services (PES) within Denver Health and Hospital Authority (DHHA). The PES provides “emergent and individualized evaluation, crisis stabilization, and treatment for patients presenting with psychiatric and/or substance-related emergencies.”¹¹

Methods

In 2017, Colorado Access launched a pilot intervention in partnership with DHHA to address high- and over-utilization of PES within the ED. The data included in this report were collected between August 2017 and March 2019. The intervention included one care coordinator (CC) from Colorado Access who was contracted with DHHA and embedded within the PES for three and a half days per week, for a total of 35 hours per week. The CC from Colorado Access was responsible for helping those who came to the DHHA PES access resources to alleviate barriers to care (e.g., transportation, emergency housing, and employment) and schedule follow up appointments. Each morning, the embedded CC from Colorado Access met with the overnight charge nurse to discuss member admission reasons. The CC then triaged members based on their priority level, identified below:

Level One	Level Two	Level Three
Overnight PES staff have determined that the member is safe to leave the PES	The member is still intoxicated with substances and cannot be evaluated by PES staff	PES staff have determined that the member needs a higher level of care for stabilization

If a member was determined to be still intoxicated, the CC conducted a chart review, communicated any additional clinical or medical information with PES staff, and updated notes. Once the member was sober and an evaluation was completed by PES staff, the PES staff and CC worked together to create a care plan for the member. When members required a higher level of care for stabilization (e.g., inpatient admission or an acute treatment unit), PES staff were required to send a prior authorization request. Once approved, the CC conducted a chart review, updated notes, and contacted the outpatient behavioral health provider to notify them of the member’s admission (if applicable).

When a member was deemed appropriate for discharge, the CC performed a chart review to determine if the member was connected to an outpatient provider, whether they had failed to follow up with outpatient care in the past, and if there were specific problems to address such as substance use, suicidal ideations, or physical health needs. The CC and member then discussed available outpatient services for behavioral health, social determinants of health and barriers to care (e.g., transportation, emergency housing, and employment), and available resources for the member and their needs. The CC also assisted in scheduling follow-up appointments.

Data

Data were divided into two main categories: face-to-face, and non-face-to-face encounters. When the CC met with members in person, they were classified as “face-to-face.” Alternatively, when the CC provided resources and referrals for a member admitted and/or discharged outside of their normal hours, the data were classified as “non-face-to-face.” In total, there were 298 face-to-face encounters and 1,325 non-face-to-face encounters from 280

and 1,115 unique members, respectively. The proportions presented are based on total encounters. Currently, there is only one CC affiliated with the program. This CC devotes three 10-hour shifts to the PES each week. If a member is admitted outside of those hours, the CC is unable to interact with them directly, and their encounter is labeled as non-face-to-face. Additionally, the CC identified each encounter as falling into one of three categories, which are defined below:

Diverted	Assisted	Not Assisted
The CC's intervention prevented a member from being admitted to a higher level of care, and thus, was diverted from a utilization.	The CC provided additional medical or clinical information, or provided the member with resources, but did not necessarily prevent a higher level of care.	The CC was not able to assist the member due to time constraints, sobriety status of the member, or rejection of offered services

Face-to-Face Encounters

A total of 1,623 encounters were documented by the CC. Of those 18% were classified as face-to-face, and 82% were classified as non-face-to-face. The high percentage of non-face-to-face encounters is attributed largely to the CC's schedule.

Housing status of patients by encounter type

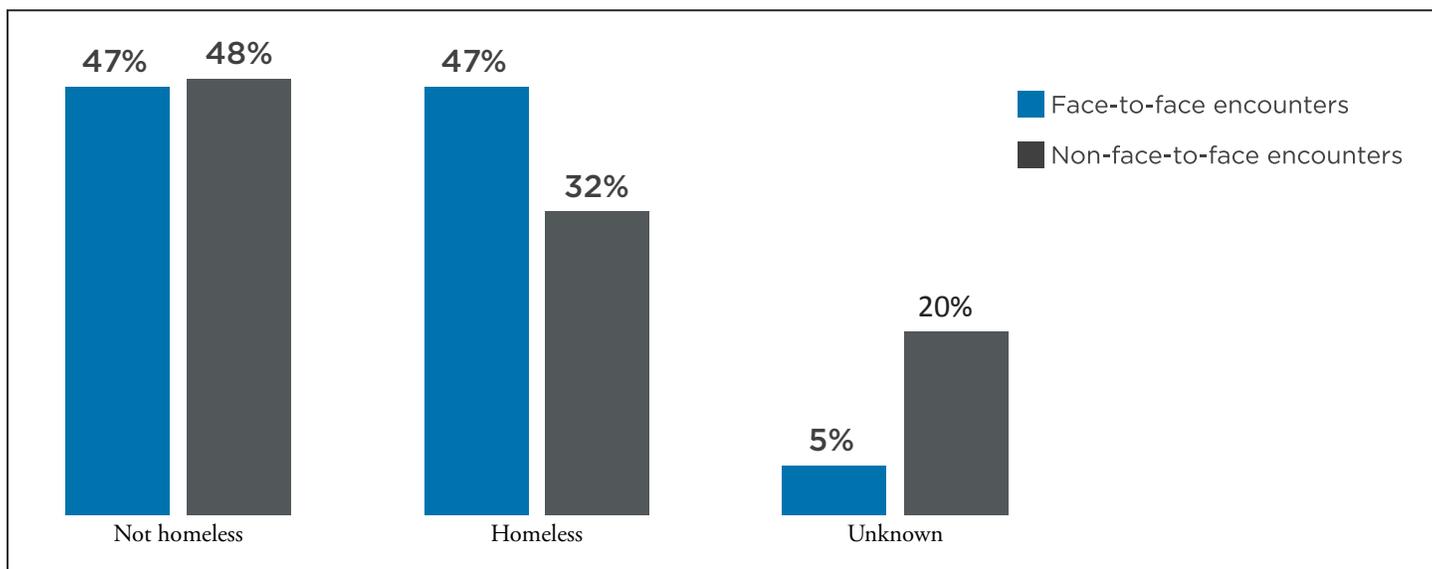


Figure 1. There were fewer missing data about housing status among face-to-face encounters

As demonstrated in Figure 1, data collected and reported for face-to-face encounters were more complete than the data collected on non-face-to-face encounters. Most face-to-face encounters were categorized as “assisted” or “diverted” (70% and 28%, respectively). Only 2% were categorized as “no assistance.” Seventy-one percent of CC face-to-face encounters lasted between 45 minutes and 1 hour. Most members seen face-to-face were discharged with a behavioral health follow up appointment scheduled (55%). Another 19% were discharged with resources but no follow up appointment, likely because they refused the care coordination services (i.e. scheduling appointments on their behalf). Fourteen percent were discharged to various locations, including residential facilities, psychiatric inpatient units, physical inpatient units (non-psychiatric unit), or scheduled substance use disorder (SUD) outpatient follow up appointments. Only 3% were discharged without resources. Lastly, 9% of individuals did not have discharge data collected.

Non-Face-to-Face Encounters

Data for non-face-to-face encounters were less complete than data for face-to-face encounters. For example, 30% of the non-face-to-face encounters did not have discharge data (i.e., if a member was discharged with or without resources, or if they had a BH or SUD follow-up appointment scheduled upon discharge) whereas for face-to-face

Discharge Outcomes by Encounter Type

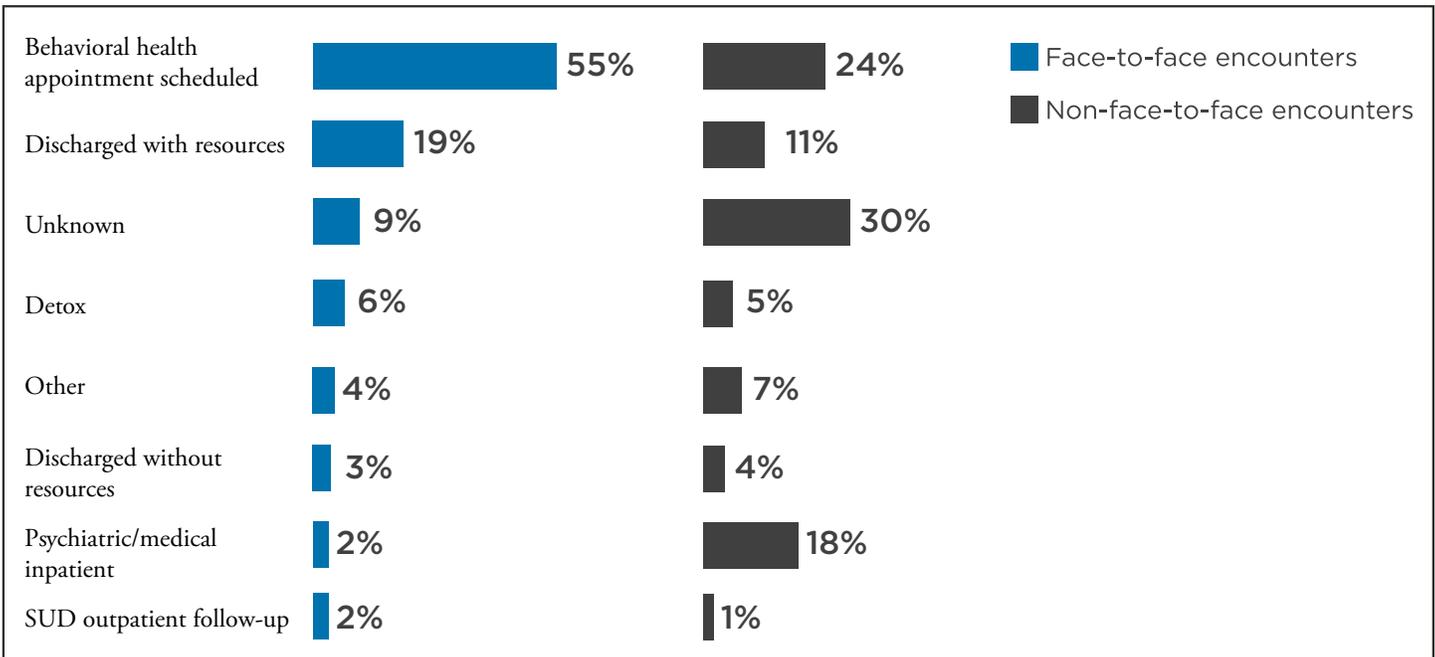


Figure 2. Non-face-to-face encounters led to fewer scheduled behavioral health appointments, more inpatient stays and more missing data.

encounters, only 9% of discharge data were missing. For non-face-to-face encounters, data around housing status were missing for 20% of members, whereas for face-to-face encounters, only 5% of housing status data were missing. Fifty-two percent of non-face-to-face encounters were categorized as “no assistance,” whereas among face-to-face encounters, only 2% were categorized as “no assistance.” Non-face-to-face encounters resulted in fewer scheduled follow-up visits than face-to-face encounters.

Discussion

Behavioral health disorders affect nearly 20% of adults in the United States, and account for approximately 10% of all ED visits.¹² Referrals to appropriate follow-up care are particularly beneficial to the patient as well as the health care system. When patients attend follow-up appointments for their BH needs and receive more appropriate care, they are less likely to return to the ED. Given that a behavioral health-related ED visit or inpatient stay can cost the health care system more than \$2,000 per ED visit, appropriate follow-up care can lead to significant cost savings for the health care industry.^{5,12,13}

This pilot intervention demonstrates that timely ED follow-up carried out in person (i.e., face-to-face) by a CC may lead to a larger number of follow-up behavioral health appointments over those who did not receive face-to-face care coordination. This model may provide a potential return on investment and improve experience in care across the ED, health plan, and member. This is also supported by literature, which suggests that face-to-face care coordination as well as coordinator and physician collaboration are two components of the most successful care coordination programs.¹⁴ Additionally, this type of partnership and care coordination allows individuals to be diverted to more appropriate care and provides members with resources and referrals that they would likely not have otherwise received.

Limitations

Despite a large proportion of missing data, these data are still informative. For example, even if all missing data regarding assistance in non-face-to-face encounters were counted as assisted, those receiving face-to-face care coordination would still have had substantially more assistance than those receiving non-face-to-face care coordination. Similarly, in Figure 2, 18% of those who received non-face-to-face care coordination had a psychiatric or medical inpatient classification as opposed to only 2% who had a face-to-face encounter. This difference is likely true as the missing data were more frequent in non-face-to-face encounters. The 18% receiving a psychiatric or medical inpatient classification may be underestimated. More data are needed but, this may suggest that face-to-face encounters avert inpatient stays more frequently than non-face-to-face encounters.

Conclusions

The success of pilot interventions such as the one deployed by Colorado Access and DHHA relies heavily on data collection and information transparency. Agreements enabling robust data collection and information sharing are necessary for CCs to deliver high-level follow-up care for all patients, but especially those patients not seen face-to-face. Additionally, providing the CC with full access to an ED's EHR would assist in the streamlining of data tracking and collection, which in turn, will allow for more complete follow-up care.

References

1. Hanrahan, N., Bressi, S., Marcus, S. & Solomon, P. Examining the impact of comorbid serious mental illness on rehospitalization among medical and surgical inpatients. *Gen Hosp Psychiatry* 42, 36–40 (2016).
2. Chwastiak, L. et al. The Effect of Serious Mental Illness on the Risk of Rehospitalization Among Patients With Diabetes. *Psychosomatics* 55, 134–143 (2014).
3. Germack, H. D., Noor-E-Alam, Md., Wang, X. & Hanrahan, N. Association of Comorbid Serious Mental Illness Diagnosis With 30-Day Medical and Surgical Readmissions. *JAMA Psychiatry* 76, 96 (2019).
4. Trudnak, T. et al. Medicaid Admissions And Readmissions: Understanding The Prevalence, Payment, And Most Common Diagnoses. *Health Aff. (Millwood)* 33, 1337–1344 (2014).
5. Nicks, B. A. & Manthey, D. M. The Impact of Psychiatric Patient Boarding in Emergency Departments. *Emerg. Med. Int.* 2012, 1–5 (2012).
6. Lin, M. P. et al. ED-Based Care Coordination Reduces Costs for Frequent ED Users. *Am. J. Manag. Care* 23, 762–766 (2017).
7. Kumar, G. & Klein, R. Effectiveness of Case Management Strategies in Reducing Emergency Department Visits in Frequent User Patient Populations: A Systematic Review - *Journal of Emergency Medicine*. *J. Emerg. Med.* 44, 717–729 (2013).
8. Soril, L. J. J., Leggett, L. E., Lorenzetti, D. L., Noseworthy, T. W. & Clement, F. M. Reducing Frequent Visits to the Emergency Department: A Systematic Review of Interventions. *PLOS ONE* 10, e0123660 (2015).
9. Stergiopoulos, V. et al. Brief case management versus usual care for frequent users of emergency departments: the Coordinated Access to Care from Hospital Emergency Departments (CATCH-ED) randomized controlled trial. *BMC Health Serv. Res.* 16, 432 (2016).
10. Griswold, K. S. et al. Primary Care After Psychiatric Crisis: A Qualitative Analysis. *Ann. Fam. Med.* 6, 38–43 (2008).
11. Psychiatric Emergency Services | Denver Health. <https://www.denverhealth.org/services/emergency-medicine/psychiatric>.
12. Ready, Risk, Reward: Improving Care for Patients with Chronic Conditions. <http://offers.premierinc.com/rs/381-NBB-525/images/Improving%20Care%20for%20Chronic%20Conditions%2C%20Premier.pdf>.
13. Batscha, C., McDevitt, J., Weiden, P. & Dancy, B. The Effect of an Inpatient Transition Intervention on Attendance at the First Appointment Postdischarge From a Psychiatric Hospitalization. *J. Am. Psychiatr. Nurses Assoc.* 17, 330–338 (2011).
14. Dorr, D., Wilcox, A., Brunner, C., Burdon, R. & Donnelly, S. The Effect of Technology Supported, Multidisease Care Management on the Mortality and Hospitalization of Seniors. *J. Am. Geriatr. Soc.* 56, 2195–2202 (2008).