

Integration of primary care into the substance use disorder outpatient treatment setting

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ABSTRACT

Background: Americans experiencing substance use disorder (SUD) carry a significant chronic disease burden, yet only half use primary care. Patients in treatment for SUD who are connected with primary care typically have better overall health outcomes.

Local problem: The identified intensive outpatient program (IOP) had no protocol in place to engage patients with primary care.

Methods: This project piloted the development and implementation of an original, evidence-based primary care integration program. It consisted of a psychoeducation group, a referral by case management, and establishment of an internal referral process to affiliated primary care providers (PCPs).

Interventions: Following the psychoeducation group, pre and posttests of patient-reported knowledge and attitudes regarding primary care were compared. Participants were contacted to collect further data after IOP discharge. An education and feedback session was held with affiliated PCPs, and an internal referral process was devised by leadership.

Results: Mean scores measuring patient knowledge and attitudes regarding primary care increased after participation in the structured psychoeducation group. By time of IOP discharge, 100% ($n = 12$) of participants had either a referral or scheduled appointment with a PCP in place. At time of follow-up, 90% ($n = 9$) reported that they had attended or planned to attend their scheduled PCP appointment.

Conclusions: A comprehensive integration program in the IOP setting can improve patient engagement with primary care. Quality improvement implementation will require consideration of challenges faced during the pilot involving scheduling, staff buy-in, changes in patient acuity, the electronic medical record, and insurance.

Keywords: Integration; intensive outpatient program; primary care; recovery; substance use.

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Introduction

Problem description

Substance use disorder (SUD) remains a serious public health problem due to the impact on morbidity and mortality and the resulting societal costs (U.S Department of Justice, 2012). In 2017, approximately 19.7 million Americans aged 12 years and older had SUD or recurrent use of alcohol or drugs, causing clinically significant impairment, and in Massachusetts, there were 109,002 SUD-

related admissions (Substance Abuse and Mental Health Services Administration, 2018; Massachusetts Department of Public Health, 2018). Persons with SUD have more chronic diseases and lower quality of life compared with the general population (Bahorik et al., 2017; Eddie et al., 2019). Primary care, considered the cornerstone of medicine, is paramount in the prevention and management of chronic diseases, but it is estimated that less than half of those with SUD use primary care. This is attributed to the fragmented current health care system and resulting lack of care integration (Cucciare et al., 2014).

Integrated care, which results from primary care and behavioral health clinicians working together using a systematic and cost-effective approach to provide patient-centered care, is considered best practice (U.S Department of Health and Human Services, n.d; Agency for Healthcare Quality and Research, n.d; Mental Health America, 2017). A

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holistic view of recovery and the emerging model of SUD as a chronic disease has increased the understanding of behavioral health, or SUD and mental health, as being inseparable from overall health (U.S Department of Health and Human Services, 2018). Yet behavioral health has historically been researched, financed, and regulated separately from medical care, and this lack of integration is now understood to be harmful to patients (Mental Health America, 2017). Successful integration of behavioral health with primary care remains a challenge in most clinical settings.

This quality improvement (QI) project addressed the lack of primary care integration as part of treatment at a local intensive outpatient program (IOP) for adults with both a SUD and mental health diagnosis. Before initiation, a June 2018 chart review revealed that out of 157 patients who had attended the IOP, only 44% ($n = 69$) of them had documented primary care providers (PCPs) in their electronic medical record (EMR). A follow-up appointment with a PCP was not considered a standard part of patients' discharge plans, no recommended timeline was established on when to follow-up with PCPs upon discharge, and there was no education provided on the role primary care can play in recovery. Primary care provider status was often charted in the wrong place or omitted altogether. Case managers worked to connect patients with a PCP only if requested by the patient. No internal referral process existed for IOP patients trying to get connected to PCPs in the affiliated Family Medicine Department, despite being part of the same parent health care organization. Intensive outpatient program staff were unable to directly communicate via EMR with Family Medicine clinical staff to coordinate care despite sharing the same system because of the way the EMR was set up to be compliant with 42 Code of Federal Regulations (CFRs) part 2, a federal law that prohibits open access to all records relating to identity, diagnosis, and treatment of patients in an SUD treatment program without written consent from the patient (Legal Action Center, 2019). Follow-up was not a standard part of the program, so it was unknown whether the patients who were referred to primary care successfully made it to their scheduled appointment and what that experience was like for them.

A needs assessment identified many challenges. These included availability of local PCPs who are accepting new patients and/or waivered to prescribe medication-assisted treatment (MAT), availability of upcoming appointments, transportation issues, insurance barriers, patients' reluctance to see a PCP due to prior negative experiences, and clinic staff members' reluctance to schedule these patients due to bias about these patients being "no-shows." A primary care integration program was needed to overcome these challenges.

Available knowledge

A review of the literature found sufficient evidence to support that SUD is best understood as a chronic disease.

A landmark study by McLellan et. al (2000) found that heritability, behavioral and environmental factors, pathophysiological changes, medication adherence, and relapse rates of SUD were comparable to type II diabetes mellitus, hypertension, and asthma, suggesting that SUD should be considered a chronic disease, and long-term care management and monitoring produce the most lasting benefits. Application of chronic disease management in the SUD patient population was noted to promote abstinence (Edens et al., 2014; Kim et al., 2012). A meta-analysis concluded that chronic care management and community treatment would greatly enhance SUD care (Fleury et al., 2016).

Patients with SUD receiving long-term primary care along with specialty substance use treatment and psychiatric services were more likely to achieve remission compared with those without (Chi et al., 2011). Primary care providers support patients' recovery through increased screening and monitoring for substance use, medical management of SUD symptoms, coordination of specialist care, providing a therapeutic relationship, and improving overall health through prevention and management of other chronic diseases (Chi et al., 2011; McNeese-Smith et al., 2014). Utilization of primary care to access medical care also helps to curb preventable emergency department (ED) visits, inpatient hospitalizations, and associated costs (Krupski et al., 2016). This is significant because patients with SUD are among the highest ED users; these patients are up to 7 times more likely to visit the ED compared with the general population (Bahorik et al., 2018). They also have a particularly high chronic disease burden (Bahorik et al., 2017). It is estimated that only half of all patients with SUD receive primary care, but integration of primary care into SUD treatment improves access to a PCP and supports recovery by addressing patient, provider, and system-level barriers to care (Chi et al., 2011; Cucciare et al., 2014; Krupski et al., 2016; McNeese-Smith et al., 2014; Samet et al., 2001).

Studies show that patient education and counseling can improve patient acceptance of and satisfaction with primary care referrals. Implementation of Project Alcohol and Substance abuse Services, Education and Referral to Treatment, an innovative psychoeducation program developed to facilitate referral to services for patients with SUDs presenting in the ED, used a brief counseling session to assess readiness and educate patients about the importance of receiving primary care, which led to reduced severity of SUD and had high patient satisfaction (Bernstein et al., 1997). Psychoeducation, an evidence-based therapeutic intervention providing information and support to help patients better understand and cope with illness, has been a long-established intervention for chronic diseases. Studies suggest that it can be applied to provide education and address patient-related care barriers in the context of a range of medical and mental

health conditions, provide health promotion, positively influence patient attitude and behaviors, and facilitate care transitions (Lukens & McFarlane, 2004).

To address patient and provider-related barriers, PCPs should work in the same institution as the SUD treatment team to enhance interdisciplinary communication and improve patient convenience (Drainoni et al., 2014; McNeese-Smith et al., 2014). The timing of a referral during SUD treatment is ideal because patients are already undergoing positive steps to improve their recovery and are engaged in health care, creating a "window of opportunity" (Samet et al., 2001). Applying a "Whole Health Model" in a community health center, which integrated health and wellness education into mental health treatment, was found to reduce Medicare expenditures, ED visits, and hospitalization rates (Bouchery et al., 2018). Putting integration into practice is challenging; the current reimbursement model, licensure issues, patient confidentiality regulations, and workforce culture are system-level barriers to integration (Kansas Health Institute, 2017). Yet the evidence shows that using an integrated model in SUD treatment results in the best patient health outcomes while reducing overall costs (Chi et al., 2011; Cucciare et al., 2014; Krupski et al., 2016; McLellan et al., 2000; McNeese-Smith et al., 2014; Samet et al., 2001).

Rationale

The framework supporting this project was the conceptual model developed by Cucciare et al. (2014) that facilitates the transition of patients from addiction treatment to primary care. Their recommendations based on the literature included colocation of primary care and SUD services, a facilitated referral by case-management, and patient education and counseling on the benefits of primary care to improve patient knowledge and attitudes toward utilization. This project applied the model of Cucciare et al. (2014) to address patient, provider, and system-related factors affecting successful integration (**Figure 1**).

Purpose

For the purpose of this QI project, the following practice question was addressed: Would an integrated model involving structured psychoeducation, a patient-driven referral by case management, and establishment of an internal referral process for SUD patients in the IOP setting improve patient engagement with primary care?

Methods

Setting and participants

The QI project was implemented at an IOP program, which was operated by an independent, community-owned health care system in the rural northeast. In this rural area, there was limited access to PCPs, MAT prescribers, and

behavioral health treatment options. This organization sought to address this community need and opened a comprehensive treatment center for patients with co-occurring mental health diagnoses and SUD. The IOP offered through this facility served an estimated 200 patients between its' opening June 2017 and November 2018. Intensive outpatient programs have been considered an important part of the SUD care continuum with high level of evidence supporting their efficacy (McCarty et al., 2014). The program was run by behavioral health clinicians and consisted of 10–15 days of individual and family counseling, case management, and group educational sessions centered around promoting overall wellness and recovery. The patient population comprised of both male and female subjects aged 18 years and older with co-occurring substance use and mental health disorders. Thirteen patients participated in the psychoeducation group in the time frame allotted for this QI pilot project, with 10 participants successfully contacted for follow-up.

Interventions

The program was designed to address patient-related, provider-related, and system-related barriers. First, aforementioned baseline data were collected via patient chart review and informal program staff interviews to identify the local problem. A standardized process was established to consistently document the patients' current PCP in the EMR at intake. A nurse-led structured 1-hour psychoeducation program for the IOP patients was devised based on the literature and implemented using original materials (see Supplementary material, Supplemental Digital Content 1, <http://links.lww.com/JAANP/A57>). The patients were informed that the group was part of a QI pilot project, and participation was voluntary. Learning objectives were to 1) enhance understanding of the importance of regular primary care, 2) advise patients how to efficiently access the health care system and maximize benefits of the PCP visit, and 3) empower patients to consider themselves as equal and important members of their care team. Participants were provided an original written brochure based on guidelines from the American Academy of Family Physicians, the California Mental Health Services Authority Partners in Health Toolkit (2013) and Mental Health America. The lesson plan included reviewing and discussing the sections of the brochure: *What is a PCP? Why is it important to have a PCP? What sorts of things can I see my PCP for? How Should I prepare for my PCP visit? and Helpful Resources*. The Institute of Health care Improvement's "Ask Me Three" brochure and the "You're on the Team: Checklist" developed by Mental Health America were reviewed and discussed as well. Then, the IOP case manager worked with participants to schedule a follow-up PCP appointment as soon as possible upon projected discharge date from the IOP, including referral for a new

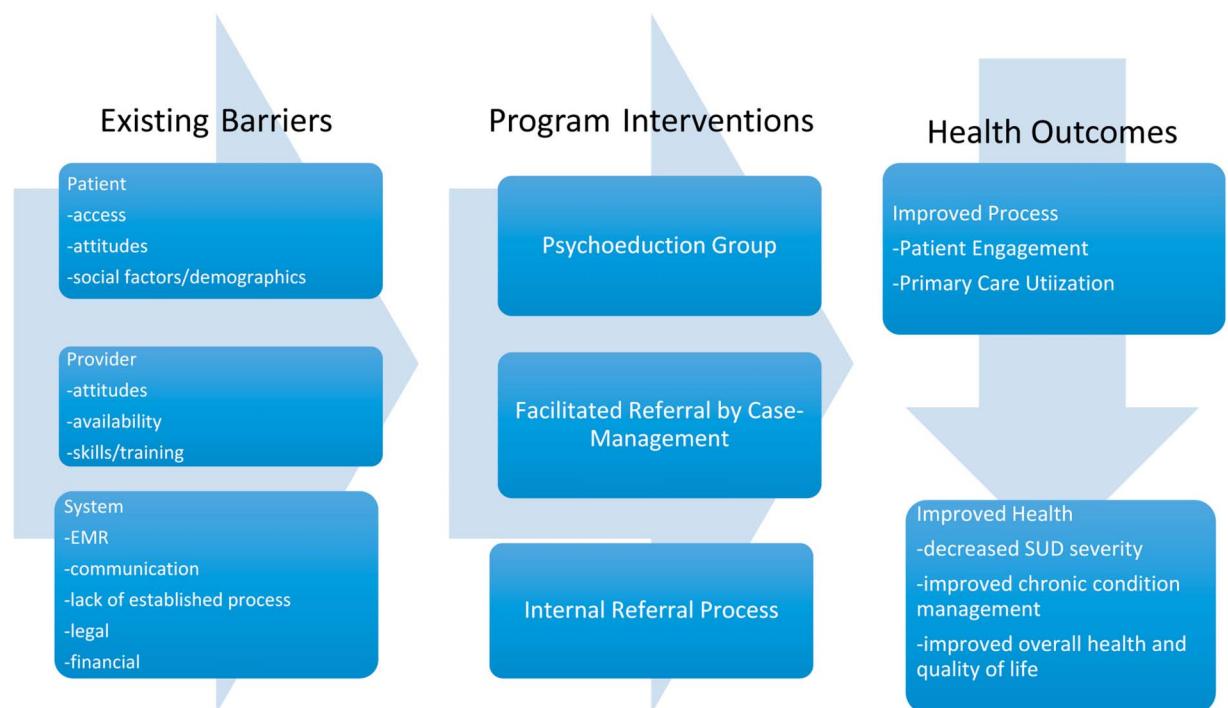


Figure 1. Project design, based on framework developed by Cucciare et al. (2014).

PCP if needed based on patient preferences (gender, location, MAT prescribing ability, etc.) and insurance requirements.

A presentation was held for affiliated PCPs and administrative staff to share goals of the integration program, collect feedback regarding the development of an internal referral process, and address questions and concerns. About 25 Family Medicine staff members attended. A follow-up meeting with the organization's Chief Medical Officer and Behavioral Health Director was held to establish the internal referral process as an organization-wide guideline and set the goal of scheduling all IOP patients with a PCP appointment for within seven days of discharge. The guideline change was drafted to be communicated to all primary care clinics via email (see Supplementary material, Supplementary Digital Content 1, <http://links.lww.com/JAANP/A57>).

Study of the interventions

Data were first collected via survey method; pre- and posttests were voluntarily completed by participants before and after the psychoeducation group to assess for improvement in knowledge and attitudes regarding primary care. The deidentified responses were coded and recorded in an Excel database. Written permission was obtained from patients to be contacted for follow-up. After IOP discharge, follow-up with participants occurred by direct outreach or review of EMR to determine whether the patient attended the scheduled primary care

appointment and collect further qualitative data about the process. Direct outreach consisted of telephone interviews or email, and deidentified patient contact information, upcoming appointments, outreach attempts, and collected qualitative feedback were tracked in an Excel database. Data points collected included if a PCP referral was made, if a PCP appointment was scheduled, how many days after discharge was the PCP appointment, if it was with an affiliated PCP, and if it was with a PCP new to the patient. Using scripted interviews, participants were asked whether they attended or planned to attend their PCP appointment, what challenges they encountered in the process, how they felt the appointment went, and if there was anything further that would have been helpful to discuss in the psychoeducation group to better prepare them. The participants also reported barriers, described their experience attending the appointment, and provided additional feedback on the program. Finally, qualitative data were collected when PCPs were asked to share feedback and concerns about the internal referral process at the Family Medicine meeting.

Measures and analysis

Pretest and posttest surveys of patient knowledge and attitudes regarding primary care was measured by comparing mean scores of composited questions. The survey was developed based on the empirical literature and reviewed by content experts, the IOP director and academic advisors. The pretest included two background

information questions, two knowledge self-assessment questions, and four attitude self-assessment questions; the posttest included the same two knowledge and four attitude self-assessment questions, as well as one feedback question, with opportunity to elaborate with a free-text response. Patients answered the questions using a Likert scale response, with possible answers ranging from 1 as strongly disagree to 5 as strongly agree. Mean patient responses were composited to directly assess the lesson objective of improving patient knowledge and attitudes toward primary care. Knowledge composite score included Q1 and Q3, attitude composite score included Q2, Q4, Q5, Q6, and Q7 (**Table 1**). Q7 was present on the posttest only. Quantitative data were analyzed using descriptive statistics. All 13 patients who attended the psychoeducation group completed pre- and posttests. One outlier posttest was omitted from data analysis because of inconsistent responses. Out of the 13 group participants, 12 granted permission for follow-up, and 10 were successfully reached. The IOP typically did not collect follow-up data from patients after program discharge, so there was no baseline data available for comparison. Data were collected before the internal referral process was established, but the chosen benchmark of 7 days post-IOP discharge was used for analysis.

Ethical considerations

This project was determined “Not Human Participants Research” on August 13, 2018 by the University of Massachusetts Medical School Institutional Review Board. All patients were notified that all program components were part of a pilot QI project and participation were voluntary with responses kept confidential. Patients were contacted for follow-up only if they granted their written permission.

Table 1. Pre- and posttest survey questions grouped by composite score categories

Knowledge	Attitude
Q1: I can define what a PCP is.	Q2: I understand why having a PCP is important.
Q3: When I go see my PCP, I feel prepared for the visit.	Q4: When I go see my PCP, I feel comfortable asking questions.
	Q5: I consider myself an equal member of my care team.
	Q6: I would like to make (or already have) an appointment to see a PCP after finishing this program.
	Q7: I found this session helpful.

Note: PCP = primary care provider.

Results

Psychoeducation group

At the start of the psychoeducation group, 10 out of 13 group participants (77%) self-reported currently having a PCP. The mean range reported length of time since last PCP appointment was 1–6 months. Participants reported improvements in knowledge and attitudes regarding primary care utilization as a result of the psychoeducation group. The mean patient knowledge composite score improved from 4.2 to 4.6, and the mean patient composite attitude score improved from 4.2 to 4.4 (**Figure 2**). Due to the small sample size, inferential statistics were not employed. The open-ended question responses on the posttest were overall positive with some constructive feedback because most patients reported having learned useful information through participation in the group. Examples of the written responses include the following:

- It was informational (sic) and facilitator was very pleasant and gave the information in a way I could understand!
- It's good to be reminded of the important reasons to have a PCP and use them, especially in early sobriety when we have neglected our health for some time.
- I think being older, 44 years old, I have had experience with PCPs but I could see this being helpful in my early 20s.

Case-management referral

Out of the 12 participants who granted permission to be contacted for follow-up, all 12 (100%) had agreed to and planned to see their PCP after finishing the IOP, and all 12 (100%) had a primary care referral in process at time of discharge. Ten participants (83%) had a PCP appointment scheduled by the time they were discharged (**Figure 3A**). The two patients who had a referral but not an appointment in place at time of discharge had left the IOP early. Five appointments (42%) were scheduled for dates within 7 days of the patients' program discharge, and the mean length of time from discharge to PCP appointment was 15 days (**Figure 3B**). The timing of three appointments was unable to be confirmed. At least eight appointments (67%) were with a PCP new to the patient because of patient or insurance authorizer request. At least four appointments (40%) were with an affiliated PCP. For two patient appointments, PCP identity was unable to be confirmed.

Patient outreach

At time of follow-up, a majority or seven participants (70%) confirmed attending their PCP appointment, and an additional two (20%) knew the date of their upcoming

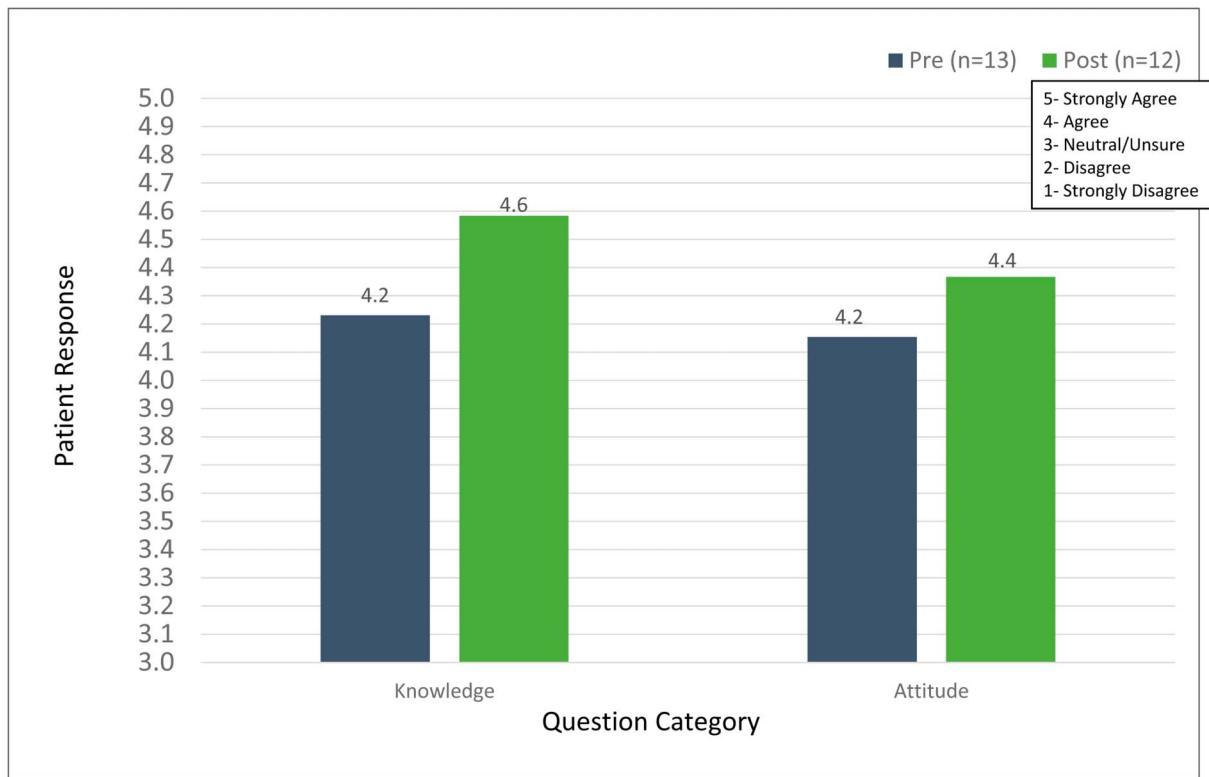


Figure 2. Composite mean patient responses comparing pre- versus posttest questions to assess project objective of implementing a psychoeducation program to improve patient knowledge and attitudes toward primary care. Knowledge composite score includes Q1 and Q3, and attitude composite score includes Q2, Q4, Q5, Q6, and Q7. One outlier posttest omitted from data analysis. See Table 1 for specific questions. Q7 present on post test only.

appointment and planned to attend (**Figure 4**). Thus, attendance rate was projected to be 90%. The one patient who was not able to attend their PCP appointment was admitted to an inpatient SUD treatment facility but planned to reschedule once discharged. At follow-up, patients reported that barriers to obtaining a PCP appointment were administrative, such as waiting for insurance changes to be processed or lack of available appointments, or plan-of-care related, for example the patient was not able to see his PCP yet due to participation in inpatient treatment. The overwhelming majority of patients reported at follow-up having overall positive experiences scheduling and attending their PCP appointment and stated they were able to apply what they had learned in the group while at their appointment. Examples included the following:

- (The appointment) went fantastic. (Since group I) felt much more informed when I did talk to (my PCP), knew more questions to ask. (Group) made me feel more knowledgeable.”
- “(scheduling the PCP appointment) was a pain in the ass due to insurance, scheduling, finding an appointment before (the year’s end) ... but (the case manager) was instrumental in helping.”

Establishing the referral process

Informal qualitative data about the referral process were collected at the meetings with affiliated PCPs and leadership staff. Expressed concerns included likelihood of SUD patients no-showing to scheduled PCP appointments, PCP access to IOP treatment records, whether the influx of new patients from the IOP would be too burdensome for clinics to accommodate, and devising a system to determine who should see these new patients.

Discussion

Summary

This QI pilot project was the first known reported initiative to implement an empirically integrated model for patients with SUD in the IOP setting to improve utilization of primary care, and the results of this pilot are promising. The structured psychoeducation group met learning objectives of improving patient knowledge and attitudes toward primary care, although the sample was too small to make further comparisons of data. Patient feedback regarding usefulness of the group was overwhelmingly positive. The majority of participants scheduled and attended PCP appointments, indicating that a facilitated referral by case management further supported patients. Although the internal referral process was not implemented in time for analysis, the data indicated a clear

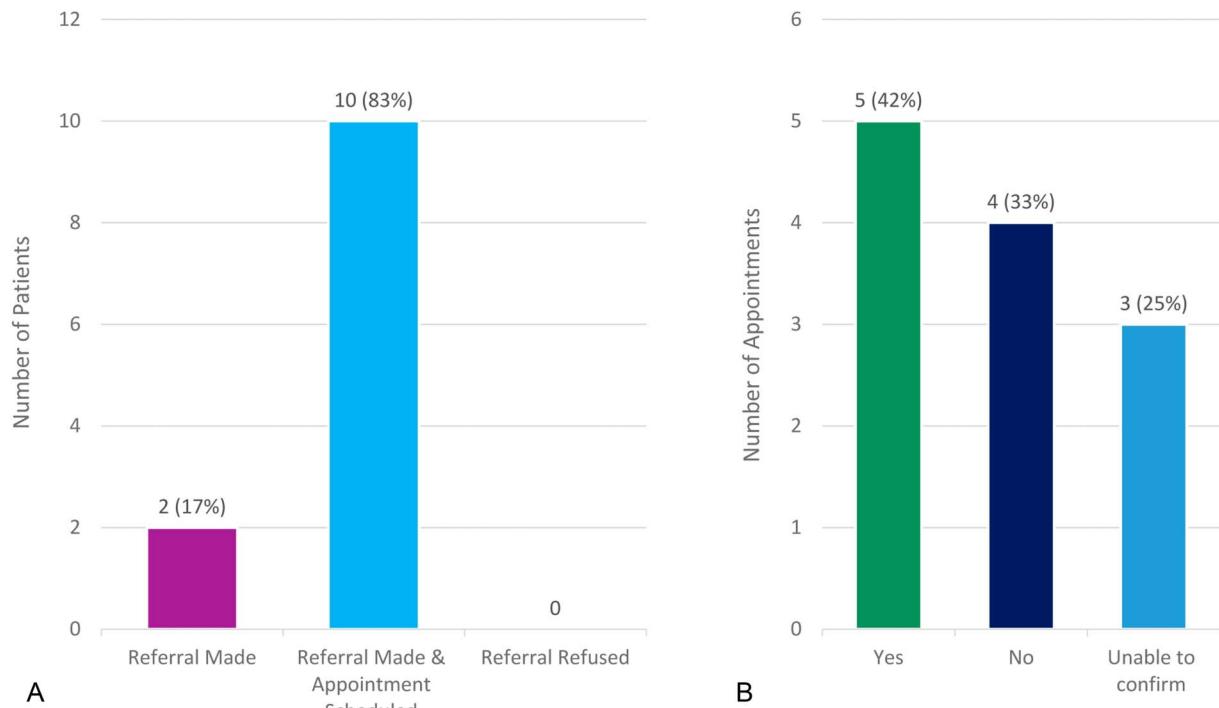


Figure 3. A and B These assess if a facilitated referral to primary care became a standard part of care for patients participating in the IOP, and the need for establishment of a guideline change to schedule patients a PCP appointment for within 7 days of program discharge. One hundred percent of patients had a facilitated referral to case management made; the two patients who did not have an appointment scheduled left the program early. Data in (B) were collected before the internal referral process was drafted and approved by organization leadership, but at least 42% met the benchmark. IOP = intensive outpatient program; PCP = primary care provider.

need, as the majority of appointments were not scheduled for within the benchmark time frame of 7 days.

Role of psychoeducation group

The data demonstrates that members of this patient population were willing and able to play a proactive role in their health care, and they were motivated to make positive changes for their health, especially when supported at the right time. The IOP setting was a particularly important window of opportunity because patients were already transitioning from actively using substances into recovery (Samet et al., 2001). In particular, the psychoeducation group served as a dedicated window of time to address the importance of overall health in recovery and was a safe space for patients to discuss preconceived notions and process prior negative experiences, all while further educating and engaging patients. Thus, participating patients felt more motivated and prepared to take charge of their health and effectively engage with their primary care team.

Referral and attendance

Substance use disorder patients were willing and able to attend PCP appointments, especially when supported by a facilitated referral. The case manager played an invaluable role, providing patient-centered care

coordination. Despite the internal referral process not being in place yet, this particular case manager was able to assist all willing patients who had finished the IOP secure a PCP appointment, and the mean wait time from discharge to PCP appointment was only 8 days longer than the 7-day benchmark later set by administration. Although the majority of patients had reported on the pretest that they had seen their PCP within 6 months, most patients still requested or required a referral to a new PCP, further supporting the need for a patient-driven referral facilitated by case management.

Challenging stigma

The data also challenges several common negative stereotypes about the SUD patient population. During program implementation, both IOP and family medicine staff brought up concerns that patients with SUD are notoriously hard to follow-up with and often no-show for appointments, so efforts to conduct outreach and schedule appointments for these patients were met with some resistance. However, the majority or 83% of patients were successfully reached for follow-up after program discharge, and the projected PCP appointment attendance rate was 90%. These findings demonstrate that outreach to and scheduling PCP visits for these patients is a worthwhile use of time and resources,

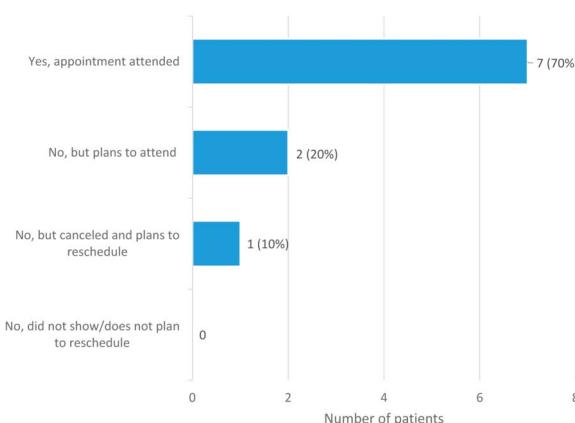


Figure 4. At time of follow-up, patients verbally confirmed whether they attended their scheduled appointment or not. If their appointment had not occurred yet at time of contact, patients reported whether they planned to attend, and were able to confirm the date and time and planned method of transportation. Ninety percent of patients either attended or planned to attend their primary care provider appointment.

especially when supported by an integration program, and this stigma is possibly ill founded.

Limitations

Although the literature clearly supported the need for integrated care, the author was unable to find any QI projects or studies on the actual implementation and assessment of integration programs in a behavioral health treatment setting to use as a model for this project. Thus, this QI project is possibly the first of its kind.

Abbreviated timeline

This QI project was a pilot of the integration program and included a small sample size due to challenges that occurred during implementation. The project implementation time line unexpectedly shortened due to unforeseen financial and regulatory concerns within the IOP, forcing a temporary closure of the IOP and significant staff turnover. This is an example of how the current convoluted health care regulatory and insurance-driven financing systems are administratively burdensome to clinical settings and can be a barrier to patient access to care. Finally, the unexpected temporary closure of the IOP and resulting time constraints of the project did not allow for data collection following establishment of the internal referral process. Although the process was drafted, organizational leadership were still determining workflows and identifying which PCPs would be assigned to IOP patients at time of data collection.

Data collection

Several limitations were related to the EMR. There was a discrepancy in patient-reported and documented PCP status at time of program implementation, indicating that

the PCP status was likely not documented in the EMR consistently and highlights the difficulty of extracting information from the current EMR. Because of the law 42 CFR part 2, the EMR was designed to block Family Medicine access to IOP notes, but as a result, the IOP staff could not access Family Medicine records. Although temporary access to both “sides” of the EMR was granted for this project, this access was lost before analysis was completed, resulting in some gaps in the data. In addition, access to a facility-owned cellphone was revoked, resulting in the inability to conduct patient outreach via text message; this method of communication could have improved patient follow-up rates.

Implications for future practice

To enhance the internal referral process, the organization could have considered developing a scheduling system to keep a certain amount of new patient appointments in the schedule open so patients discharge from the IOP can be seen more quickly. Because data analysis revealed that only 40–60% of appointments were with internal PCPs, this organization’s administration should have been reassured that the demand for appointments with these PCPs would not overwhelm family medicine clinics as they implement the organization’s new internal referral process. Another evidence-based practice change would be hiring or training more PCPs to be waivered to prescribe MAT and collocating their clinics with the IOP (Cucciare et al., 2014). The author had recommended that once the IOP accepts new patients again, data continue to be collected to measure whether the internal referral process improves access to internal PCPs.

Also, although PCPs cannot legally have open access to notes related to behavioral health treatment, 42 CFR does not prohibit the IOP staff from having access to medical records (Legal Action Center, 2019). A practice change moving forward should be to grant the IOP staff access to the medical side, so they can directly check PCP status, be updated on patients’ medical needs and the plan of care, and communicate more easily with the entire care team. The evidence indicates that a multidisciplinary, team-based approach to care is best for supporting patient recovery, so efforts to promote transparency, care coordination, and better communication between parties via the EMR are needed.

Conclusion

In conclusion, this QI project demonstrated that a primary care integration program as part of patient treatment in the IOP setting can potentially improve primary care utilization and promote recovery. Although the small sample size limits generalizability of findings, the results of this pilot are promising. At the time of writing, the IOP has been reestablished and is accepting new patients again. A modified version of this project, including the

psychoeducation group and facilitated PCP referral, has been incorporated into standard treatment. The IOP established a close relationship with two affiliated PCPs with SUD experience and most, if not all, referrals are going to these providers, and data are being collected for further analysis.

In the current legal and financial health care environment, practical solutions to address clinical challenges are needed, and this program could be modified and implemented in many clinical settings. As the health care system embraces SUD as a chronic disease and shifts toward more recovery-focused, integrated models of care, this pilot can serve as an exemplar for future practice.

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Authors' contributions: R. Wasserman designed and implemented the quality improvement project, developed the curriculum and associated materials and instruments, facilitated the program, collected patient data, and wrote the initial draft of the article. J. Terrien was a lead adviser on project design and revised the manuscript for final submission.

Competing interests: The authors report no conflicts of interest.

References

Agency for Healthcare Research and Quality (n.d.). *The academy: Integrating behavioral health and primary care*. <https://integrationacademy.ahrq.gov/>.

Bahorik, A. L., Satre, D. D., Kline-Simon, A. H., Weisner, C. M., & Campbell, C. I. (2017). Alcohol, cannabis, and opioid use disorders, and disease burden in an integrated healthcare system. *Journal of Addiction Medicine*, 11, 3–9.

Bahorik, A. L., Satre, D. D., Kline-Simon, A. H., Weisner, C. M., Young-Wolff, K. C., & Campbell, C. I. (2018). Alcohol, marijuana, and opioid use disorders: 5-year patterns and characteristics of emergency department encounters. *Substance Abuse*, 39, 59–68.

Bernstein, E., Bernstein, J., & Levenson, S. (1997). Project ASSERT: An ED-based intervention to increase access to primary care, preventive services, and the substance abuse treatment system. *Annals of Emergency Medicine*, 30, 181–189.

Bouchery, E. E., Siegwarth, A. W., Natzke, B., Lyons, J., Miller, R., Ireys, H. T., Brown, J. D., Argomaniz, E., & Doan, R. (2018). Implementing a whole health model in a community mental health center: Impact on service utilization and expenditures. *Psychiatric Services (Washington, D.C.)*, 69, 1075–1080.

Chi, F. W., Parthasarathy, S., Mertens, J. R., & Weisner, C. M. (2011). Continuing care and long-term substance use outcomes in managed care: Early evidence for a primary care-based model. *Psychiatric Services (Washington, D.C.)*, 62, 1194–1200.

Cucciare, M. A., Coleman, E. A., Saitz, R., & Timko, C. (2014). Enhancing transitions from addiction treatment to primary care. *Journal of Addictive Diseases*, 33, 340–353.

Drainoni, M., Farrell, C., Sorensen-Alawad, A., Palmisano, J. N., Chaisson, C., & Walley, A. Y. (2014). Patient perspectives of an integrated program of medical care and substance use treatment. *AIDS Patient Care and STDs*, 28, 71–81.

Eddie, D., Greene, M. C., White, W. L., & Kelly, J. F. (2019). Medical burden of disease among individuals in recovery from alcohol and other drug problems in the United States: Findings from the National Recovery Survey. *Journal of Addiction Medicine*, 13, 385–395.

Edens, E. L., Donahue, C. A., & Riordan, C. E. (2014). Pilot results of a new model of addiction treatment: Managing addiction as a chronic disease. *Connecticut Medicine*, 78, 487–491.

Fleury, M., Djouini, A., Huynh, C., Tremblay, J., Ferland, F., Ménard, J., & Belleville, G. (2016). Remission from substance use disorders: A systematic review and meta-analysis. *Drug and Alcohol Dependence*, 168, 293–306.

Kansas Health Institute. (2017). *Integrating Primary Medical and Behavioral Health Care*. www.khi.org/assets/uploads/news/14760/integratedcare_brief17_final_web_2.pdf.

Kim, T. W., Saitz, R., Cheng, D. M., Winter, M. R., Witas, J., & Samet, J. H. (2012). Effect of quality chronic disease management for alcohol and drug dependence on addiction outcomes. *Journal of Substance Abuse Treatment*, 43, 389–396.

Krupski, A., West, I. I., Scharf, D. M., Hopfenbeck, J., Andrus, G., Joesch, J. M., & Snowden, M. (2016). Integrating primary care into community mental health centers: Impact on utilization and costs of health care. *Psychiatric Services*, 67, 1233–1239.

Legal Action Center. (2019). *The fundamentals of 42 CFR part 2: What is it? why is it important?* <https://lac.org/addiction-confidentiality-42-cfr-part-2-important/>.

Lukens, E. P., & McFarlane, W. R. (2004). Psychoeducation as evidence-based practice: Considerations for practice, Research, and policy. *Brief Treatment and Crisis Intervention*, 4, 205–225.

Massachusetts Department of Public Health Bureau of Substance Addiction Services. (2018). *Geographic fact sheets FY 2014*. <https://www.mass.gov/files/documents/2019/03/13/statewide.pdf>.

McCarty, D., Braude, L., Lyman, D. R., Dougherty, R. H., Daniels, A. S., Ghose, S. S., & Delphin-Rittmon, M. E. (2014). Substance abuse intensive outpatient programs: Assessing the evidence. *Psychiatric Services (Washington, D.C.)*, 65, 718–726.

McLellan, A. T., Lewis, D. C., O'Brien, C. P., & Kleber, H. D. (2000). Drug dependence, a chronic medical illness: Implications for treatment, insurance, and outcomes evaluation. *JAMA*, 284, 1689–1695.

McNeese-Smith, D. K., Faivre, C. L., Grauvogl, C., Warda, N. U. S., & Kurzbar, M. A. (2014). Substance abuse treatment processes and outcomes in day/outpatient health maintenance organization setting. *Journal of Addictions Nursing*, 25, 130–136.

Mental Health America. (2017). *Position statement 13: Integration of mental and general health care*. http://www.mentalhealth-america.net/positions/integrated-care#_edn2.

Samet, J. H., Friedmann, P., & Saitz, R. (2001). Benefits of linking primary medical care and substance abuse services: Patient, provider, and societal perspectives. *Archives of Internal Medicine*, 161, 85–91.

Substance Abuse and Mental Health Services Administration. (2018). *Key substance use and mental health indicators in the United States: Results from the 2017 National Survey on Drug Use and Health (HHS Publication No. SMA 18-5068, NSDUH Series H-53)*. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/data/>.

U.S. Department of Health and Human Services. (2018). *Recovery and recovery support*. <https://www.samhsa.gov/recovery>.

U.S. Department of Justice. (2012). *Economic impact of illicit drug use on American society*. ASI 6008-81;2011-Q0317-002. <https://statistical.proquest.com/statisticalinsight/result/pqpresultpage.previewtitle?docType=PQSI&titleUri=/content/2012/6008-81.xml>.

U.S. Department of Health & Human Services (n.d.) SAMHSA-HRSA center for integrated health solutions: <https://www.integration.samhsa.gov/>.