

**Improving Access to Community Mental Health Specialists
By Considering Transfer of Stable Clients to Primary Care**

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Abstract

Introduction: Rising rates of mental illness and worsening provider shortages increase the risk of unmet psychiatric needs (Jacobs et al., 2020). Long wait times for specialty prescriber care adds to this problem (Naiker et al., 2018). Patient prioritization is an important facet of effective health care provision (Déry et al., 2019). In Clackamas County, rates of mental health conditions are higher than state averages (Oregon Health Authority, 2018). Transferring stable patients from specialty prescribers to primary care may improve access to psychiatric providers.

Aim: Our project's aim is to promote discourse and consideration of transfer criteria from specialty psychiatric prescribers to primary care providers (PCPs) for comprehensive care. A shared understanding of transfer criteria and of conditions for referral back to a psychiatric specialist will support clinician decision making and caseload management. Elevation of this clinical domain will encourage providers to identify transfer-eligible patients from their caseload.

Intervention: An evaluative questionnaire assessed culture, definitions, and procedures surrounding patient stability and transfer-readiness at a county-based, hybrid primary-specialty care setting. An informational resource was created and distributed to providers. Pre- and post-intervention surveys measured baseline perceptions of this issue and response to our project.

Results: Findings highlighted a diversity of clinical perspectives on this subject. No single definition of psychiatric stability stood out, though providers clearly valued psychosocial support for their patients as well as thorough communication between specialist and PCP.

Conclusions: Our project offers a template for pooling clinical judgement around this subject and illuminates existing barriers to safe, timely patient transfers. PCP readiness to accept clients once discharged from specialty care is emphasized as a vital clinical priority. Future projects can design a communication tool to share transfer rationale and confirm PCP readiness.

Introduction

Problem Description

According to the 2019 National Survey on Drug Use and Mental Health (NSDUMH), 61.2 million American adults had either a mental illness, a substance use disorder, or both at the time of response (Substance Abuse and Mental Health Services Administration, 2020). The same survey found that Serious Mental Illness (SMI) is on the rise among all adult age brackets, affecting 13.1 million people with subsequent losses of function and of life expectancy (Jacobs et al., 2020; SAMHSA, 2020). The U.S. Department of Health and Human Services projects a national shortage of more than 15,000 FTE psychiatrists by the year 2025, with similar scarcities among other mental health (MH) roles (Health Resources and Services Administration, 2016).

Rising disease prevalence and poor access to providers increase the likelihood that SMI will go untreated. With an estimated annual cost of \$300 billion, untreated SMI is a public health concern that requires attention (SAMHSA, 2020). Long wait times for treatment initiation in outpatient settings leads to less effective care and inferior outcomes (Naiker et al., 2018). Unstandardized protocols for patient prioritization delay necessary care (Déry et al., 2019). Oregon consistently ranks among the worst MH outcomes in the country (Oregon Health Authority, 2018), with average wait times for outpatient specialty services reaching 6 months (CareOregon, 2021). In Clackamas County, rates of MH conditions are higher than state averages, highlighting the importance of clinical attention to this community (OHA, 2016).

Available Knowledge

Goals of outpatient psychiatric care include symptom alleviation, return of function, and improved quality of life. Definitions of treatment success vary depending on the condition(s) and their severities (Chen et al., 2019; de Zwart et al., 2019; Vita & Barlati 2018; Witkiewitz et al.,

2020). Complete remission occurs in a minority of cases, and meaningful treatment depends on each patient's unique recovery goals (Ghaemi, 2019; Salzer et al., 2018). Strains on health systems made worse by the pandemic demand that providers be intentional about provision and duration of care (Boerema et al., 2016; Ghanbari et al., 2019). While complex patient needs are referred to psychiatric specialists, primary care providers (PCPs) provide half of all MH services in the U.S. despite having little training (Ureste et al., 2017). It is important that psychiatric and primary care providers examine their roles treating MH conditions in the community (Colaiacono et al., 2018; Durbin et al., 2012). Establishing shared definitions of patient stability may improve care coordination and allotment of provider attention (McIntyre et al., 2006; Wei et al., 2022).

Many factors influence outpatient wait times and efforts to improve them (Lewis et al., 2018; Muse et al., 2017; Palmer et al., 2018). Milakovic et al. (2021) found that a single-entry-point intake system reduced time from primary care referral to specialty consult, though the study is not easily translated to care in the United States. Another study warned that centralized waiting lists may result in ill-targeted care if patient prioritization is not part of their design (Breton et al., 2020). Ansell et al. (2017) concluded that interdisciplinary teams reduce wait times, while Farr et al. (2021) found that needs-based referrals and early discussions about duration of treatment improved access to care. A systematic review by Pomey et al. (2013) concluded that the most influential predictors of success for wait time management strategies were stakeholder engagement, common standards, and consultation with front-line actors.

A review of literature did not reveal standardized assessments for transfer-readiness from MH specialist to PCP. Pharmacotherapeutic stability in psychiatry is not clearly defined beyond medication-specific serum levels and clinical course, which focuses on symptoms and function rather than levels of health care system utilization. Reducing wait times for MH evaluation is a

complex public health goal that requires attention at macro-, meso-, and micro-system levels. Unexamined retention of stable patients among psychiatric specialists is a valuable target for micro-system intervention, as transferring such patients to primary care would increase access to specialists for more complex needs. A starting point for improvement is assessing setting culture, definitions, and procedures surrounding the issue of patient stability and transfer-readiness.

Rationale

We used the Theory of Constraints (TOC) as a conceptual framework for our system problem and intervention. TOC is a model that addresses resource limitations, positing that a given setting should focus improvement efforts on its scarcest asset (Bacelar-Silva et al., 2020). Conceived by Dr. Eliyahu Goldratt for the manufacturing industry, TOC is valuable to health care systems because it views organizations as composites of many interacting resources. In their systematic review of health care outcomes following TOC implementation, Bacelar-Silva et al. (2020) concluded that targeting attention to a setting's most limiting constraint improved patient wait time, no-show rate, and throughput.

Authors of the Theory of Constraints propose three "Processes of Ongoing Improvement" (POOGI), including 5 Focusing Steps, Buffer Management systems, and the Change Question Sequence (see appendix I). These processes facilitate self-reflective changes in a given setting (Bacelar-Silva et al., 2020). Interpretation of this theory in the provision of outpatient psychiatric care suggests that specialist evaluation and treatment are among the most constrained resources; thus, targeting specialist attention to treatment of complex patients will best serve the MH needs of the community. While step four of the 5 Focusing Steps seeks to eliminate the constraint, provider shortages are unlikely to disappear given future estimates (HRSA, 2016). An appropriate re-framing for our project is "elevate the constraint and respond to its limitation."

Aims

By December of 2022, providers at our clinical setting will increase attention to patient transfer-readiness from specialty MH services to primary care. Psychiatric and primary care providers will pool their clinical judgement toward a shared definition of pharmacotherapeutic stability and associated non-pharmacologic factors. Each participating psychiatric prescriber will identify one to three transfer-eligible clients from their current panel. Setting-specific culture around transfer practices will be explored and findings disseminated to stakeholders. Providers will report approval of the project's premise and better illuminated criteria for patient transfer.

Methods

Context

Our setting is a county-based outpatient behavioral health clinic serving adults and children in Oregon City, Oregon. Specialty prescribers include Psychiatric Mental Health Nurse Practitioners (PMHNPs) and Psychiatrists. Recent departures and part-time status of several providers place our clinic at a transition in its professional community. The current workforce at our clinic includes 1 full time provider (1 PMHNP and 0 psychiatrists), 4 part time providers (1 PMHNP and 3 psychiatrists), and one medical director (psychiatrist) who oversees and supports the clinicians. A substantial proportion our adult patient population carries dual substance use disorder and MH diagnoses (70.8%), and 3% of adult patients are engaged in mandated MH services through Mental Health Court (MHC). Additional services include RN case management, individual psychotherapy, skills groups, and access to peer support.

Primary care services are co-located across the parking lot in an affiliate clinic, offering a hybrid model of health care integration with behavioral health counselors available for consult and a referral process for specialty prescriber evaluation and treatment. Provider composition at

this clinic includes 5 full time providers (2 MD/DOs and 3 FNPs), 2 part time providers (2 MD/DOs and 0 FNPs), and one medical director (MD). Improvement processes are underway at this clinic to encourage PCP retention of patients with low-complexity mental health needs.

Intervention

A 12-query evaluative questionnaire was created for clinic psychiatric providers and PCPs (appendix E). The domains of our evaluation include: definition of pharmacotherapeutic stability; non-pharmacological conditions encouraged for transfer to PCP; specific circumstances ineligible for transfer; preferred procedures for information sharing; shared expectations for consistent consideration of this topic; perceived barriers around this aim; criterion for re-referral to psychiatric specialist; and preferred protocol for return to psychiatric specialist if needed. Findings were compiled and results were represented graphically. An informational resource of cross-disciplinary findings was designed and distributed to all participating providers.

Study of the Intervention

Quantitative metrics such as average wait time for evaluation are unavailable; thus, a qualitative, cross-disciplinary questionnaire was selected to best capture clinician perspectives. Without standardized transfer criteria, we cannot compare setting practices to an empirical reference. Our assessment was unique to our setting and should not be generalized to other outpatient clinics. Pre- and post-intervention surveys were administered to assess provider perception of this issue and measure the impact of our project (see appendix D). Pilot surveys were administered to select providers prior to project implementation for feedback and revision.

Measures

Response to our evaluation was measured through pre- and post-intervention surveys. The following domains were explored: Provider clarity around transfer-eligibility criteria;

provider understanding of how peers define transfer-readiness; provider satisfaction with current interdisciplinary communication surrounding this topic; provider perception of this issue's importance; regularity of provider attention to this issue; provider definition of criteria for re-referral back to psychiatric services; appropriateness of previous transfers; provider approval of project premise; and provider identification of transfer-eligible patients from caseload.

The primary outcome of our project (response rate) was measured by dividing the number of participating providers by the total number of providers contacted for engagement. This outcome was met if the proceeding value is 0.80 or greater. Our secondary outcome (identification of eligible patients) was measured via self-report in response to query "G" of the post-survey. Success of this outcome occurred if all participating specialists marked "Yes." Our tertiary outcome (interest in further attention to this issue) was measured via self-report in response to query "E" and was met if 80% of participating providers replied with "yes." Other queries provided further detail into clinician perspective and indicators of project impact.

Contextual elements influencing our intervention included high clinical demand on providers and multiple concurrent system-level changes. These limited available time for clinician engagement. Surveys were made brief and their format was streamlined to encourage participation. Validity of self-reported data was presumed as a feature of provider autonomy.

Analysis

Several methods were used to draw inferences from our data. A Root-Cause Analysis offers a multi-variate assessment of specialist prescriber inaccessibility (see appendix B). Macro-system elements driving supply imbalances are listed under "Provider Shortages" and "Increased Mental Health Needs." Meso- and micro-system factors are found in "Stagnant Client Flow,"

“System Complexity,” and “Provider Autonomy.” The latter three factors are those most represented in the purview of this project.

Questionnaire responses were tallied and graphical representations generated for each query (see appendix F), offering a visual representation of provider perspectives. Pre- and post-survey findings were displayed as histograms and pie graphs accordingly (see appendices G and H). Several items captured provider input via short written answer, though a majority of queries were scored via 5-Point Likert Scale (Preedy & Watson, 2010) or checkboxes. Inference of any changes in provider perspective resulting from this intervention are limited by our uncontrolled study design and brief contact time with participating providers. However, queries “A” through “D” of the post-survey gathered a broad impression of provider-identified impact.

Ethical Considerations

Attention to ethical concerns is important in health care improvement (Lockwood & Sfetcu, 2020). The following steps helped to mitigate conflicts in our project: Submission of project proposal to the Oregon Health and Sciences University (OHSU) Institutional Review Board; emphasis on evaluation-as-intervention, prioritizing clinician perspective; exclusion of protected health information (PHI) from any aspect of this project; confidentiality of provider responses; recording of initials and clinical role only to match survey responses; minimizing clinician burden by keeping requests for attention brief; and feedback sought from clinicians, faculty chair, and other members of the OHSU School of Nursing faculty.

Results

Initial Steps of the Intervention

In September, October, and December of 2022, the PMHNP student attended virtual staff meetings for the Psychiatric Specialist and Primary Care Providers at our setting. The student

introduced providers to our quality improvement project and requested their participation in the pre-survey, evaluative questionnaire, and post-survey (see appendix C). Originally designed for in-person completion, the questionnaire and surveys were modified for online access to facilitate participation and reduce interruptions to providers elsewhere in their schedules. Virtual staff meetings were chosen to allow for a uniform introduction to the project and to streamline provider contact. However, due to an abundance of agenda items for the primary care September meeting, pre-surveys were sent to this group via email with a written introduction. In November, the student distributed a summary of questionnaire findings to participating providers.

Process Measures and Outcomes

5 Psychiatric Specialists and 8 Primary Care Providers participated in the evaluative questionnaire, a 86.7% response rate (total providers contacted for participation: 15). This exceeded our primary outcome goal of 80% participation. Pre- and post-intervention surveys were completed with a response rate of 73.3% and 33.3% respectively. 5 out of 5 psychiatric specialists identified 1-3 transfer-eligible patients from their caseloads, meeting our secondary outcome of 100% positive response to this query. 4 out of 5 providers indicated approval of the project's premise and that they would like to see further attention paid to this issue moving forward, meeting our tertiary outcome goal of a 80% positive response rate. The remaining survey and questionnaire queries captured a range of clinical perspectives on this subject.

Results: Contextual Elements and Unexpected Consequences

Multiple contextual elements interacted with our intervention. Brevity of contact time available for project introduction and provider participation limited discussion and may have reduced reflection on each inquiry, resulting in a snapshot of "first-impressions" around this issue. Had additional time been allotted or questionnaires been completed in person, responses

may have received more rigorous consideration. Additionally, staff meetings for behavioral health and primary care included county-based providers representing clinics beyond the two initially selected for inclusion. Thus, the number of providers contacted for participation was larger than expected and three participants represented separate clinics in the same county system. Consequences of this are nominal given the small scope of our project and reflect the challenge of discrete clinic-based surveys in an interconnected county-based system of care.

Results: Missing Data

We contacted the medical directors of behavioral health and primary care to determine the preferred method of provider engagement. Subsequent provider contact was limited to email and remote all-staff meetings. Of those contacted, 1 psychiatric specialist and 1 PCP did not participate in the questionnaire. Efforts to reach those providers included emails sent following the staff meeting with links to the surveys. Staff participation in the post-survey in particular was low. Possible reasons for this include unclear instructions at the time of provider contact and declining provider bandwidth for additional questions on this subject. Student email was made available to all providers for follow up questions or feedback.

Discussion

Key Findings

Findings of our 12-query evaluative questionnaire highlighted a diversity of clinical perspectives on the subject of transfer eligibility and its affiliate considerations. The findings' relevance to our rationale (TOC) was reflected in a shared goal of maximizing the utility of psychiatric specialists. Providers endorsed the clinical importance of this issue and expressed interest in improving interdisciplinary communication around transfers. Our project's specific

aims – to increase attention paid to transfer-readiness and pool clinical judgement on this issue – were met with varying rates of provider participation at each stage of implementation.

No single definition of psychiatric stability by measure of time without medication changes stood out as the majority opinion, though six months without changes was the most agreed-upon timeframe overall with a 46.2% selection rate. A patient-specific definition of “medication stable” was the second most selected at 30.8%. Regarding non-pharmacotherapeutic factors, trends in clinical judgement were clearly visible and demonstrated shared beliefs across treatment settings. Examples include the predominant importance of adequate psychosocial support for those patients considered for transfer (76.9%), as well as their prior establishment with the receiving primary care provider (92.3%).

Thorough communication between specialist and PCP was highly valued in multiple query domains, with PCP willingness to accept the patient transfer written in as the “*most important factor*” in multiple responses. Other factors such as patient sobriety status, engagement level with psychotherapy, underlying developmental delay, and need for regular serum level checks received moderate levels of priority with 20-46% selection rates. Primary care providers identified examples of unsatisfactory patient transfer conditions, including poor communication prior to and during transfer, patient-expressed mood instability, and continued medication instability. Warm handoff via phone call between providers was preferred at a rate of 38.5%, and follow up with PCP within 4-8 weeks of discharge from specialty provider was the most agreed-upon post-transfer procedure at 46.2%. 61.5% of providers preferred to identify transfer-eligible patients on a case-by-case basis, and zero providers felt that transfer to PCP was never appropriate once established with psychiatric specialist.

Principle barriers to identifying eligible patients and initiating transfer include a shared perception of PCP hesitation around the psychiatric complexity of transferred patients (84.6%), concerns around safety in the event of psychiatric decompensation (69.2%), and perceived therapeutic value of the specialist-patient relationship with subsequent reluctance to terminate care. Insufficient time to consider the subject was also written in by two providers. High degrees of consensus were seen in the indications for re-referral back to psychiatric specialist, including emergence of new/concerning psychotic symptoms (92.3%), clinical distress not-responsive to PCP-led intervention (92.3%), and new loss of function due to psychiatric acuity (100%). Offering providers a through-line for specialty prescriber consult in the event of worsening psychiatric symptoms was the preferred mediator of this possibility (84.6%). Complete questionnaire responses by query are visible in appendix F.

Strengths of the Project

Our project had several strengths. Our questionnaire required less than 10 minutes for completion, supporting a high provider response rate. The format of our questionnaires was intuitive and streamlined courtesy of the online platform selected (Google Forms), and the 4 month timeframe from project introduction to completion offered clinicians multiple, brief encounters with the project premise to encourage engagement with the subject matter. The evaluation-as-intervention study design minimized conflicts of interest, and the self-report nature of all queries meant that no PHI needed to be accessed nor data sets de-identified. Finally, the student's familiarity with the specific county setting and many of its staff members fostered professional rapport and lead to collaborative project refinement with both medical directors and participating providers.

Interpretation

Our project sought to stimulate clinician reflection on and discussion of patient transfer-eligibility from MH specialist to PCP. While it was understood at the outset that any decision to transfer is unique and cannot be based on static criteria, our premise still aspired toward a shared definition of pharmacotherapeutic stability in the outpatient setting. Results of the questionnaire and surveys highlighted the need for a shift of focus toward collaborative-care models emphasizing efficient and thorough communication between specialist and PCP. In our pre-intervention survey, clinicians indicated that over half (63.7%) ‘disagreed’ or ‘strongly disagreed’ with the statement “I am satisfied with current interdisciplinary communication practices surrounding patient transfers and referrals between psychiatric specialists and primary care.” Given the partially-integrated model of our setting, it is unsurprising that providers can perceive a siloed collaborative dynamic in certain domains. While this project cannot claim to have affected the underlying practice model of our setting, it does support existing evidence that effective communication between disciplines plays a key role in a settings’ ability to meet the MH needs of its patients (Colaïaco et al., 2018; Durbin et al., 2012).

When asked prior to the intervention how well they agreed with the statement “I have a clear understanding of how providers at my clinic and across the parking lot define transfer-readiness,” a vast majority of providers (91%) indicated neutral, disagree, or strongly disagree. On follow up, 60% of providers expressed that their understanding of colleagues’ perspectives on this subject and preferences for collaboration was clearer than prior to the questionnaire. Zero providers indicated that their perspective on best practices for patient transfers had changed after reflecting on this subject and reviewing the clinical perspectives of their colleagues. Reasons for this may include limited depth of engagement throughout the project’s implementation, a project

scope that was too broad, or the subjective nature of each transfer decision. Full pre- and post-questionnaire survey results are visible in appendices G and H.

Limitations

Many factors limit the generalizability of our work. Efforts to engage clinicians were conservative given the demands on their time, and so a more rigorous study design was forgone in favor of convenience and access to participation. All-staff meetings where project engagement took place were practical from many standpoints but meant provider attention quickly moved on to following agenda items, limiting synchronous discourse and time to complete questionnaires. While the themes of patient stability and interdisciplinary communication are common across care settings, the cultures, norms, and procedures of our setting were not controlled for in such a way that bears high validity at other locations. Efforts to mitigate such limitations include clearly identifying the purview and objectives of our project at the outset, as well as adjusting our questionnaires and surveys to be clear and concise based on input from collaborating providers.

Conclusions

Rates of mental illness and deepening provider shortages contribute to unmet psychiatric needs (Jacobs et al., 2020). Unexamined retention of transfer-eligible patients may be a target for improving access to psychiatric specialists. Our project engaged specialist and primary care providers in a county-based health care setting to elevate this possibility. One useful outcome of our project is that it offers a template for pooling clinical judgements around patient stability and preferences for cross-disciplinary communication. It also models low-barrier engagement via self-report questionnaire administered during all-staff meetings, which likely occur in other outpatient care settings. Our project is sustainable due to its minimal costs and could be continued by designing an algorithm that specialists use to identify eligible patients, clearly state

their rationale, and confirm willingness of PCP to accept. Implementation would require greater contact with specialists and PCPs, presenting a barrier due to the remote nature of the current practice model. Still, medical directors indicated that this was a subject of relevance to their clinics and would likely consider its progression.

This project offers applications to other contexts due to its evaluation-as-intervention design, as queries could be adapted to the unique characteristics of a different site. The implications of our study include a clinician-driven desire for improved interprofessional communication around patient transfers as well as a shared belief in the importance of psychosocial support for patients being considered. While our project initially focused on specialist identification of transfer-eligible patients, the results of our study illuminated the importance of PCP willingness and comfort in receiving clients once discharged from specialty care. Just as each patient deserves individualized consideration for transfer-eligibility, the receiving PCP must be incorporated into the decision to transfer or continue specialist care.

Next steps for future projects include the algorithmic tool described above, as well as a deeper look into the proportion of specialist panels made up of patients eligible for transfer (factoring in PCP readiness to accept). This would substantiate the degree to which retention of psychiatrically stable patients is precluding evaluation and treatment of higher complexity mental health needs. This would also offer a template for other settings seeking to improve their psychiatric caseload management and increase the utility of their specialist providers. Analogous studies should elevate PCP concerns around psychiatric complexity on their panel, a necessary step given their vital role in treating community mental health.

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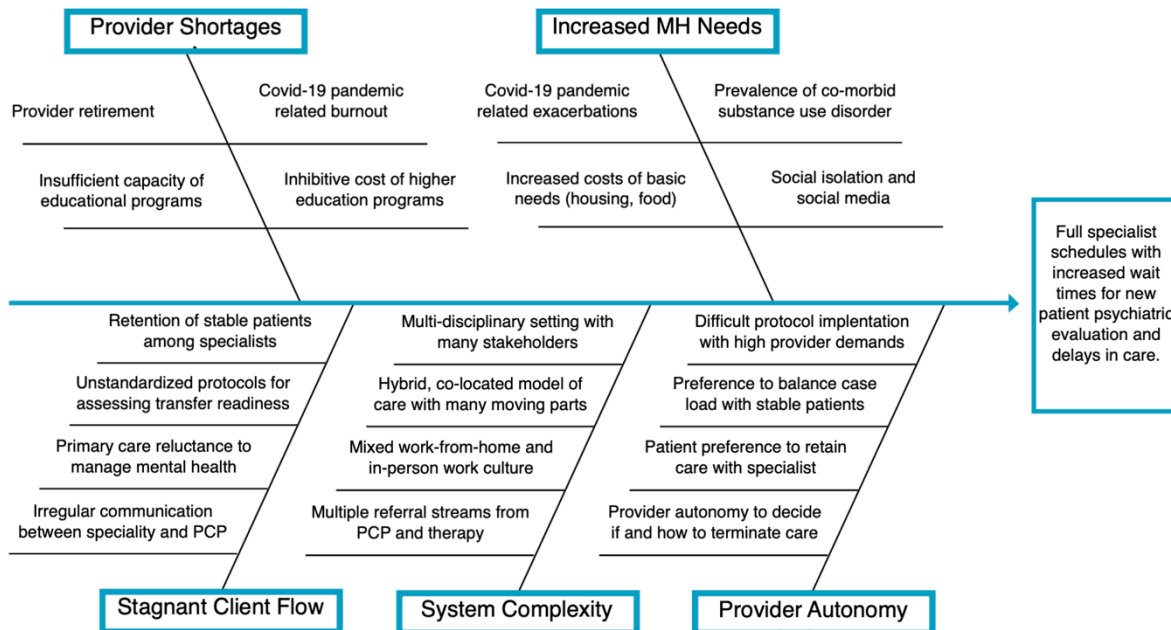
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<https://doi.org/10.35946/arcr.v40.3.01>

Appendix B

Root-Cause Analysis Diagram

Team: Dario LaPoma, OHSU PMHNP '23

Project: Improving Availability of Community Mental Health



Appendix C – Introductory Statement to Clinical Staff

My name is Dario LaPoma, and I am a graduate student in my last year of the Psychiatric Mental Health Nurse Practitioner program at OHSU. Thank you for offering me a few minutes of your time today. I have been interning with Maret Pfohman at the Hilltop clinic this year, and I chose to conduct my doctoral capstone project at the Hilltop and Beaver creek clinics. The focus of my quality improvement project is patient transfer eligibility from psychiatric specialist to primary care provider. Demands for specialist evaluation and treatment are high, and provider shortages only exacerbate this problem. Unexamined retention of psychiatrically stable patients among specialists may be valuable target to improve caseload management and increase access to care for patients experiencing active mental health needs.

I have prepared a short evaluative questionnaire to explore clinician-led definitions and practices surrounding pharmacotherapeutic stability, non-pharmacologic factors, and other domains related to transfer-eligibility from psychiatric specialist to primary care. Today, I am only introducing this project and asking you to complete a brief pre-survey to explore baseline perceptions of this issue. The link in the chat window takes you to my Google Forms survey, so you wouldn't mind taking a moment to fill that out, I would greatly appreciate it. I'll return in October with the evaluative questionnaire and again in December to discuss results. Thank you for your time, and Andrew/Maria for your facilitation.

Appendix D - Pre-Intervention Survey (Likert Scale)

Respondent Initials _____

Respondent Setting (Hilltop, Beaver creek) _____

Respondent Clinical Role (MD, PMHNP, FNP) _____

- A. I have a clear definition of pharmacotherapeutic stability with psychiatric medications.
1-----5
- B. I have a clear definition of non-pharmacologic factors for patient transfer from mental health prescriber to PCP for comprehensive care. 1-----5
- C. I have a clear understanding of other providers at my clinic and providers “across the parking lot” define transfer-readiness from psychiatric specialist to PCP. 1-----5
- D. I am satisfied with current interdisciplinary communication practices surrounding patient transfers and referrals between psychiatric specialists and primary care. 1-----5
- E. Psychiatric Specialists: I consider the issue of transfer-readiness among my patients an important aspect of my professional practice. 1-----5
- F. Psychiatric Specialists: I devote regular clinical attention – even if briefly – to identifying transfer-eligible patients from caseload. 1-----5
- G. Primary Care Providers: I have a clear definition of criteria for re-referral back to psychiatric specialist from PCP in the event of elevated psychiatric needs. 1-----5
- H. Primary Care Providers: The patients (if any) who have transferred their care to me from Hilltop were appropriate for this transfer. 1-----5

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Post-Intervention Survey (Likert Scale)

Respondent Setting (Hilltop, Beavercreek) _____

Respondent Clinical Role (MD, PMHNP, FNP) _____

- A. Did your perspective on best transfer practices and psychiatric stability change in any way after reflecting on this subject and reviewing the clinical perspectives of your colleagues? (Yes, No)
- B. ...if so, how? _____
- C. Does your understanding of your colleagues' perspectives around this subject and preferences for collaboration feel clearer than it did prior to the questionnaire? (Yes, No)
- D. ...if so, what is one take away? _____
- E. I approve of this project's premise and would like to see more attention devoted to the issue of safe patient transfer between psychiatric specialist and primary care providers? (Yes, No)
- F. Any feedback or suggestions for future projects? _____
- G. Psychiatric Specialists: I have identified 1 to 3 patients from my caseload who may be eligible for transfer to PCP, and I will reach out to their PCP to discuss possibility of transfer prior to initiating this conversation with the patient! (Yes, No)

Appendix E

Evaluative Questionnaire:

Respondent Setting (Hilltop, Beavercreek) _____

Respondent Clinical Role (MD, PMHNP, FNP) _____

- A) How do you define pharmacotherapeutic stability?
- a. 3 months with no psychiatric medication changes.
 - b. 6 months with no psychiatric medication changes.
 - c. One year with no psychiatric medication changes.
 - d. Patient-specific definition of “medication stable” (e.g. Adequate benefit from psychiatric medications for three appointments in a row, per patient and provider).
 - e. Other _____
- B) What non-pharmacological conditions are encouraged or required when considering eligibility for transfer to PCP? (Select all that apply).
- a. Non-engagement with or graduation from psychotherapeutic services.
 - b. Currently established with PCP.
 - c. Sobriety from any substance use disorders (6 months, 1 year, 2 years).
 - d. Adequate psychosocial support from community/other professionals.
 - e. None of the above.
 - f. Other: _____
- C) Do any specific diagnoses, comorbidities, or circumstances contraindicate transfer to PCP? If so, which ones? (Select all that apply).
- a. Need for regular serum level checks (e.g. lithium, clozapine).

- b. Multiple psychiatric medications taken regularly.
- c. Schizophrenia or other thought disorders.
- d. PTSD and/or complex personality features.
- e. Comorbid mental illness and developmental delay.
- f. Comorbid mood disorder and history of substance use disorder.
- g. History of attempted suicide or self-harm.
- h. Poor social support in community.
- i. None assuming previous conditions for stability are met.
- j. Other: _____

D) What procedures for information sharing and follow up would best facilitate transfer to PCP?

- a. Use of a standardized fax-sheet with relevant patient psychiatric history.
- b. Warm handoff via phone call including pertinent patient details prior to follow-up with PCP.
- c. Follow-up with PCP within 4-8 weeks of discharge from specialty provider.
- d. Other: _____

E) What is a reasonable amount of regular consideration per provider toward identifying transfer-ready patients?

- a. 1-3 patients identified per provider per month.
- b. 1-3 patients identified per provider per quarter.
- c. One hour allotment per month for identification of transfer-eligible patients.
- d. Don't establish expectations but consider on a case-by-case basis.
- e. Never transfer patients back to PCP once established with specialty prescriber.

f. Other: _____

F) What barriers do you perceive around provider engagement with this aim? (Select all that apply).

- a. Patient- and provider- perceived value of therapeutic relationship and subsequent reluctance to terminate care.
- b. Specialist reticence to terminate care with relatively stable patients given balancing effect on their total case-load.
- c. PCP hesitation around psychiatric complexity of transferred patients.
- d. Specialist discomfort initiating care termination conversation with patients.
- e. Concerns around possible need for referral back to specialist in the event of psychiatric decompensation.

f. Other: _____

G) How do you define elevated psychiatric needs indicating for re-referral back to specialty prescriber? (Select all that apply).

- a. Patient-expressed desire for changes to psychiatric medications.
- b. Patient-expressed desire for specialist attention to psychiatric medications.
- c. Emergence of clinical distress not responsive to PCP-led interventions.
- d. Emergence of suicidal/homicidal ideation.
- e. Emergence new/recurrent psychotic symptoms.
- f. Loss of function due to re-emerging psychiatric acuties.

g. Other: _____

H) What would help prepare for the possibility of re-referral to psychiatric specialist?

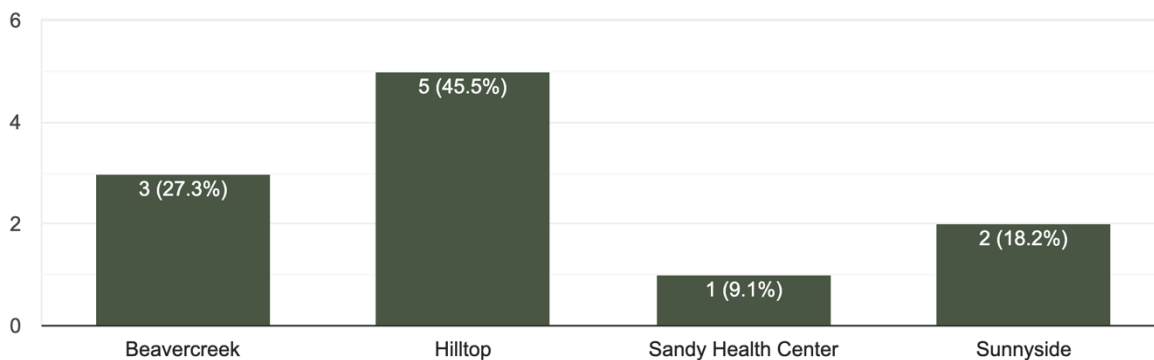
- a. Establish procedure/norms for reserving space in specialty providers' schedule (for example, "emergency/re-evaluation" appointment slots).
 - b. Offer primary care providers a through-line back to specialty prescriber consult in event of worsening psychiatric symptoms.
 - c. Consistent interdisciplinary staff meetings between specialty and primary care providers.
 - d. Other: _____
- I) Psychiatric Specialists: Are you willing to identify one to three patients from your panel who may be eligible for transfer? (By December 1st, 2022) (Yes, No)
- J) ...if not, what barriers are in the way? _____
- K) Primary Care Providers: Have you had a patient transfer from psychiatric specialist for whom you felt the transfer was not appropriate? (Yes, No)
- L) ...if so, what about it felt inappropriate? _____

Appendix F

Evaluative Questionnaire Findings:

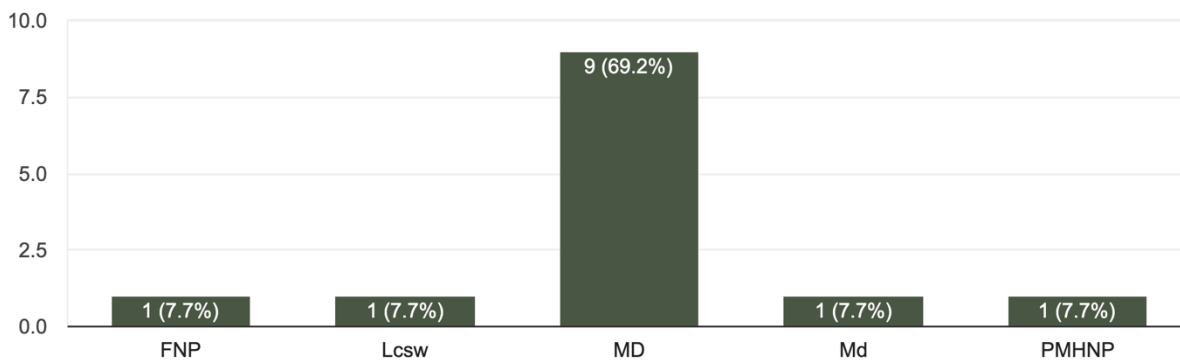
Respondent Setting (Hilltop, Beavercreek)

11 responses



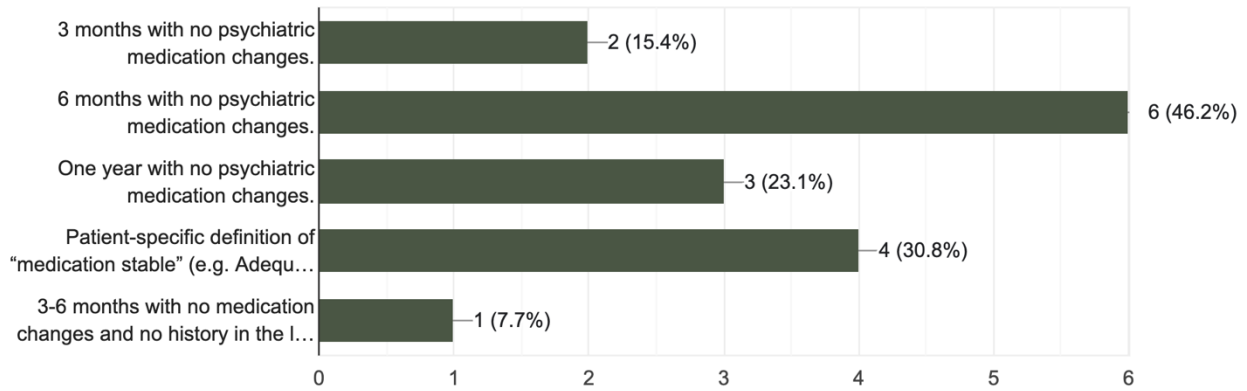
Respondent Clinical Role (MD, PMHNP, FNP)

13 responses



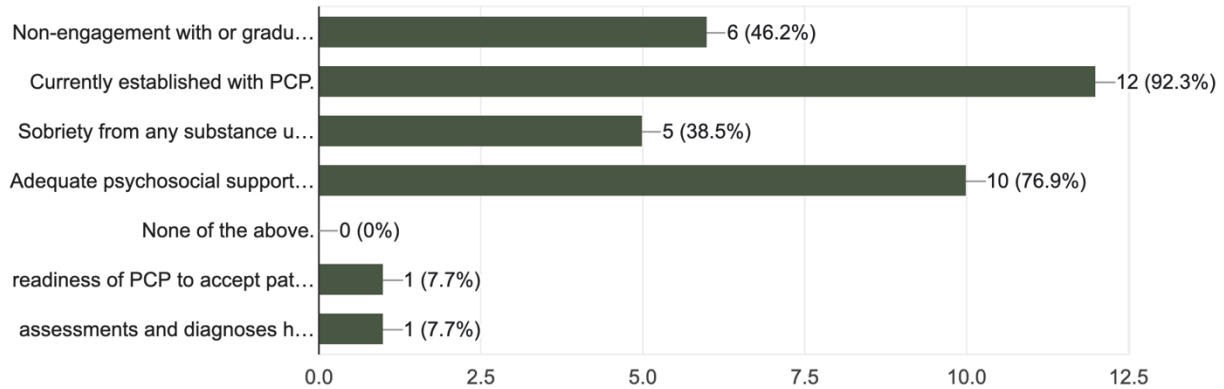
How do you define pharmacotherapeutic stability?

13 responses



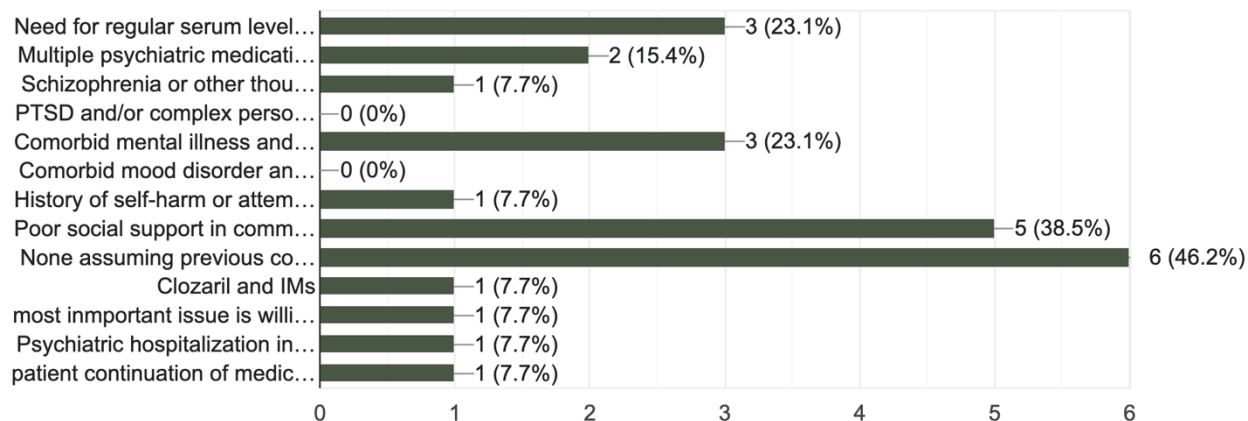
What non-pharmacological conditions are encouraged or required when considering eligibility for transfer to PCP? (Select all that apply).

13 responses



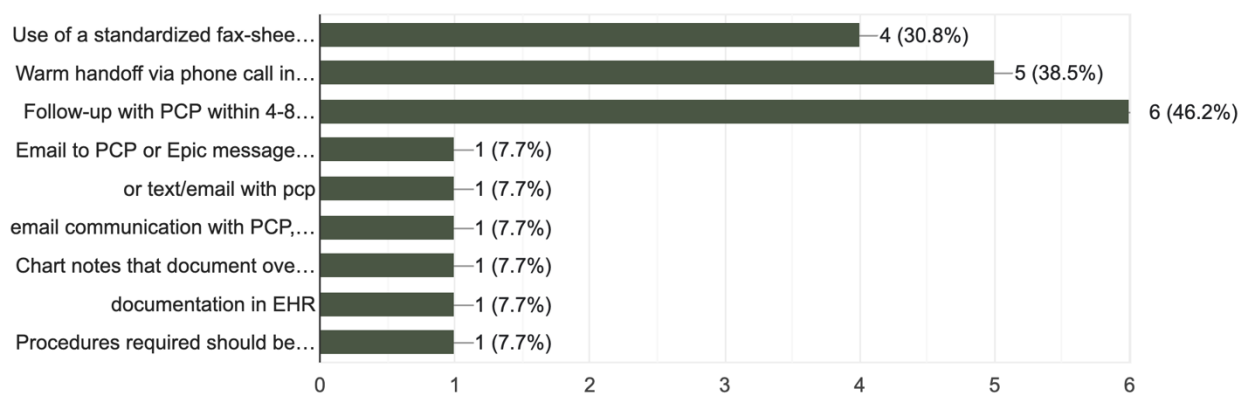
Do any specific diagnoses, comorbidities, or circumstances contraindicate transfer to PCP? If so, which ones? (Select all that apply).

13 responses



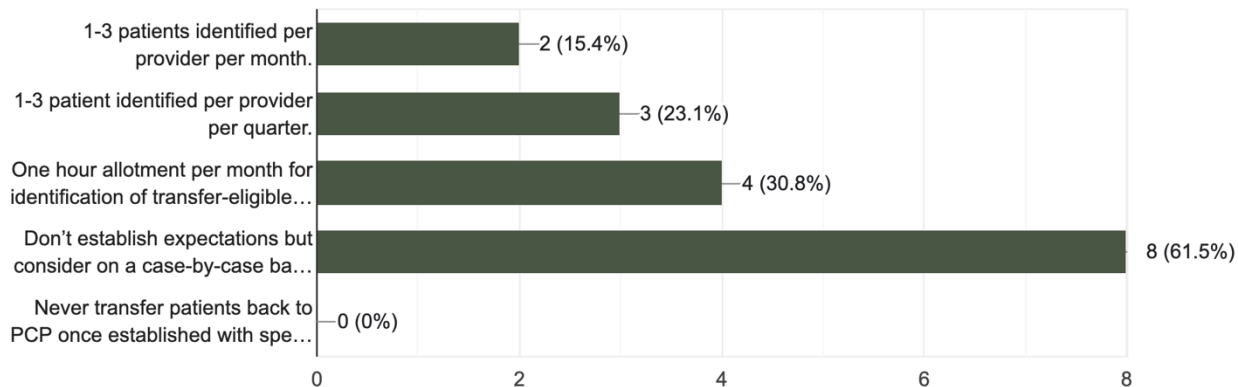
What procedures for information sharing and follow up would best facilitate transfer to PCP?

13 responses



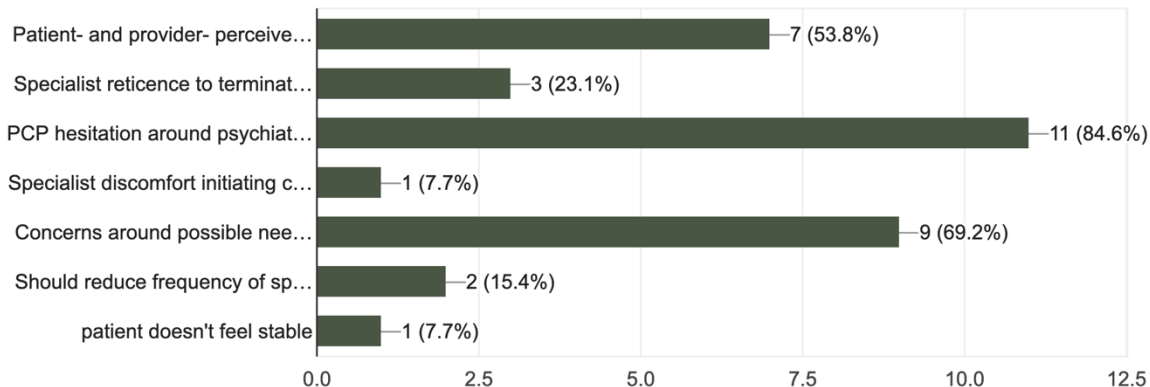
What is appropriate for consistent consideration per provider toward identifying transfer-eligible patients?

13 responses



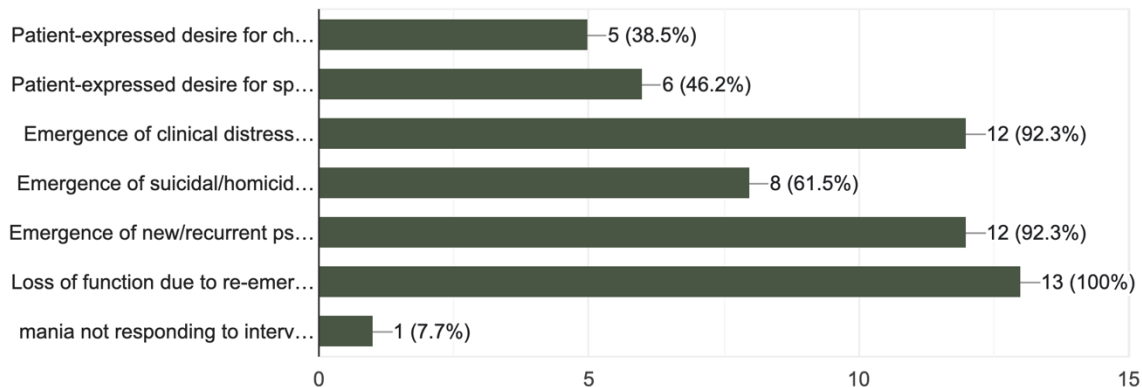
What barriers do you perceive around provider engagement with this aim? (Select all that apply).

13 responses



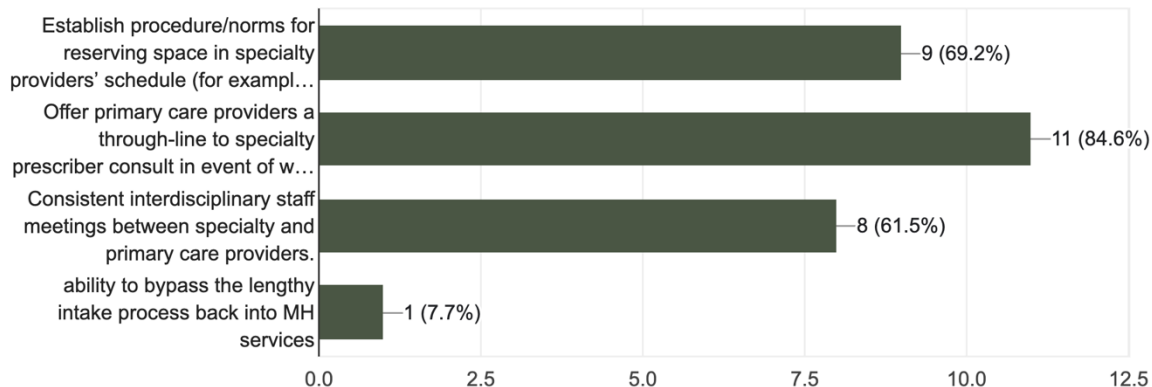
How do you define elevated psychiatric needs indicating re-referral back to specialty prescriber?
(Select all that apply).

13 responses



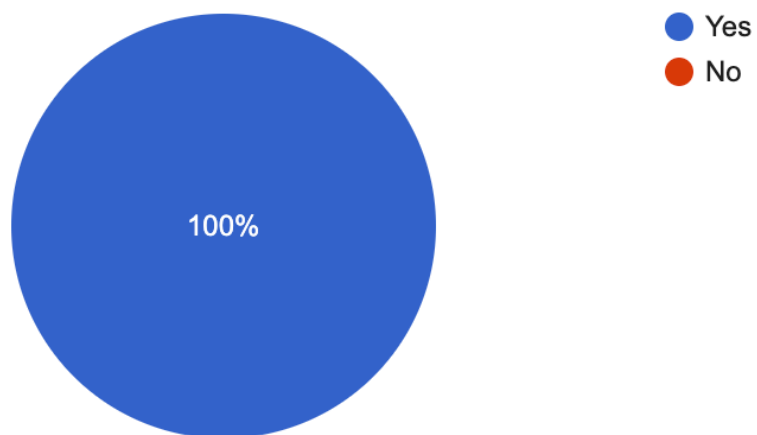
What would help prepare for the possibility of re-referral to psychiatric specialist?

13 responses



Psychiatric Specialists Only: Are you willing to identify one to three patients from your panel who may be eligible for transfer? (By December 1st, 2022)

6 responses



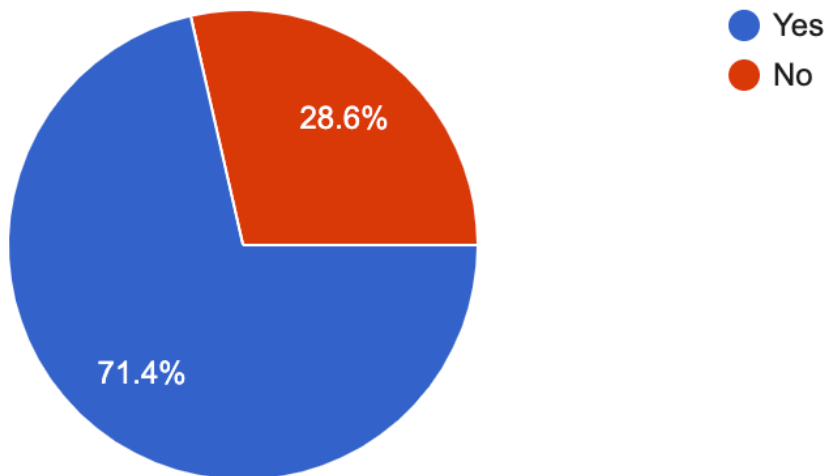
...if not, what barriers are in the way?

1 response

TIME!!!!

Primary Care Providers: Have you had a patient transfer from psychiatric specialist for whom you felt the transfer was not appropriate?

7 responses



...if so, what about it felt inappropriate?

5 responses

Not stable on meds but transferred due to pregnancy

Not stable on medications, poor communication about planned transfer of care

They're main request of me was to treat anxiety, specialty provider discharged because pt wanted meds that provider didn't find appropriate. also, transfer back for me to start stimulants for ADHD, which is what I would like specialty provider to address and stabilize first.

Client desire to change med therapy; client expression of mood instability

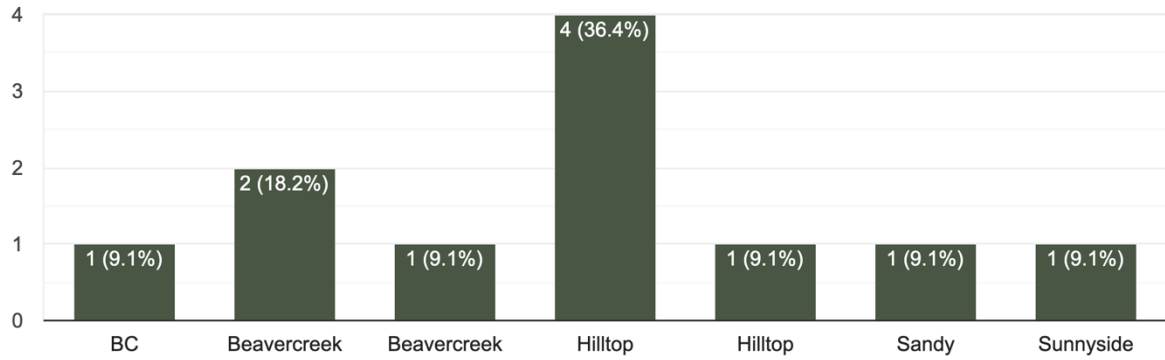
Pt had ongoing psychotic symptoms.

Appendix G

Pre-Survey Findings:

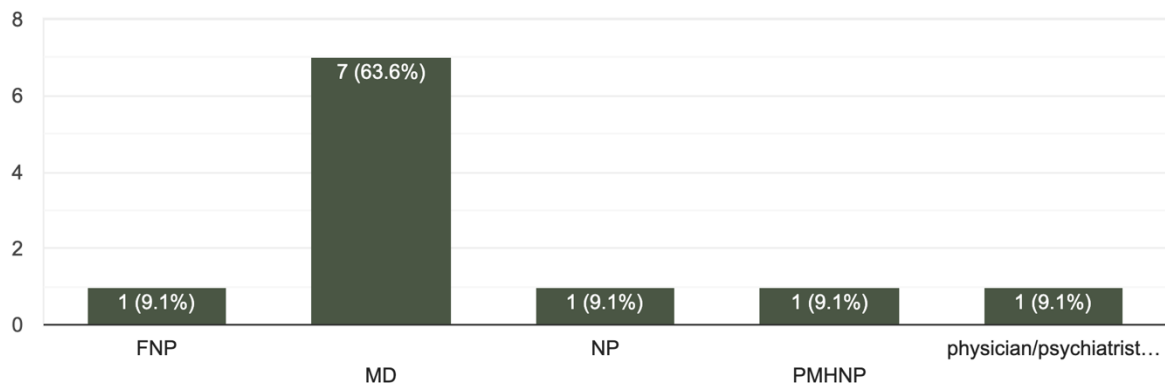
Respondent Setting (Hilltop, Beavercreek)

11 responses



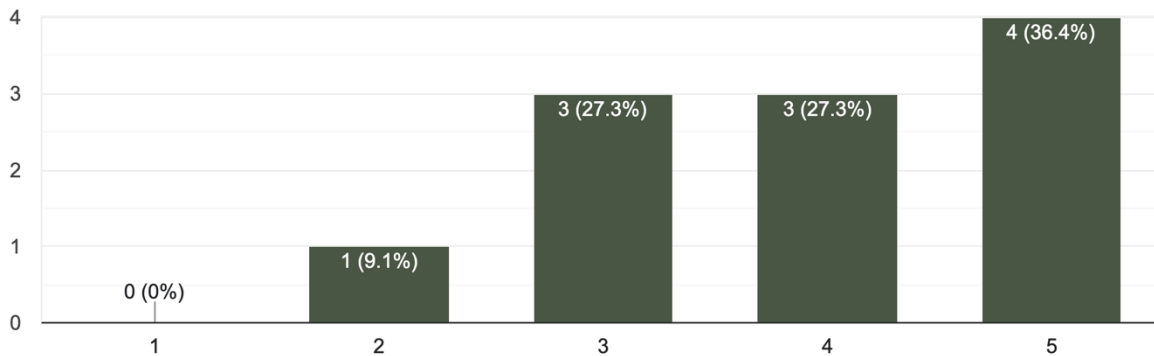
Respondent Clinical Role (MD, PMHNP, FNP)

11 responses



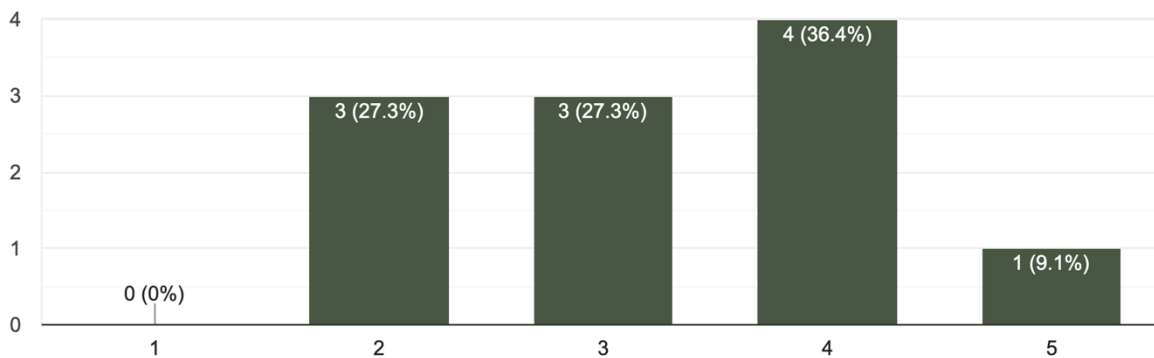
All Providers: I have a clear definition of pharmacotherapeutic stability with psychiatric medications.

11 responses



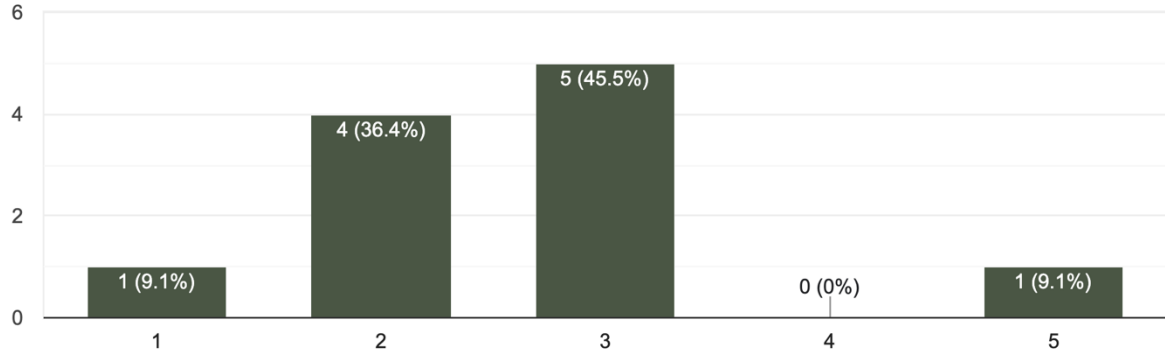
All Providers: I have a clear definition of non-pharmacologic factors for patient transfer from mental health prescriber to PCP for comprehensive care.

11 responses



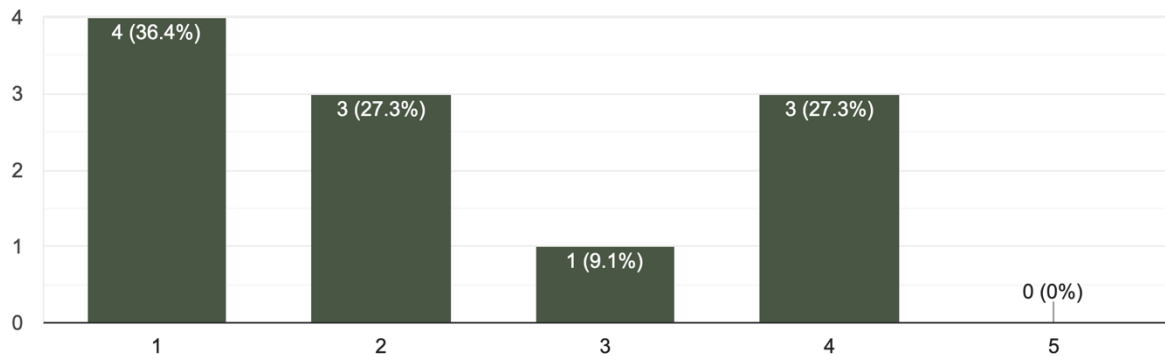
All Providers: I have a clear understanding of how providers at my clinic and "across the parking lot" define transfer-readiness from psychiatric specialist to PCP.

11 responses



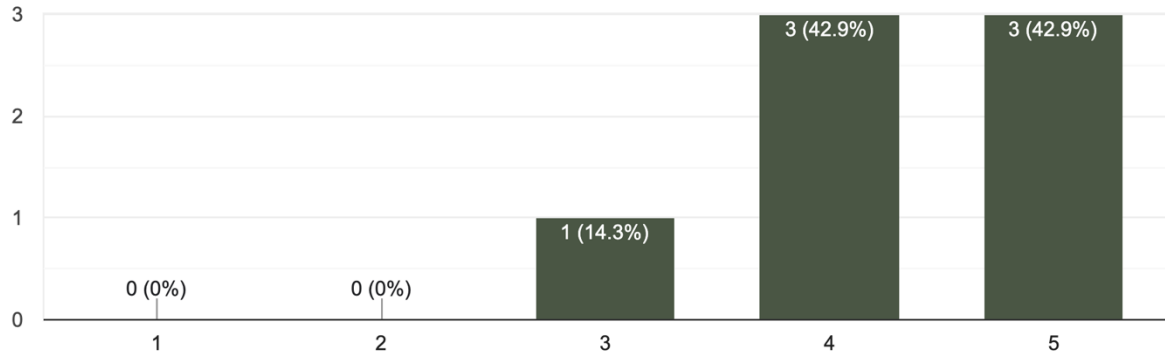
All Providers: I am satisfied with current interdisciplinary communication practices surrounding patient transfers and referrals between psychiatric specialists and primary care.

11 responses



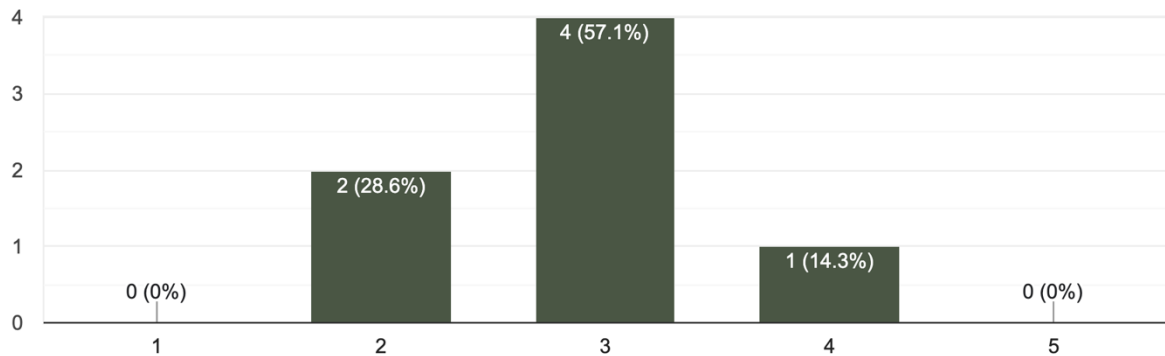
Psychiatric Specialists Only: I consider the issue of transfer-readiness among my patients an important aspect of my professional practice.

7 responses



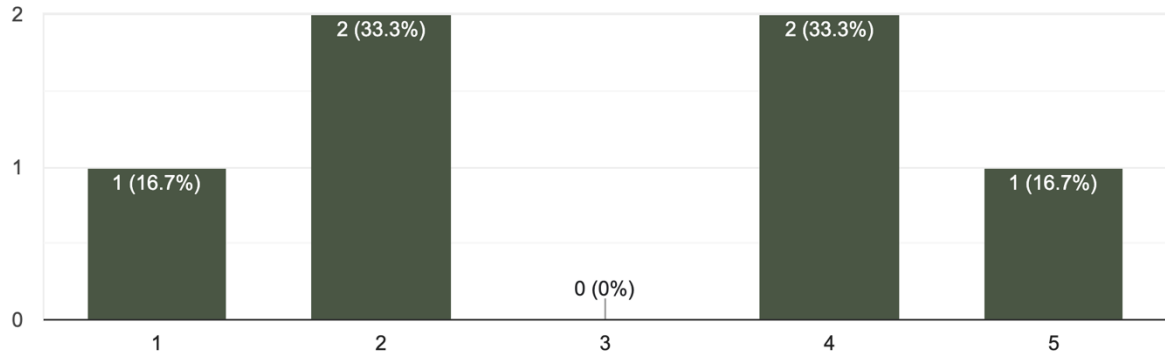
Psychiatric Specialists Only: I devote regular clinical attention – even if briefly – to identifying transfer-eligible patients from my caseload.

7 responses



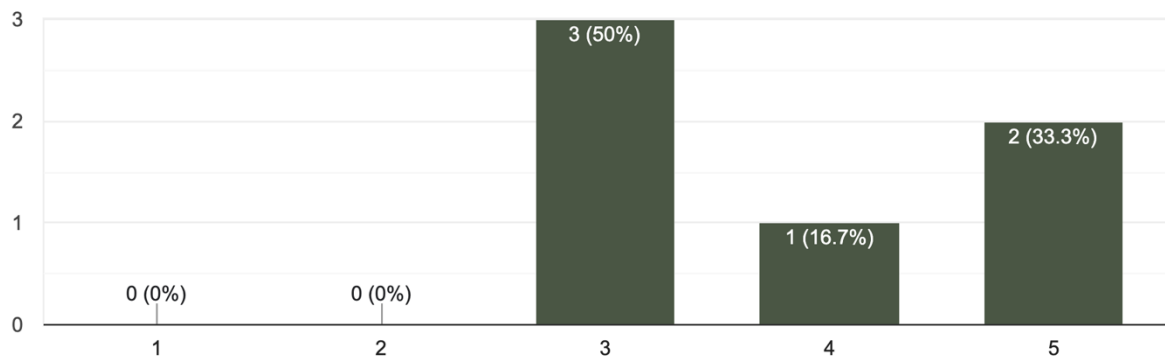
Primary Care Providers Only: I have a clear definition of criteria for re-referral back to psychiatric specialist from PCP in the event of elevated psychiatric needs.

6 responses



Primary Care Providers Only: The patients (if any) who have transferred their care to me from Hilltop were appropriate for transfer.

6 responses

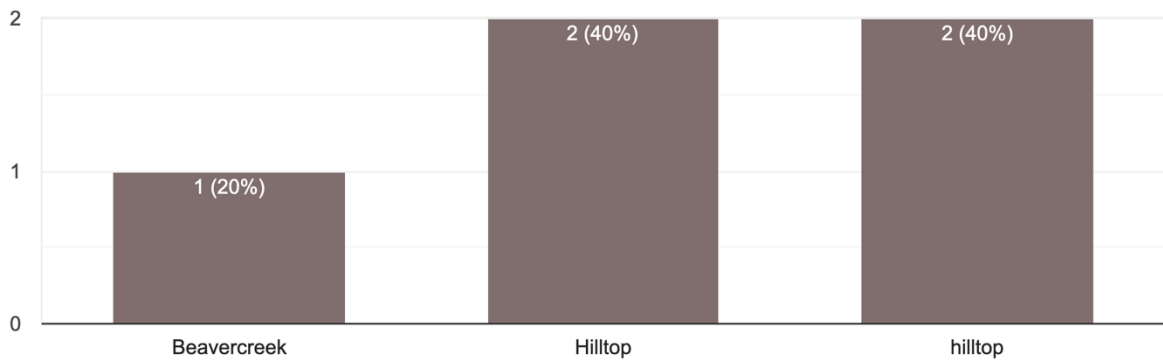


Appendix H

Post-Survey Findings:

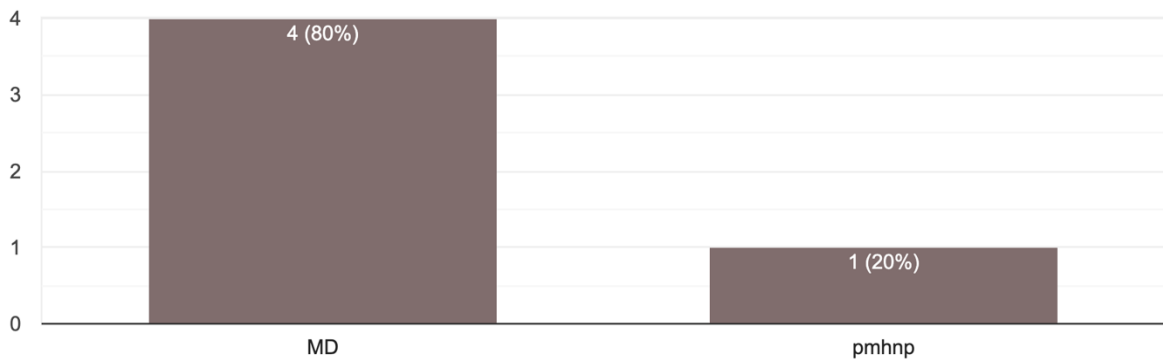
Respondent Setting (Hilltop, Beavercreek)

5 responses



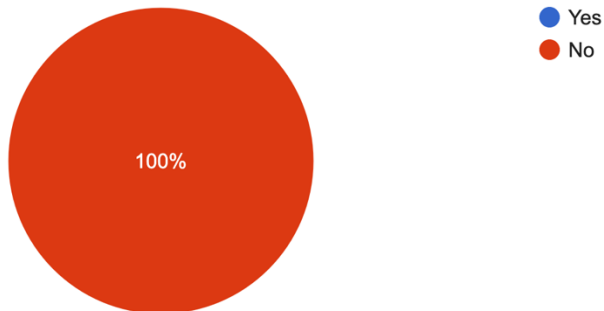
Respondent Clinical Role (MD, PMHNP, FNP)

5 responses



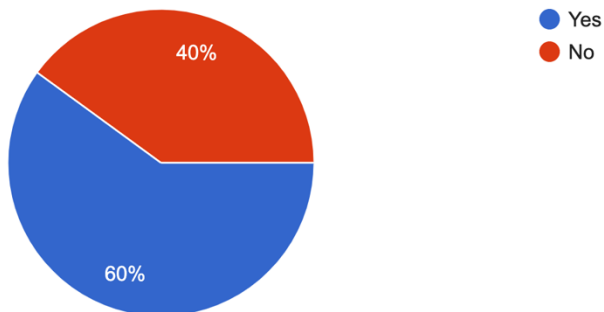
All Providers: Did your perspective on patient stability and best transfer practices change in any way after reflecting on this subject and reviewing the clinical perspectives of your colleagues?

4 responses



All Providers: Does your understanding of your colleagues' perspectives around this subject and preferences for collaboration feel clearer than it did prior to the questionnaire?

5 responses



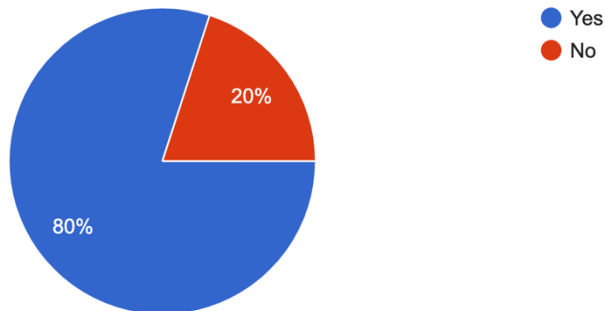
If so, what is one take away?

Patient care will benefit from better collaboration.

We do not have adequate support in our community to appropriately take care of people with serious mental illness.

All Providers: I approve of this project's premise and would like to see more attention devoted to the issue of safe patient transfer between psychiatric specialists and primary care providers.

5 responses



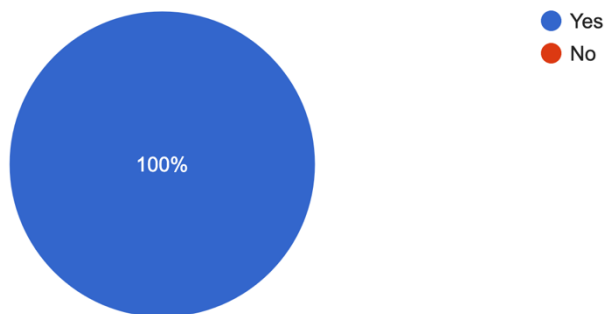
Any feedback or suggestions for future projects?

Follow-up on transfers

At some point we need to work on the problems that psychiatrists should be able to see some lower acuity patients, some patients with SPMI are not appropriate for therapy and that not having a shared medical record is a significant barrier to good patient care.

Psychiatric Specialists Only: I have identified one to three patients from my caseload who may be eligible for transfer to PCP, and I will reach out to ... before initiating this conversation with the patient!

4 responses



Appendix I

Processes of Ongoing Improvement:

5 Focusing Steps

1. Identify the constraint.
2. Decide how to make maximum use of the constraint's available capacity.
3. Identify how non-constraint resources can work to support the previous decisions.
4. Elevate the constraint and eliminate it.
5. Do not allow inertia to become the system's constraint.

Buffer Management

A buffer management system communicates constraint status with stakeholders. This often takes the form of a simple color-coding system indicating adequate flow (green), incoming constraint (yellow), or active constraint (red) (Bacelar-Silva et al., 2020). Common examples in hospital settings highlight demand for vs. availability of inpatient beds. A buffer management system is outside the scope of this project.

Change Question Sequence (CQS)

1. Analyze the current system problems, or its "undesirable effects" (Why change?)
2. Identify the system's underlying core problem(s) and its assumptions (What to change?)
3. Develop a holistic win-win solution to the core problem(s) (What to change to?)
4. Construct an effective implementation plan (How to cause the change?)
5. Create procedures for measuring and sustaining results (How to measure/sustain change?)