

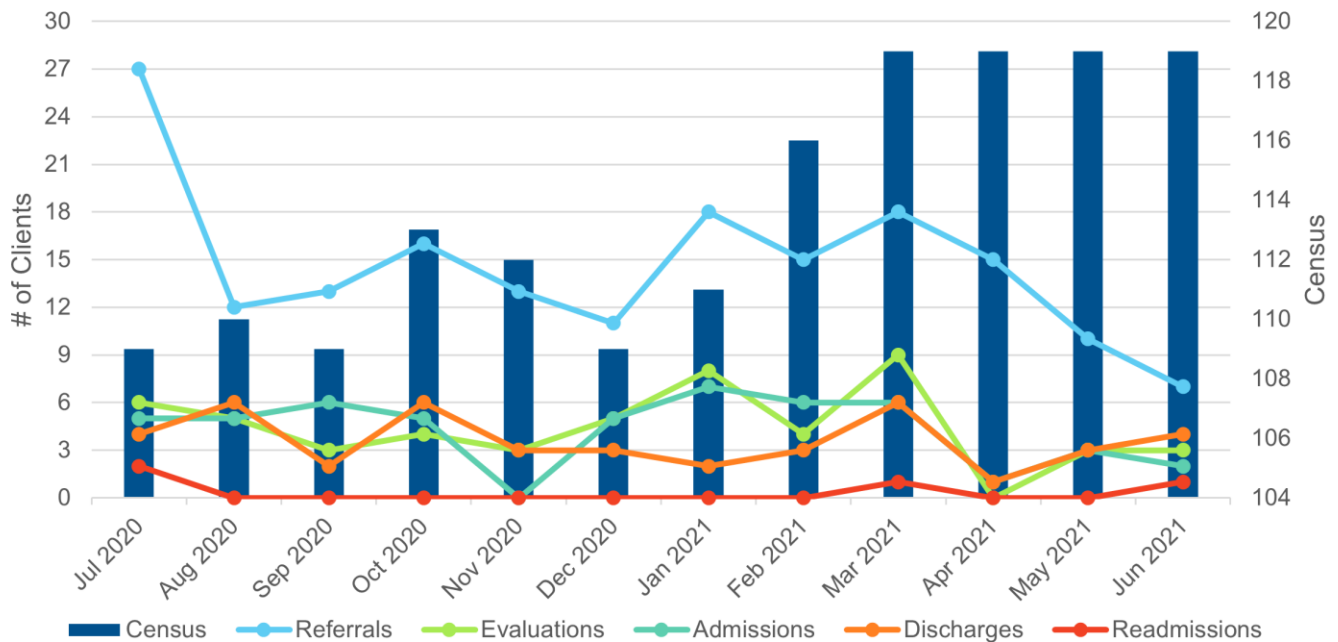
# North Carolina Coordinated Specialty Care Services for the Treatment of Early Psychosis

Prepared by the Early Psychosis Intervention Advisors of North Carolina

Annual Report: July 2020 - June 2021

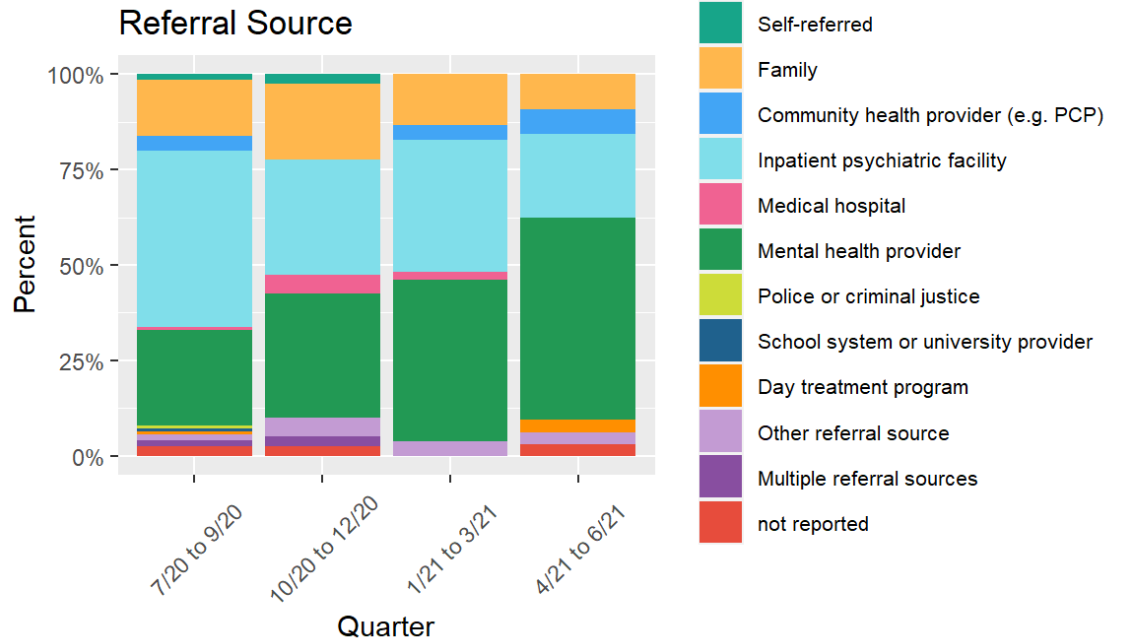
## Program Referrals, Admissions, and Discharges

From July 1, 2020, through June 30, 2021, North Carolina supported three Early Psychosis Intervention programs, located in Raleigh, Wilmington, and Charlotte. During this time, the programs received 175 referrals and admitted 51 first episode psychosis patients. Reasons for not accepting the referral included not being able to contact the prospective client (15%), the client declining (9%), the clinic not accepting new patients (15%), the patient not meeting program criteria (36%), or other or multiple reasons (26%). During this reporting period, the program discharged 43 patients. Reasons for discharge included the patient moving away (24%), completing the program (10%), requiring a higher level of care (7%), refusing “critical time” interventions (45%), patient later determined not to meet program criteria (2%), or multiple reasons (12%). The census ranged from 109 to 119 patients per month. During the reporting period, 176 first episode psychosis patients were served by the programs.

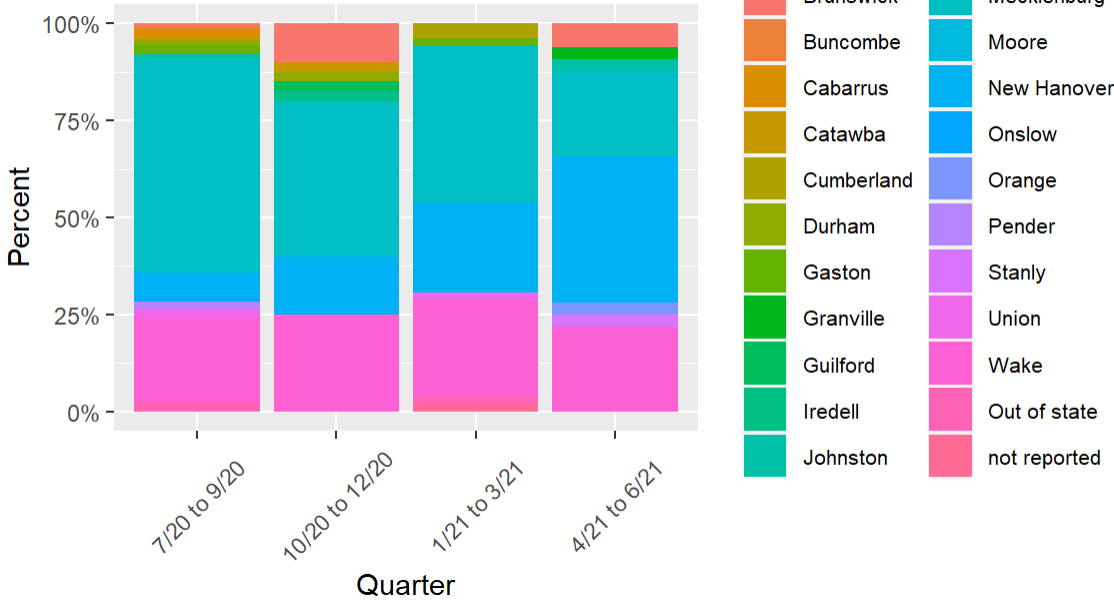


## Referral Sources

Referrals to the program were mainly from patients' families, inpatient psychiatric facilities, and mental health providers.



## Referred Patient County

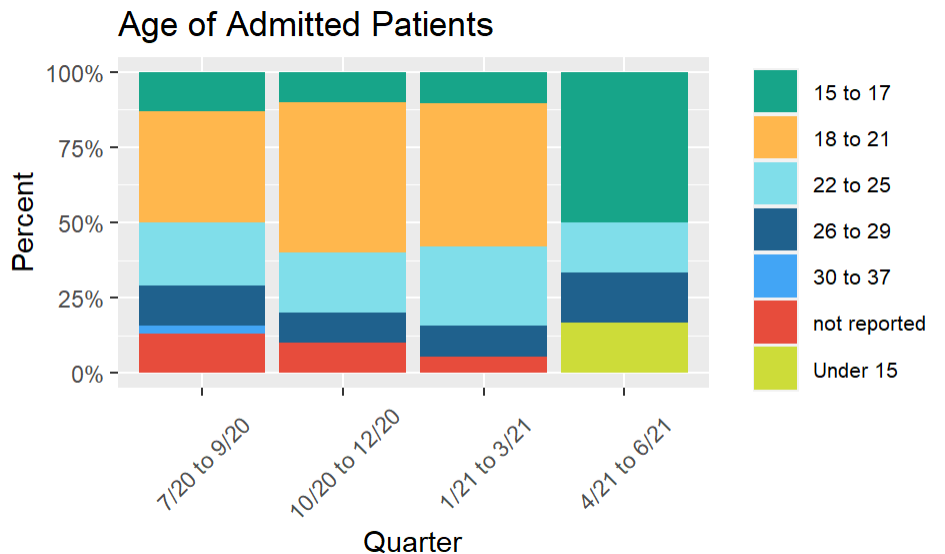


## Referral Counties

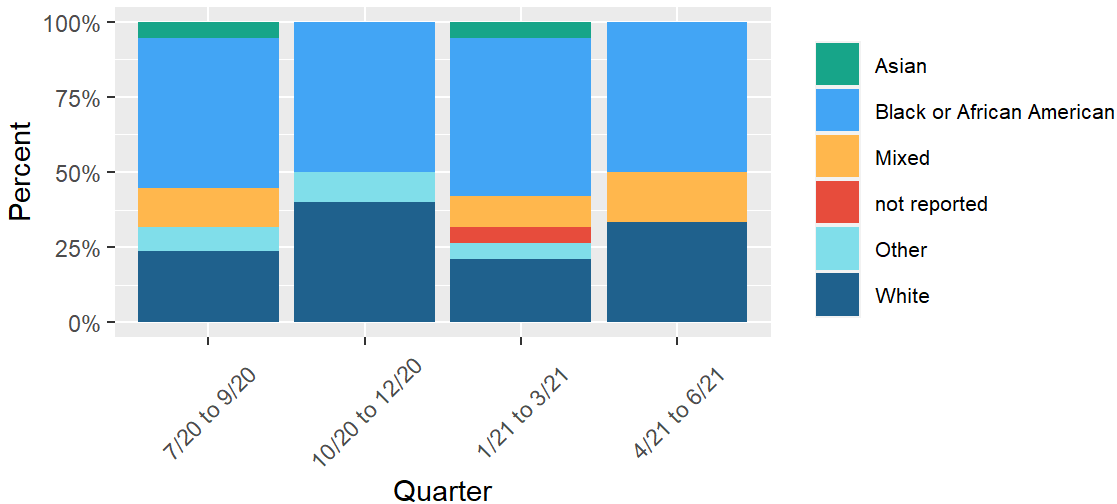
Referrals came from all over the state.

## Admitted Patient Demographics

The average age of admitted patients was 20 years old. The age of admitted patients ranged from 15 to 30 years old.



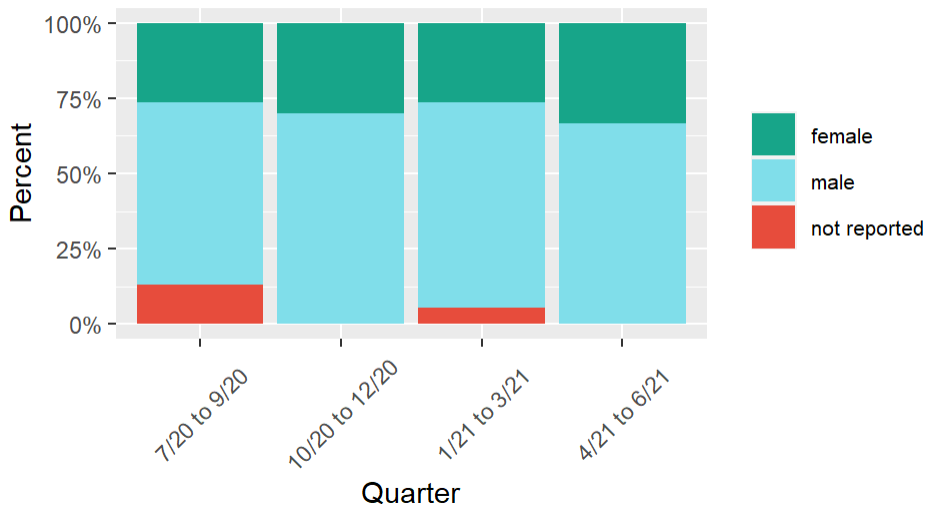
### Reported Ancestry of Admitted Patients



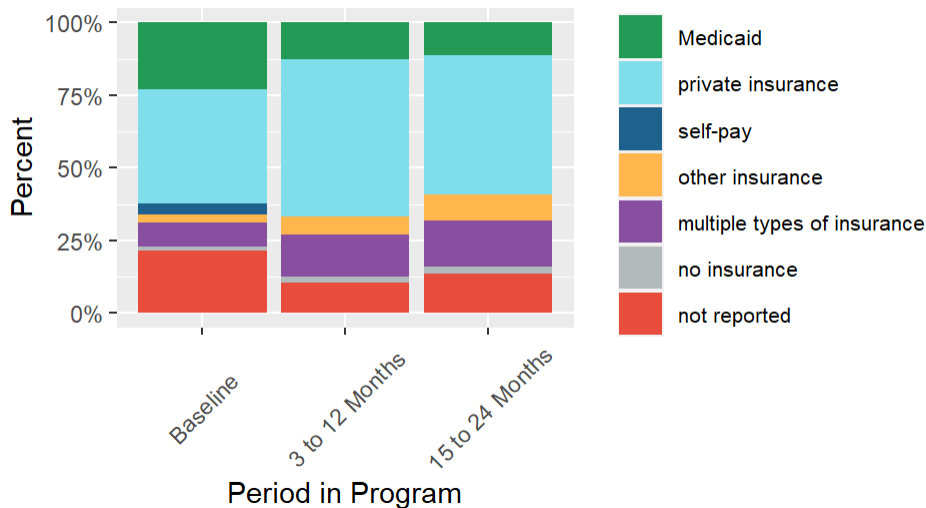
The majority of patients admitted during this time reported either White or Black ancestry.

### Reported Sex of Admitted Patients

Most of the patients admitted during this period were male.



### Patient Insurance



Most patients admitted to or active in the program during the reporting period had private insurance.

# Recovery

The mission of early psychosis programs is to foster recovery from psychosis. The importance of various aspects of recovery may vary for patients, clinicians, and the community. The primary treatment targets reflect these different perspectives, and include personal recovery, symptomatic recovery, and functional recovery.

Even though most persons recover from a first episode of psychosis, with treatment-as-usual only a minority regain their premorbid level of social and vocational function. Patients who participate in early psychosis coordinated specialty care programs have better functional outcomes overall, but still many remain functionally impaired. Bridging the gap between symptomatic and functional recovery is a critical need in early psychosis treatment.

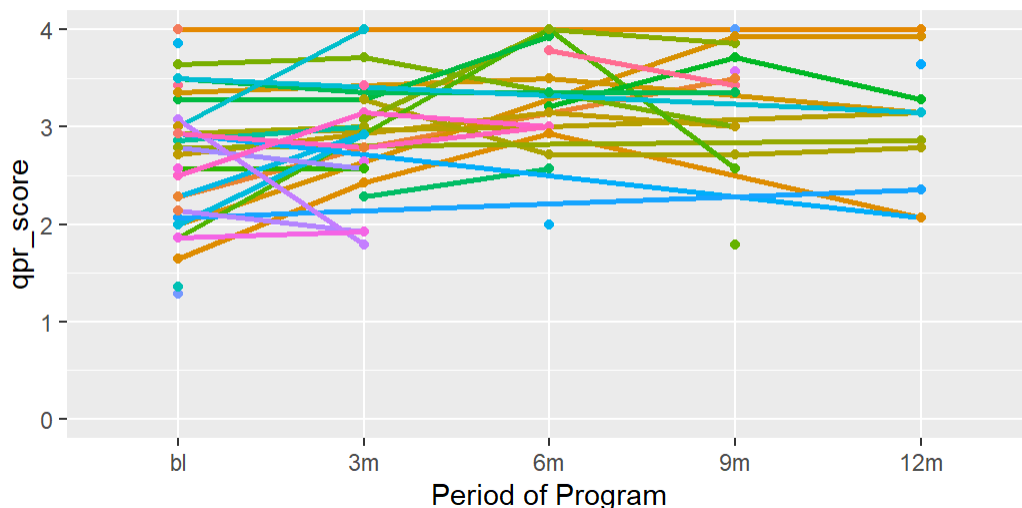
Coordinated specialty care includes a variety of clinical services. The intensity of service delivery is greater for persons in the earlier phases of the program. In order for a clinic to be meeting the standard of service delivery, at least 75% of patients must receive services at the specified frequency.

## Recovery and Peer Support Services

### Personal

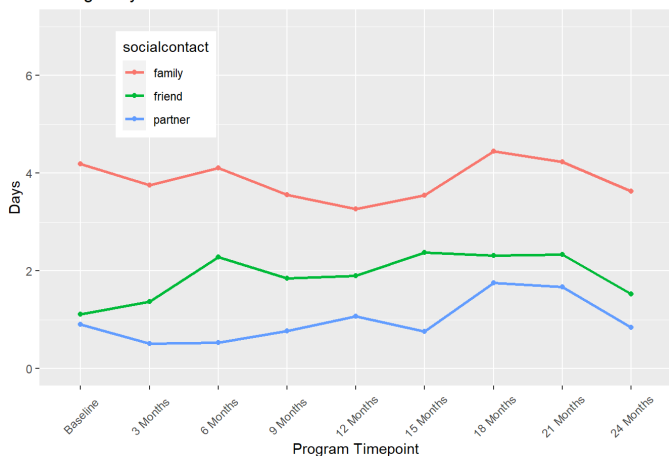
**Recovery:** Recovery, considered from the perspective of the patient, includes self-report of connectedness to others, hope and optimism about their future, personal identity, finding meaning in life, and empowerment. These constructs are measured by the “Questionnaire about the Process of Recovery”, a scale that includes 15 statements, such as: “I feel that my life has a purpose”, “I can take charge of my life.”, and “I feel part of society rather than isolated”. Patients rate the extent that they agree with each recovery statement with a 5-point scale (0=disagree strongly, 1=disagree, 2=neither agree nor disagree, 3=agree, 4=agree strongly). Clinicians review their clients’ recovery responses with them as a tool for facilitating engagement and identification of recovery-focused goals.

Patient-Rated Recovery - Individual Clients

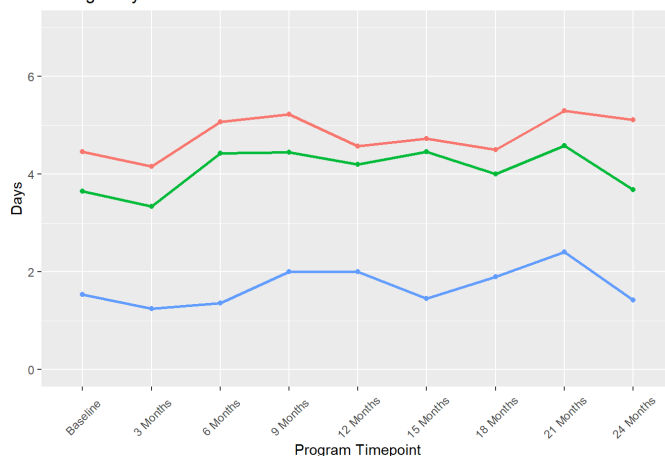


**Social Interactions:** Patients reported the frequency of interactions with family, friends, and romantic partners for the previous week, both in-person or electronically.

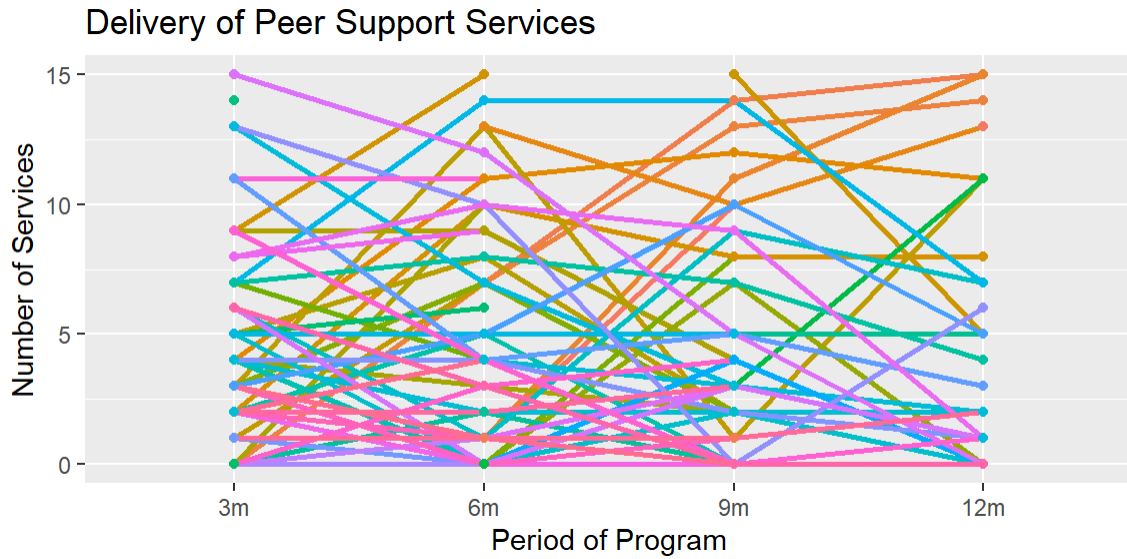
Average Days of In Person Social Contact



Average Days of Electronic Social Contact



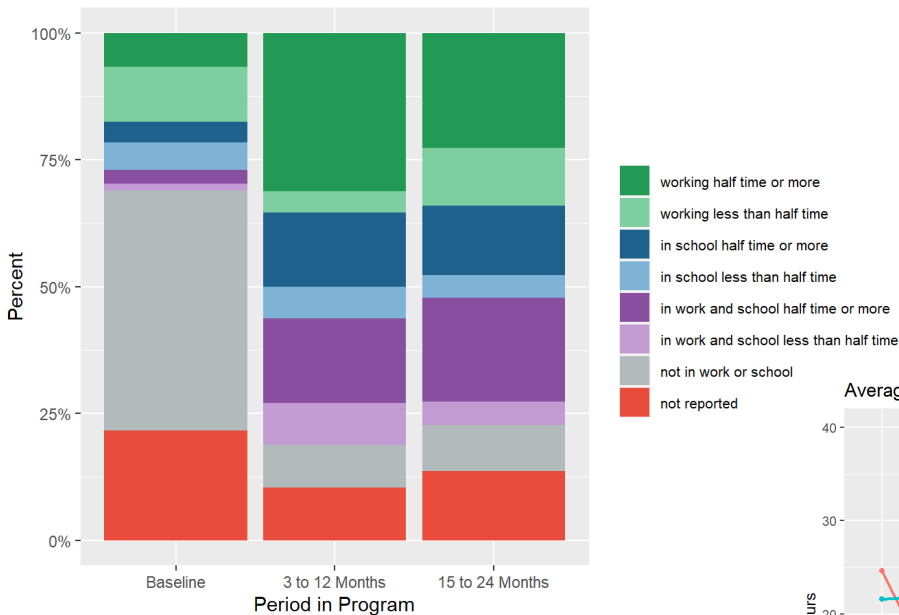
**Peer Support Service Delivery:** This graph represents the delivery of Peer Support Services to individual clients enrolled in the program.



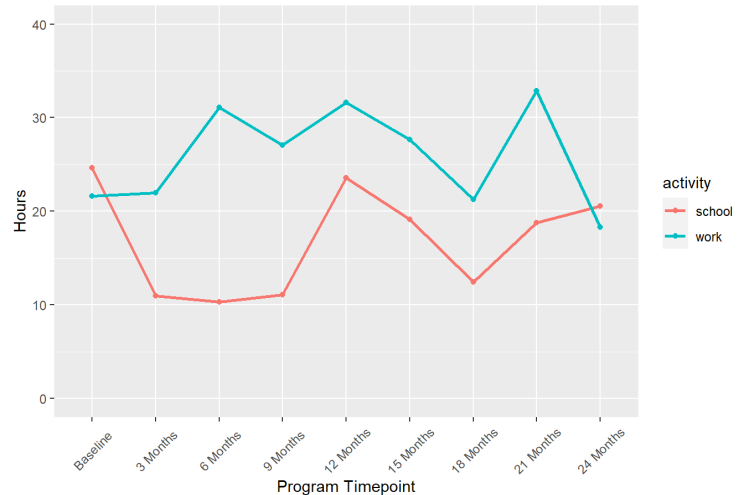
## Recovery and Supported Employment & Education Services

**Employment and School Enrollment:** At program admission, 50% of patients reported not being in school or working. After 12-Months in the program, 10% of patients reported not being in school or working. After two years of enrollment in the programs, 10% of patients reported not being in school or working.

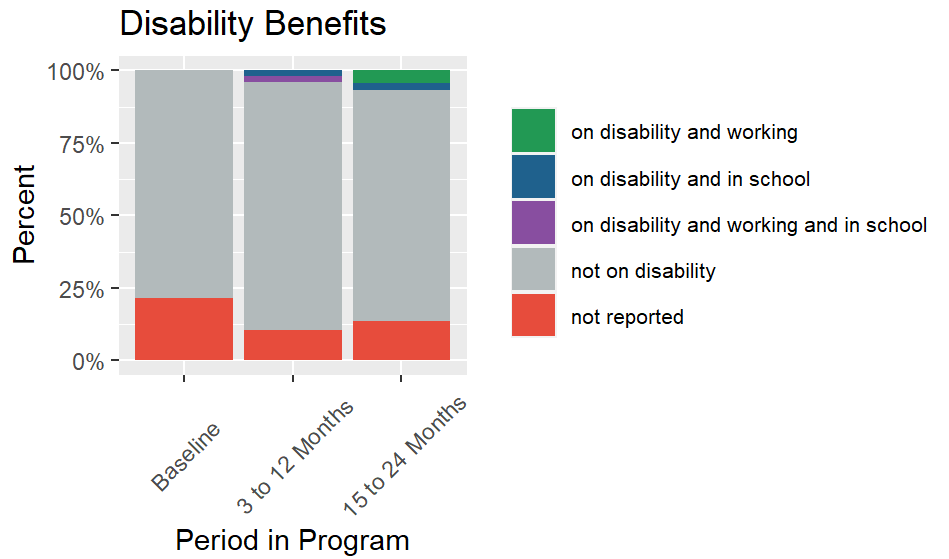
Employment and Enrollment in School



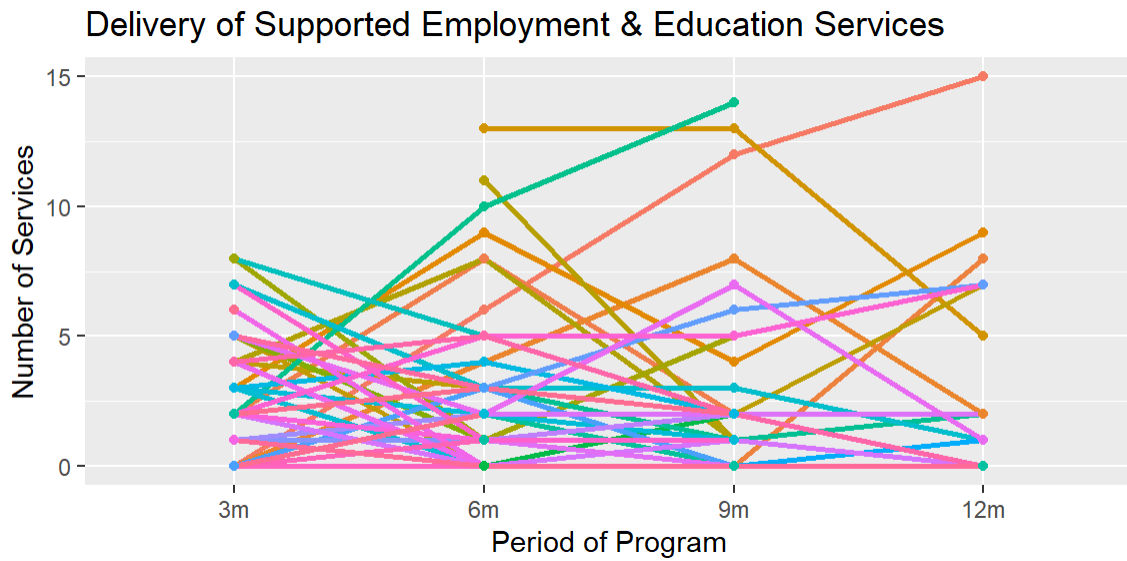
Average Weekly Hours of Work and School



**Disability:** A minority of patients receive disability benefits. There are a few patients who receive disability benefits who have also reported either working or attending school.

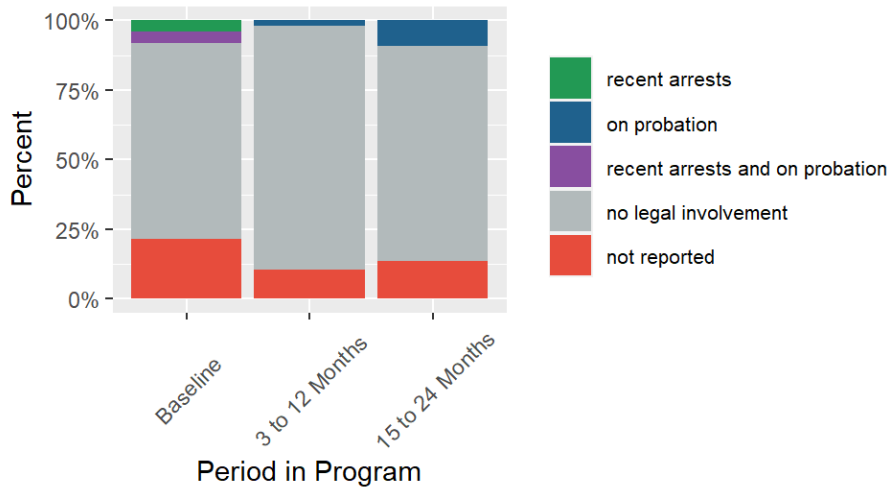


**Supported Employment & Education Service Delivery:** The below graphs represent the delivery of Supported Employment & Education Services to individual clients enrolled in the program.



# Functioning and Symptom Severity

## Legal Involvement

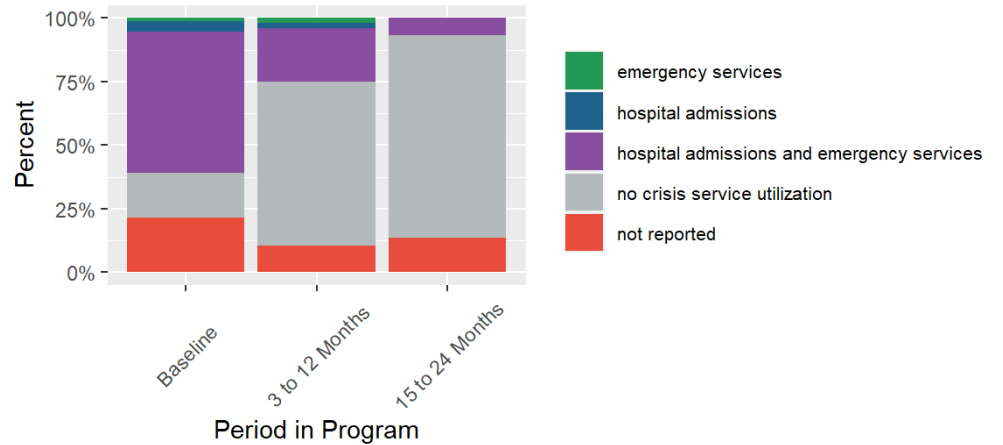


## Relapse and Legal System Involvement:

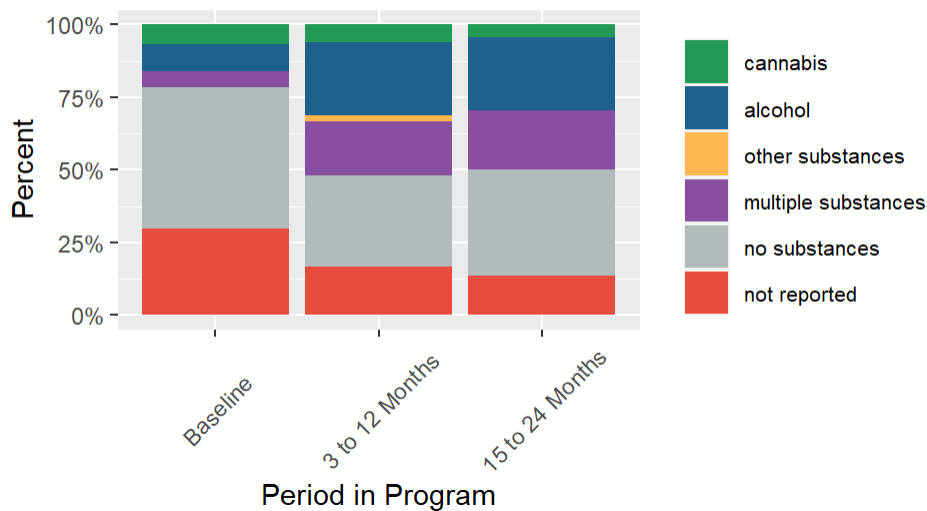
Symptom relapse is associated with use of costly services, increased risk of disability, and legal system involvement. Coordinated specialty care programming aims to reduce the likelihood of these costly interventions.

**Hospitalizations:** Hospitalization and crisis service utilization was lower for patients after program enrollment compared to the six months prior to program enrollment.

## Hospital Admissions and Emergency Services Utilization



## Substance Use

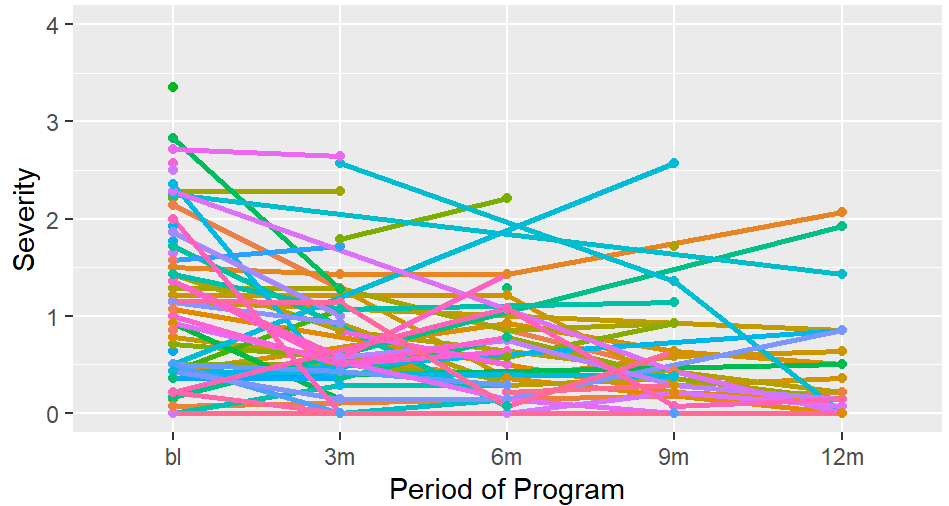


**Substances:** Clients report the use of substances during the week prior to clinic appointments.

## Patient-Rated Symptoms - Individual Clients

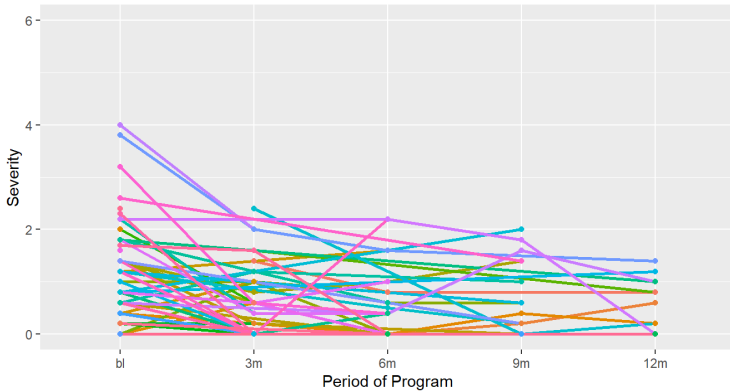
### Patient-Rated Symptom

**Severity:** Psychosis, negative, and mood symptoms occur in persons with a psychotic disorder and are a primary focus of medical management. We ask patients to rate on a scale of 0 (not at all) to 4 (every day) how often they have experienced these different symptoms using the Colorado Symptom Inventory, a 14-item scale.

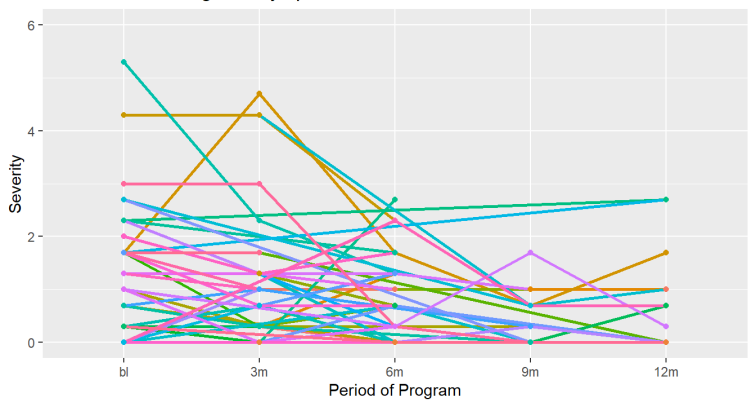


**Clinician-Rated Symptom Severity:** Clinicians rate the severity of hallucinations, delusions, disorganization, depression, anxiety, activation, and negative symptoms using an abbreviated 17-item version of the Brief Psychiatric Rating Scale. Symptoms are rated on a scale of 0 (absent) to 5 (extremely severe). For patients in their first 12 months of program enrollment during the reporting period, positive symptoms and negative symptoms were most improved over time.

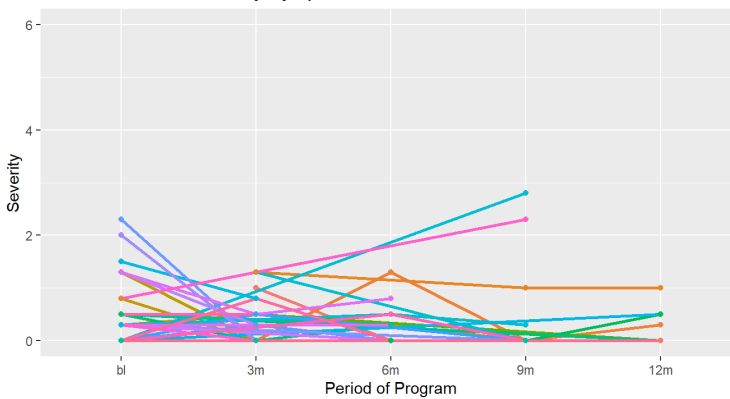
Clinician-Rated Positive Symptoms of Individual Clients



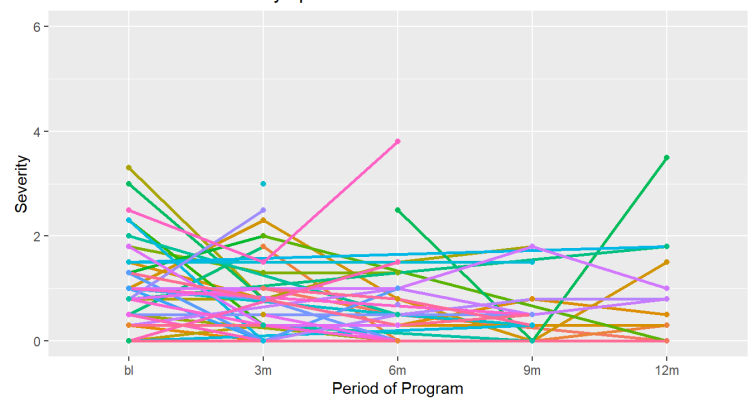
Clinician-Rated Negative Symptoms of Individual Clients



Clinician-Rated Excitability Symptoms of Individual Clients

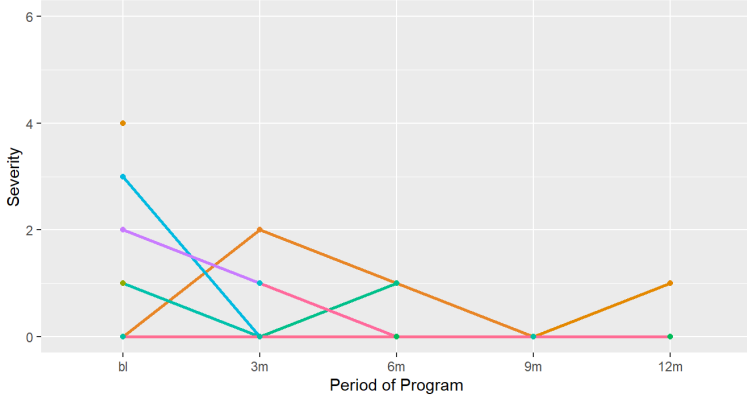


Clinician-Rated Affective Symptoms of Individual Clients

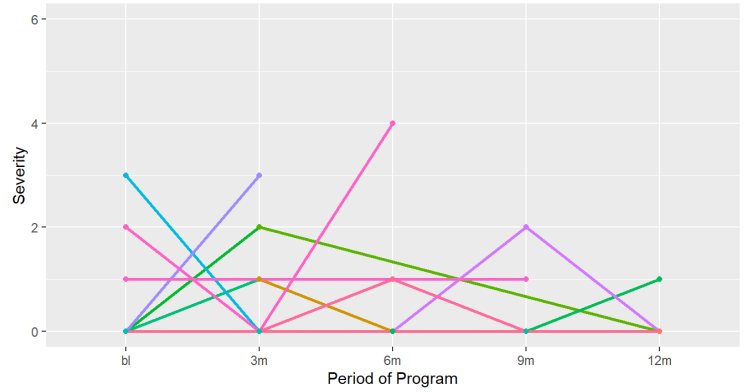




Clinician-Rated Hostility of Individual Clients

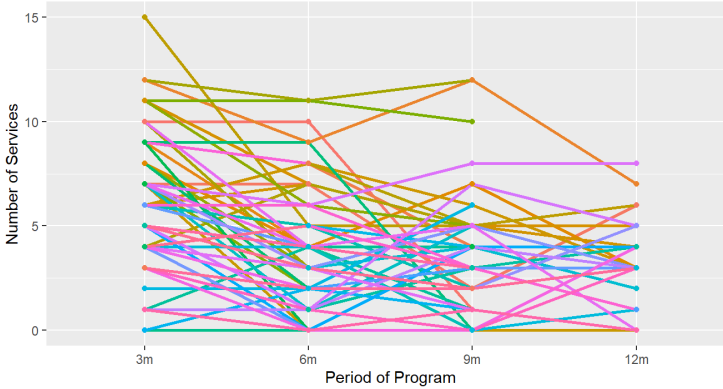


Clinician-Rated Suicidality of Individual Clients

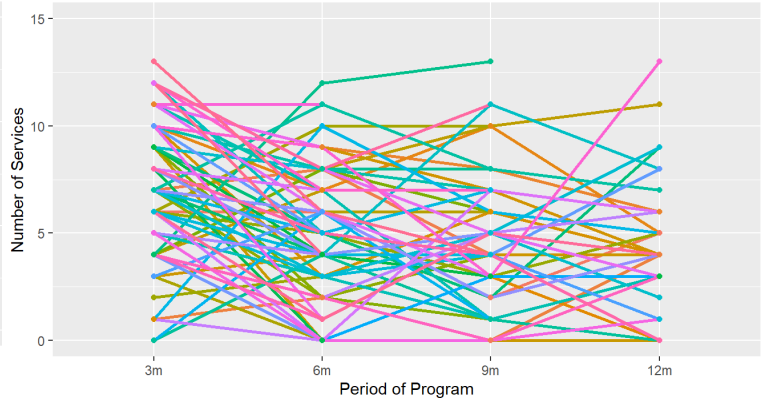


**Medical Management and Individual Therapy Service Delivery:** The below graphs represent the delivery of Medical Management and Individual Therapy services to clients enrolled in the program. In order for the clinic to meet the fidelity standard, at least 75% of clients must receive at least 8 medical management sessions and 8 individual therapy sessions during the initial three months of program enrollment and at least 3 medical management sessions and 3 individual therapy sessions during the later periods of program enrollment.

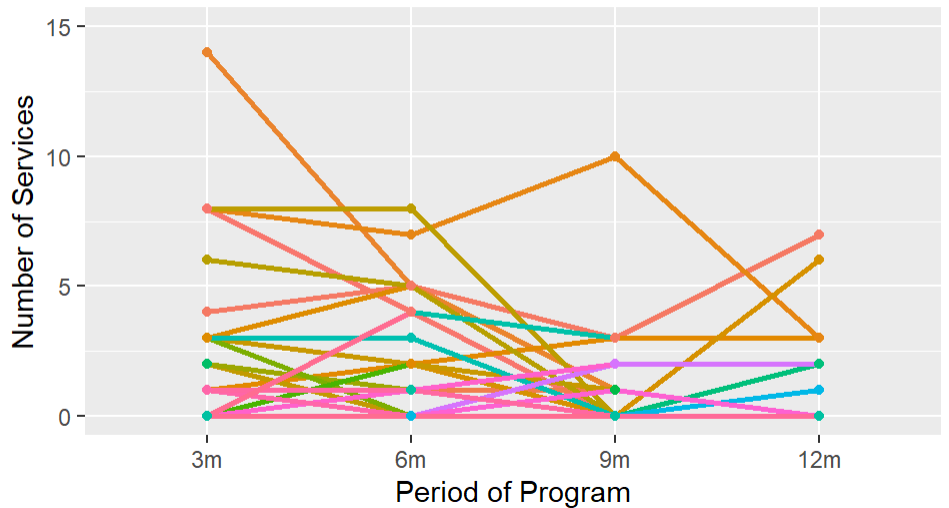
Delivery of Medical Management Services to Individual Clients



Delivery of Individual Therapy Services to Individual Clients



Delivery of Family Therapy Services to Individual Clients

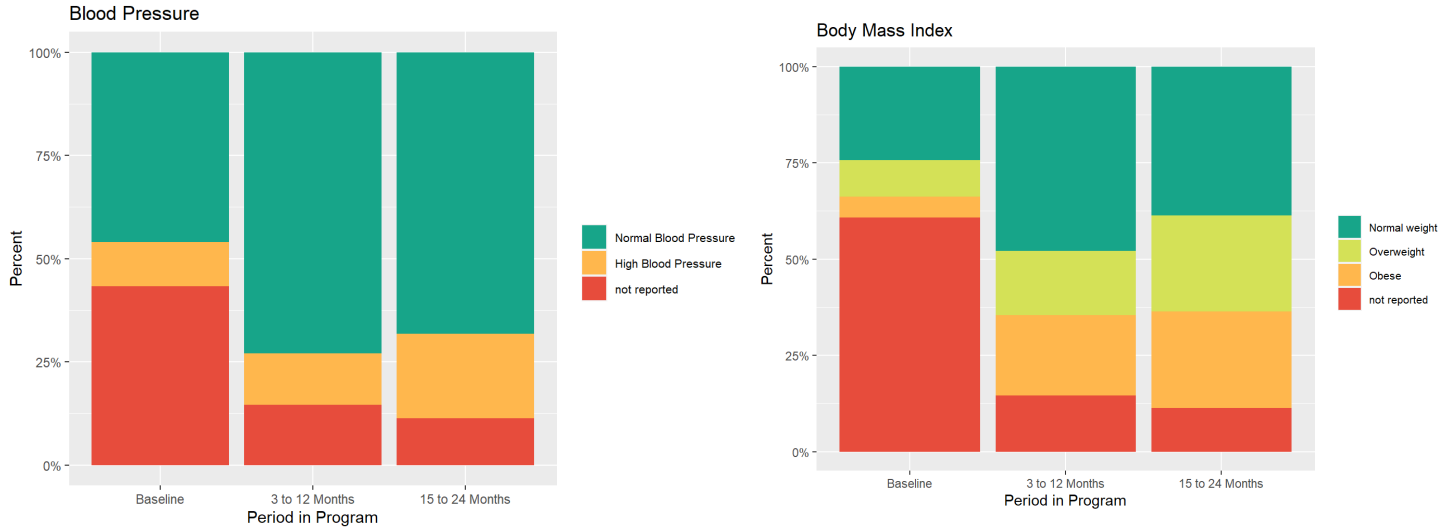


**Family Therapy Service**

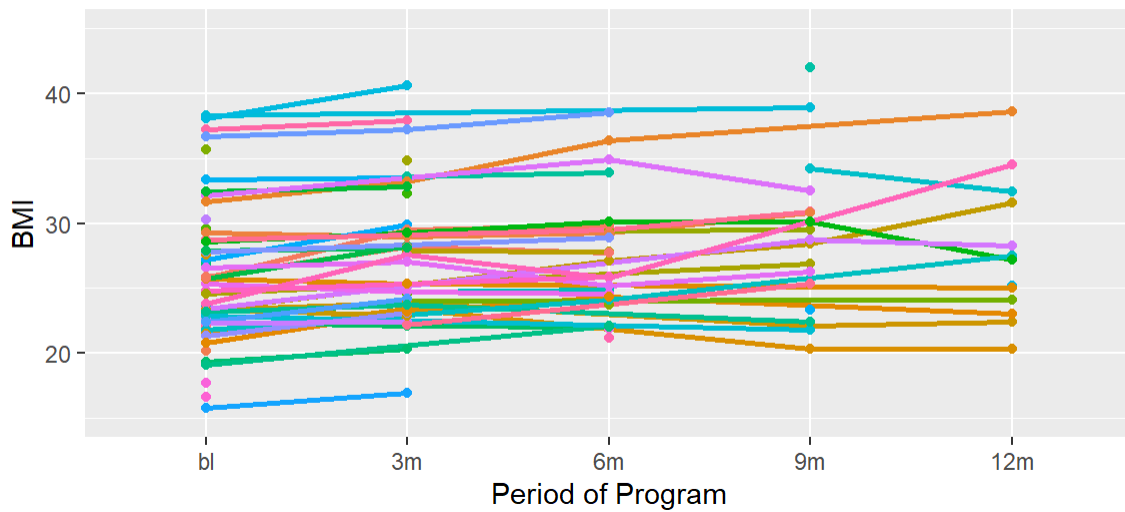
**Delivery:** This graph represents the delivery of Family Therapy services to clients enrolled in the program. In order for the clinic to meet the fidelity standard, at least 75% of clients must receive at least 3 Family Therapy sessions during their first year of program enrollment.

# Health Measures

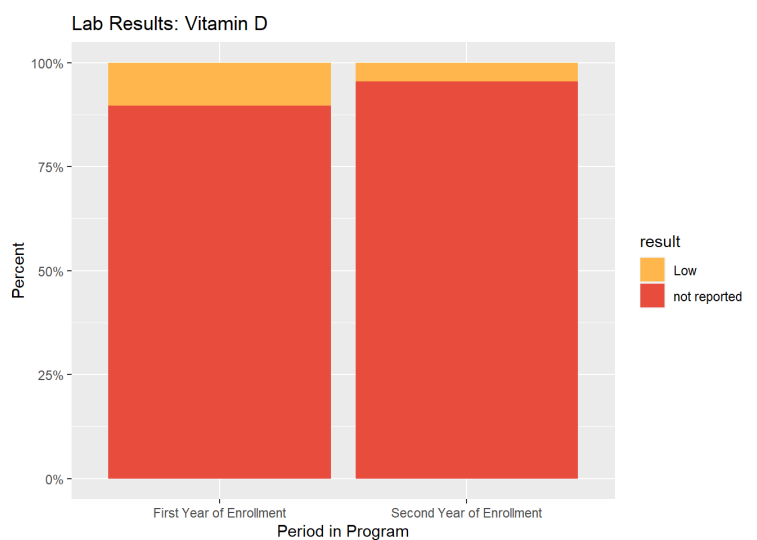
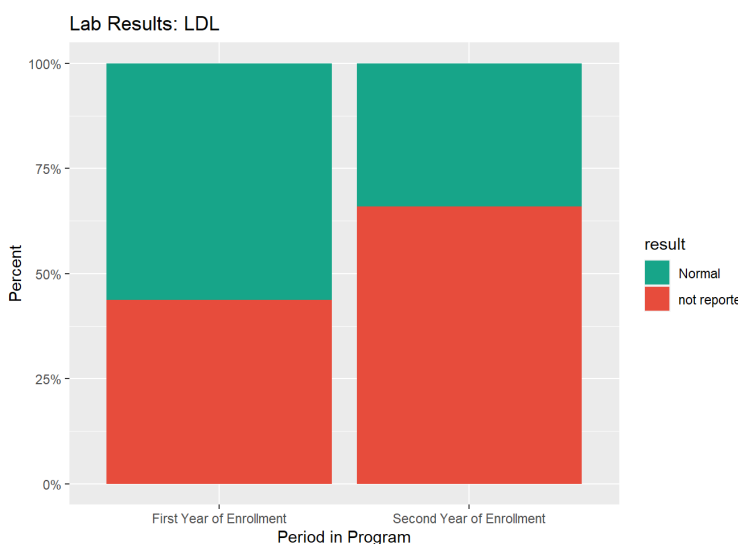
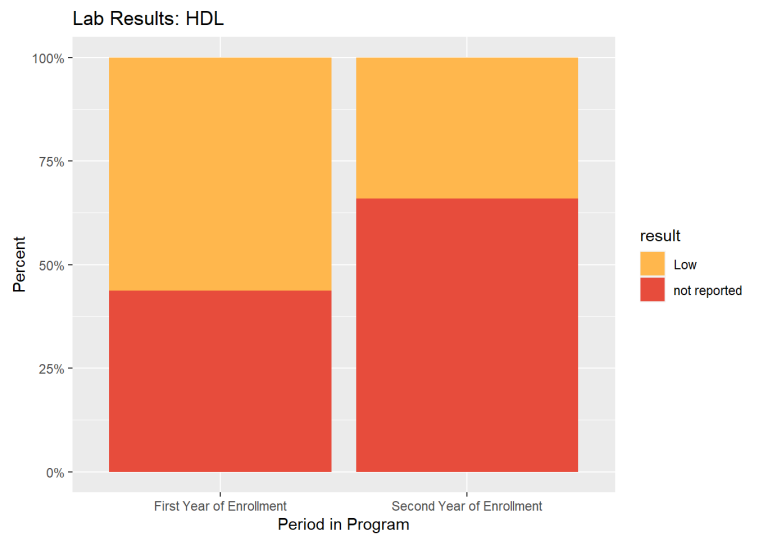
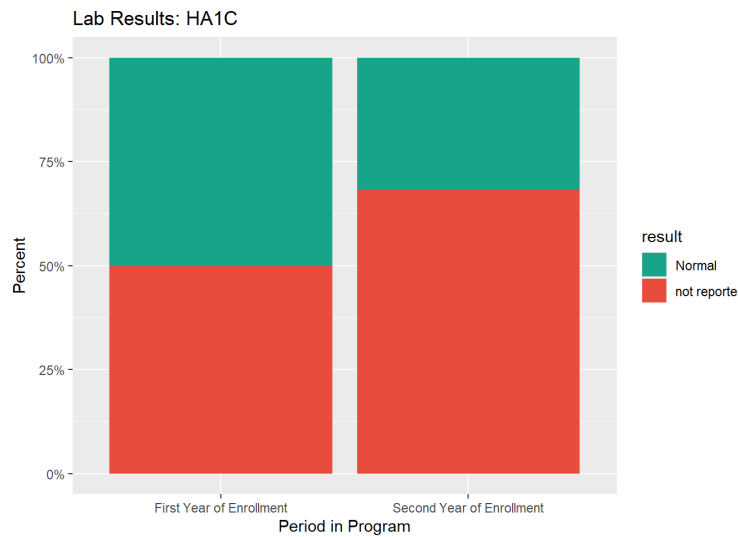
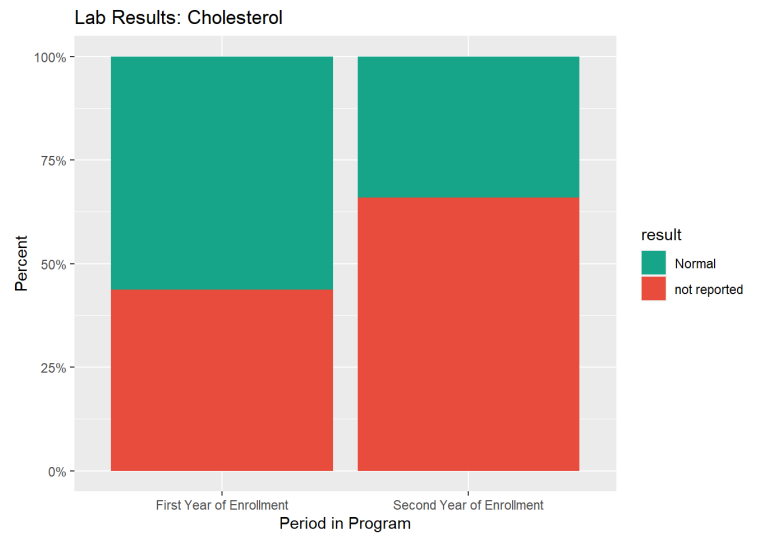
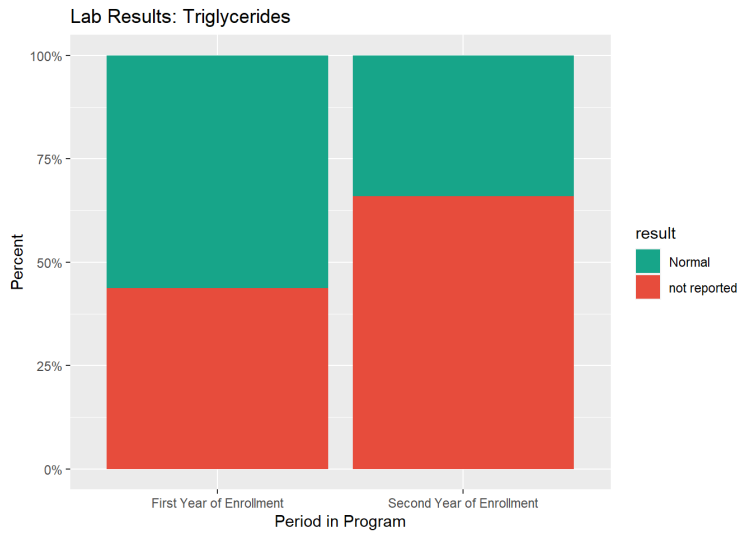
A goal of coordinated specialty care services is to reduce risk of patients developing obesity and metabolic syndrome.



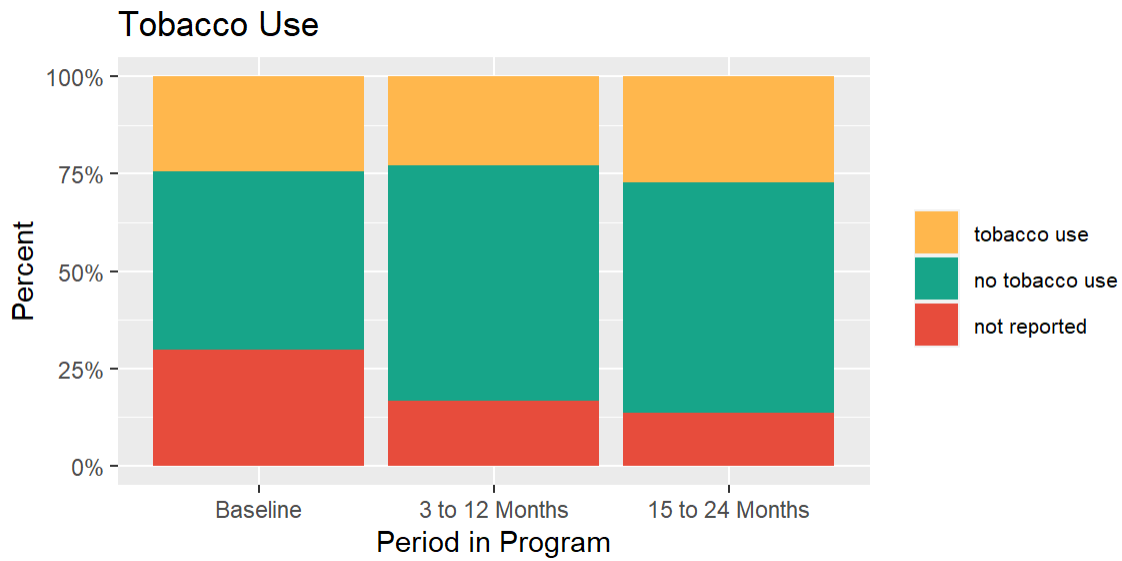
## Body Mass Index - Individual Clients



Other indicators of increased risk of diabetes and cardiovascular disease include cholesterol, triglycerides, a measure of average blood sugar (HgA1c), measures of high density and low density lipoproteins (HDL and LDL), and vitamin D. Collecting labs at least once each year is standard of care.

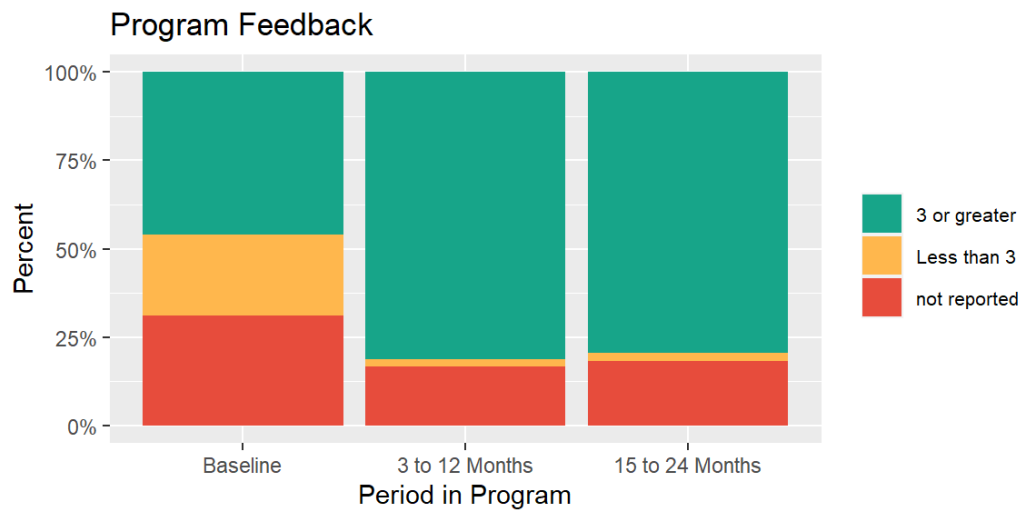


Reducing tobacco use is also a health prevention target in early psychosis programs, with the aim of reducing risk of cardiovascular disease and cancers later in life.

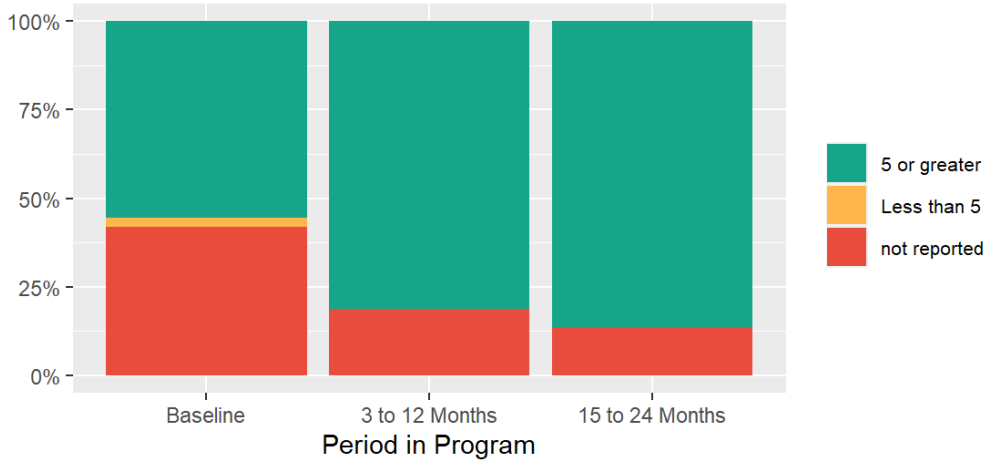


## Program Satisfaction

**Program Feedback:** Patients rate the quality of services they are receiving in the program by rating how much they agree or disagree with statements about the program on a scale of 0-4. Lower ratings indicate greater disagreement, while higher ratings indicate greater agreement. A rating of “2” indicates “Neither disagree nor agree.” Some of the items include: “Staff here believe that I can grow, change, and recover,” “Staff told me what side effects to watch out for,” and “I would recommend this agency to a friend or family member.”



## Collaboration Satisfaction



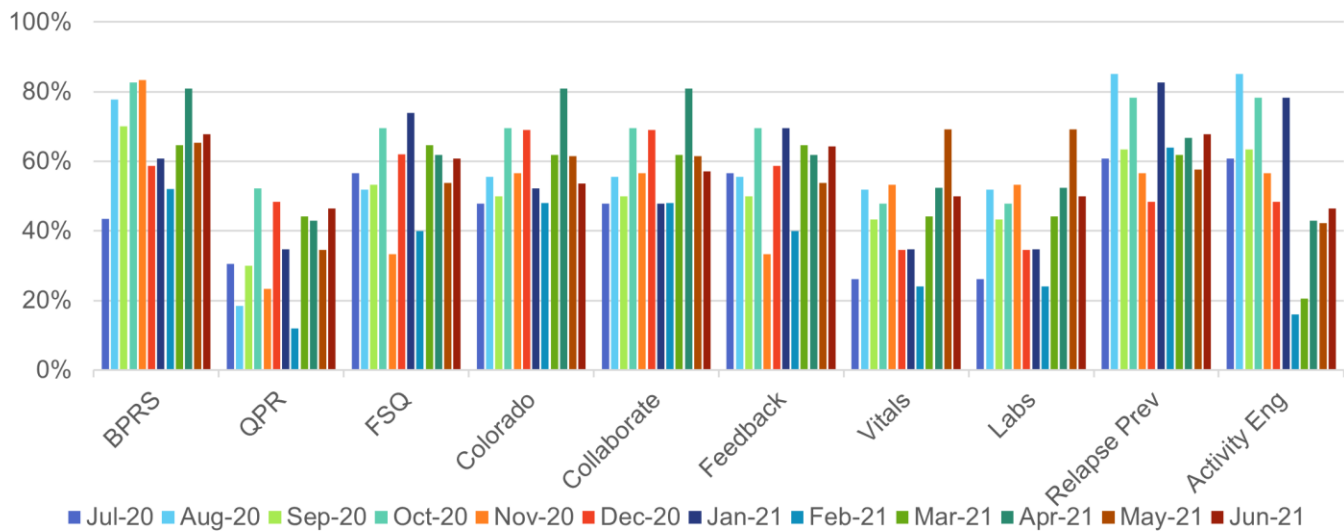
**Collaboration Satisfaction:** Patients rate the quality of shared decision making during clinical services using the CollaboRATE measure. Effort towards shared decision making by their medical provider is rated on a scale from 1-10. Lower ratings indicate that less effort was involved, while higher ratings indicate greater amounts of effort. Items include: “How much effort was made to help you understand your health issues?” and “How much effort was made to include what matters most to you in choosing what to do next?”

## Data Collection

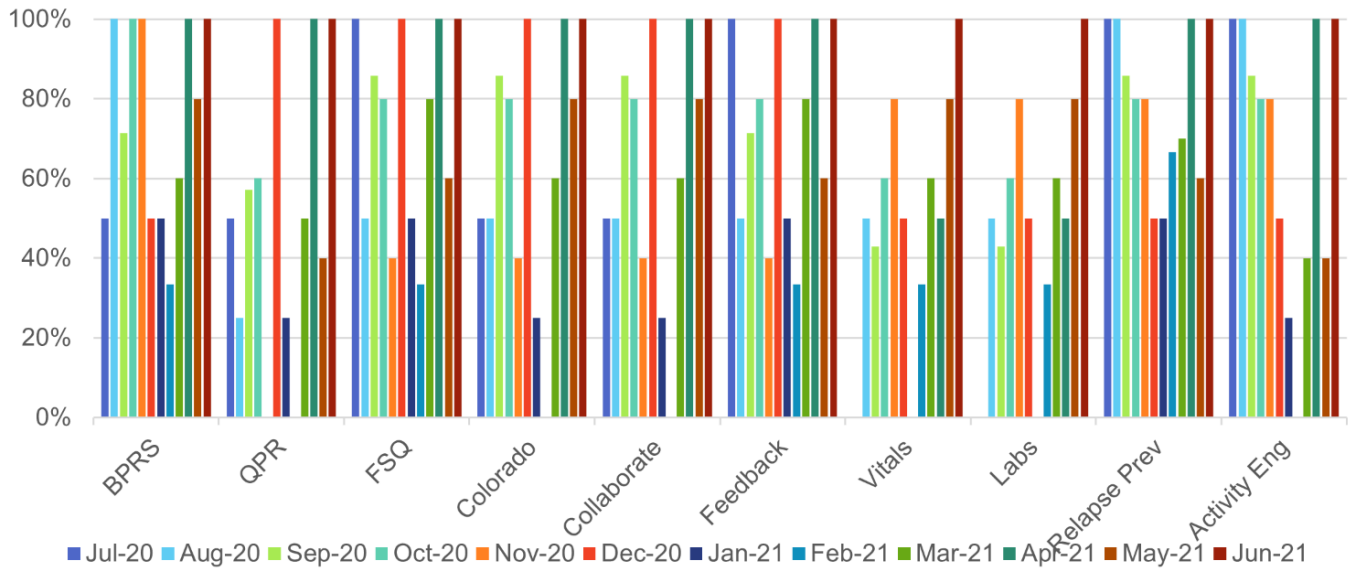
Data is collected in order to assess program quality and track patient recovery. Below displays quarterly data completion by type of data collection form. Percentages are calculated based on the actual number of forms that are completed out of the total possible amount of forms that should be completed during that time period. Reducing the amount of missing data is one of the main goals of the Technical Assistance Program.

The completion of baseline data forms is of particular importance.

### EPI-NC Data Collection: Baseline to 24 Months



## EPI-NC Data Collection: Baseline Only



### References

- 1 Williams, J. et al. Psychometric evaluation of the Questionnaire about the Process of Recovery (QPR). *Br J Psychiatry* 207, 551-555, [doi:10.1192/bjp.bp.114.161695](https://doi.org/10.1192/bjp.bp.114.161695) (2015).
- 2 Boothroyd, R. A. & Chen, H. J. The psychometric properties of the Colorado Symptom Index. *Adm Policy Ment Health* 35, 370-378, [doi:10.1007/s10488-008-0179-6](https://doi.org/10.1007/s10488-008-0179-6) (2008).