

Early Psychosis Treatment in Massachusetts: Access, Quality, and Innovation

Emily Kline, PhD

BIDMC Dept. of Psychiatry

December 2019

Acknowledgements

I have no conflicts of interest to declare.



Mass
DMH
Department of
Mental Health



CBH
KNOWLEDGE
CENTER



National Institute
of Mental Health

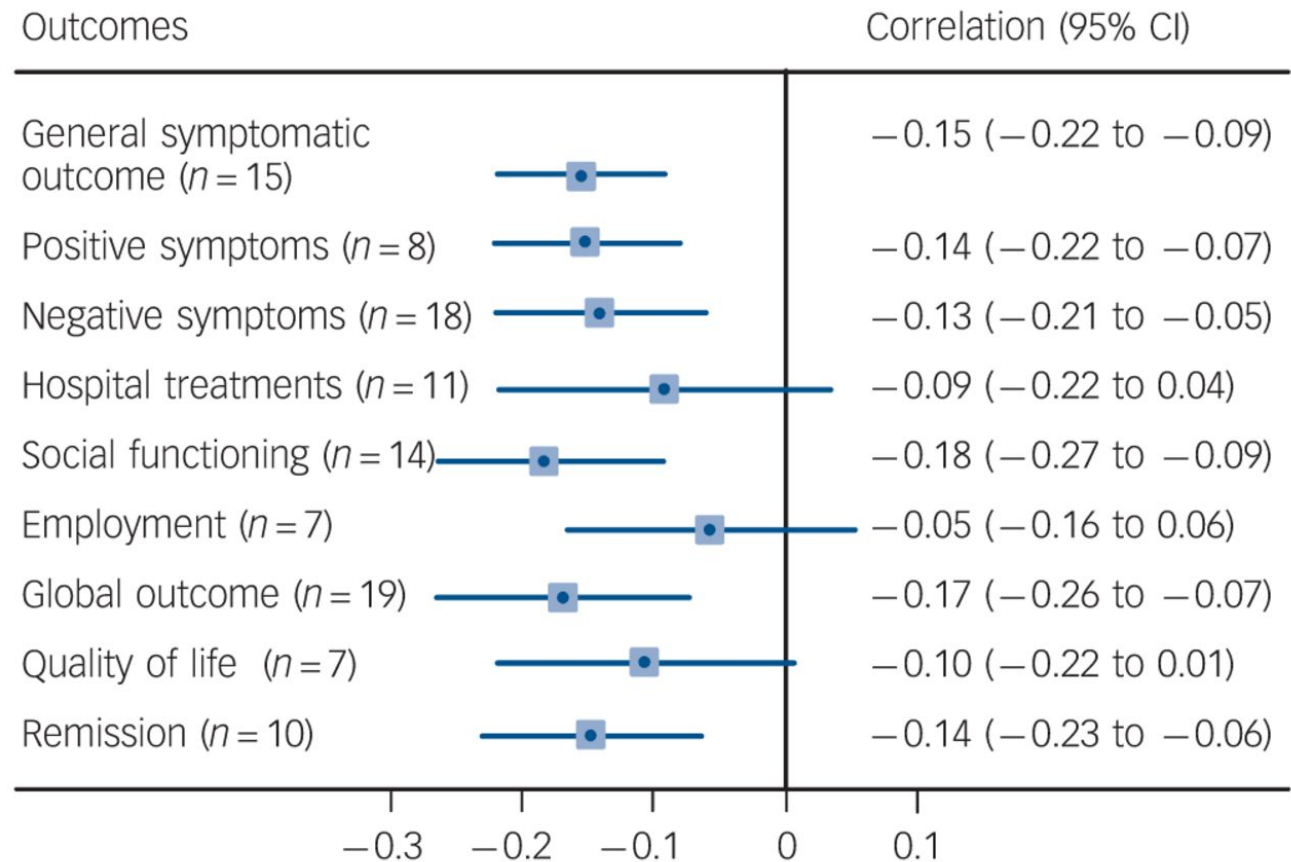
First Episode Psychosis

Prevalence

- Lifetime prevalence of psychotic disorders is around 3% (~1% schizophrenia-spectrum, 1.5% bipolar disorder, .5% “other” e.g. substance-induced psychosis)
 - Average (median) age of onset ~21; men > women
 - 2015 estimate of annual incidence in United States ~100,000¹ → **~2,100 in MA**

Duration of Untreated Psychosis (DUP) is a powerful, modifiable prognostic factor

- DUP in U.S. tends to be extremely long (~1.5 years; WHO recommends DUP < 90 days)²
- DUP predicts treatment response and recovery³

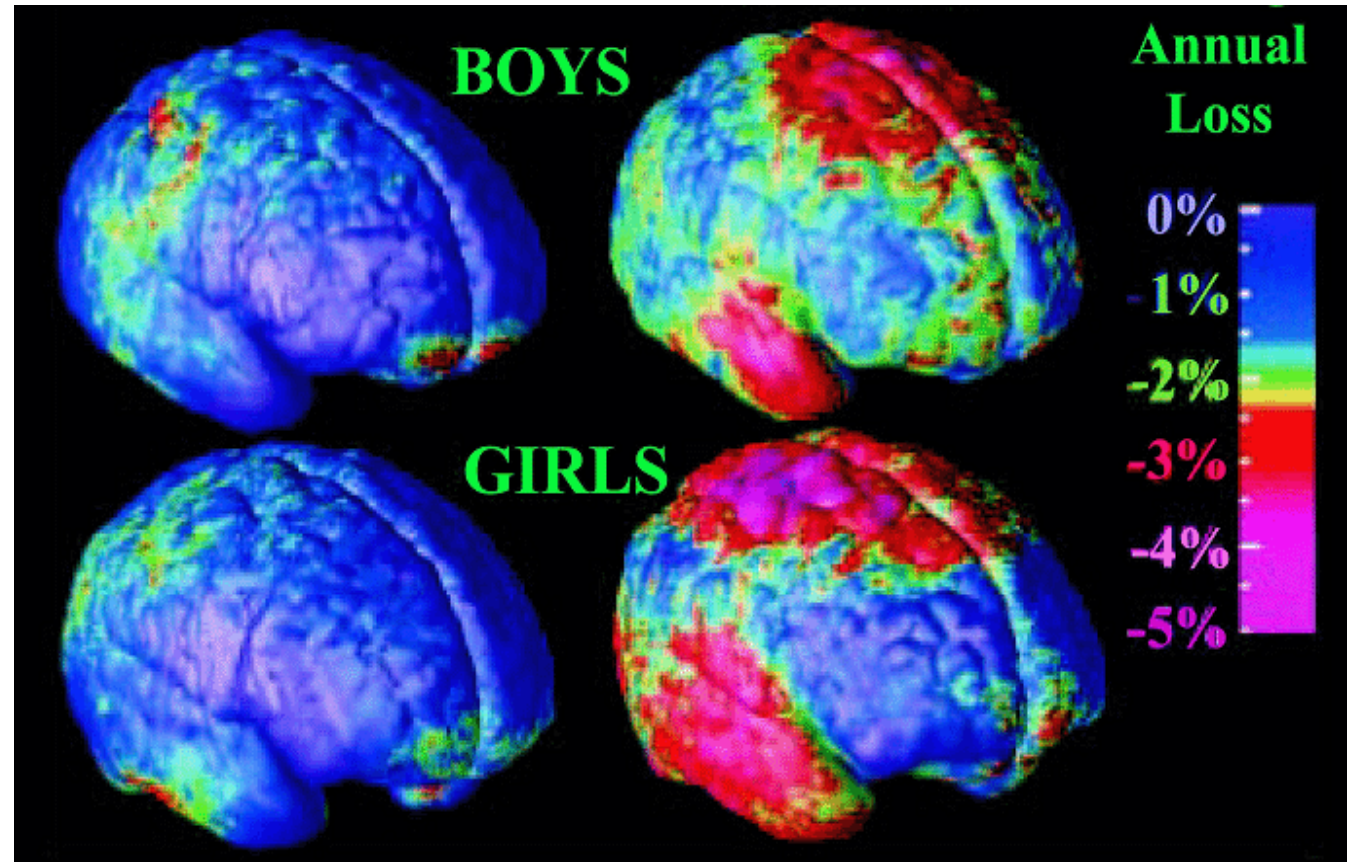


Early Intervention is Key

- Continuous gray matter loss occurs *after* illness onset⁴
- Psychotic disorders tend to be “episodic” (relapsing/recurring) but *many episodes are PREVENTABLE*
 - A 5th episode is much harder to recover from than a 1st

Normal Adolescents

Adolescents with Schizophrenia



Public Health Significance



This population is *vastly undertreated*: a review of privately insured 16-30 year olds in U.S. found that in the year following index diagnosis of psychotic disorder, 61% filled no prescriptions and 41% received no psychotherapy⁵



Young people with psychosis have greatly *elevated all-cause mortality* due to suicide, overdose, accidents^{3,4} and adults with psychosis have *15-20 years shorter life expectancy* due to high rates of cardio-metabolic illnesses⁶

FEP Treatment



Of the early intervention models that have been trialed, “Coordinated specialty care” (CSC) has best evidence for treating FEP⁶



Specialized early interventions for FEP yield better outcomes than typical treatment, including *fewer symptoms, more school/work participation, less treatment drop-out, and reduced use of inpatient services* (measured in both admissions and bed-days)⁷

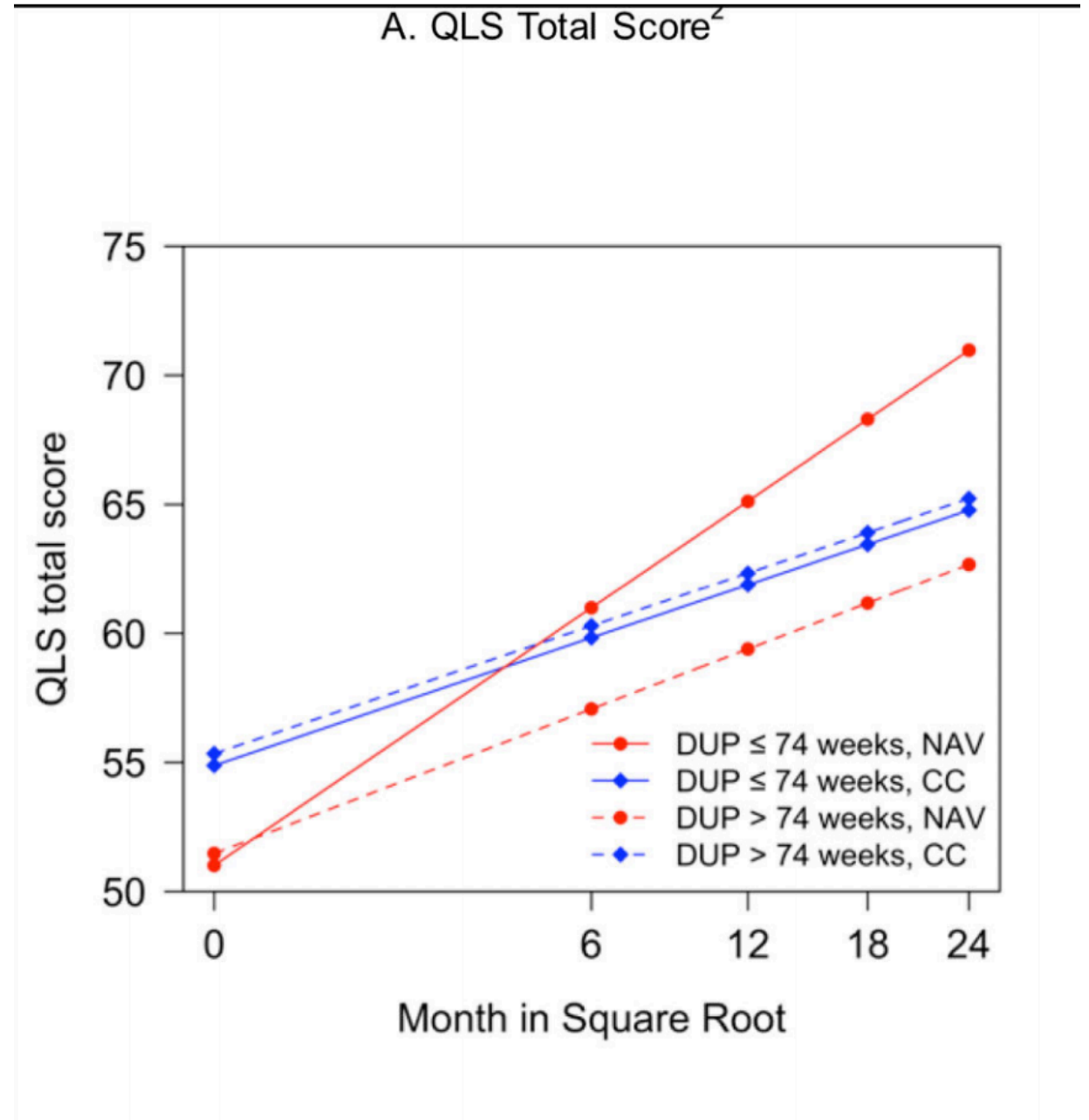
FEP Treatment: Coordinated Specialty Care



- CSC involves: *medication management within FEP treatment guidelines; psychotherapy; case management; education/employment support; and education and support for patients' families*
 - These services can be staffed individually, or combined into a few roles
 - Some of these are billable and some not; can also partner with outside infrastructure (e.g., Mass Rehabilitation Commission) to provide some non-billable services

CSC in the United States

- “RAISE” Study demonstrated the CSC feasible and effective in U.S. community mental health care settings
 - “Navigate” was the treatment used in RAISE
 - Effects mostly limited to those with DUP < 74 weeks

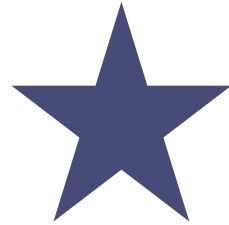


Culture of FEP Care

- This is not just a service change but a culture change involving:
 - HOPE and the expectation of recovery
 - Coordination (rather than fragmentation) is the default
 - Families included by default
 - Young adult developmental considerations (e.g., sexual identity exploration, conflicts over autonomy from parents, and career ambivalence embraced as developmentally normative)
 - A collaborative clinical assessment process that sets expectations for treatment and serves as a yardstick to measure progress toward goals

CSC in Massachusetts

Federal Block Grant Set- Aside

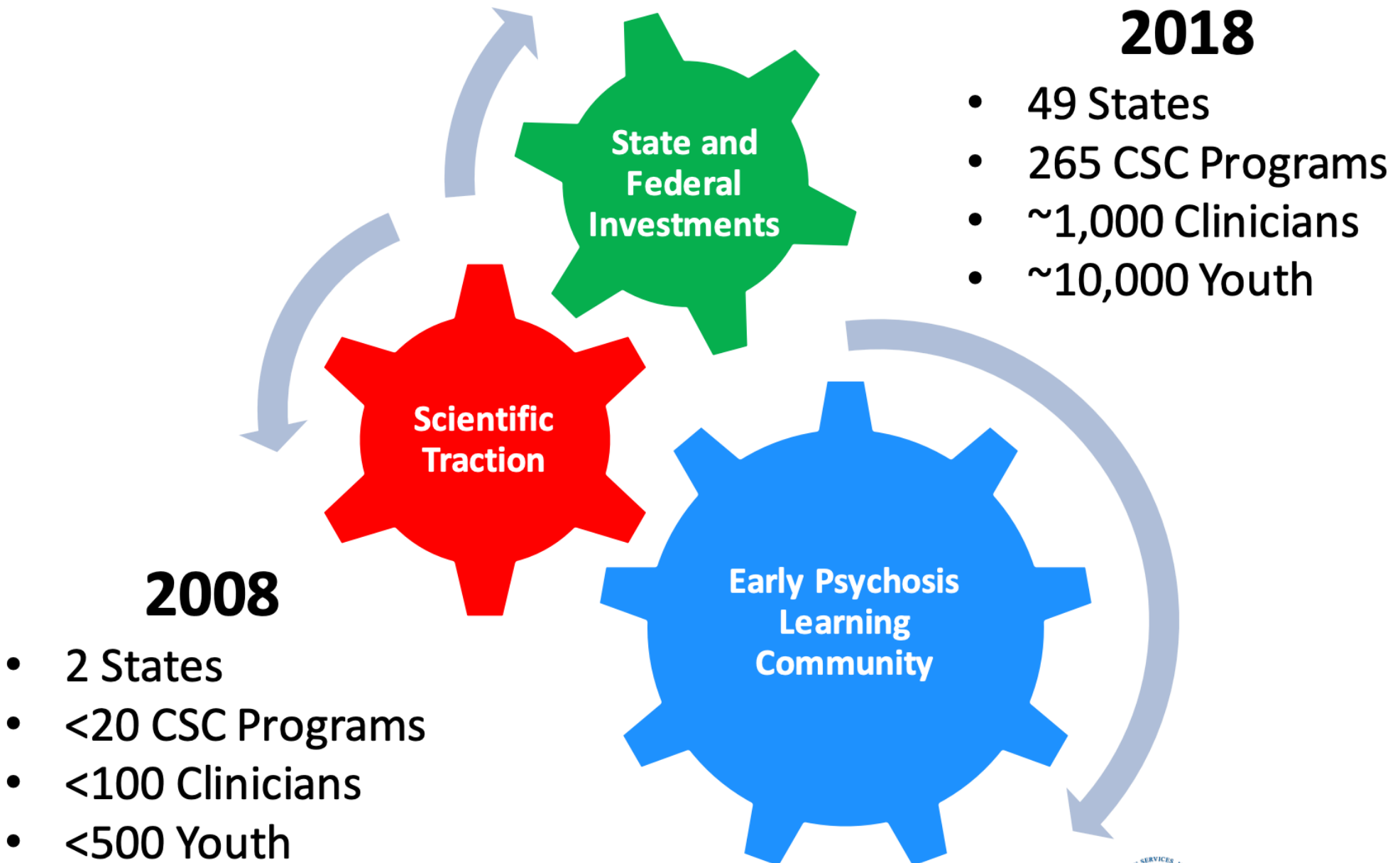


**In 2015-2016, congress
allocated “set-aside” SAMHSA
funds for FEP intervention**

Enormous increase in FEP
treatment programs nationally



**Key services not covered
by 3rd party payers**



DMH use of FEP Set-Aside Block Grant Funds



Support FEP programs in providing non-reimbursable service components (training, team meetings, supported employment)



Create a First Episode Psychosis Technical Assistance Center: MAPNET!



First round of program grants awarded July 2017 (“Learning Collaborative Cohort 1”)



Second round of program grants awarded July 2019 (“LC Cohort 2”)



Now ~15 (??) FEP programs in MA

Massachusetts: Special Considerations

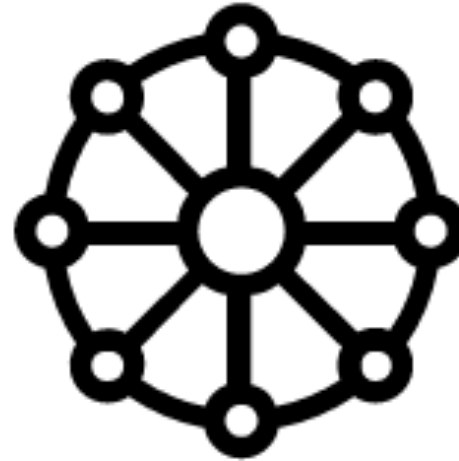


“Pioneer” FEP
Program Models:
ahead of their
peers, or behind the
times?



Huge culture and
resource gaps
between
Boston/Academic
and everyone else

Massachusetts
Network for
Early
Treatment



mapnet

MAPNET Mission



Create a community supporting early intervention in psychosis THROUGHOUT Massachusetts



Promote evidence-based practices



Facilitate early identification of psychotic disorders



Encourage cross-program consultation



Evaluate the effectiveness of FEP treatment in MA as well as our own effectiveness

MAPNET Activities



Annual conferences



Training and supervision on implementing Evidence Based Practices



Webinars (e.g., identifying risk for psychosis, FEP services for veterans, preventing metabolic syndrome, peer support)



Training and consultation on psychosis screening & assessment



Fidelity evaluations

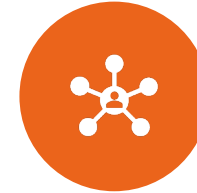


Website: WWW.MAPNET.ONLINE

MAPNET Accomplishments



13 Programs using
standardized
assessment protocol



7 “original” programs
now in communication
and collaboration



6 NEW Navigate-trained
programs in
Northeastern MA



Partnered with NIMH
and SAMHSA for 1st
ever National FEP Care
Conference (10/2018)



Thousands of providers
reached through
conferences, webinars,
& outreach talks

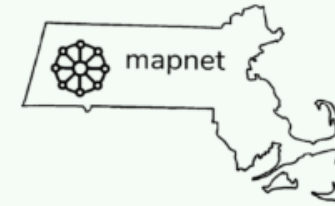


Provider directory
receives ~30 unique
page views daily



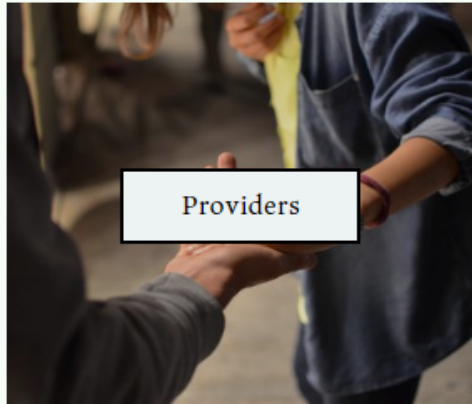
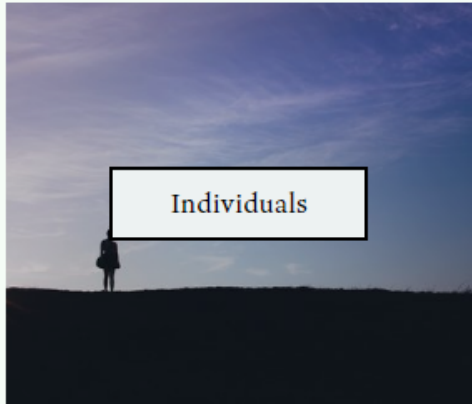
Massachusetts Psychosis Network for Early Treatment

MAPNET is dedicated to the early detection and treatment of mental illness. We are a Technical Assistance Center with the goal of connecting and supporting First Episode Psychosis service providers in Massachusetts.



[JOIN OUR MAILING LIST \(RECEIVE UPDATES, TRAINING ANNOUNCEMENTS, ETC.\)](#)

[Click here to view the recording of our most recent webinar,
A Peer Support Model for Cultural Responsiveness when Facing Psychosis.](#)



First Episode Psychosis Programs in Massachusetts

PLEASE SEE THE BELOW LIST OF PROGRAMS IN MASSACHUSETTS THAT PROVIDE SPECIALIZED FIRST EPISODE PSYCHOSIS (FEP) CARE.

Click the a program's name (**left**) to visit their website.

Click on the box (**right**) to learn more about what makes each program unique, specific treatment services offered, and eligibility.

Western Massachusetts:

Prevention and Recovery in Early Psychosis
Massachusetts Department of Mental Health
Holyoke, MA

PREP WEST

Central Massachusetts:

Screening and Treatment of Early Psychosis
Community Healthlink (CHL)/ UMass Memorial Health Care
Worcester, MA

CHL STEP

The Collaborative Pathway
Advocates
Framingham, MA

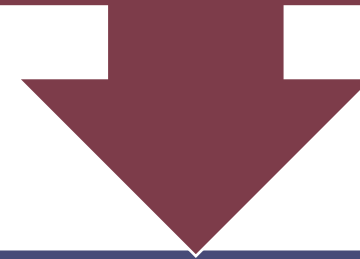
THE COLLABORATIVE PATHWAY

Northeastern Massachusetts:

Danvers Clinic

Program Outcomes

How effective was “LC Cohort 1”?



6 programs in “cohort 1” provided data reflecting September 2017-October 2019

76 patients had both baseline & 6 month data enabling us to look at interim treatment outcomes

Demographics

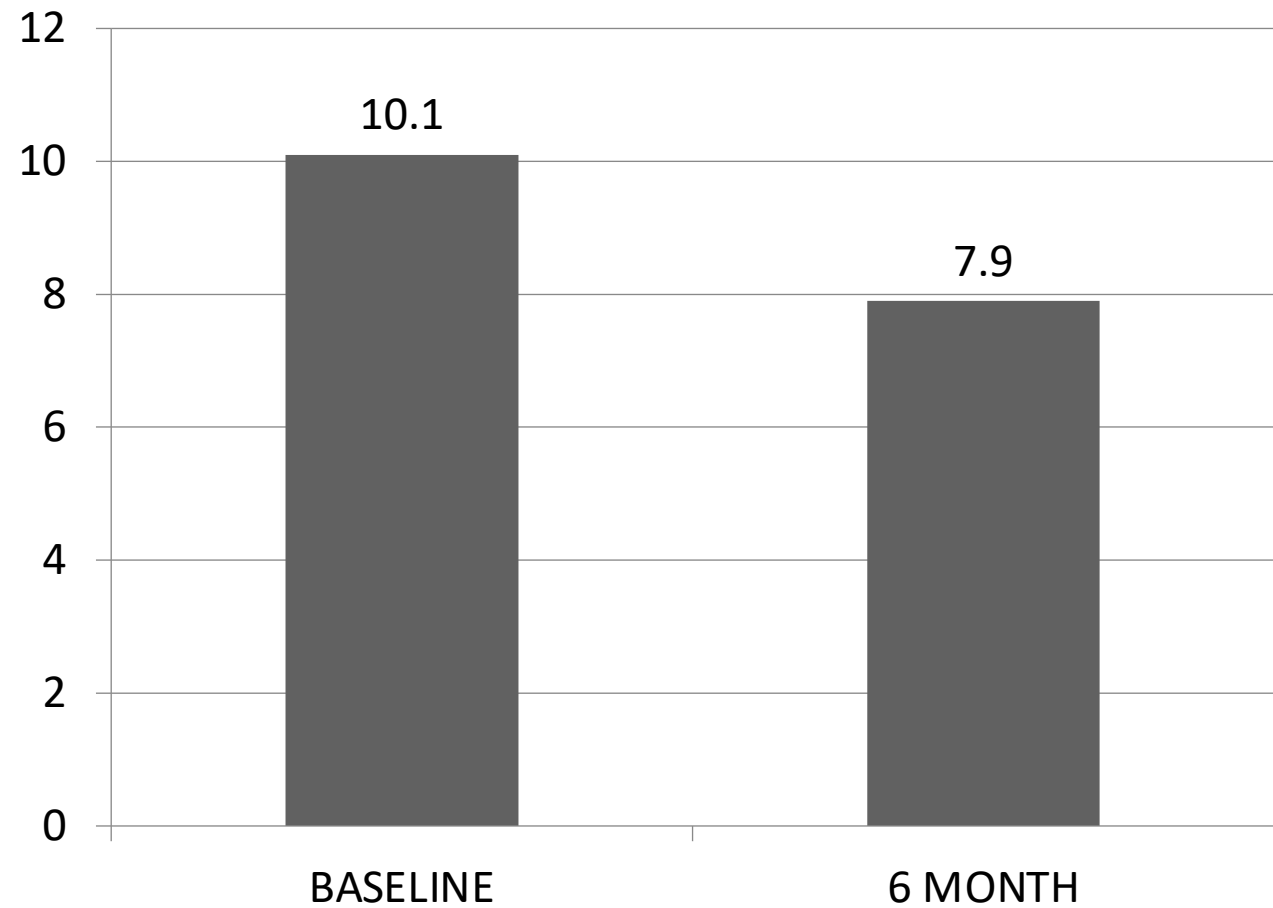
Age: Mean = 22.18 years

Gender: 71% men, 29% women

Education: 23% completed HS; 57% started college

Treat
symptoms
effectively

DSM Symptom Rating Scale (0-48)

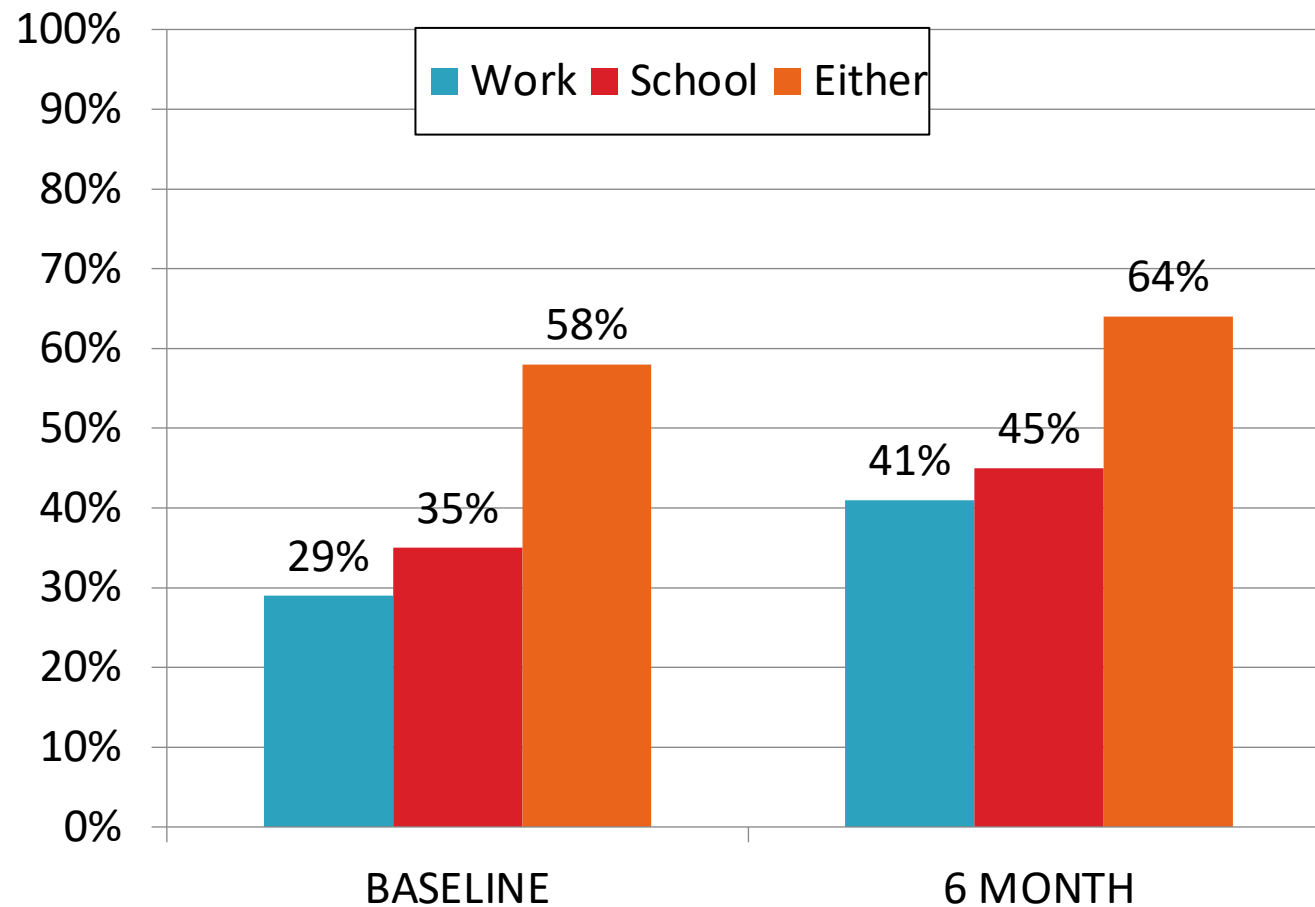


Ensure safety and basic needs

	Baseline	6 Months
Homelessness	0%	1%
Recent victim of crime/petitioning for restraining order	3%	0%
Recent arrest/subject of restraining order/other police involvement	10%	8%

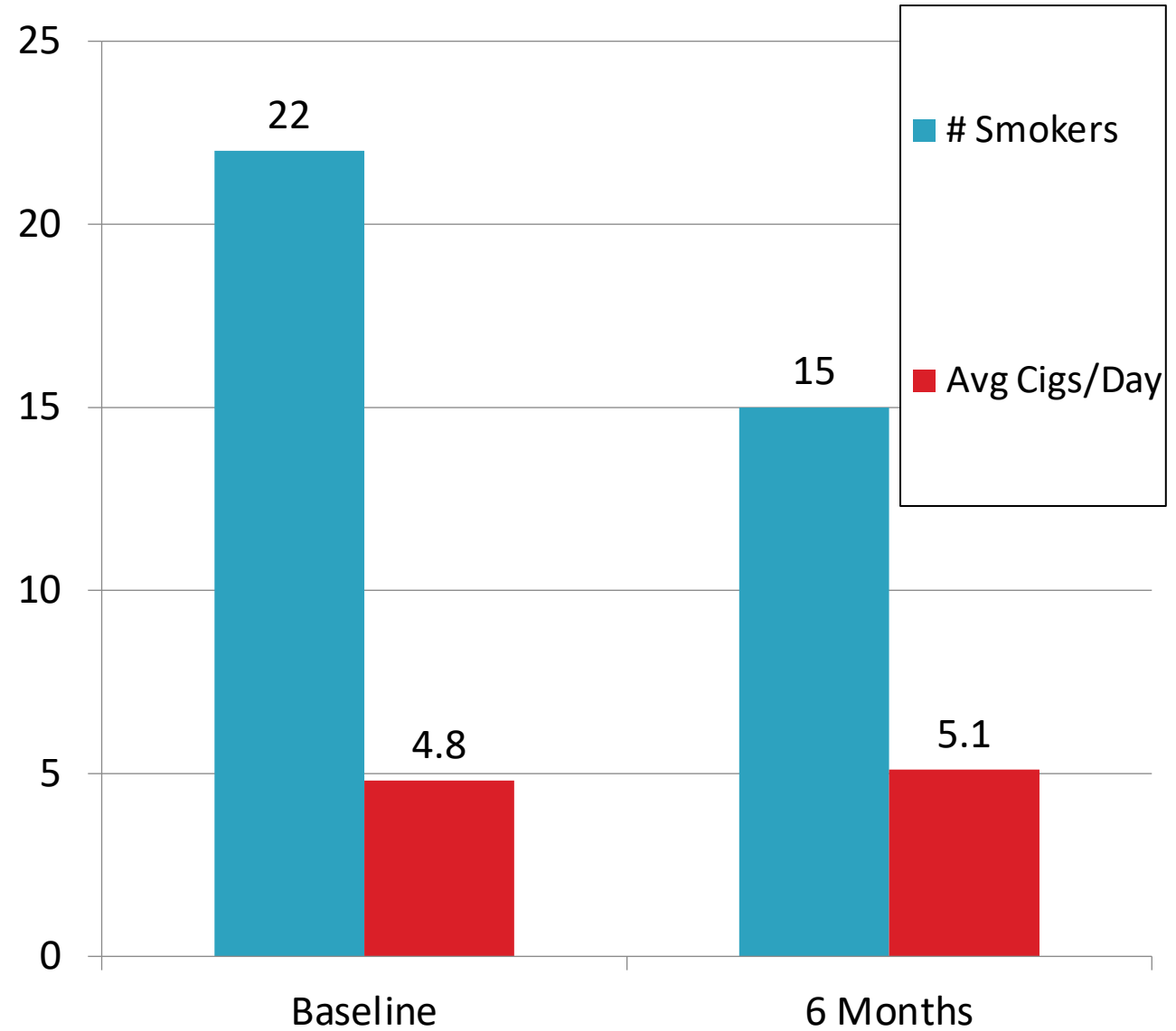
Prevent
disability

Past Month Participation in Work/School



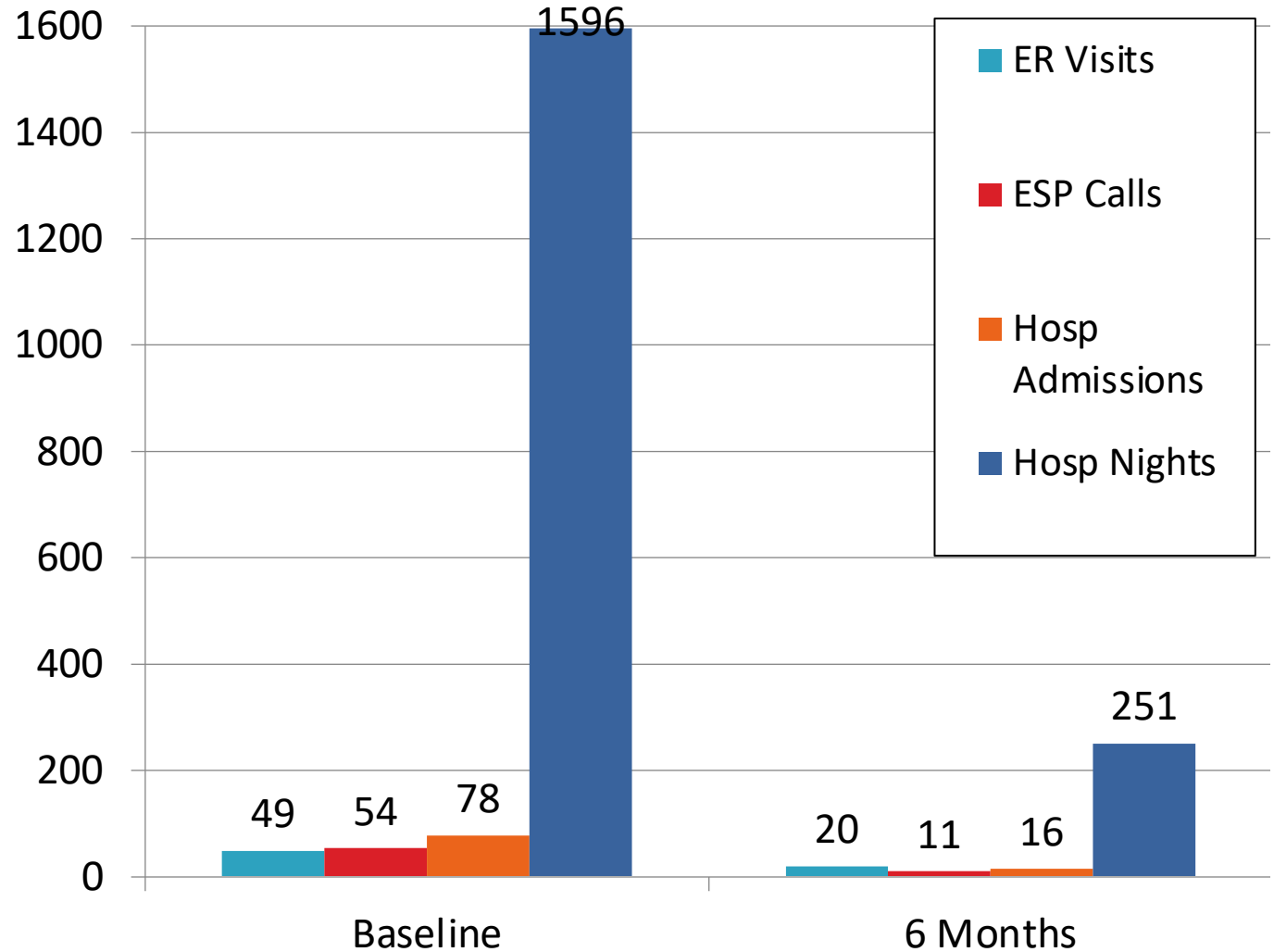
Prevent
medical
morbidity

Smoking Status and Daily Cigarettes



Alleviate
needs for
more
intensive
care

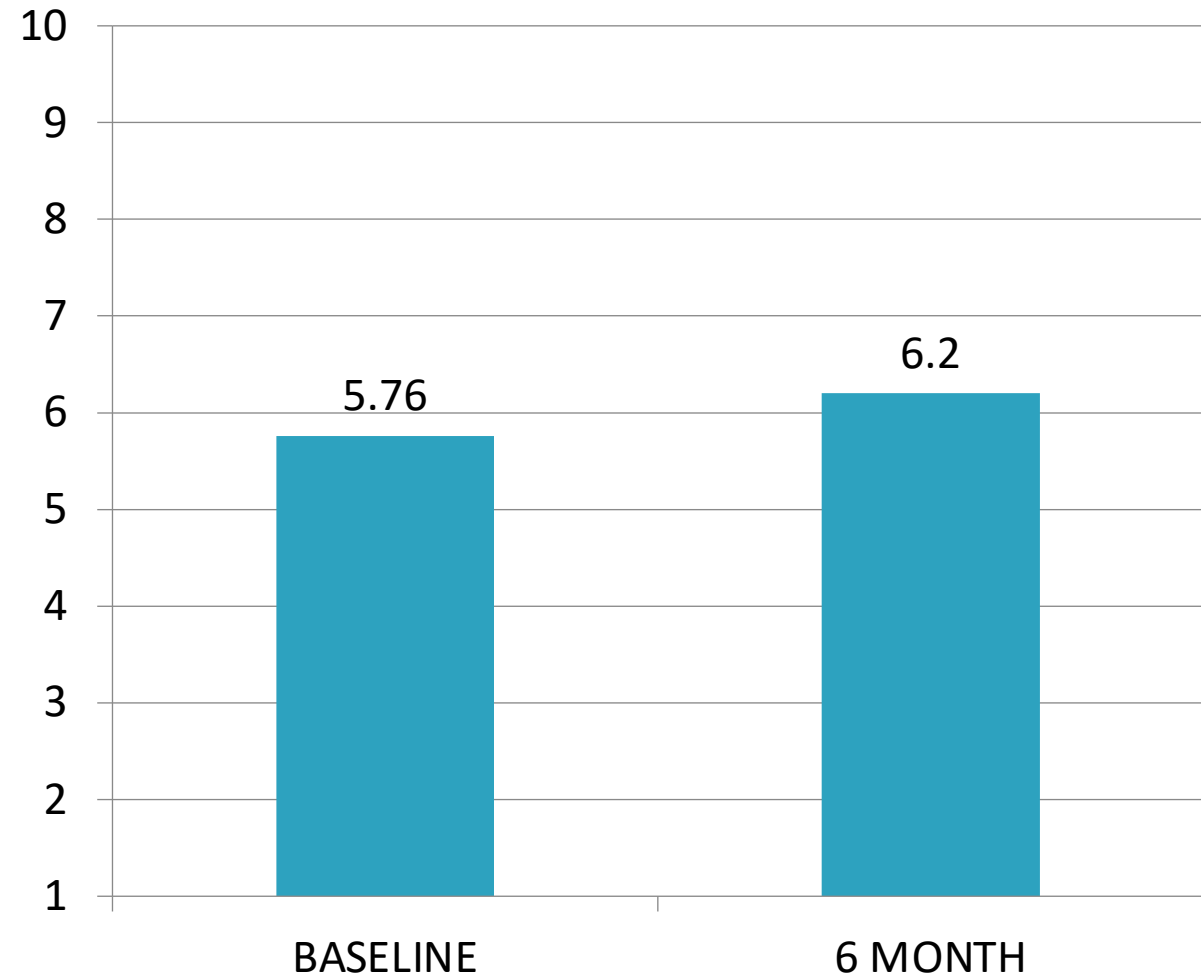
Crisis Service Utilization



**Data reflects past 6 months of service utilization*

Improve
quality of life

Global Functioning – Social (1-10)



**A score of 6 or more requires having at least one friend*



Challenges
&
Opportunities

What qualifies
as an EBP?



Implementation



Adaptation



Innovation

What are best practices for implementation?



Many “EBP”s are difficult to implement



“Implementation Science” is a relatively new field



Treatments not always designed with the end user in mind

How do we
learn from
MAPNET


MAPNET data
consortium?

EHR-based studies?

Implementation
questions?



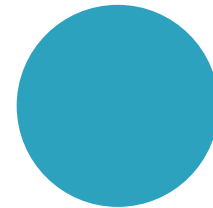
I'm not supposed to say
this but...

The background features three overlapping teal circles of varying shades, creating a Venn diagram-like effect. A dark grey horizontal bar is centered across the middle of the circles.

Outcomes for most patients remain poor:
We need to innovate WHILE we implement

To really impact the prognosis in FEP,
we need to:

- Shorten DUP
- Enhance retention and adherence in treatment
- Continue to improve treatments (medical & psychosocial)



New & Ongoing Projects



STEP-Early Detection

Can an early detection public health campaign shorten time to first antipsychotic and referral to specialized care?



Outreach and Screening

Can a brief training on assessment and referral for emerging psychoses change provider behavior?



Motivational Interviewing for Loved Ones

Can parents use MI techniques to more effectively facilitate treatment seeking and engagement?

MAPNET
Team
& Partners



Thank You!

References

1. Heijnen, R. K., Goldstein, A. B., & Azrin, S. T. (2014). Evidence-based treatments for first episode psychosis: components of coordinated specialty care. White paper. Bethesda: National Institute of Mental Health.
2. Addington, J., Heijnen, R. K., Robinson, D. G., Schooler, N. R., Marcy, P., Brunette, M. F., ... & Robinson, J. A. (2015). Duration of untreated psychosis in community treatment settings in the United States. *Psychiatric Services*, 66(7), 753-756.
3. Penttilä, M., Jääskeläinen, E., Hirvonen, N., Isohanni, M., & Miettunen, J. (2014). Duration of untreated psychosis as predictor of long-term outcome in schizophrenia: systematic review and meta-analysis. *The British Journal of Psychiatry*, 205(2), 88-94.
4. Thompson, P. M., Vidal, C., Giedd, J. N., Gochman, P., Blumenthal, J., Nicolson, R., ... & Rapoport, J. L. (2001). Mapping adolescent brain change reveals dynamic wave of accelerated gray matter loss in very early-onset schizophrenia. *Proceedings of the National Academy of Sciences*, 98(20), 11650-11655.
5. Schoenbaum, M., Sutherland, J. M., Chappel, A., Azrin, S., Goldstein, A. B., Rupp, A., & Heijnen, R. K. (2017). Twelve-month health care use and mortality in commercially insured young people with incident psychosis in the United States. *Schizophrenia bulletin*, 43(6), 1262-1272.
6. Shiers, D. (2018). Right from the Start: A resource to improve the physical health of people experiencing psychosis. Great Manchester West Early Intervention Service & Psychosis Research Unit.
7. Simon, G. E., Stewart, C., Yarborough, B. J., Lynch, F., Coleman, K. J., Beck, A., ... & Hunkeler, E. M. (2018). Mortality rates after the first diagnosis of psychotic disorder in adolescents and young adults. *JAMA Psychiatry*, 75(3), 254-260.
8. Correll, C. U., Galling, B., Pawar, A., Krivko, A., Bonetto, C., Ruggeri, M., ... & Hui, C. L. (2018). Comparison of early intervention services vs treatment as usual for early-phase psychosis: a systematic review, meta-analysis, and meta-regression. *JAMA psychiatry*, 75(6), 555-565.
9. Kane, J. M., Robinson, D. G., Schooler, N. R., Mueser, K. T., Penn, D. L., Rosenheck, R. A., ... & Marcy, P. (2015). Comprehensive versus usual community care for first-episode psychosis: 2-year outcomes from the NIMH RAISE early treatment program. *American Journal of Psychiatry*, 173(4), 362-372.