Moving Early Psychosis Intervention from Research to On-The-Ground Community Practice

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OnTrackNY
Acknowledgements

OnTrackNY Central Staff
OnTrackNY Teams
OnTrackNY Clients
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Epidemiology Department, Mailman School of Public Health
Disclosures

• None
Welcome to NY!
Welcome to NY!
Objectives

• Background/History
• RE-AIM framework
• Walking through the framework with OnTrackNY
• Looking ahead
The “Recovery After an Initial Schizophrenia Episode” initiative seeks to fundamentally alter the trajectory and prognosis of schizophrenia through coordinated and aggressive treatment in the earliest stages of illness.
NIMH RAISE Projects

Randomized clinical trial
- John Kane
- Nina Schooler
- Delbert Robinson

Implementation study
- Lisa Dixon
- Susan Essock
- Jeffery Lieberman
- Howard Goldman
2013: What Did New York Learn From RAISE Connection Program?

• Successful creation of multi-disciplinary teams
• Recruitment feasible
• Engagement effective
• Outcomes achieved
• Community support
• Financing a work in progress
OnTrackNY is an innovative treatment program for adolescents and young adults who recently have had unusual thoughts and behaviors or who have started hearing or seeing things that others don’t. OnTrackNY helps people achieve their goals for school, work, and relationships.
OnTrackNY Team Intervention

**Outreach/Engagement**
- Evidence-based Pharmacological Treatment and Health
  - Supported Employment/Education
  - Recovery Skills (SUD, Social Skills, FPE)
  - Psychotherapy and Support
  - Family Support/Education
  - Suicide Prevention

**Shared Decision Making**

**Peer Support**

Recovery

4.0 FTE
Eligibility Criteria

- **Age:** 16-30

- **Diagnosis:** Primary psychotic disorder. Diagnoses include: Schizophrenia, Schizoaffective disorder, Schizophreniform disorder, Other specified schizophrenia spectrum and other psychotic disorder, Unspecified schizophrenia spectrum and other psychotic disorder, or Delusional disorder

- **Duration of illness:** Onset of psychosis must be ≥ 1 week and ≤ 2 years

- **New York State Resident** (applicable to only OnTrackNY sites)
Growth of OnTrackNY Sites

- MHBG 10% Set aside
- MHBG 5% Set aside
- SAMHSA HT Grant
- RAISE Connection: 2010-2013

- Replace 2 poor performing Sites; New SAMHSA HT Grant
Buffalo (2*)
1 NAV

Syracuse

Rochester

Albany

Middletown

Peekskill

Yonkers

Long Island (2)

13 Programs*
What is the Center for Practice Innovations?

• CPI supports the NYS OMH mission to promote the widespread availability of evidence-based practices to improve mental health services, ensure accountability, and promote recovery-oriented outcomes for recipients and families.

• CPI serves as a key resource to OMH by spreading those practices identified by OMH as most critical to accomplish OMH’s system-transformation initiatives.

• CPI is a Purveyor and Intermediary Organization
Purveyor Organization

• An individual or group of individuals representing a practice that work to implement a model program with fidelity and good effect
• Typically involved in the implementation of a specific EBP

Intermediary Organization

• An individual or group of individuals that acts as an intermediary between two or more entities to promote the implementation of model programs with fidelity and good effect
• Defined as having a broader role to promote implementation including building the capacity of providers or systems to implement and sustain best practice models
Timeline: CPI’s Initiatives

FIT Focus on Integrated Treatment
Whole Treatment. Whole Recovery. Whole Lives.

OnTrack NY

IPS Individual Placement and Support
Working with you to help you work.

UNIFORM NETWORK PROVIDER TRAINING


ACT Institute
for Recovery-Based Practice

WSM Wellness Self-Management

SP-TIE Suicide Prevention-Training Implementation Evaluation

Center for Practice Innovations at Columbia Psychiatry
New York State Psychiatric Institute
Building best practices with you.

OCD
Cognitive Health
Psychopharm
HCBS
Consolidated Framework for Implementation Research (CFIR)

Offers an overarching typology to promote implementation theory
Replicating Effective Programs Framework

Figure 1
Replicating effective programs framework for health care interventions. This figure outlines the Replicating Effective Programs (REP) process as it can be applied to health care interventions.

**Outer Setting** – policies, regulations, and fiscal reimbursements to programs must align to support the change; State authorities must provide a clear message of importance to programs.

**Inner Setting** – intervention must address felt need in programs; leadership must be on board with the changes, and the program must support a culture of change; interventions have to fit into modifiable limits of program structure, workflow, and processes; resources must be allocated to the change (especially time).

**Pre-implementation**
- Understand policies, regulations, and fiscal incentives to align them as closely as possible to the proposed change
- Work with State to communicate clear message to programs

**Implementation**
- Targeted interventions to policies and incentives to increase participation
- Work with State to communicate clear message of continued support (including guidance documents)

**Maintenance and Evolution**
- Advise State on policies, regulations and fiscal incentives that would improve uptake
- Encourage state to communicate clear message of support for maintenance

**Pre-implementation**
- Understand program-level commitment
- Understand barriers and incentives for program participation
- Engage program leadership

**Implementation**
- Training – advise programs on staff selection, provide high quality training, support supervisors in a coaching role
- Provide technical assistance to support implementation
- Evaluate the implementation process and practitioner and client outcomes – provide feedback to programs

**Maintenance and Evolution**
- Reach out to programs that have not yet adopted the intervention
- Refine original intervention package as necessary
OnTrackNY Outer Setting

**Outer Setting** – policies, regulations, and fiscal reimbursements to programs must align to support the change; State authorities must provide a clear message of importance to programs.

**Pre-implementation**
- Understand relevant policies and regulations, e.g. licensing issues for programs to serve youth and young adults
- Develop fiscal plan of support (may include OMH or SAMHSA grant support and billing revenue; CCBHC and state-operated services as alternative models)
- OMH (through field offices) communicates clear message to agencies regarding importance of the program

**Implementation**
- OMH provides clear guidance on issues as needed, e.g. importance of providing services regardless of ability to pay; obligation of agencies to remain open to enrollment and provide clinical coverage during gaps in staffing

**Maintenance and Evolution**
- Work with OMH and MCO’s to develop model(s) for financial sustainability, including eligibility for individuals with FEP for HARPs and HCBS services; bundled case rate
- Medicaid MCO’s will be required to identify and report to OMH on members with FEP and referral to Coordinated Specialty Care

**Inner Setting**
OnTrackNY Inner Setting

Inner Setting – intervention must address felt need in programs; leadership must be on board with the changes, and the program must support a culture of change; interventions have to fit into modifiable limits of program structure, workflow, and processes; resources must be allocated to the change (especially time).

Pre-implementation
- Engage program leaders. Leadership must support model: team approach with low caseload, high risk pop, SDM model, assertive outreach, community work
- Understand program level commitment for staffing, participation in training & data collection, supervision
- Understand barriers & facilitators to implementation (e.g. state programs w/ civil service rules, staffing policies or union rules that may impact ability for staff to be on call, pre-existing relationships with referral sources)

Implementation
- Hire or re-allocate staff. Understand qualities needed among staff (engaging, youth and family friendly, recovery orientation)
- Provide team-based and role-specific training in the OnTrackNY model
- Provide technical assistance to support implementation (learning collaborative structure combining team-wide and role-specific calls and online curriculum on learning management system)
- Collect client-level and program-level data and provide feedback to teams
- Assess fidelity and support teams in enhancing high-fidelity implementation of the model
- Teams evaluate training and technical assistance

Maintenance and Evolution
- Support development of new OnTrackNY teams to enhance reach
- Refine intervention as needed, e.g. added cognitive health component to the model, enhanced training and resources in cultural competence and working with LGBTQ participants, piloting screening tool for tobacco and substance use
- Refine methodology for training and technical assistance as needed (e.g. creation of monthly statewide webinar series)
- Refine fidelity scale as needed

Outer Setting
Program Set Up

Admin Calls w/Agency Staff and TL

Initial Training

3-day overview of principles and model | In person 2-day SEES training | Remote MD/RN training | Remote MIRECC GAF & Data Form Training

Building Competency (2 years)

Frequent individual and collaborative role-based calls | Monthly Care Consultation Calls | LMS | Use of data & fidelity reports to highlight problems and strengths

General Maintenance and Ongoing Support (2 yrs +)

Reduce collaborative calls | Care Consultation Calls | Use of data & fidelity reports to highlight problems and strengths
OnTrackNY
Data Flow

OMH
Commissioner, Sr. Medical Officer
Field Offices, PME, NKI

OnTrackCentral
Intermediary and Purveyor Organization

Fidelity, Monthly Reports

Teams  Clinics  Agencies

Quarterly Forms: Program Components

Self-report Forms

Data Science

OnTrackNY Clients and Families
Flow of Stakeholder Feedback

OMH Commissioner, Sr. Medical Officer
Field Offices, PME, NKI

OnTrackCentral
Intermediary and Purveyor Organization

Executive Committee
(Includes Fam/Cons Advocates)
Evaluation of TA & Solicitation of Needs

Teams
Clinics
Agencies

OnTrackNY Clients and Families

Youth and Family Council

QI Activities
RE-AIM

**Figure 1.** Elements of the RE-AIM Framework

- **Maintenance:** How do I incorporate the intervention so it is delivered over the long-term?
- **Reach:** How do I reach the targeted population?
- **Adoption:** How do I ensure the intervention is delivered properly?
- **Implementation:** How do I develop organizational support to deliver my intervention?
- **Effectiveness:** How do I know my intervention is effective?
Why RE-AIM?

- Grew from need for improved reporting on issues related to implementation and external validity of health promotion and health care research.
- Developed partially as a response research conducted under optimal efficacy conditions—not real-world complex settings.
- Initially designed to help evaluate interventions and public health programs, to produce a more balanced approach to internal and external validity, and address key issues important for dissemination and generalization.

R is for Reach: How Do I Reach the Targeted Population?

- The number of eligible people who are enrolled and the extent to which the program is serving the population in need.

What is Possible for OnTrackNY?
Roadmap for Pathway to Care

Onset of Symptoms

Help Seeking

Referral to Mental Health Services (Could receive criterion treatment in MHS)

Referral to EIS

Demand Side (Target consumers, families)

Supply Side (Target providers, linkage)

Also consider criminal justice, child welfare
OnTrackNY Strategy

- Eligibility limited to individuals within two years of onset
- Focus on post help-seeking to start
- Fund and monitor outreach activities
- Develop “DUP Toolkit” to train providers
- Work with Medicaid MCO’s
- Use social media/youth leaders
- Designate team member with responsibility
% of Clients Referred From Different Sources and Outcome of Referral (05/15-07/19)

- Total Referrals: 6,091
- Psychiatric inpatient unit: 44%
- Outpatient MH provider: 24%
- Self/Family: 19%
- *Other: 9%
- Community organization: 2%
- ER: 2%

*Other includes School system, Legal system, Another OnTrackNY program, NYC START and MCO.

Outcome of Referral:

1. Person not contacted: 8%
2. Client/Family declined to continue: 10%
3. Screening completed-Individual not eligible: 33%
4. Screening completed-potentially eligible, not progress beyond: 11%
5. Eligibility evaluation completed-found not eligible: 13%
6-1. Eligibility eval. completed-found eligible-not admitted: 3%
6-2. Eligibility eval. completed-found eligible-admitted: 23%
Characteristics of OnTrackNY Enrollees through 9/1/2019 (N=1655)

- Mean age= 21, Median= 21, 14% under 18
- 73% Male, 26% Female, <1% Transgender
- 26% Non-Hispanic White, 34% Non-Hispanic Black, 26% Hispanic 9% Asian, 2% Multiracial, 7% Missing
- 53% Medicaid, 35% Private, 4% Uninsured, 8% Other* (47% vs 42% among first 325 clients)
- 85% Live with parents, 5% Homeless
- Time since onset of psychosis 7.5 (5.3) mo
Comparison of Demographic Composition of OTNY Participants with NYS

% of Total

- Non-Hispanic White
- Hispanic
- Non-Hispanic Black
- Asian
- Two or More
- Other

NYS  OnTrackNY
Incidence of Psychosis From Medicaid Data (2013-7)

<table>
<thead>
<tr>
<th>Characteristic BH=Behavioral Health</th>
<th>Incidence of Putative Cases Per 100,000 (N)</th>
<th>Confirmed by MCO Review (%)</th>
<th>Adjusted Incidence Rate (Per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Diagnosis Type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia Spectrum</td>
<td>97</td>
<td>72</td>
<td>70</td>
</tr>
<tr>
<td>Other Psychosis</td>
<td>215</td>
<td>64</td>
<td>137</td>
</tr>
<tr>
<td>Affective Psychosis</td>
<td>142</td>
<td>48</td>
<td>68</td>
</tr>
<tr>
<td>First Service Type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BH— ED or Inpt</td>
<td>172</td>
<td>62</td>
<td>106</td>
</tr>
<tr>
<td>Non-BH-ED or Inpt</td>
<td>32</td>
<td>43</td>
<td>14</td>
</tr>
<tr>
<td>OP-BH</td>
<td>199</td>
<td>62</td>
<td>123</td>
</tr>
<tr>
<td>OP-General</td>
<td>51</td>
<td>64</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>60</td>
<td>272</td>
</tr>
</tbody>
</table>

Mean Duration of Untreated Psychosis for OnTrackNY (N=779)

**Onset of psychosis**

- Mean (SD) = 73.7 days (110.8)
- Median = 27 days

**First Tx Contact**

- Mean (SD) = 160.6 days (178.7)
- Median = 83 days

**Entry into OTNY**

**Time from onset of psychosis to entry into OTNY**

- Mean (SD) = 231.2 days (187.7)
- Median = 169 days

Marino et al. Early Intervention Psychiatry in press
Evaluation of “Reach”

- Increasing availability across the state
- Numbers served (1605) and slots (~960)
  Estimated need: at least 2000, maybe a lot more
- DUP: 7.5 months exceeds goal of no more than 3 months
- Over-reliance on hospitals and mental health system for recruitment
Lessons Learned

• Tension between reaching out to high-yield referrers (inpt) and doing extensive community work so that individuals are referred before a first admission

• Impact of turnover (within teams and at outside agencies) on referral relationships

• MCO’s can identify members with FEP - but differences across plans in how to do so

• Rural areas more challenging than urban
E is for Effectiveness: How Do I Know My Program is Effective?

- Effectiveness is the impact of an intervention on outcomes, including potential negative effects, quality of life, and economic outcomes.

Integrated Coordinated Specialty Care

Key Service Elements

• Case management, Supported Employment/Education, Psychotherapy, Family Education and Support, Pharmacotherapy and Primary Care Coordination

Core Service Processes

• Team-based approach, Specialized training, Community outreach, Client and family engagement, Mobile outreach and Crisis intervention services, Shared decision-making

% Receiving Treatment Over Time (7/1/19)

- At 3 mon.: 95%
- At 6 mon.: 85%
- At 9 mon.: 78%
- At 12 mon.: 72%
- At 15 mon.: 66%
- At 18 mon.: 62%
- At 21 mon.: 57%
- At 24 mon.: 51%

Statewide

<table>
<thead>
<tr>
<th>Denominator</th>
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<tbody>
<tr>
<td>At 3mon.</td>
</tr>
<tr>
<td>At 6mon.</td>
</tr>
<tr>
<td>At 9mon.</td>
</tr>
<tr>
<td>At 12mon.</td>
</tr>
<tr>
<td>At 15mon.</td>
</tr>
<tr>
<td>At 18mon.</td>
</tr>
<tr>
<td>At 21mon.</td>
</tr>
<tr>
<td>At 24mon.</td>
</tr>
<tr>
<td>1,504</td>
</tr>
<tr>
<td>1,384</td>
</tr>
<tr>
<td>1,291</td>
</tr>
<tr>
<td>1,178</td>
</tr>
<tr>
<td>1,076</td>
</tr>
<tr>
<td>975</td>
</tr>
<tr>
<td>888</td>
</tr>
<tr>
<td>766</td>
</tr>
</tbody>
</table>
% With Hospitalization in Past 3 months (07/26/19)

Inpatient Hospitalizations

Statewide

<table>
<thead>
<tr>
<th>Time</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM</td>
<td>16%</td>
</tr>
<tr>
<td>3m. F/U</td>
<td>10%</td>
</tr>
<tr>
<td>6m. F/U</td>
<td>9%</td>
</tr>
<tr>
<td>9m. F/U</td>
<td>9%</td>
</tr>
<tr>
<td>12m. F/U</td>
<td>8%</td>
</tr>
<tr>
<td>15m. F/U</td>
<td>9%</td>
</tr>
<tr>
<td>18m. F/U</td>
<td>10%</td>
</tr>
<tr>
<td>21m. F/U</td>
<td>8%</td>
</tr>
</tbody>
</table>

n=1,583 n=1,338 n=1,096 n=916 n=764 n=644 n=547 n=482
MIRECC GAF Symptom Scores (7/19)

MIRECC GAF - Symptoms Score

Avg. GAF Sym Score

31 50 54 55 56 58 57 59

n=1.583 n=1.338 n=1.096 n=916 n=764 n=644 n=547 n=482

ADM 3m. F/U 6m. F/U 9m. F/U 12m. F/U 15m. F/U 18m. F/U 21m. F/U
% in Work or School (07/1/19)

If Select cohort = "All Clients", "All Discharged" or "Currently Active", F/U's with small n (<25% of n at ADM) are not shown.
Trajectories (Social and Occ Fxning)

**Occupational Functioning**

- Converging: 57.95% (n = 543)
- High-Stable: 14.84% (n = 139)
- Moderate-stable: 17.82% (n = 167)
- Low-improving: 9.39% (n = 88)

**Social Functioning**

Follow-Up Time (Months)

GAF Scores
Evaluation

• Rates of participation in treatment, hospitalization, participation in school and work and social functioning are positive and promising relative to other studies, but must limit attribution given lack of control condition.

• Limited validation of data obtained from site clinicians
Lessons Learned

- It is possible to collect robust data in real world settings, but requires significant investment (in infrastructure and by sites)
- Understanding discharge is challenging; how to think about “program length”
- While positive outcomes are sustained in wide scale implementation beyond research context, substantial site level variation needs to be understood
- Staff turnover limits potential benefits of team maturity
A is for Adoption:
How Do I Develop Organizational Support to Deliver My Intervention?

• Adoption is the absolute number, proportion and representativeness of settings and intervention agents who are willing and able to initiate a program

# OnTrackNY Sites*

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FQHC</td>
<td>1</td>
</tr>
<tr>
<td>Hosp Based Private NFP</td>
<td>5</td>
</tr>
<tr>
<td>Health and Hospital Corp (NYC)</td>
<td>3</td>
</tr>
<tr>
<td>CMHC</td>
<td>10 (2 CCBHC)</td>
</tr>
<tr>
<td>State Operated Facility</td>
<td>4</td>
</tr>
</tbody>
</table>

* Two sites closed with difficulty implementing model
Principles Guiding the Expansion of OnTrackNY and Site Selection

- State-wide with regional representation
- Required to implement and maintain high fidelity to OnTrackNY
- Willingness to participate in CPI training and implementation and performance monitoring activities
- Bill all payers for reimbursable services.
- Ability to do outreach into the community to identify individuals experiencing FEP
- A strong recovery orientation and commitment to hiring individuals with lived experience of mental illness
- Experience providing care to youth (both children and young adults) that are early in a psychotic illness
Site Matters for Adoption Participation in Work and School

Select cohort="All Clients", "All Discharged" or "Currently Active"; F/Us with small n (<25% of n at ADM) are not shown.
## Clinician Ratings (N=67)

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been satisfied with the quality of the training and technical assistance</td>
<td>3.40</td>
<td>0.62</td>
</tr>
<tr>
<td>The material covered was useful to me for implementing my role(s) on the OnTrackNY team</td>
<td>3.37</td>
<td>0.62</td>
</tr>
<tr>
<td>The trainers were skillful and knowledgeable</td>
<td>3.66</td>
<td>0.59</td>
</tr>
<tr>
<td>The training and technical assistance were provided in an engaging manner which encouraged participation</td>
<td>3.30</td>
<td>0.79</td>
</tr>
<tr>
<td>I feel comfortable implementing the practices/approach covered</td>
<td>3.49</td>
<td>0.61</td>
</tr>
<tr>
<td>I feel I am able to implement my role(s) within the OnTrackNY model successfully to help participants and families</td>
<td>3.61</td>
<td>0.60</td>
</tr>
</tbody>
</table>

1- strongly disagree…4=strongly agree
Evaluation

- Reasonable breadth of program types and integration into services
- Gaps in rural areas
- Teams mostly able, but not 100%
- Training feedback generally positive with identifiable and notable gaps/needs
Lessons Learned

- Not all agencies are able to sustain program; staff turnover is one of the key problems.
- Continual need to determine agency-level support for team’s success (e.g., supervision, staffing) to determine sustainability of program.
- Provision of strong, continual technical assistance that is flexible enough to address individual team issues or adaptations across time.
- Employing a conservative approach towards approval of significant changes to model.
- Value in using learning collaboratives so that sites can learn from each other.
I is for Implementation: How Do I Ensure that the Intervention is Being Delivered Properly?

• Implementation refers to the intervention agents’ fidelity to the various elements of an intervention’s protocol. This includes consistency of delivery as intended and the time and cost of the intervention.

Implementation:

• Fidelity, Fidelity, Fidelity
• Evolving strategy that requires data collection and on-site review
OnTrackNY Fidelity Scale

• 25 Domains, comprised of 79 sub-items
• One “critical” sub-item per domain that must be met to meet fidelity for that domain

• Data Sources
  • Client- and program-level data, collected quarterly (51 items)
  • Site Visits (39 items)
    • Participant and family member interviews
    • Team meeting observation
    • Staff interviews
    • Review of client charts and program records
## OnTrackNY Fidelity Approach: Domains

<table>
<thead>
<tr>
<th>Domain</th>
<th>Practice Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staffing &amp; Roles</td>
<td>Prescribing Practices</td>
</tr>
<tr>
<td>Team Integration</td>
<td>Case Management</td>
</tr>
<tr>
<td>Team Communication</td>
<td>Metabolic Risk Factors</td>
</tr>
<tr>
<td>Eligibility Determination</td>
<td>Psychoeducation</td>
</tr>
<tr>
<td>Community Outreach</td>
<td>CBT/ MI-Based Interventions</td>
</tr>
<tr>
<td>Managing Referrals</td>
<td>Substance Use Treatment</td>
</tr>
<tr>
<td>Caseload</td>
<td>Trauma Assessment &amp; Treatment</td>
</tr>
<tr>
<td>Flexibility of Services</td>
<td>Working with Families</td>
</tr>
<tr>
<td>Assertive Outreach</td>
<td>Supported Employment &amp; Education Services</td>
</tr>
<tr>
<td>Crisis Services</td>
<td>Peer Specialist Services</td>
</tr>
<tr>
<td>Care Processes, Client Preferences &amp; SDM</td>
<td>Discharge</td>
</tr>
<tr>
<td>Initial Assessment &amp; Treatment Planning</td>
<td>Time-Limited Services</td>
</tr>
<tr>
<td>Safety Planning</td>
<td></td>
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</tbody>
</table>
Fidelity Findings to Date

• All teams submit data; 16 teams have had site visit & full assessment with new tool

• Most teams demonstrated high fidelity. Scores have ranged from 17-23 out of 24 domains (d/c domain is not being currently scored pending revisions)

• Most commonly unmet domains: metabolic screening, staffing, peer services, and managing referrals
# OnTrackNY Fidelity Scale: Sample Domains

<table>
<thead>
<tr>
<th>8. Flexibility of Services</th>
<th>Delivery of services in the community and flexible hours are provided to support engagement and service utilization.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRITICAL → 8a. Services in the Community: At least 10% of clients are seen in the community by at least one team member at least once each quarter in the past year (excluding services provided by the Supported Education and Employment Specialist).</td>
<td>Data (PME)</td>
</tr>
<tr>
<td>8b. Scheduling: Staff schedule shows availability of office time outside of 9am to 5pm for the scheduling of routine appointments (hours outside of 9-5 can be regularly scheduled, as-needed, or via phone) at least once monthly in the past year.</td>
<td>Data (Program Components Form)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Assertive Outreach</th>
<th>Proactive and diversified outreach strategies are designed to reduce missed appointments, engage clients, and minimize drop-outs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRITICAL → 9a. Assertive Outreach: Team has a concrete strategy to promote client engagement when clients miss appointments or show disinterest in services, which includes reaching out to people by various methods (e.g., phone, text, email, and home visits) to promote engagement in the past year.</td>
<td></td>
</tr>
</tbody>
</table>

**Probing questions for staff:** What does the team usually do when dealing with client disengagement and disinterest in services? What methods of communication or strategies are being utilized to increase engagement? Does the team have a policy about what to do if a client has not been heard from in the past month? Ask Primary Clinicians if they go out to the community to meet clients and what creative activities they might offer to increase engagement. *Request examples. Review participant records for documentation of assertive outreach.*

9b. Engagement: At least 70% of individuals are still enrolled after 1 year of enrollment. Data
% of Clients with Family Contact

21a. Family Participation (contact)

Expectation: For at least 50% of clients, at least one team member had contact with at least one member of the client’s family.

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<thead>
<tr>
<th>Team 2</th>
<th>2018 Q1</th>
<th>n=24</th>
<th>41%</th>
<th>2018 Q2</th>
<th>n=22</th>
<th>45%</th>
<th>2018 Q3</th>
<th>n=21</th>
<th>67%</th>
<th>2018 Q4</th>
<th>n=27</th>
<th>81%</th>
<th>2019 Q1</th>
<th>n=38</th>
<th>65%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>2018 Q1</td>
<td>n=528</td>
<td>75%</td>
<td>2018 Q2</td>
<td>n=536</td>
<td>77%</td>
<td>2018 Q3</td>
<td>n=512</td>
<td>78%</td>
<td>2018 Q4</td>
<td>n=580</td>
<td>76%</td>
<td>2019 Q1</td>
<td>n=629</td>
<td>80%</td>
</tr>
</tbody>
</table>

n: number of clients who had follow-ups during the quarter
## % of Clients Seen in the Community

### 8a. Services in the Community

Expectation: At least **10%** of clients are seen in the community by at least one team member (excluding SEES).

<table>
<thead>
<tr>
<th>Team</th>
<th>2018 Q1</th>
<th>2018 Q2</th>
<th>2018 Q3</th>
<th>2018 Q4</th>
<th>2019 Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td>19</td>
<td>17</td>
<td>17</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td><strong>%</strong></td>
<td>6%</td>
<td>-</td>
<td>-</td>
<td>26%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>35%</td>
<td>31%</td>
<td>31%</td>
<td>30%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statewide</th>
<th>2018 Q1</th>
<th>2018 Q2</th>
<th>2018 Q3</th>
<th>2018 Q4</th>
<th>2019 Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td>528</td>
<td>536</td>
<td>512</td>
<td>580</td>
<td>629</td>
</tr>
<tr>
<td><strong>%</strong></td>
<td>32%</td>
<td>35%</td>
<td>31%</td>
<td>32%</td>
<td>30%</td>
</tr>
</tbody>
</table>

\[n: \text{number of clients who had follow-ups during the quarter}\]
Monthly Data Reports Delivered to Team

E3. Education and Employment

Select cohort:
- All Clients
- Discharged
- Currently Active
- Admitted in Period
- Discharged in Period

Period begin date: 10/1/2015
Period end date: 8/31/2016

Select site(s):
(Statewide excludes HPC, T/WHCS/T/LENX/T/BRING/E/ERIE/ERIE-T)
- 01.BLV
- 04.HPR
- 04.HPC/T
- 05.BFCS
- 06.KEH
- 07.BSSH
- 08.ZICK
- 09.MHA
- 10.WHCS
- 10.WHCS/T
- 11.PAAS
- 13.SLX
- 14.ASL
- 15.BING
- 15.BING.E
- 16.EHC
- 17.IFH
- 18.LENX
- 18.LENX/T
- 20.MME
- 21.MONTE
- 22.RPC
- 23.SIPH
- 24.FRIE
- 24.FRIE-T
- 25.PEACH
- 26.BUS
- 29.FIP

% Enrolled in School or Employed

<table>
<thead>
<tr>
<th>% Enrolled in School or Employed</th>
<th>n=138</th>
<th>n=122</th>
<th>n=108</th>
<th>n=97</th>
<th>n=81</th>
<th>n=72</th>
<th>n=60</th>
<th>n=55</th>
<th>n=45</th>
<th>n=37</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM</td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>3m. F/U</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>6m. F/U</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
</tr>
<tr>
<td>9m. F/U</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
<td>42%</td>
</tr>
<tr>
<td>12m. F/U</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>15m. F/U</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>18m. F/U</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>21m. F/U</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>24m. F/U</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>27m. F/U</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
<td>43%</td>
</tr>
</tbody>
</table>

If select cohort is “All Clients”, “All Discharged” or “Currently Active”, F/U's with small n (< 1% of n at ADM) are not shown.

% Enrolled in School or Employed [For clients with at least two F/U]

<table>
<thead>
<tr>
<th>% Enrolled in School or Employed</th>
<th>n=114</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>3m. F/U</td>
<td>51%</td>
<td></td>
</tr>
<tr>
<td>6m. F/U</td>
<td>69%</td>
<td></td>
</tr>
</tbody>
</table>

Statewide

<table>
<thead>
<tr>
<th>% Enrolled in School or Employed</th>
<th>n=1,128</th>
<th>Baseline</th>
<th>First F/U</th>
<th>Most Recent F/U</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM</td>
<td>42%</td>
<td>60%</td>
<td>55%</td>
<td></td>
</tr>
</tbody>
</table>

New York State Psychiatric Institute
Building best practices with you.
Evaluation

• Ability to develop a fidelity process that is reasonable for training staff and teams
• Fidelity assessments have highlighted gaps observed less systematically by OnTrack Central Trainers
• Teams appreciate concrete fidelity guidelines and are receptive to feedback for making improvements
Lessons Learned

- Importance of developing a feasible fidelity process that uses a combination of pre-collected data and on-site review to reduce burden.
- Need for identifying key indicators within a multi-component model.
- Starting with data driven thresholds that can be modified as more data are collected and teams expand.
- In early phases, allowing the real world implementation inform the fidelity process.
M is for Maintenance: How Do I Incorporate the Intervention So it Can Be Delivered Over the Long Term?

- Maintenance is the extent to which a program or policy becomes institutionalized or part of the routine organizational practices and policies.
- Maintenance also has referents at the individual level defined as the long term effects of a program on outcomes 6 or months after the most recent intervention.

Maintenance

- Financing, financing, financing
- Ongoing training and technical assistance
- Measuring follow up after discharge
  - Appropriate length of intervention
  - Follow up treatment
## Financing: Iterative Models

<table>
<thead>
<tr>
<th>Year</th>
<th>Source</th>
<th>Site Changes</th>
<th>Funding model</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>State Funds</td>
<td>Four pilot sites start recruiting patients (MHA, NSLIJ, Kings County, WHCS)</td>
<td>Full coverage of personnel and some additional program funds. No billing of insurers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>State Funds, 5% Set Aside Block Grant, SAMSHA HT</td>
<td>Add five programs (Lakeshore, Parsons, Farmingville, Rochester, and Bellevue) from Block Grant and two programs (Hutchings (Syracuse), Jewish Board (NYC)) from HT grant.</td>
<td>Teams receive full cost less revenue from billing all payers. All programs to bill all insurers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>State Funds + 5% Set Aside Block Grant Addition + SAMSHA HT</td>
<td>Expand census of two initial sites for lower cost per client Partial funding for one new site (Lenox Hill)</td>
<td>Similar to above: base subsidy expanded with lower per client cost Billing required (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>State Funds + 10% Set Aside Block Grant Addition + SAMSHA HT</td>
<td>Add six mainstream programs (ACCESS: Supports for Living; Elmhurst HHC; IFH; Mercy Medical Center; Montefiore Medical Center; Staten Island University Hospital) Add one site at state operated facility (Binghamton)</td>
<td>Sites receive partial subsidy, billing expected; more at risk (6) One state operated facility with full state support (1) Direct funding of Navigate site (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>State Funds + 10% Set Aside Block Grant Addition + SAMSHA HT</td>
<td>Add one mainstream program (Pesach Tikvah)—replace one dropout Add one CCBHC program (SUS)</td>
<td>Sites receive partial subsidy, billing expected; more at risk (1) CCBHC Funding (1)</td>
</tr>
</tbody>
</table>

2016 Enhance 1 NAVIGATE site Erie County Medical Center;
Costs Exceed Revenue

**FIGURE 1.** Estimated monthly costs and revenues for seven coordinated specialty care clinic sites

- **Average cost per client per month:** $1375
- **Average revenue per client per month:** $622

Smith et al. Psych Services 2019, 70, 425-7
Evaluation

• Moving closer to financing model that may be sustainable, but still a ways to go
• Have good fortune of state support for technical assistance
• Notable gap in the issue of follow up care—but data emerging
Lessons Learned

• Financing is complex in both public sector and for privately insured
• Need for more developed approach to discharge/step down/follow up
Future Work: EPINET

• Reach: Prospect Project designed to identify individuals with CHR (Nossel, Landa), R34 to study routine screening in OP clinics (Landa); R34 Test link to criminal justice (Rikers)-(Compton) R34 Develop google search pathways (Birnbaum); Sociocultural Factors Influencing Pathways to Care among Asian Americans with First Episode Psychosis: A Pilot Study (Ngo)

• Effectiveness: Cognitive health R34 (Medalia); Optimizing health and prescribing R34 (Stroup); Reducing suicide R34 (Stanley); Treating Cannabis OPAL pilot (Marino); SBIR Game (Dixon); Assessing violence risk OPAL pilot (Rolin)

• Maintenance: Horyzons online platform OPAL pilot (Bello)
<table>
<thead>
<tr>
<th>Group Health Cooperative Model</th>
<th>Scanning &amp; Surveillance</th>
<th>Design</th>
<th>Implement</th>
<th>Evaluate</th>
<th>Adjust</th>
<th>Disseminate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A healthcare system that is willing to learn and identify gaps in quality and efficiency and solutions</td>
<td>Design of solutions includes key stakeholders to ensure that solutions meet their needs</td>
<td>Piloting or testing solutions (with early adopters or comparison group)</td>
<td>Evaluation of pilot results with feedback from all key stakeholders</td>
<td>Make program changes based on evaluation feedback</td>
<td>Dissemination of knowledge in a timely manner through evidence-based communications</td>
<td></td>
</tr>
</tbody>
</table>

| Questions to guide application and movement through LHS phases implementation | Do we have data from field-based practice that demonstrate achievement of benefit? | Does knowledge meet stakeholder needs? /Are modifications needed? | What resources are needed to implement knowledge or intervention? | What are the outcomes associated with implementation of this knowledge? | What are the implementation or adaptation lessons learned? | Are processes of in place to convey findings and gather data on uptake? |

<table>
<thead>
<tr>
<th>Application of Knowledge to Action Framework</th>
<th>Knowledge Inquiry</th>
<th>Action cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify problem and knowledge needed to address it</td>
<td>Adapt knowledge to local context Assess barriers to knowledge use</td>
<td>Select, tailor and implement knowledge and interventions Monitor knowledge use Evaluate outcomes</td>
</tr>
<tr>
<td></td>
<td>Select, tailor and implement knowledge and interventions</td>
<td>Sustain knowledge use</td>
</tr>
</tbody>
</table>
Thank you
Follow me on Twitter
@lisabdixon