Implementing Evidence-Based Quality Improvement to Improve Outcomes at Mental Health Clinics

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How to Improve Specialty Mental Health Care?

- Evidence-based practices often not used
  - routine outcomes much worse than expected
- Efforts to improve care have had limited success
- VA has improved care
  - a national leader for many indicators
  - but mental health has lagged
- Challenges
  - clinicians: often lack key psychosocial competencies
  - medical records: lack data on patient preferences, needs, outcomes, and use of psychosocial services
  - policy makers: unable to evaluate the value of care
EQUIP: Research – Operations Partnership

- Implement improved care for schizophrenia
  - 15 month clinic-level controlled trial
  - 4 VA networks (VISNs): each with 1 intervention and 1 control site
- Networks chose care targets to improve
  - competitive employment & weight
- Implementation strategies
  - implementation science, formative evaluation
  - Evidence-Based Quality Improvement (EBQI)
  - EBQI made possible with patient-facing kiosks
## EQUIP Team

<table>
<thead>
<tr>
<th>New York</th>
<th>Texas &amp; Louisiana</th>
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<tbody>
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<th>Texas</th>
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<td>Sherry Fairchild, PhD</td>
<td>Stacey Maruska, LCSW</td>
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<th>Los Angeles (Coordinating Site)</th>
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<td>Amy N. Cohen, PhD (co-PI)</td>
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<tr>
<td>Jennifer Pope, BS</td>
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<td>Youlim Choi</td>
<td>Stone Shih</td>
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<td>Paul Jung</td>
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Returning Patients to Competitive Employment

- 90% of individuals with schizophrenia are unemployed
- Increasing employment improves patient outcomes and has economic benefits
- Supported Employment (SE) is an evidence-based practice
  - found in national treatment guidelines
  - employment is 59% in SE vs. 19% in usual care
- But is rarely used
Design

- Clustered, clinic-level controlled trial
- Enrollment
  - 4 VA networks, 8 clinics
  - 171 staff (clinicians & administrators)
  - 801 patients
- Evaluation of both effectiveness and implementation
  - evaluate the effect (relative to usual care) of implementation on: provider competency, appropriate service use, and patient outcomes
  - evaluate processes of and variations in care model implementation and effectiveness
Implementation Tools & Strategies: Evidence-Based Quality Improvement (EBQI)

- Leadership support
- Clinical champion
- Quality manager
- QI Informatics support
- Provider/patient education
- Performance feedback
Routine Inquiry: Desire to Work

Patient Assessment System

- Audio, computer assisted self-interviewing
- Kiosk in waiting room for patients’ use at every visit
- Produces educational report for the patient
Patient Assessment System (PAS)

- results very similar to in-person assessment
- well accepted by patients
- easy to use
WORKING FOR PAY
You have reported that you are not working but might like to.

WHAT YOU CAN DO
You should discuss with your doctor a referral to a new VA program that helps people find and keep jobs.

YOUR WEIGHT
Your Body Mass Index (BMI) is 35.9. That means, for your height, you are overweight. Medications you are taking for your illness could be making this worse. It is important that you take prescribed medications.

WHAT YOU CAN DO
- Talk with your doctor about switching to a medication that does not cause weight gain.
- Talk to your doctor about a referral to your local wellness program. That program can help you lower your BMI by helping you to eat a balanced diet and get enough exercise.

How you are doing with......

![Graphs showing weight and difficulty with depression/daily functioning](image)

What you can do
You should discuss with your doctor a referral to a new VA program that helps people find and keep jobs.
## Reports for Clinicians and Managers

### Intervention Status

<table>
<thead>
<tr>
<th>Date</th>
<th>VISN</th>
<th>Supported Employment (SE)</th>
<th>Number of Patients</th>
<th>%</th>
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<tbody>
<tr>
<td>1/30/2009</td>
<td>A</td>
<td>Possible or definite interest on the PAS</td>
<td>53</td>
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<tr>
<td></td>
<td></td>
<td>Interest when discussed</td>
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<tr>
<td></td>
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<td>Referred to SE</td>
<td>43</td>
<td>81%</td>
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<tr>
<td></td>
<td></td>
<td>Seen by SE</td>
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<td>4%</td>
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### Benchmark Status

<table>
<thead>
<tr>
<th>Date</th>
<th>VISN</th>
<th>Patients seen by SE/Patients who want to work</th>
<th>%</th>
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<tbody>
<tr>
<td>1/30/2009</td>
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<td>Other Site</td>
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<td>YOUR SITE</td>
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Research Aims

◆ Evaluate the effect of intervention on
  – treatment appropriateness, patient outcomes, service utilization
  – patient interviews and utilization data at 0 and 12 months

◆ Using mixed methods, evaluate processes of care model implementation and effectiveness to strengthen implementation and to:
  – assess barriers and facilitators to implementation
  – understand how strategies and tools affect implementation
Methods: Process Evaluation

- Diagnostic evaluation
  - structure of care varied across sites
  - availability & quality of care varied across sites

- Process
  - characterize provider competencies, organizational readiness, barriers, facilitators
  - survey providers & managers at 0 and 12 months
  - interview providers & managers at 0, 6, and 12 months
  - monitor use of informatics
  - logs and minutes of implementation team meetings
  - field notes from local QI teams
Results: Process

◆ Clinician competencies
  – variable, often low, regarding employment services
  – improved with implementation

◆ Organization
  – collaboration between services was difficult (nutrition, primary care, specialty mental health)
  – strong support from managers
  – EBQI teams formed
  – data used to tailor implementation to site context

◆ Managers used data to reorganize care
  – hired another Supported Employment specialist
  – trained clinical staff to provide services
  – discharged patients who were not succeeding, or not appropriate
Results: Employment

◆ At baseline
  – 85% of patients unemployed
  – 51% want paid employment
  – 6% receive Supported Employment
  – use similar at intervention & control sites

◆ During implementation
  – more used Supported Employment at implementation sites (17% vs. 8%, p<.01)
  – patients using Supported Employment more likely to be employed (16% vs. 6%, p<.001)
Conclusions

- Successful partnership allowed for implementation to match healthcare organization goals & be tailored to local context
- Implementation strategies and tools improved clinician competencies and behaviors, treatment use and patient outcomes
- In mental healthcare, data from patient-facing kiosks was necessary for EBQI
References

Acknowledgements

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