Comparison of Outcomes between Consumers in Full-Service Partnership Programs and Usual Care in the California Public Mental Health System

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Partnership for Mental Health
UCLA

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MHSA – Background

Why Did It Pass?

• Passed in 11-04, Effective 01-05
  – 53.7% in favor
  – 46.3% against

• Majority was swayed by
  ▪ current state of MH system
  ▪ mentally ill homeless and incarcerated
  ▪ taxing of the rich

MHSA – Background

**Funding**

- 1% tax on adjusted gross income >$1 million
- 0.1% of taxpayers
- $3.7 billion has been approved/distributed based on county requests
Expenditures by Funding Category

- Community Services & Supports (CSS): 77%
- Workforce Education & Training: 5%
- Capital Facilities & Technological Needs: 3%
- Prevention and Early Intervention: 13%
- Innovation: 2%
- State Administration: 0%
MHSA was passed to reduce:

- Suicide
- Incarcerations
- Prolonged suffering
- School failure or dropout
- Unemployment
- Homelessness
- Removal of children from their homes
Full Service Partnerships
“whatever it takes”

- Housing
- Job training
- Peer support
- Life skills
Full Service Partnerships

Entry Criteria

1. Unserved and one of following:
   - Homeless/at risk of homelessness
   - Criminal justice
   - Frequent ER/hospital

2. Underserved and at risk for one of following:
   - Homeless
   - Criminal justice
   - Institutionalization
Study Questions

Do FSPs differ from usual care?

Global Rating
  • General satisfaction

Outcomes
  • Outcomes of services
  • Functioning
  • Arrests
  • Emergency room visits
Study Questions

Do FSPs differ from usual care?

Characteristics of Services

- Quality and appropriateness
- Participation in treatment planning
- Access
Analytic Approach

- Quasi-experimental
  - FSP vs. usual care
  - Instrumental variables (IV)
  - Pass statistical tests
    - Strength of IVs
    - Overidentification
    - Essential heterogeneity
Data

- Consumer Perception Survey (CPS) for adults and older adults from May 2005-May 2008
- Client and Service Information System (CSI)
- Data Collection and Reporting System (DCR)
- Total: up to approx 80,000 obs (60,000 individuals)
  FSP: up to approx 1,700 obs (1,400 individuals)
Counties Used in Analysis

85.4% of Population
### Results: FSP vs. Usual Care

<table>
<thead>
<tr>
<th>Category</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>General satisfaction</td>
<td>27%+ more satisfied</td>
</tr>
<tr>
<td>Outcomes of services</td>
<td>30% better outcomes (varies)</td>
</tr>
<tr>
<td>Functioning</td>
<td>27% better functioning</td>
</tr>
<tr>
<td>Quality and appropriateness</td>
<td>28%+ higher quality</td>
</tr>
<tr>
<td>Access</td>
<td>No difference</td>
</tr>
<tr>
<td>Participation in tx planning</td>
<td>No difference</td>
</tr>
<tr>
<td>Arrests</td>
<td>50%+ fewer arrests</td>
</tr>
</tbody>
</table>
Additional Study Question

Does FSP differ from usual care?

• Emergency room visits?
Analytic Approach

• Quasi-experimental
  – FSP vs. usual care
  – Account for all baseline factors
  – Conditional logistic regression
Data

• Short-Doyle/Medi-Cal Claims Data (SD/MC) January 1\textsuperscript{st}, 2007 – June 30\textsuperscript{th}, 2008

• Data Collection and Reporting System (DCR)

• Total 88,128 observations, 14,668 individuals (FSP: 4446 observations, 741 individuals)
Counties Used in Analysis

Humboldt
Sacramento
San Mateo
Santa Clara
Los Angeles
San Diego
Probability of Using Emergency Room: FSP vs. Usual Care (Stylized)

Odds reduced 50%+

95% Confidence Intervals
Study Questions

• Does participation in FSP change:
  – Living situation
  – Employment
  – Education
Event history analysis

- Estimate transition probabilities
- Adjusted for predictors
  - Age
  - Gender
  - Race/Ethnicity
  - Sources of financial support
  - Psychiatric diagnoses
  - Educational attainment
Petris Center analysis of data from the Data Collection and Reporting System and the Client and Service Information System from 2005-2009 for adults ages 26 or older in 43 California counties. This study included data from 7,028 FSP participants. FSP: Full Service Partnership program.
Residency of clients after 1 year in FSP

- Independent Living: 47%
- Supervised Residential: 27%
- Homeless: 0%
- Shelter: 5%
- Long-Term Care: 5%
- Medical Hospital: 1%
- Psychiatric Hospital: 6%
- Licensed Residential: 5%
- Jail: 4%
- FSP: Full Service Partnership program.

Petris Center analysis of data from the Data Collection and Reporting System and the Client and Service Information System from 2005-2009 for adults ages 26 or older in 43 California counties. This study included data from 7,028 FSP participants.
Statistical Methods
Employment and Education

• Education/Employment recovery goal
  – Logistic regression

• Starting education
  – Cox non-proportional hazard model

• Employment
  – Ordinal logistic regression

• Determine probabilities
# Employment Outcomes

<table>
<thead>
<tr>
<th>Time in FSP</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSP involvement for 6 months</td>
<td>12.5% increase in employment</td>
</tr>
<tr>
<td>FSP involvement for 1 year</td>
<td>25% increase in employment</td>
</tr>
</tbody>
</table>

Petris Center analysis of data from the Data Collection and Reporting System and the Client and Service Information System for 2005-2008 for clients aged 16 or older in 43 California counties. This study included data from 6,241 FSP participants. FSP: Full Service Partnership program.
# Education Outcomes

## Impact of FSP on Starting Educational Programs

<table>
<thead>
<tr>
<th>Factor examined</th>
<th>Starting Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>200% more likely to start education</td>
</tr>
<tr>
<td>FSP involvement for 1 year</td>
<td>30% more likely to start education</td>
</tr>
<tr>
<td>Current substance abuse problem</td>
<td>24% less likely to start education</td>
</tr>
<tr>
<td>Receiving substance abuse treatment</td>
<td>49% more likely to start education</td>
</tr>
</tbody>
</table>

Petris Center analysis of data from the Data Collection and Reporting System and the Client and Service Information System from 2005-2008 for clients aged 16 or older in 43 California counties. This study included data from 9,888 FSP participants. FSP: Full Service Partnership program.
Conclusions

• MHSA intended to move mental health care toward a recovery model & has been highly successful

• FSPs improve:
  – Housing
  – Employment
  – Education outcomes

• Compared to usual care, FSPs decrease:
  – Arrests
  – Mental health-related emergency room use
Conclusions (continued)

• Compared to usual care, FSPs cause large increases in:
  – Functioning
  – Outcomes of services
  – General satisfaction

• Evaluation of the FSP program needs to continue to determine the long-term impact

• County best practices need to be understood, documented and disseminated

• Cost-effectiveness studies should be done
General Satisfaction

• I like the services that I received here.
• If I had other choices, I would still get services from this agency.
• I would recommend this agency to a friend or family member.
Outcomes of Services

• I deal more effectively with daily problems.
• I am better able to control my life.
• I am better able to deal with crisis.
• I am getting along better with my family.
• I do better in social situations.
• I do better in school and/or work.
• My housing situation has improved.
• My symptoms are not bothering me as much.
Functioning

- I do things that are more meaningful to me.
- I am better able to take care of my needs.
- I am better able to handle things when they go wrong.
- I am better able to do things that I want to do.
- My symptoms are not bothering me as much.
Connectedness

- I am happy with the friendships I have.
- I have people with whom I can do enjoyable things.
- I feel I belong in my community.
- In a crisis, I would have the support I need from family or friends.
Arrests

• In the past MONTH, how many times have you been arrested for any crimes?
Access to Services

- The location of services was convenient.
- Staff were willing to see me as often as I felt it was necessary.
- Staff returned my calls within 24 hours.
- Services were available at times that were good for me.
- I was able to get all the services I thought I needed.
- I was able to see a psychiatrist when I wanted to.
Quality and Appropriateness

- Staff here believe that I can grow, change and recover.
- Staff encouraged me to take responsibility for how I live my life.
- Staff were sensitive to my cultural/ethnic background.
- Staff helped me obtain the information needed so that I could take charge of managing my illness.
- Staff told me what side effects to watch for.
- I was encouraged to use consumer-run programs (support groups, drop-in centers, crisis phone line, etc.).
- I was given information about my rights.
- Staff respected my wishes about who is, and is not to be given information about my treatment.
- I felt free to complain.
Participation in Tx planning

- I, not staff, decided my treatment goals.
- I felt comfortable asking questions about my treatment and medication
MHSA Bibliography


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MHSA Bibliography

