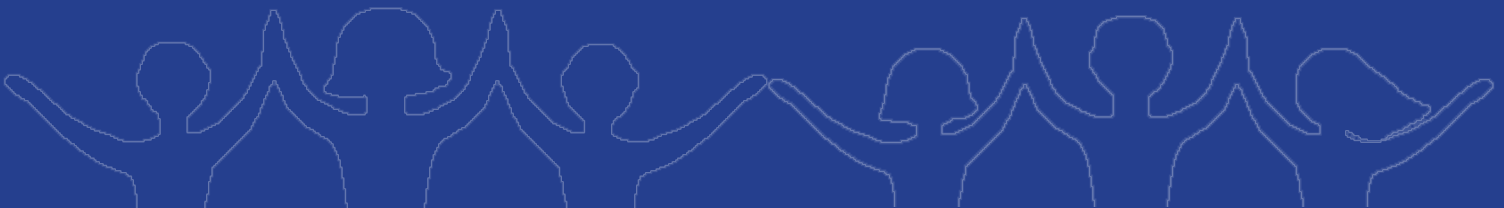

EVIDENCE ON THE EFFECTIVENESS OF FULL SERVICE PARTNERSHIP PROGRAMS IN CALIFORNIA'S PUBLIC MENTAL HEALTH SYSTEM



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May 2010

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This project was jointly funded by the California Department of Mental Health (Contract No: 08-78106-000)
and the California HealthCare Foundation (Award No. 04-1616).

Table of Contents

3	Executive Summary
6	Section 1.1: Introduction to the Mental Health Services Act and Full Service Partnerships
6	Section 1.2: What Does the 2004 Mental Health Services Act (MHSA) Do?
7	Section 1.3: California has Changed the Way Mental Health Services are Traditionally Provided
8	Section 1.4: Full Service Partnerships
9	Section 1.5: Criteria for Admission into Full Service Partnerships
12	Section 2: Data and Methods
13	Section 3: Comparison of Outcomes between Full Service Partnerships and Usual Care
15	Section 4: Comparison of Emergency Room Outcomes between Full Service Partnerships and Usual Care
16	Section 5: Housing Outcomes for the Full Service Partnership Programs
18	Section 6: Employment Outcomes for the Full Service Partnership Programs
19	Section 7: Education Outcomes for the Full Service Partnership Programs
20	Section 8: Conclusions and Recommendations
21	Appendix 1: List of Full Reports Evaluating Full Service Partnerships
22	References

Tables and Figures

- 9 **Figure 1:**
FSP Criteria for Transition Age Youth
- 10 **Figure 2:**
FSP Criteria for Adults
- 11 **Figure 3:**
FSP Criteria for Older Adults
- 12 **Figure 4:**
California Counties Used in the FSP evaluation studies
- 14 **Figure 5:**
Comparison of FSP Outcomes to Usual Care
- 15 **Figure 6:**
Odds of FSP Clients Using Mental Health-Related Emergency Room Services as compared to Usual Care
- 17 **Figure 7:**
Residency of Clients Beginning FSP
- 17 **Figure 8:**
Residency of Clients After 1 Year in FSP
- 18 **Table 1:**
Employment Outcomes in FSP Programs
- 19 **Table 2:**
Impact of FSP on Starting Educational Programs

Executive Summary

January 2010 marks the five-year anniversary of the passage of the Mental Health Services Act (MHSA) in California. The MHSA places a 1% tax on adjusted gross incomes over \$1 million to be used to expand access to the public mental health system by providing funding for new types of services including the Full Service Partnerships (FSP) program. The FSP programs provide consumers with a broad spectrum of services to aid in their movement towards recovery. This includes mental health services and supports, such as medication management, crisis intervention, case management and peer support. It also provides non-mental health services such as food, housing, respite care and treatment for co-occurring disorders, such as substance abuse. A key element of the FSP programs that are different from the current usual care is that it provides a more intensive level of care and a broader range of services.

As of February 26, 2010, \$3.7 billion has been approved/distributed based on county requests (Mayberg, 2010). In addition, approximately 25,000 clients have been served by FSPs and over 400,000 clients have been served in all MHSA programs. The MHSA mandates that programs emphasize strategies that reduce seven negative outcomes: suicide, incarceration, prolonged suffering, school failure or dropout, unemployment, homelessness and removal of children from their homes. Findings from this report address five of these seven negative outcomes.

To determine the effect of the FSP programs on the first step in becoming incarcerated, we evaluated whether arrest rates were different between clients in the FSP program and clients receiving usual care. To determine the effect of the FSP programs on prolonged suffering we examined whether clients in the FSP programs had different outcomes from clients receiving usual care with regard to functioning, measures of overall outcomes (outcomes of services) and the use of mental health-related emergency room services. We evaluated the impact of FSPs on school failure or dropout by looking at the effect of participating in the FSP program on starting an educational program. We assessed the effect of FSPs on unemployment by looking at employment outcomes among FSP participants. Finally, we analyzed the effect of FSPs on homelessness by looking at housing outcomes, including homelessness among FSP participants.

This report presents selected findings of our evaluation of the FSP programs through 2008 and early 2009. Complete findings are available in the six major evaluation reports produced by the Petris Center.

Homelessness and Independent Living

Our most significant finding relates to homelessness. Homeless individuals who enter the FSP programs are expected to stay homeless less than one day, and after one year of participation in the FSP programs the level of homelessness remains close to zero. The reduction of homelessness is especially significant as FSP participants are, by design, more likely to be homeless or at risk of being homeless when they enter the FSP programs as compared to the average consumer in the public mental health system.

Importantly, at the other end of the housing spectrum is independent living. After 12 months of participation in the FSP programs, the proportion of consumers living independently increases by approximately 20%.

Criminal Justice System Involvement

Entry into the criminal justice system is dramatically changed. The probability of being arrested drops by 56% due to participation in the FSP programs, as compared to those receiving usual care. This is a causal effect and is statistically significant at the 95% confidence level. This reduction of arrests is impressive as FSP participants are, by design, more likely to be involved with the criminal justice system when they enter a FSP program as compared to the average consumer in the public mental health system.

Prolonged Suffering

Full Service Partnerships also reduce prolonged suffering. Our results show that participating in the FSP programs strongly reduces the odds of using mental health-related emergency rooms as compared to consumers receiving usual care. After eight months of treatment, the odds of FSP participants using mental health-related emergency services are 57% lower than those receiving usual care. At 12 months of treatment, the odds of FSP participants using mental health-related emergency services are 67% lower than those receiving usual care.

Again, this result is highly significant as consumers entering the FSP programs are above-average users of mental health-related emergency services. These results are statistically significant at the 95% confidence level.

Not only do the FSP programs reduce prolonged suffering by reducing negative outcomes, such as mental health-related emergency services, it also increases positive outcomes. Functioning, which includes reduced psychiatric symptoms, improved ability to take care of one's needs and being better able to deal with problems, is increased 27% by participation in the FSP programs relative to those receiving usual care. In addition, participation in a FSP program improves overall outcomes, such as problem solving, self-control, crisis management, social effectiveness, housing, and psychiatric symptoms by 30% for some consumers. These are causal effects and are statistically significant at the 95% confidence level.

Education

Educational outcomes are better the longer consumers remain in the FSP programs. After 12 months of participation, consumers are 30% more likely to start an education program as compared to individuals just entering the FSP program. This result is statistically significant at the 95% confidence level.

Employment

Employment outcomes are improved the longer consumers remain in the FSP programs. After 12 months of participation, there is a 25% increase in employment as compared to individuals just entering the FSP program. This result is statistically significant at the 95% confidence level.

General Satisfaction

As might be expected from the above findings, consumers in the FSP programs are more satisfied than those receiving usual care. In fact, they are 27% (or higher) more satisfied relative to those receiving usual care. This is a causal effect and is statistically significant at the 95% confidence level.

Analytic Methods and Data

The above results used state-of-the-art statistical analyses, which for some outcomes (arrests, functioning, outcomes of services, satisfaction, and mental health-related emergency services), yields conclusions that are not merely descriptive, but causal (FSP participation is not merely associated with the results, but causes the results).

Since randomized controlled trials could not be conducted in this study due to cost and time limitations, we used data collected and maintained by the Department of Mental Health for administrative purposes. The analyses were conducted by 10 researchers over a period of more than 12 months. Results are summarized in more detail in the full reports listed at the end of this report.

Conclusions and Recommendations

- The Mental Health Services Act was intended to move mental health care services toward a recovery model and has been highly successful.
- Full Service Partnerships improve housing, employment, and education outcomes as well as decrease arrests and mental health-related emergency room use.
- Full Service Partnerships increase functioning, outcomes of services, and general satisfaction compared to usual care, and these improvements are large.
- Evaluation of the FSP programs need to continue to determine the long-term impact of the program.
- Best practices in counties need to be understood, documented and disseminated.
- Studies on the cost-effectiveness of the FSP programs should be conducted in accordance with the requirements of the MHSA.

Section 1.1: Introduction to the Mental Health Services Act and Full Service Partnerships

The Mental Health Services Act (MHSA), which became law in January of 2005, was the result of a voter initiative passed in November 2004. Known as Proposition 63 on the ballot, MHSA focused on expanding access to public mental health services and restructuring California's public mental health system into a more consumer-oriented system that addresses a broad continuum of prevention, early intervention, and service needs. It is funded by a 1% tax on adjusted gross incomes over \$1 million (affecting approximately 0.1% of California taxpayers). Importantly, the concern of voters with the plight of the homeless mentally ill was a significant factor in the passage of this legislation (Scheffler and Adams 2005). As of February 26, 2010, \$3.7 billion has been approved/distributed based on county requests (Mayberg, 2010). The MHSA programs are required to emphasize strategies that reduce seven negative outcomes: suicide, incarcerations, school failure or dropout, unemployment, prolonged suffering, homelessness and removal of children from their homes (State of California, 2004).

This report summarizes findings of the first major academic evaluation of the Full Service Partnership (FSP) program, a key program of the MHSA (described in detail below). It compares results for consumers participating in the FSP program with results for consumers receiving usual care and focuses on the following measures: general satisfaction, outcomes of services, functioning, social connectedness, arrests, the quality and appropriateness of services received, access to services, participation in treatment planning, and mental health-related emergency room care. In addition, this report summarizes additional findings describing changes in housing, education and employment among clients in the FSP program.

Section 1.2: What Does the 2004 Mental Health Services Act Do?

In an effort to expand access and restructure California's mental health system into a more consumer-driven system, resiliency- and recovery-focused system, the 2004 Mental Health Services Act includes components to target different aspects of mental health care:

- 1. Community Services and Supports** provides funding for direct services to people with serious mental illness
- 2. Capital Facilities and Technological Needs** provides funding for building projects and increasing technological capabilities in order to provide better services for people with mental illness
- 3. Workforce Education and Training** calls for a statewide needs assessment of the mental health workforce and for the development of a five-year plan to address the shortage of qualified personnel. It provides funding to increase the capacity of the mental health workforce.
- 4. Prevention and Early Intervention** develops outreach programs for families, providers, and others to recognize early signs of mental illness, to improve early access to services, and to develop programs to reduce stigma and discrimination
- 5. Innovation** funds new programs that increase access to the underserved, promote inter-agency collaboration and increase the quality of services

Section 1.3 California has Changed the Way Mental Health Services are Traditionally Provided

In the 1970s, the deinstitutionalization movement began, which transferred care for people with mental illness away from large state-operated hospitals and into community settings. While the goal was to provide care in the least restrictive setting possible, many communities lacked the infrastructure and resources necessary to provide adequate care once individuals were released from hospitals. Resources that were no longer used for the hospital system were not sufficiently reinvested into community mental health services as had been originally envisioned. Consequently, many of those released from institutions did not succeed and thrive in the community. A significant number of those released from institutions became homeless and their receipt of treatment (if any) tended to be the result of contact with law enforcement (Felton et al, 2006).

In order to address the gap in care left by deinstitutionalization and an inadequate community care system, California began to build a more effective community-oriented and county-based mental health system beginning in the early 1990s. In 1991, the California Legislature initiated the realignment program (AB1288), which partially shifted both administrative and fiscal responsibility for health, social and mental health services from the state to counties in order to increase the flexibility and stability of funding. By consolidating sources of mental health funds into a single dedicated sales tax, funding across counties was equalized through redistribution while overall costs decreased. Realignment legislation also established local mental health boards and a statewide monitoring system to ensure services were targeted to people with serious mental illness (SMI) and others most in need. This effort has had significant success: utilization and costs decreased with Realignment, while access for consumers, particularly those with the most severe impairments, was unchanged (Scheffler, et al, 1998 and 2000; Scheffler, Zhang, & Snowden, 2001; Snowden, Scheffler, & Zhang 2002).

California also passed AB 3015 in 1992 and SB 163 in 1997 which focused on enhancing mental health services for children by promoting a *system of care* approach to provide intensive, individualized, family-based care across multiple agencies as an alternative to foster care. Counties were subsequently given the state's share of funding for children at risk for out-of-home placement and were encouraged to increase inter-agency collaboration, particularly among the mental health department, probation department, special education agencies and school districts. Evidence from the California System of Care Model Evaluation Project found that children in the system of care programs were more likely to be placed in the least restrictive settings, had decreased recidivism rates, and registered significant improvements in educational attainment (Felton et al, 2006). Additionally, costs for foster care fell in counties with these programs (California System of Care Model Evaluation Project).

The pilot project AB 34 began in 1999 and focused on individuals who were homeless and also had a mental illness, or had a mental illness and were at risk of being incarcerated. This program was expanded in 2000 under AB 2034 to provide housing and intensive services with a focus on recovery and wellness. Anchored in a "whatever it takes" approach to meeting individuals' needs, these programs were lauded as models for successful mental health care (President's New Freedom Commission, 2003). Evaluations showed that rates of homelessness, incarceration, hospitalization, and unemployment all decreased after the new services were instituted (Davis, 2003). In addition, for clients in the Village, a model AB 2034 program, it was found that most movement towards recovery occurs in the first two years in the program (Miller, Brown, Pilon, Scheffler, Davis, 2009).

The outcomes of these programs and initiatives made it clear that the strategic dedication of money and resources could substantially improve both access to and the effectiveness of services that improve the quality of life among individuals with serious mental illness in California. The success of these programs and initiatives guided the development of Proposition 63.

Section 1.4: Full Service Partnerships

This report focuses on one subcomponent of MHSA, the Full Service Partnership (FSP), which is part of the Community Services and Supports (CSS) component of MHSA. Full Service Partnerships, according to the California Code of Regulations (Title 9, § 3620, 2010), may include the following services for adults:

Full Service Partnership Service Category.

(a) The County shall develop and operate programs to provide services under the Full Service Partnership Service Category. The services to be provided for each client with whom the County has a full service partnership agreement may include the Full Spectrum of Community Services necessary to attain the goals identified in the Individual Services and Supports Plan (ISSP). The services to be provided may also include services the County, in collaboration with the client, and when appropriate the client's family, believe are necessary to address unforeseen circumstances in the client's life that could be, but have not yet been included in the ISSP.

(1) The Full Spectrum of Community Services consists of the following:

(A) Mental health services and supports including, but not limited to:

- (i) Mental health treatment, including alternative and culturally specific treatments.*
- (ii) Peer support.*
- (iii) Supportive services to assist the client, and when appropriate the client's family, in obtaining and maintaining employment, housing, and/or education.*
- (iv) Wellness centers.*
- (v) Alternative treatment and culturally specific treatment approaches.*
- (vi) Personal service coordination/case management to assist the client, and when appropriate the client's family, to access needed medical, educational, social, vocational rehabilitative and/or other community services.*
- (vii) Needs assessment.*
- (viii) ISSP development.*
- (ix) Crisis intervention/stabilization services.*
- (x) Family education services.*

(B) Non-mental health services and supports including, but not limited to:

- (i) Food.*
- (ii) Clothing.*
- (iii) Housing, including, but not limited to, rent subsidies, housing vouchers, house payments, residence in a drug/alcohol rehabilitation program, and transitional and temporary housing.*
- (iv) Cost of health care treatment.*
- (v) Cost of treatment of co-occurring conditions, such as substance abuse.*
- (vi) Respite care.*

(C) Wrap-around services¹ to children in accordance with WIC Section 18250 et. seq.

To date, FSP programs appear to be moving toward fulfilling these criteria. An early study found that 66% of the FSP programs examined planned to provide services in six of the eight service categories studied including housing, therapeutic and rehabilitative services, case management or coordination, employment or education, peer support, outreach or community education, co-occurring disorders or substance abuse treatment and other supports (Cashin, Scheffler, Felton, Adams, Miller, 2008).

¹ "Wrap-around" services provide comprehensive services through interagency cooperation for children and their families.

Section 1.5: Criteria for Admission into Full Service Partnerships

Figures 1, 2 and 3 show the criteria for admission into FSPs for transition age youth, adults, and older adults respectively. First, a person must meet the eligibility criteria for mental health services as defined in WIC Section 5600.3 (a), (b) or (c). Next, it must be determined whether an individual is unserved or underserved. An individual is considered to be unserved if they have a serious mental illness (SMI) or have a serious emotional disturbance (SED) and are not receiving mental health services. People who have only had emergency or crisis-oriented contact and/or services are considered unserved. The definition of underserved is broad, including anyone with an SMI or SED who does not receive sufficient services to support their wellness, recovery or resilience (California code of regulations. Title 9, Section 3200.300, 2010). The last criteria that participants must meet varies by age group but can include: homelessness, being at risk of homelessness, involvement or being at risk of involvement with the criminal justice system, being at risk of institutionalization, being a frequent user of hospital and/or emergency room treatment for mental health care, or for transition age youth, aging out of the child and youth mental health system, child welfare system or juvenile legal system (California code of regulations. Title 9, Section 3620.05, 2010).

Figure 1: FSP Criteria for Transition Age Youth

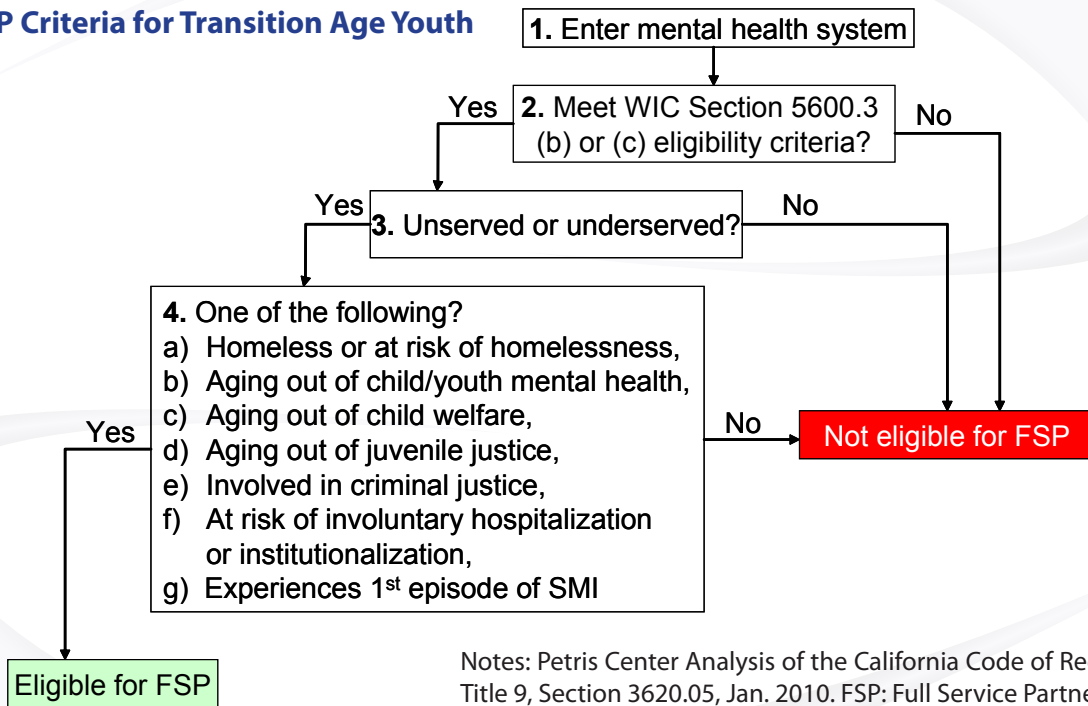
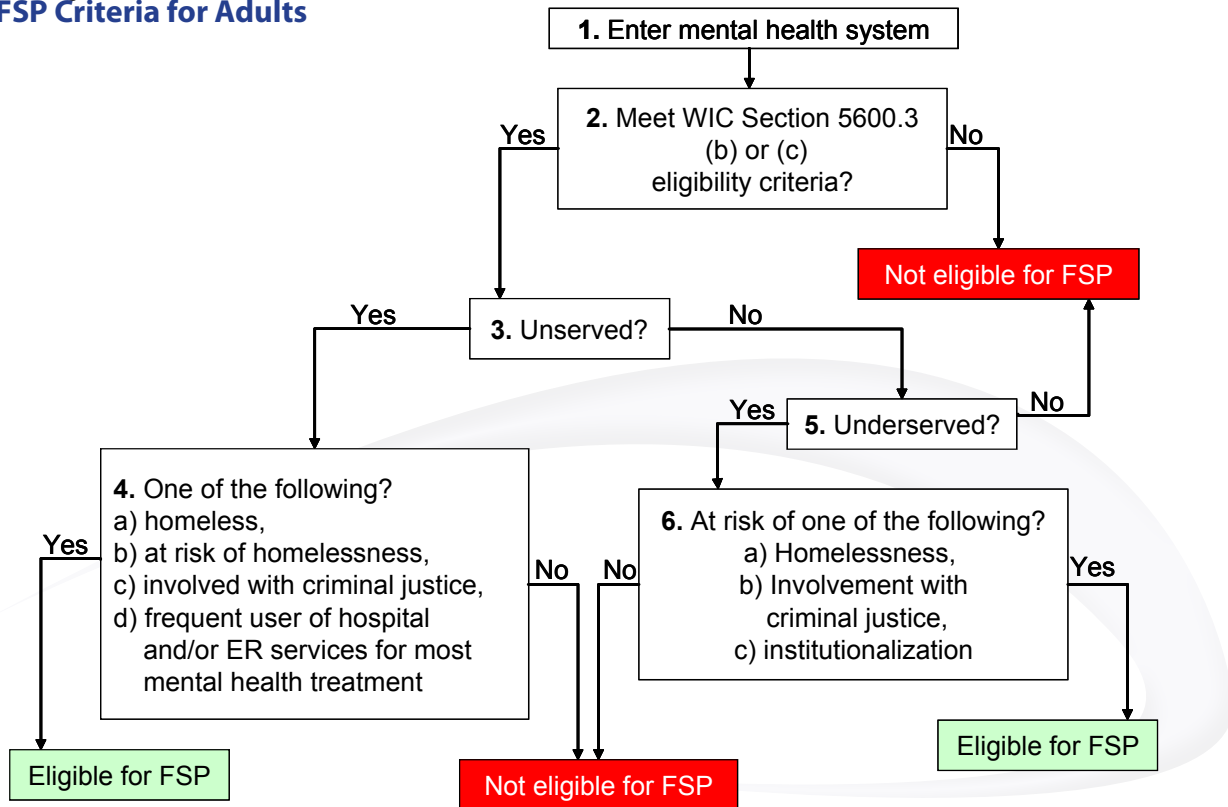


Figure 1 illustrates the criteria used to determine eligibility to enter the FSP program for transition age youth (TAY).

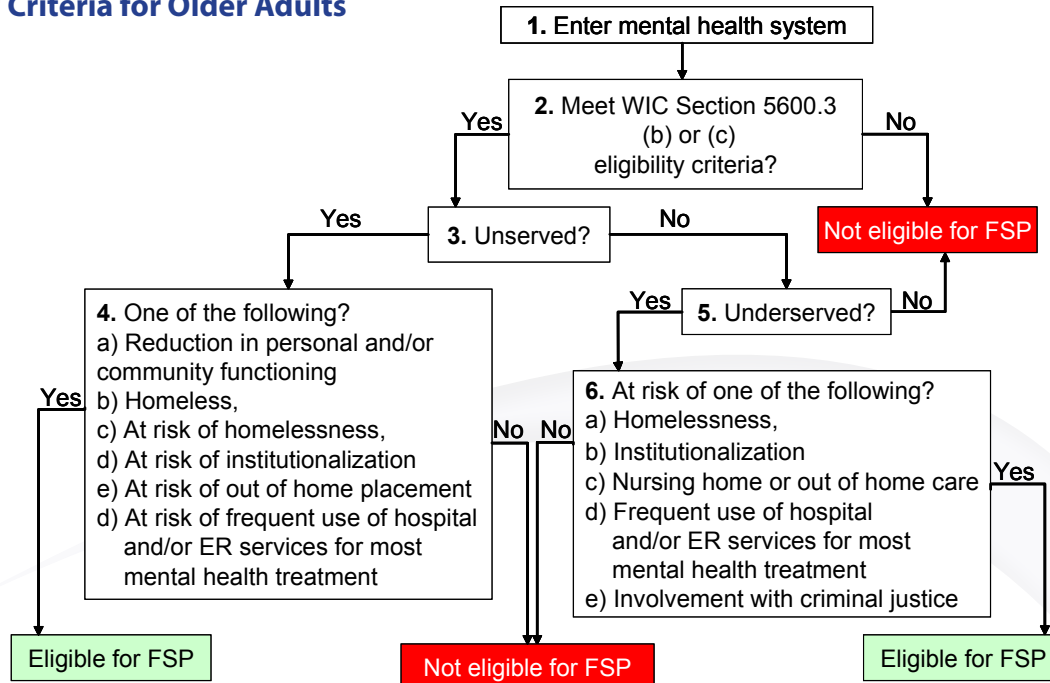
- Box 1 shows a TAY entering the mental health system for evaluation of eligibility.
- Box 2 shows where the TAY are evaluated to see whether they meet the eligibility criteria in WIC Section 5600.3 for admittance into the public mental health system. If the TAY is not eligible (the answer is no), they are not eligible to participate in the FSP program. If it is determined that, yes, a client does meet the eligibility requirements of WIC Section 5600.3, they then move to Box 3.
- In Box 3, the TAY is evaluated to determine whether they are unserved or underserved. If they are neither unserved nor underserved (the answer is no), they are not eligible to participate in the FSP program. If it is determined that yes, the TAY is unserved or underserved, the TAY is then evaluated according to the criteria in Box 4.
- Box 4 shows the final evaluation of the TAY. If it is determined that yes, the TAY is one of the following: homeless or at risk of homelessness; aging out the child/youth mental health system or the juvenile justice system; involved in the criminal justice system, at risk of involuntary hospitalization or institutionalization or experiencing a first episode of serious mental illness; then they are eligible for participation in the FSP program. If the answer is no, the TAY is not eligible for participation in the FSP program.

Figure 2: FSP Criteria for Adults

Notes: Petris Center Analysis of the California Code of Regulations, Title 9, Section 3620.05, Jan. 2010.
FSP: Full Service Partnership.

Figure 2 illustrates the criteria used to determine eligibility to enter the FSP program for adults.

- In Box 1, an adult enters the public mental health system for evaluation.
- Box 2 shows where the adult is evaluated to see whether they meet the eligibility criteria in WIC Section 5600.3 for admittance into the public mental health system. If the adult does not meet the eligibility criteria for WIC Section 5600.3, (the answer is no), they are not eligible for participation in the FSP program. If it is found that yes, the adult is eligible for public mental health services, then they are evaluated according to the criteria in Box 3.
- In Box 3, the adult is evaluated to determine if they are unserved. Adults who only receive emergency or crisis-oriented contact and/or services are considered unserved. If it is determined that yes, the adult is unserved, they are then evaluated by the criteria in Box 4.
- According to the criteria listed in Box 4, adults who are homeless, at risk of homelessness, involved with the criminal justice system or frequent users or hospital and/or emergency rooms for most of their mental health treatment (they can answer yes to Box 4) are eligible for FSP programs. If it is determined that no, the adult does not meet the criteria in Box 4, then they are not eligible for participation in the FSP program.
- If it is determined that no, adult clients are not unserved (Box 3), they are then evaluated in Box 5 to determine if they are underserved. An adult with an SMI who does not receive services to support their wellness, recovery or resilience is considered underserved. If the answer is no in Box 5, the adult is not eligible to participate in the FSP program. This means that it was determined that the adult is neither unserved nor underserved. If it is determined that yes the adult is underserved (Box 5), they are then evaluated according to the criteria in Box 6.
- If it is determined that, yes, the adult is at risk of homelessness, criminal justice involvement or institutionalization (Box 6), they are then eligible for participation in the FSP program.

Figure 2: FSP Criteria for Older Adults

Notes: Petris Center Analysis of the California Code of Regulations, Title 9, Section 3620.05, Jan. 2010.
FSP: Full Service Partnership.

Figure 3 illustrates the criteria used to determine eligibility to enter the FSP program for older adults.

- Box 1 shows where an older adult enters the public mental health system for evaluation.
- Box 2 shows where the older adult is evaluated to see whether they meet the eligibility criteria in WIC Section 5600.3 for admittance into the public mental health system. If it is determined that yes, the older adult meets the criteria in WIC Section 5600.3, then the older adult client is evaluated by the criteria in Box 3. If it is determined that no, the older adult does not meet the criteria in Box 2, then the older adult is not eligible for participation in the FSP program.
- Box 3 shows where the older adult is evaluated to determine if they are unserved. Older adults who only receive emergency or crisis-oriented contact and/or services are considered unserved. If it is determined that, yes, the older adult is unserved, they then move to Box 4.
- In Box 4, the older adult is evaluated to determine if at least one of the following characteristics applies to them: reduction in personal or community functioning, homeless or at risk of homelessness, at risk of institutionalization, at risk of out-of-home placement or at risk of frequent use of hospital and/or emergency room services. If at least one of these applies to the older adult, then they are eligible for participation in the FSP program. If it is determined that, no, the older adult does not meet the criteria in Box 4, then they are not eligible for participation in the FSP program.
- If it is determined that, no, the older adult is not unserved (Box 3), they are then evaluated in Box 5 to determine if they are underserved. An older adult with an SMI who does not receive services to support their wellness, recovery or resilience is considered underserved. If it is determined that, no, the older adult is not underserved, then they are not eligible for participation in the FSP program. If it is determined that, yes, the older adult is underserved (Box 5), then they are evaluated in Box 6.
- In Box 6, if it is determined that, yes, one the following applies to the older adult: at risk of homelessness, institutionalization, nursing home use or out-of-home care, frequent use of the hospital or emergency services for most mental health treatment or criminal justice involvement, then they are eligible for participation in the FSP program. If it is determined that, no, the older adult does not meet the criteria in Box 6, then they are not eligible for participation in the FSP program.

Section 2: Data and Methods

All but one of the evaluation studies used data from 43 of the 58 counties in California, the exception being the study on mental health-related emergency room admissions. These 43 counties represent 85.4% of the California population and are shown in Figure 4. Counties were only omitted from the study if data was unavailable at the time this study was conducted. The lack of available data at the time this study was conducted does not reflect on the quality of FSP programs in any county.

Counties included in the study on mental health-related emergency room admissions included Humboldt, Los Angeles, Sacramento, San Diego, San Francisco, San Mateo, and Santa Clara. Counties were only included if no apparent administrative changes in the reporting of the data occurred during the period from 2000 to 2008. Such administrative changes are legitimate and occur for many reasons but counties with such changes were excluded to avoid mistaking the effects of changes in reporting for the effects of the Full Service Partnership program. The exclusion of any county from this portion of the evaluation in no way reflects the quality of the FSP program in that county.

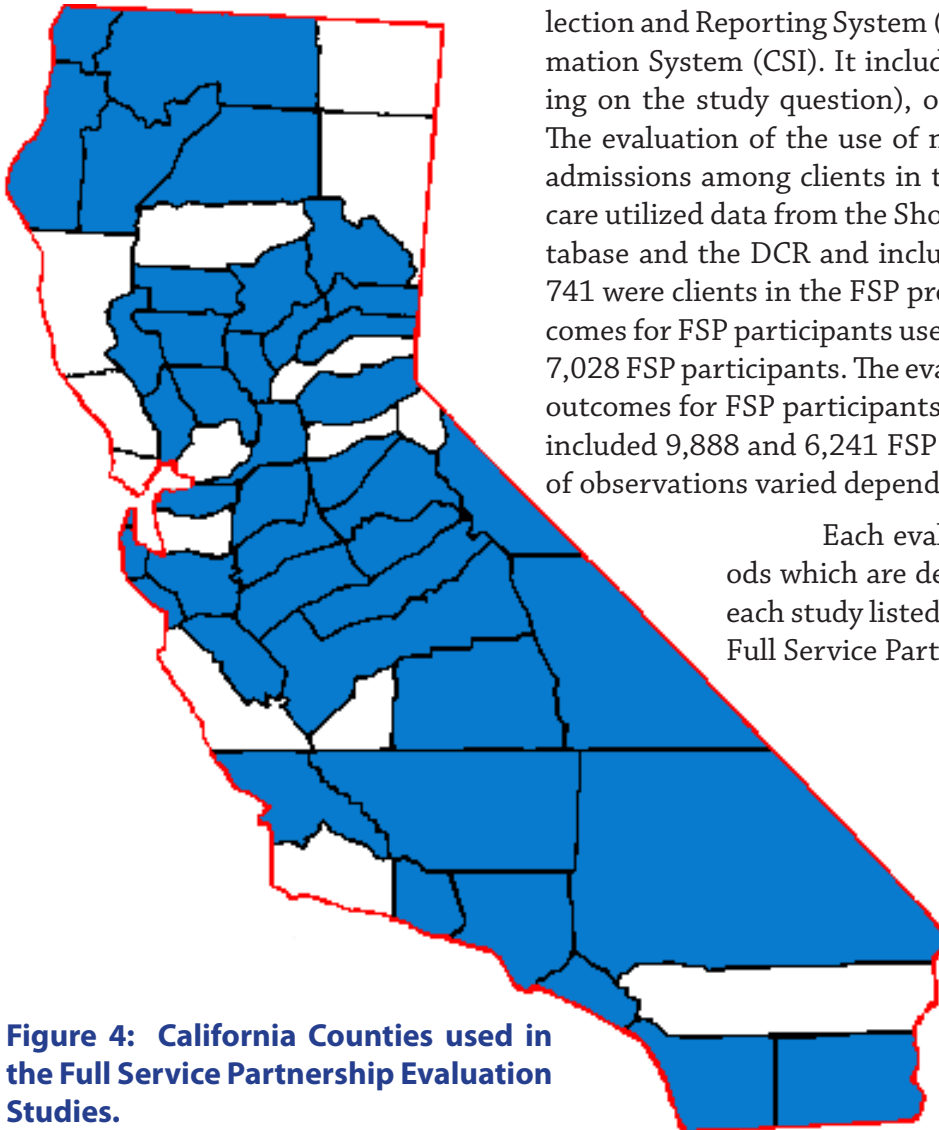


Figure 4: California Counties used in the Full Service Partnership Evaluation Studies.

The evaluation of the FSP program as compared to usual care used data from the Consumer Perception Survey (CPS), the Data Collection and Reporting System (DCR), and the Client and Service Information System (CSI). It included up to 57,023 total clients (depending on the study question), of which up to 1,411 were FSP clients. The evaluation of the use of mental health-related emergency room admissions among clients in the FSP program as compared to usual care utilized data from the Short-Doyle/Medi-Cal (SD/MC) claims database and the DCR and included 14,668 total consumers, of which 741 were clients in the FSP program. The evaluations of housing outcomes for FSP participants used data from DCR and CSI, and included 7,028 FSP participants. The evaluations of education and employment outcomes for FSP participants also used data from DCR and CSI, and included 9,888 and 6,241 FSP participants, respectively. The number of observations varied depending on the study question.²

Each evaluation used different statistical methods which are described in detail in the full reports for each study listed in Appendix 1: Full Reports Evaluating Full Service Partnerships.

² An observation refers to the number of times information is recorded about a given individual.

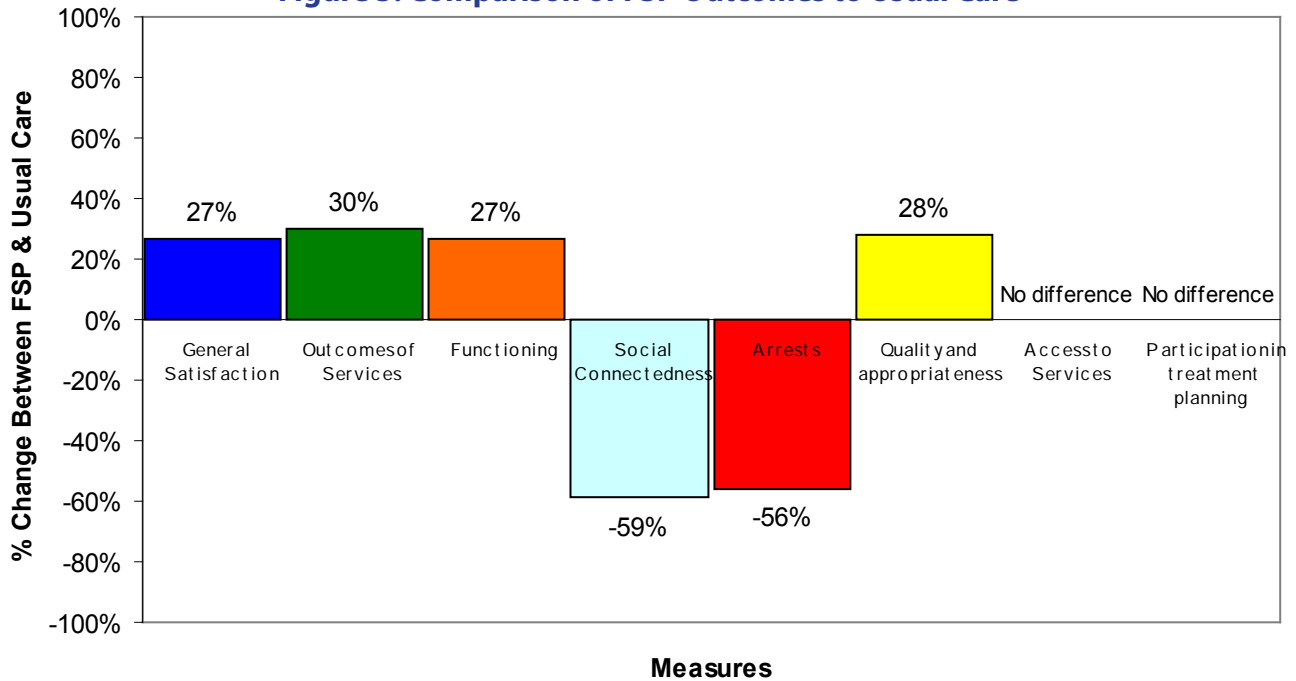
Section 3: Comparison of Outcomes between Full Service Partnerships and Usual Care

The comparison of Full Service Partnership (FSP) participants and clients in usual care consisted of three components: an evaluation of general satisfaction, an evaluation of service characteristics (quality and appropriateness of care, access to services, and participation in treatment planning), and evaluation of outcomes (outcomes of services, functioning, arrests, social connectedness).

As noted previously, individuals participating in the FSP program are more likely to be homeless, frequent users of emergency room services, and involved in the criminal justice system relative to individuals receiving usual care. FSP clients are also more likely to be unserved or underserved. The study design accounts for this difference and also allows us to examine the causal effects of participation in the FSP program. The measures of general satisfaction, quality and appropriateness of care, access to services, participation in treatment planning, outcomes of services, functioning, arrests, and social connectedness are each made up of an index based on consumers' answers to questions regarding their personal experience with the public mental health care system in California.

General satisfaction measures overall satisfaction with mental health services received. Quality and appropriateness measures quality from a recovery-oriented perspective and evaluates the way in which staff treats consumers with respect to encouragement, cultural background, treatment information, privacy, and openness to criticism. Access is measured in terms of location, convenience of appointment times, and staff responsiveness. Outcomes of services measure overall life functioning and focuses on problem solving, self-control, crisis management, social effectiveness, housing, and psychiatric symptoms. Functioning is similar to outcomes of services but focuses on internal functioning. Social connectedness measures satisfaction with friends, support from family and friends in times of crisis, and perceptions of belonging in the community. The results are summarized in Figure 5: Full Reports Evaluating Full Service Partnerships on the next page.

Figure 5: Comparison of FSP Outcomes to Usual Care



Petris Center analysis of data from the Consumer Perception Survey, the Data Collection and Reporting System, and the Client and Service Information System, May 2005 to May 2008, on adults aged 18 or older in 43 California Counties. This study included data from up to 57,023 clients, of whom 1,411 were in Full Service Partnerships (FSPs). Further analysis of social connectedness found no differences with regard to satisfaction with friendships, but negative differences with respect to perceptions of belonging in the community and perceived support from friends and family during a crisis. All findings are statistically significant at the 95% confidence level.

Results

- FSP clients show 27% greater satisfaction (or higher) than clients in usual care.
- FSP clients have outcomes of services that are 30% better than clients in usual care.³
- FSP clients have 27% higher functioning than clients in usual care.
- FSP clients show 59% lower social connectedness compared to clients in usual care.
- FSP clients are 56% less likely to be arrested compared to clients in usual care.
- FSP clients receive care that is 28% higher (or more) in quality and appropriateness.
- There is no difference between FSP clients and clients in usual care with respect to access to services and participation in treatment planning.

The social connectedness finding was studied further. We unpacked the results and found that there was no difference between FSP participants and those receiving usual care with respect to satisfaction with friendships. The negative difference between FSP participants and those receiving usual care was due to differences in the perceptions of whether friends and family would provide needed support in a crisis and differences in the perception of belonging in the community. Clients may feel less belonging as an FSP participant because of their increased interaction with the community, which may increase their experience with stigmatization. In addition, clients may view the second question as referring to a mental health crisis and clients in the FSP program may be taught to seek out professional care (including peer support) during such a crisis, which family and friends are not ordinarily equipped to provide. These findings should be studied further. All findings are statistically significant at the 95% confidence level.

Details on methods and results can be found in the following report:

Brown TT, Choi S, Chung JJ, Felton MC, Scheffler RM. (2010) An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California. Petris Report # 2010-1. A Comparison of Satisfaction, Services Characteristics and Outcomes in the Full Service Partnership Program Relative to Usual Care. University of California, Berkeley.

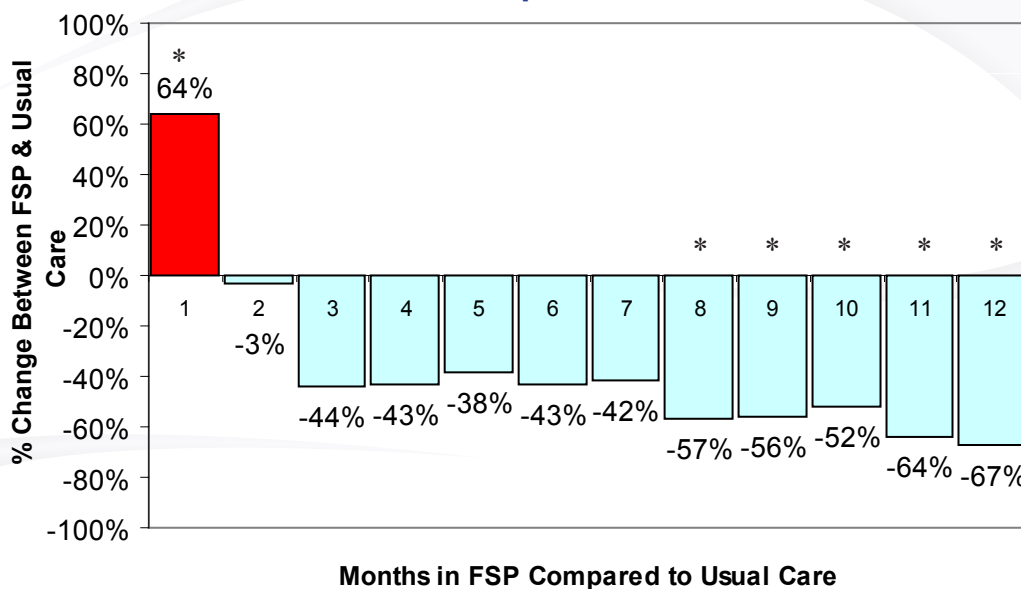
³ This result only applies for a subset of clients as results did vary across individuals.

Section 4: Comparison of Emergency Room Outcomes between Full Service Partnerships and Usual Care

A key measure of the effectiveness of Full Service Partnership (FSP) programs for persons with serious mental illness is their impact on emergency interventions. This evaluation determined whether participation in the FSP program for adults aged 18 or older causes a difference in mental health-related emergency room admissions compared to clients receiving usual care.

As noted in Section 2, individuals participating in FSP programs differ from individuals receiving usual care in terms of their need for services. The study design accounts for this difference and also allows us to examine the effects of participation in the FSP program with respect to mental health-related emergency room admissions. The results are summarized in Figure 6: Odds of FSP Clients Using Mental Health-Related Emergency Room Service as Compared to Usual Care.

Figure 6: Odds of FSP Clients Using Mental Health-Related Emergency Room Service as Compared to Usual Care.



* Statistically significant with 95% confidence. Petris Center analysis of Short-Doyle/Medi-Cal (SD/MC) and Data Collection and Reporting System (DCR) data from January 1st, 2007 to June 30th, 2008 for adults aged 18 or older in Humboldt, Los Angeles, Sacramento, San Diego, San Francisco, San Mateo, and Santa Clara Counties. This study included data from 14,668 total consumers, of which 741 were clients in the FSP program. FSP: Full Service Partnership.

Clients in the first month of participation in the FSP program show 64% higher odds of a mental health-related emergency room admission. This is expected since the criteria for entry into the FSP program includes being a frequent user of emergency rooms for mental health care or being at risk of being a frequent user of mental health-related emergency room care. However, we see a roughly constant decline in odds of mental health-related emergency room services for clients in FSP compared to usual care. After eight months of treatment, FSP participants show a 57% decrease in the odds of using mental health-related emergency room services as compared to those receiving usual care. After one year, we see an even larger decrease as FSP participants show a 67% decrease in the odds of using mental health-related emergency room services as compared to those receiving usual care. All findings are statistically significant at the 95% confidence level.

Details on methods and results can be found in the following report:

Brown TT, Chung JJ, Choi S, Bruckner TA, Felton MC, Scheffler RM. (2010). *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California. Petris Report # 2010-4. The Impact of the Mental Health Services Act on Emergency Interventions and Involuntary Hospitalizations.* University of California, Berkeley.

Section 5: Housing Outcomes for the Full Service Partnership Programs

California piloted many of the treatment philosophies used in the MHSAs in programs created by the previous passage of AB 2034. The programs created by this legislation have been recognized as model programs by the President's Commission on Mental Health (New Freedom Commission of Mental Health, 2003). AB 2034 programs targeted seriously mentally ill clients who were homeless and provided intensive services including housing.

Full Service Partnerships programs are based on the success of the AB 2034 program. In this section, we look at whether the FSP program has met its goal of improving the housing situation for participating individuals. Figure 7 shows the baseline proportion of clients in nine housing situations: Independent Living, Jail, Homelessness, Long-term Care, Licensed Residential, Supervised Residential, Psychiatric Hospital, Medical Hospital, and Shelter. Clients in Independent Living hold a lease or share in rent/mortgage or live with family members. Clients in Supervised Residential live in an assisted living facility, board and care, unlicensed but supervised congregate housing, which includes group living homes, sober living or unlicensed but supervised individual placement. Licensed Residential includes skilled nursing facilities and licensed residential treatment including crisis, short-term, long-term, substance abuse and dual diagnosis residential programs. Figure 8 shows the proportion of clients in these nine residential settings after one year in the FSP program.

Results

- Consumers in Independent Living settings increased by approximately 20% after one year of FSP participation.⁴
- Almost all homeless clients are moved out of homelessness and after one year homelessness is reduced to near 0% (i.e. homelessness is reduced by 99.99% among FSP participants).
- Supervised Residential Living increased by 35% after one year of FSP participation.
- Consumers living in a Shelter decreased by 64% after one year of FSP participation.

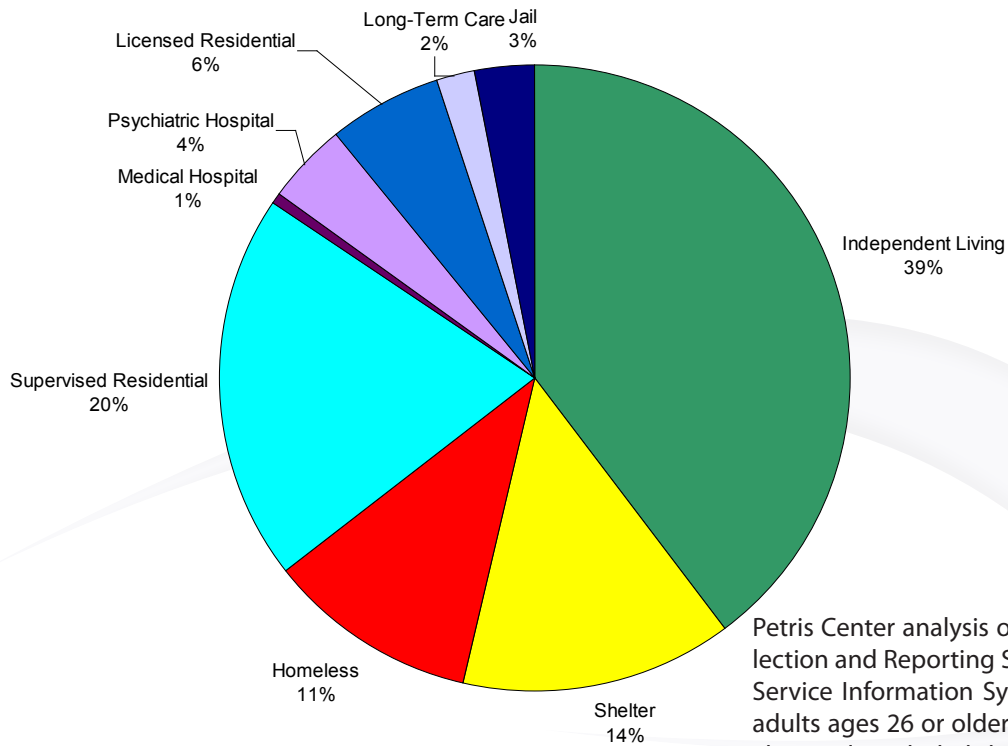
Details on methods and results can be found in the following reports:

Miller LS, Chung JJ, Brown TT, Felton MC, Choi S, Scheffler RM (2010). *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California*. Petris Report # 2010-2. *An Analysis of Transitions across and Stays within Residency Settings for Full Service Partnership Clients*. University of California, Berkeley.

Yoon J, Chung JJ, Brown TT, Felton MC, Choi S, Scheffler RM (2010). *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California*. Petris Report # 2010-3. *An Evaluation of the Impact of the Full Service Partnership Programs on Independent Living: A Markov Analysis of Residential Transitions*. University of California, Berkeley.

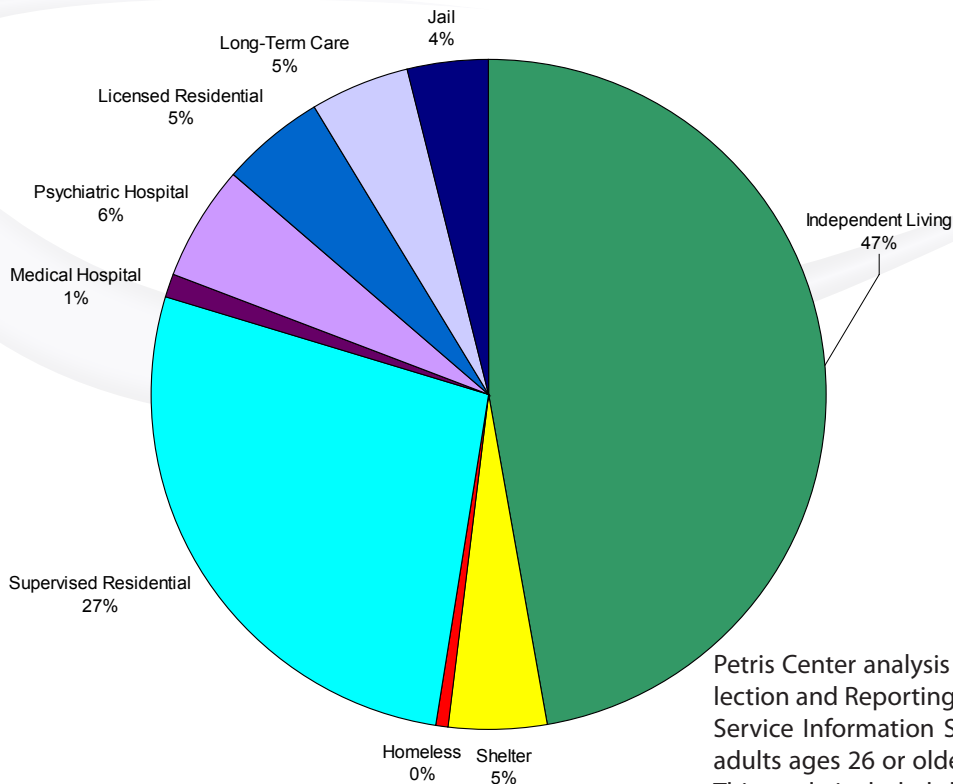
⁴ The increase from 39% to 47% is a 20% increase from baseline. This was calculated by subtracting the percentage at one year from the percentage at baseline and dividing this result from the value at baseline: $47\% - 39\% = 8\%$, $8\% / 39\% = 20\%$ (final result). Similar calculations were used for the other bulleted results.

Figure 7: Residency of Clients Beginning FSP



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.

Figure 8: Residency of Clients After 1 Year in FSP



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.

Section 6: Employment Outcomes for the Full Service Partnership Programs

Full Service Partnership (FSP) programs provide comprehensive, community-based treatment, including employment support to individuals with serious mental illness (SMI). Persons with SMI face a number of obstacles which can impair their ability to maintain meaningful employment. Aside from providing additional income, employment enhances self esteem and improves quality of life, thereby strengthening the recovery process of consumers (Biegel, Stevenson, Beimers, Ronis, Boyle, 2010; Bush, Drake, Xie, McHugo, Haslett, 2009). In this study, 7.9% of clients are employed when they enter an FSP. As part of their implementation of the FSP program, counties planned to provide employment services such as vocational training and support, skills development, and job readiness training (Cashin, Scheffler, Felton, Adams, Miller, 2008). In this section, we examine whether FSP participation had an impact on employment. The key findings of the employment evaluation are shown in Table 1: Employment Outcomes in FSP Programs.

Table 1: Employment Outcomes in FSP Programs

Time in FSP	Employment
FSP involvement for 6 months	12.5% increase in employment
FSP involvement for 1 year	25% increase in employment

Notes: 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. All findings are statistically significant at the 95% confidence level. FSP: Full Service Partnership.

Result

- FSP participants who participate for a longer period in the FSP program are more likely to be employed.

Details on methods and results can be found in the following report:

Auh E, Ganesh C, Brown TT, Choi S, Felton MC, Scheffler RM. (2010). An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California. Petris Report # 2010-5. The Employment of Consumers with Serious Mental Illness. University of California, Berkeley.

Section 7: Education Outcomes for the Full Service Partnership Programs

The appearance of serious mental illness (SMI) during the teens or early 20s can interrupt education and hamper progression to higher education (Isohanni, Jones, Järvelin, Nieminen, Rantakallio, Jokelainen, Croudace, Isohanni, 2001). Education level has been shown to be highly correlated with income and economic independence for people with an SMI (Baron & Salzer, 2002; Mowbray & Megivern, 1999; Nordt, Müller, Rössler, Lauber, 2007). In addition, people with an SMI are more likely to have lower educational levels (Isohanni, Jones, Järvelin, Nieminen, Rantakallio, Jokelainen, Croudace, Isohanni, 2001; Megivern, Pellerito, Mowbray, 2003). This evaluation focused on the association of time spent in the FSP program and the likelihood of starting an educational program. Key results are presented in Table 2: Impact of FSP on Starting Educational Programs.

Table 2: Impact of FSP on Starting Educational Programs

Factor examined	Starting Education
Employment	200% more likely to start education
FSP involvement for 1 year	30% more likely to start education
Current substance abuse problem	24% less likely to start education
Receiving substance abuse treatment	49% more likely to start education

Notes: 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. All findings are statistically significant at the 95% confidence level. FSP: Full Service Partnership.

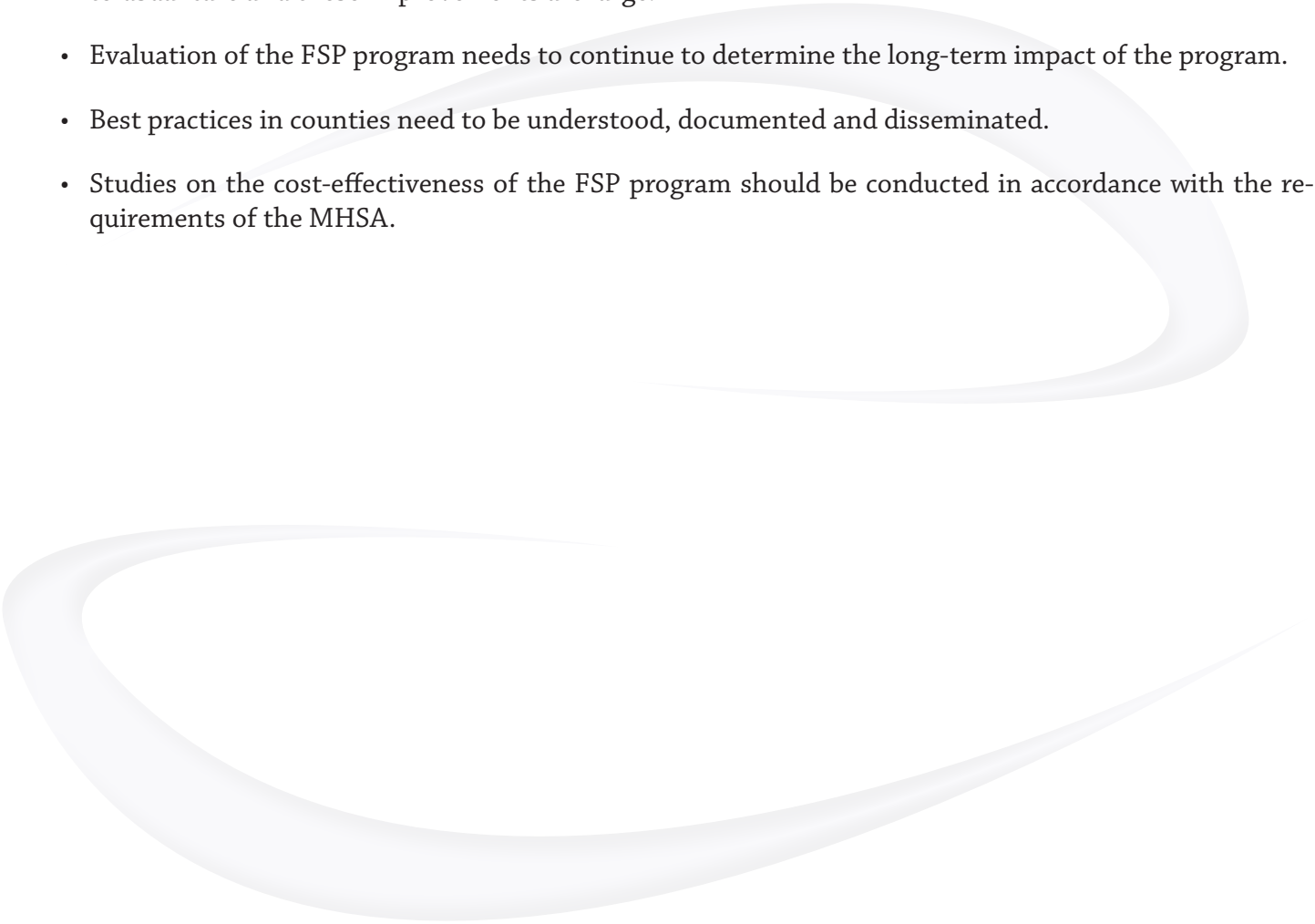
Results

- Clients who are employed are twice as likely to start an educational program as clients who are unemployed
- Involvement in Full Service Partnerships is associated with a 30% increase in starting an educational program
- Consumers with a current substance abuse problem have a 24% decreased likelihood of starting an educational program while clients receiving substance abuse treatment have a 49% increased likelihood of starting an educational program

Details on methods and results can be found in the following report:

Brown TT, Felton MC, Choi S, Chung JJ, Scheffler RM. An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California. Petris Report # 2010-6. An Analysis of Characteristics Associated with Choosing Education as a Recovery Goal and Beginning an Educational Program in Full Service Partnerships. University of California, Berkeley.

Section 8: Conclusions and Recommendations

- The Mental Health Services Act was intended to move mental health care services toward a recovery model and has been highly successful.
 - Full Service Partnerships improve housing, employment, and education outcomes as well as decrease arrests and mental health-related emergency room use.
 - Full Service Partnerships increase functioning, outcomes of services, and general satisfaction compared to usual care and these improvements are large.
 - Evaluation of the FSP program needs to continue to determine the long-term impact of the program.
 - Best practices in counties need to be understood, documented and disseminated.
 - Studies on the cost-effectiveness of the FSP program should be conducted in accordance with the requirements of the MHSA.
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Appendix 1: List of Full Reports Evaluating Full Service Partnerships

Brown TT, Choi S, Chung JJ, Felton MC, Scheffler RM. (2010). *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California*. Petris Report # 2010-1. A Comparison of Satisfaction, Services Characteristics and Outcomes in the Full Service Partnership Programs Relative to Usual Care. University of California, Berkeley.

Miller LS, Chung JJ, Brown TT, Felton MC, Choi S, Scheffler RM. *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California*. Petris Report # 2010-2. An Analysis of Transitions across and Stays within Residency Settings for Full Service Partnership Clients. University of California, Berkeley.

Yoon J, Chung JJ, Brown TT, Felton MC, Choi S, Scheffler RM. *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California*. Petris Report # 2010-3. The Impact of the Full Service Partnership Programs on Independent Living: A Markov Analysis of Residential Transitions. University of California, Berkeley.

Brown TT, Chung JJ, Choi S, Bruckner TA, Felton MC, Scheffler RM. (2010). *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California*. Petris Report # 2010-4. The Impact of the Mental Health Services Act on Emergency Interventions and Involuntary Hospitalizations. University of California, Berkeley.

Auh E, Ganesh C, Brown TT, Choi S, Felton MC, Scheffler RM. (2010). *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California*. Petris Report # 2010-5. The Employment of Consumers with Serious Mental Illness. University of California, Berkeley.

Brown TT, Felton MC, Choi S, Chung JJ, Scheffler RM. (2010). *An Evaluation of the Full Service Partnership Program in the Public Mental Health System in California*. Petris Report # 2010-6. An Analysis of Characteristics Associated with Choosing Education as a Recovery Goal and Beginning an Educational Program in Full Service Partnerships. University of California, Berkeley.

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