Evaluation Report

Evaluation of the Mental Health Services Act in Los Angeles County

Implementation and Outcomes for Key Programs

J. Scott Ashwood, Sheryl H. Kataoka, Nicole K. Eberhart, Elizabeth Bromley, Bonnie T. Zima, Lesley Baseman, F. Alethea Marti, Aaron Kofner, Lingqi Tang, Gulrez Shah Azhar, Margaret Chamberlin, Blake Erickson, Kristen Choi, Lily Zhang, Jeanne Miranda, M. Audrey Burnam

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Preface

In 2004, California voters approved Proposition 63, which was signed into law as the Mental Health Services Act (MHSA). The MHSA made resources available to counties to support treatment for individuals with mental illness, as well as prevention and early intervention mental health services. This report focuses on MHSA implementation in Los Angeles County. The Los Angeles County Department of Mental Health, in partnership with the California Mental Health Services Authority, requested an evaluation of its implementation of major MHSA-funded activities for quality-improvement purposes. The Los Angeles County Department of Mental Health sought to understand whether it is meeting the needs of the Los Angeles community it serves. To this end, the evaluation focuses on understanding who is being reached by key MHSA-funded services and what the impact of those services has been. This evaluation was conducted by RAND Health in collaboration with the UCLA Center for Health Services and Society.

RAND Health

This work was conducted in RAND Health, a division of the RAND Corporation, and funded by CalMHSA. A profile of RAND Health, abstracts of its publications, and ordering information can be found at www.rand.org/health.

CalMHSA

The California Mental Health Services Authority (CalMHSA) is an organization of county governments working to improve mental health outcomes for individuals, families, and communities. Prevention and early intervention programs implemented by CalMHSA are funded by counties through the voter-approved Mental Health Services Act (Prop. 63). Prop. 63 provides the funding and framework needed to expand mental health services to previously underserved populations and all of California's diverse communities.

About the Authors

Sheryl H. Kataoka, Elizabeth Bromley, Bonnie T. Zima, F. Alethea Marti, Lingqi Tang, Blake Erickson, Kristen Choi, Lily Zhang, and Jeanne Miranda are affiliated with the UCLA Center for Health Services and Society. J. Scott Ashwood, Nicole K. Eberhart, Lesley Baseman, Aaron Kofner, Gulrez Shah Azhar, Margaret Chamberlin, and M. Audrey Burnam are affiliated with the RAND Corporation.

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Summary

Background

On November 2, 2004, California voters approved Proposition 63, which was signed into law as the Mental Health Services Act (MHSA). The MHSA levied a 1 percent tax on all California personal incomes over $1 million, resulting in a substantial investment in mental health in the state. The intent of the act was to address the urgent need for expanding accessible, recovery-based, community mental health services. California has a decentralized behavioral health system in which treatment services are provided by its 58 counties. As a result, MHSA funding has been largely administered by California's counties.

Key MHSA-funded services include Prevention and Early Intervention (PEI) services, which aim to prevent onset and negative consequences of mental illness, and Full-Service Partnership (FSP) services that take the "Housing First" approach and aim to do "whatever it takes" to improve residential stability and mental health outcomes for people with serious mental illness (Gilmer, Stefancic, et al., 2010).

The current evaluation focuses on Los Angeles County, which used MHSA funds to offer new PEI services and greatly expand access to FSP services. **The goal of the evaluation is to understand who is being reached by key MHSA-funded services and what the impact of services has been.** The Los Angeles County Department of Mental Health (LAC DMH) is providing PEI services across the life span, but the current evaluation focuses specifically on PEI services for children and transition-age youth (TAY) and FSP programs for children, TAY, and adults.

Approach

The reach and short-term outcomes of the PEI and FSP services were assessed using a range of administrative data, including claims data from all payers and program data shared with the evaluators by LAC DMH. Analyses of these data were supplemented with qualitative interviews designed to collect detailed accounts from clients who had received these MHSA-funded services.

Key Findings

PEI Programs for Children and TAY

- **LAC DMH's PEI services provided care to almost 130,000 children and TAY, the vast majority of whom were of racial/ethnic minority backgrounds.** Almost 65

percent of these clients were new clients, suggesting that PEI services are successfully reaching children and TAY who have not previously gotten care.

- **Utilization of treatments, such as therapy and case management, increased with use of PEI services.**
- **PEI evidence-based practices are associated with staying well and getting better.** Of those receiving preventive care (i.e., those who scored below a widely used threshold for psychological distress at entry into care), almost nine out of ten remained below the threshold for clinically significant symptoms over time. Of those who had symptom levels at or above a clinical cut point for psychological distress at the start of their PEI service, more than half no longer had clinically significant symptoms after care.
- **Hispanic and Asian youth responded particularly well to PEI services**, in comparison with non-Hispanic white and black youth. However, all racial/ethnic groups experienced significant improvements in symptoms.

FSP Programs for Children, TAY, and Adults

- **FSP enrollment increased over the five years evaluated for children, TAY, and adults.** Further, the majority of those enrolled actively engaged in the program.
- **FSP programs provide services to vulnerable and diverse populations.** The programs are located throughout the county, but they are primarily in areas with more households in poverty, where LAC DMH services are likely to be needed the most. The individuals served by the programs tend to have severe diagnoses (e.g., psychotic disorders) and relatively high rates of homelessness. Qualitative interviews also revealed that FSP clients were simultaneously experiencing problems with mental health, physical health, and social issues. The programs predominately serve racial/ethnic minorities.
- **FSP clients experienced improvements in their life circumstances and functioning.** FSP clients experienced decreased rates of homelessness, decreased rates of detention or incarceration within the justice system, and decreased utilization of inpatient hospitalization for mental health. Adults in particular had increased rates of having a primary care provider, suggesting a better connection to physical health care.

Recommendations

LAC DMH should continue its efforts to reach vulnerable populations across the county and improve outcomes for diverse racial/ethnic groups. There is evidence that LAC DMH programs are already reaching at-risk individuals and members of racial/ethnic minority groups across the county. Future evaluations should focus on understanding the unique PEI needs of different racial/ethnic groups, and LAC DMH should use these evaluation findings to inform quality-improvement efforts for groups not faring as well.

Facilitate future outcome-monitoring and quality-improvement efforts by retooling the approach to measuring outcomes. LAC DMH should consider refining *which* outcomes it measures, *how* it measures them, and *how often* it measures them for both FSP and PEI programs. New data-collection tools are needed to understand how clients are doing with respect to whether they have "somewhere to live, someone to love, and something to do" (the pillars of life satisfaction, according to LAC DMH) and other indicators of recovery from serious mental illness. For evaluations of child PEI programs, such outcomes as school engagement and performance should be considered. Careful attention should be paid to choosing measures that are reliable, valid, and responsive to change, with available benchmarks for measuring progress. Key measures, such as homelessness, should be collected at regular intervals, rather than in response to life changes, to reduce missing data and enhance the interpretability of available data. However, many elements of FSP data are collected at state-mandated intervals, so advocacy may be needed at the state level to adjust data-collection requirements.

Consider measuring *processes* of care and using these data for quality improvement. LAC DMH should consider evaluating the fidelity with which the most frequently used interventions are implemented. In addition, it might query patients' satisfaction with care and their impressions of providers' cultural competency.

Examine provider-level differences in engagement and outcomes. We recommend the development of key performance indicators and an examination of how they vary across providers.

If some providers are better at engaging clients and getting positive results than are others, this would be instructive regarding where to focus quality-improvement efforts.

Conduct cost-effectiveness and cost-benefits analyses. Now that the reach and outcomes of key programming have been established, a next step could be to examine the resource investments in these programs in relation to the social and economic benefits associated with those investments.

Conclusions

The current evaluation found evidence that LAC DMH is reaching the highly vulnerable populations it seeks to reach with its PEI and FSP programs. Furthermore, those reached by the programs experience improvements in their mental health and life circumstances. Refining data collection will enable more-thorough evaluation of processes of care and whether clients have "somewhere to live, someone to love, and something to do" and would inform the program's quality-improvement efforts.

Abbreviations

ACT	Assertive Community Treatment
CalMHSA	California Mental Health Services Authority
CPP	Child-Parent Psychotherapy
EBP	evidence-based practice
ECBI	Eyberg Child Behavior Inventory
ER	emergency room
FSP	Full-Service Partnership
IR	Interpersonal Relations
LA	Los Angeles
LAC DMH	Los Angeles County Department of Mental Health
MAP	Managing and Adapting Practice
MHSA	Mental Health Services Act
OQ	Outcome Questionnaire
PEI	Prevention and Early Intervention
PHQ-9	Patient Health Questionnaire–9
PTSD	posttraumatic stress disorder
PTSD-RI	UCLA PTSD Reaction Index
SP	Social Problems
SS	Seeking Safety
TAY	transition-age youth
TF-CBT	Trauma-Focused Cognitive Behavioral Therapy
TSCYC	Trauma Symptom Checklist for Young Children
Y-OQ	Youth Outcome Questionnaire

1. Background

Mental Health Services Act Implementation in Los Angeles County

On November 2, 2004, California voters approved Proposition 63, which was signed into law as the Mental Health Services Act (MHSA). The MHSA levied a 1 percent tax on all California personal incomes over $1 million, resulting in a substantial investment in mental health in the state. The intent of the act was to address the urgent need for expanding accessible, recovery-based, community mental health services. California has a decentralized behavioral health system in which services are directed by its 58 counties. As a result, MHSA funding largely supports programs that are directly administered by California's counties. However, the counties have pooled some funds through the California Mental Health Services Authority (CalMHSA), a joint powers authority that allows the counties to combine their resources to work on statewide projects.

The MHSA provided guidance on how the funds were to be spent (Brown, Dooley, and Kent, 2016). Twenty percent of funds were allocated to Prevention and Early Intervention (PEI) programs, which aim to reduce risk for mental illness and provide early treatment for mental health problems to reduce negative consequences, such as prolonged suffering. Forty-five percent of the funds were allocated to community services and supports, with the majority of this funding going to Full-Service Partnerships (FSPs) that do "whatever it takes" to improve residential stability and mental health outcomes, consistent with Assertive Community Treatment (ACT) and "Housing First" approaches (Gilmer, Stefancic, et al., 2010). The remaining community service and support funding was allocated to general system development, outreach and engagement, and housing. In addition, 10 percent of funds were allocated to community program planning and administration, 10 percent to buildings and information technology, 10 percent to education and training, and 5 percent to innovation.

The current evaluation focuses on Los Angeles (LA) County, which used MHSA funds to offer new PEI services and greatly expand access to FSP programs. PEI services were newly established with MHSA funds; previously, the Los Angeles County Department of Mental Health (LAC DMH) had treated only individuals who already had mental illness. Consequently, MHSA funding resulted in a large expansion: LAC DMH implemented new PEI services and started providing services to many people who previously would not have received them. FSP programs had previously been established through AB-2034, legislation that specifically funded demonstration programs for mentally ill adults who were homeless (LAC DMH, undated). MHSA funds allowed LAC DMH to build on that foundation by making FSP services available to children, transition-age youth (TAY), and older adults, as well as by providing client supportive services, such as rental subsidies, food, clothing, and other recovery supports.

With a population of 10.1 million, LA County is the largest in the state, containing nearly 26 percent of California's population. LAC DMH, in partnership with CalMHSA, requested an evaluation of its implementation of major MHSA-funded activities for quality-improvement purposes. LAC DMH sought to understand whether it is meeting the needs of the LA community it serves. To this end, the evaluation focuses on understanding who is being reached by key MHSA-funded services and what the impact of those services has been.

LAC DMH is providing a full spectrum of PEI services, including community outreach, social marketing efforts, primary prevention, and targeted PEI evidence-based practices (EBPs), and serves individuals across the life span, from young children to adults.

LAC DMH requested an evaluation of a subset of its services: PEI services for children and TAY and FSP programs for children, TAY, and adults. To date, LAC DMH has focused its dissemination of child and TAY PEI EBPs on those that reduce symptoms or problems related to anxiety, trauma, depression, life crisis, first-break psychotic symptoms, emotion dysregulation, disruptive behaviors, conduct problems, and parenting or family difficulties. LAC DMH's FSP programs have focused on individuals who already have substantial mental health or psychosocial problems, including those with a history of homelessness, incarceration, frequent use of emergency rooms (ERs) or hospitals, and school failure (for children only).

The evaluation does not examine PEI programs for adults; they are a relatively small part of LAC DMH's PEI services, and the county chose to focus on children and TAY, who receive the bulk of PEI services. LAC DMH also did not request evaluation of its primary prevention, social marketing, or outreach, because these programs do not have data readily available for evaluation. Rather, the evaluation focuses on direct-service interventions, for which medical records and claims data are available.

PEI Programs for Youth

LAC DMH provides a wide range of MHSA-funded PEI programs, encompassing prevention for those at risk for mental illness, suicide, or violence; stigma- and discrimination-reduction efforts; and various evidence-based, promising, and community-defined early intervention practices for mental illness symptoms (LAC DMH, 2016). The EBPs for children and families employ manualized approaches (e.g., Seeking Safety [SS], which focuses on building coping skills) to common problems, such as traumatic stress and behavior issues.

PEI programs are designed to not only improve the reach of services but also prevent illness from occurring and intervene early in the course of illness to prevent longer-term negative outcomes. The current evaluation examines reach (i.e., who was served?) for all PEI services for which data were available and examines outcomes (i.e., what was the result of being served?) for the subset of youth and parenting PEI programs for which LAC DMH collects outcome data. The PEI programs most frequently provided to youth are Managing and Adapting Practice (MAP), SS, and Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). The parenting PEI programs most frequently provided are Triple P—Positive Parenting Program and Child-Parent

Psychotherapy (CPP). Table 1.1 summarizes characteristics of the five PEI interventions for youth and families that are most frequently provided by LAC DMH.

FSP Programs for Youth and Adults

California's FSP programs are rooted in the ACT and wraparound services models and use a team approach to provide comprehensive, community-based psychiatric treatment, rehabilitation, and support for "whatever it takes" to move toward recovery and resilience for target populations (Cashin et al., 2008). FSP programs extend ACT programs by placing the focus on housing first in all programs and explicitly calling for client-driven and recovery-oriented focus (Spaite and Davis, 2005). The Housing First model has been described and evaluated in the literature (see, e.g., Padgett, Gulcur, and Tsemberis, 2006).

As envisioned in the MHSA, FSP programs would provide a range of services, including housing, mental health services, and social supports (educational, vocational, and financial). These services aim to be client-centered and build on the existing strengths and resiliencies of clients. Long-term recovery and self-sufficiency are promoted through the development of the physical, emotional, and intellectual skills needed by people with mental illness. However, there has been wide variation in how FSP programs are actually implemented (Cashin et al., 2008; Gilmer, Katz, et al., 2013).

FSP programs are one of various ways LA County reaches out to homeless people with serious mental illness. Of the 43,854 people counted as homeless in the 2016 greater-LA homeless count, 13,006 (29.7 percent) had some form of long-continuing mental illness (e.g., depression, bipolar disorder, or schizophrenia) (Los Angeles Homeless Service Authority, undated). In the current evaluation, we describe the impact of FSPs on homelessness, as well as other key outcomes, such as health service utilization.

Table 1.1. LAC DMH's Most Frequently Provided MHSA-Funded PEI Programs for Children and Families

Practice	Indicated Age	Target Problems	Description of Practice	Evidence Base
MAP	0–21	Anxiety, traumatic stress, depression, conduct	Provides a framework for collaboration and a decision support tool for summarizing EBPs to improve outcomes and the quality of behavioral health care. Provides a resource around which to organize and guide activity across a diverse service array, across levels of care, across populations, and across health care settings. (See PracticeWise, undated.)	A pre-post analysis of the impact of scaling up MAP in LA County demonstrated significant improvements in client outcomes (Southam-Gerow et al., 2014). While the evidence for MAP as a system is limited, it is built on the deep and well-established literature of EBPs for delivery in community mental health systems (Chorpita, Daleiden, and Collins, 2014).
SS	13–18	PTSD, substance use	An evidence-based counseling model that employs a present-focused perspective to help people attain safety from trauma or substance abuse. Can be conducted in groups or with individuals. (See Treatment Innovations, 2016.)	Associated with significant reductions in unplanned sex, substance use and associated problems, trauma-related symptoms, and cognitions related to substance use disorders and PTSD (e.g., Hien et al., 2012; Najavits, Gallop, and Weiss, 2006).
TF-CBT	3–18	PTSD, traumatic stress	A treatment model that incorporates various trauma-sensitive intervention components that can be individualized to the needs of the child and his or her circumstances while maintaining a therapeutic relationship with both the child and parent. A short-term treatment (typically 12–16 sessions) that combines cognitive behavioral and resiliency-building techniques in a phase-based approach (Cohen, Mannarino, and Deblinger, 2016),	TF-CBT has extensive empirical evidence supporting its ability to reduce PTSD, depressive symptoms, and behavioral problems among children ages 3–18 who have experienced different traumas (e.g., Allen and Hoskowitz, 2017; Dopp et al., 2017; Lang and Connell, 2017; Lang et al., 2015; Roundfield and Lang, 2017; Wamser-Nanney and Steinzor, 2017). It has been implemented across the globe in a wide variety of settings.
Triple P	2–12	Disruptive behavior, family dysfunction	Prevention-focused parenting and family support strategy that comprises five levels of intervention on the family system of increasing strength. All levels aim to prevent behavioral, developmental, and emotional problems in children. Designed to achieve minimally sufficient intervention to prevent future problems. (See Sanders, 1999.)	A meta-analysis of 101 Triple P studies found significant effects for all seven outcomes examined at up to 36 months follow-up (Sanders et al., 2014). Participants experienced benefits beyond improving parenting practices and child behavior, such as reductions in parental distress and marital problems. A four-year follow-up study found evidence of sustained parenting change (Heinrichs, Kliem, and Hahlweg, 2014).
CPP	0–6	Trauma, poor attachment	Weekly one-hour sessions between clinician, caregiver, and child focused on supporting and strengthening the relationship between child and caregiver as a vehicle for restoring the child's cognitive, behavioral, and social functioning. (See Child Trauma Research Program, undated.)	CPP is associated with improved outcomes for both preschool children and mothers. Children improved in total behavior problems, traumatic stress symptoms, attachment style, and diagnostic status; mothers improved in avoidance symptoms, PTSD symptoms, parenting-related stress, and general distress (e.g., Ippen et al., 2011; Lieberman, Van Horn, and Ippen, 2005; Lieberman, Ippen, and Van Horn, 2006).

SOURCE: For age ranges and target problems, see Brookman-Frazee et al., 2016.

Purpose and Organization of This Report

This report describes the results of an objective, external evaluation of MHSA implementation in LA County, with a focus on PEI programs for children and families and FSP programs for children, TAY, and adults. We outline our evaluation methods in Chapter Two. In Chapters Three, Four, and Five, we present results for PEI programs for youth and FSP programs for youth and adults, in turn. In each of these chapters, we first describe how many people these programs reached—in total, among key demographic groups, and by geographical location within the county. We describe the short-term impact of participation in these programs by examining changes in program engagement rates; life circumstances, such as housing and employment; health care utilization; symptoms; and functioning. We complement the quantitative data analysis and literature review by presenting qualitative findings from interviews, which elicited richer information about client and family experiences. We conclude the three chapters on results with key takeaways for youth PEI programs and youth and adult FSP programs, respectively. Finally, in Chapter Six, we summarize key findings across the different kinds of interventions, draw conclusions, and make recommendations for future program implementation and evaluation.

2. Methods

The current evaluation examined administrative data to assess the reach and short-term outcomes of the PEI and FSP services provided and qualitative interviews designed to collect rich data on topics not covered in quantitative data sets. Each of these approaches will be discussed. We evaluated PEI programs for children and TAY (in this report, we refer to children and adolescents as *children*, and we refer to children, adolescents, and TAY as *youth*). We evaluated FSP programs for children, TAY, and adults. We focused our evaluation on the years 2012–2016, the most recent five years for which complete data were available. LAC DMH has provided PEI programs since 2009 and FSP programs since 2006, but the programs offered expanded over time and experienced a learning period for defining who is eligible. By focusing on 2012–2016, we feel that we evaluated the complete set of programs available and observed less fluctuation in potential outcomes than we would have from programs that were less mature.

Quantitative Data Sources

LAC DMH provided service and outcome data related to clients who received PEI and FSP services in 2012–2016. Specifically, two data sources were provided: (1) the DMH Services Dataset, which includes claims for any mental health service (MHSA-funded services and non–MHSA-funded services), and (2) the DMH Program Dataset, including clinical assessments for clients receiving PEI and FSP services (for clients who were already in these programs and new clients). All data sets included a scrambled person identifier that linked an individual across data sources. We combined these data sources to perform our quantitative evaluation.

Service Data

We received service claims data for all clients receiving mental health services and crisis stabilization services from LAC DMH providers between 2012 and 2016. These data include all payers. For the PEI sample, the DMH Services Dataset included 89.2 percent Medicaid clients, 0.6 percent privately insured clients, and 10.3 percent uninsured or other insurance status clients. In addition, the information contained in the data has diagnosis, type of procedures (e.g., therapy, case management), plan type (MHSA, non-MHSA source), and service delivery dates. Provider locations (including zip code) are also included in these data. These data do not include services provided by non–LAC DMH providers. We cannot observe services offered by private providers, for example.

We analyzed demographic data for clients who participated in PEI or FSP programs between 2012 and 2016. The data include age, gender, race/ethnicity, primary language, and zip code of residence. The self-reported race/ethnicity data included in the demographic data are very

detailed. Clients were allowed to have multiple race/ethnicity selections. For our evaluation, we collapsed race/ethnicity into seven categories: Hispanic, African American/black, non-Hispanic white, Asian/Pacific Islander, American Indian/Alaska Native, other, and missing. Race/ethnicity information is missing for 14.7 percent of all individuals who received LAC DMH services. We report the percentage missing for each population we evaluate in the chapters that follow. In general, race/ethnicity is missing more often for PEI clients. Gender includes only female, male, or missing.

Program Data

In addition to the service claims data we described, we also received program data from LAC DMH that are specific to the PEI and FSP programs. These data were collected by LAC DMH and by PEI and FSP providers for both PEI and FSP clients at baseline or entry into the program, as well as at intervals during program participation and at completion.

PEI outcome data describe the type of PEI program that the client received, with assessment scores from standardized scales collected at enrollment and completion of the evidence-based program.

FSP data include enrollment data describing which program the client is enrolled in, as well as the dates of enrollment and disenrollment; assessment data collected at entry (baseline) and at three-month intervals; and key-event-change data tracking changes in employment and living arrangements. The assessment data cover a range of topics, including social connections, health status, education, employment, financial situation, health care service utilization, and interaction with the justice system. The baseline assessment also includes the current living arrangement. Individual clients and episodes of care can be linked across the data sources.

Quantitative Data Analyses

The goals of the quantitative data analyses were to describe the *reach* of LAC DMH MHSA-funded PEI and FSP programs and to describe their *impact.* To this end, we examined service utilization and program data for both kinds of programs. This section describes our analytic approach.

We describe limitations to our analyses of each program in detail below, but a common limitation for all of our impact analyses is the lack of a strong comparison group. Most of the outcomes we evaluate are derived from program data, and we have program data only for clients who participated in the programs. We can observe whether there are changes in outcomes for the participants, but we have no good source of data to compare these against. Furthermore, even though some of our outcomes are derived from service utilization data, we are unable to observe utilization that occurs outside the LAC DMH system. These limitations significantly hinder our ability to identify the true impact of these programs. Our results must therefore be interpreted as suggestive rather than definitive.

PEI Programs for Youth

Reach

We analyzed PEI baseline assessment data and service claims data. The target population for PEI services was clients ages 0–25—children and TAY. TAY were defined as clients between ages 16 and 25.

Descriptive frequencies were calculated for 2012–2016 and by year. The main objectives were to describe the geographic reach of PEI providers within LA County, the amount of total PEI services provided, and the sociodemographic characteristics (i.e., age, gender, race/ethnicity) of the clients served. We then drilled down to describe PEI service use by service area (known technically as Service Planning Area). In addition, for 2013–2016, we estimated the number of new clients receiving PEI services compared with clients who were continuing any mental health services. New cases were defined as those with no prior mental health service claims during the 12 months prior to entry into PEI services; thus, clients receiving services in 2012 were excluded from the analysis of new cases, since we did not have 2011 data to confirm whether they were new or continuing clients.

Impact

We analyzed both service and program data to characterize change in service use and clinical and functioning outcomes because of participation in PEI programs. We examined change within individual clients' episodes of care.

From the DMH Services Dataset, we examined the type of mental health service use before versus after initiation of PEI participation (*before* defined as service use in the 12 months prior to PEI participation and *after* being the 12 months following enrollment into a PEI program). Types of services evaluated include psychotherapy, psychiatric evaluations, medication, targeted case management, and crisis care. We also examined ER visits, defined as psychiatric ER visits at LA County hospitals.

Using the DMH Program Dataset, we assessed the change in assessed outcomes for the subset of clients receiving PEI services who had assessments captured in the DMH Program Dataset. We focused on PEI programs that required collection of outcome assessments. We evaluated performance on several outcome measures included in the DMH Program Dataset. Table 2.1 summarizes the outcomes we examined. The Youth Outcome Questionnaire (Y-OQ) is used by 85 percent of PEI programs. It includes a parent report (Y-OQ 2.01) for clients ages 4–17 and a child self-report (Y-OQ–Self Report 2.0) for client ages 12–18. Because the Y-OQ is measured for most programs, the outcomes from the Y-OQ are the main outcomes we evaluated. They include the Y-OQ total score and subscores for Interpersonal Relations (IR) and Social Problems (SP). For the total score, we also included the Outcome Questionnaire 45.2 (OQ) for clients age 19 and older.

There are also specific clinical outcome measures that vary by the clinical focus areas of the PEI programs. For this evaluation, we examined four of these specific clinical outcome measures that are commonly used: Patient Health Questionnaire–9 (PHQ-9), UCLA PTSD Reaction Index (PTSD-RI), Eyberg Child Behavior Inventory (ECBI), and Trauma Symptom Checklist for Young Children (TSCYC). See Appendix A for a list of PEI interventions by these outcome measures.

Table 2.1. General and Specific Outcome Measures

Measure	Type	Age (Years)	Clinical Significance Score
Total score for Y-OQ-Parent (ages 4–17), Y-OQ–Self-Report (ages 12–18), and OQ (ages 19–25)	General clinical outcome	4–25	Y-OQ–Parent ≥ 46, Y-OQ–Self-Report ≥ 47, or OQ ≥ 64
Subscore for Y-OQ–IR, Parent or Self-Report	General functional outcome	4–25	Y-OQ–IR–Parent ≥ 4 or Y-OQ–Self-Report ≥ 3
Subscore for Y-OQ-SP, Parent or Self-Report	General functional outcome	4–18	Y-OQ–SP–Parent ≥ 3 or Y-OQ–SP–Self-Report ≥ 3
PHQ-9	Specific clinical outcome	12–25	PHQ-9 ≥ 10
PTSD-RI, child/adolescent or parent	Specific clinical outcome	3–20	Total child/adolescent or parent T-score ≥ 60
ECBI, total score for intensity or problem	Specific clinical outcome	2–16	Intensity T-score ≥ 60 or problem T-score ≥ 60
TSCYC	Specific clinical outcome	2–8	Total T-score ≥ 60

The analytic sample ($N = 29{,}237$ cases) includes only those youth PEI cases that have both a pre- and post-assessment on the general outcome measure (Y-OQ) or the most commonly used specific measures available. The outcome analyses are primarily at the treatment case level, distinguished from unique individuals ($N = 26{,}812$ clients), since 8 percent of individuals had more than one treatment during the study period. We first describe youth in this data set by age, gender, race, and clinical diagnosis. We defined *diagnosis* as the primary diagnosis from the DMH Service Dataset that was nearest in time to the beginning of the PEI episode of treatment.

To evaluate whether PEI programs lead to improvement in symptoms and functioning, for each outcome, we defined an indicator for staying well (client scored below a clinical cutoff for psychological distress at baseline and remained nonclinical at follow-up) and an indicator for improvement (at or above a clinical cutoff for symptoms at pre-test and no longer in the clinical range at follow-up).

We reported percentages of staying well and improvement by demographics and prior primary diagnosis. We used the Pearson's chi-square test of association and conservatively used a p value of ≤ 0.001 to indicate statistical significance to account for multiple testing.

For each outcome, we also compared the percentage of cases that were in the clinical range at pre-test to post-test using McNemar's test of paired proportions stratified by demographics and PEI practices (see Appendix B for results of McNemar's test by PEI program). Finally, to

improve internal validity, given the lack of a comparison group, we compared our results with an analysis of similar outcomes in a clinical trial's study of youth interventions (Weersing and Weisz, 2002). We calculated normative z-scores for each client's Y-OQ–SR total score at post-treatment for each practice and compared these with the confidence intervals found for clinical trials as reported by Weersing and Weisz (2002).

A limitation of our quantitative evaluation of outcomes is the relatively low number of completed pre- and post-test assessments for those who received any PEI services. From the DMH Service Dataset (claims), we know that 129,684 PEI child and TAY clients received some type of PEI service between 2012 and 2016. Of those, 113,223 clients had a PEI claim for an EBP. There are a variety of reasons clients receiving PEI services might not have had both pre- and post-outcome assessments. Some PEI services do not require outcome assessments, so clients in these programs will not have assessment data. Some clients who started a PEI EBP might have dropped out before completing any assessments. For MAP, TF-CBT, and Triple P, outcome data were collected by an outside agency between 2012 and 2013; therefore, the claims for this period are not included in the DMH Program Dataset. Finally, there is variation in provider reporting of assessments.

There are 113,223 PEI child and TAY clients identified in the DMH Services Dataset, and 73,456 have at least one assessment in the DMH Program Dataset (2012 to 2016); 26,812 clients (37 percent) have both pre- and post-assessments for at least one of the five outcome measures evaluated in this report, including 26,277 with both pre– and post–Y-OQ assessments (see Appendix A). Of the 46,644 clients with only one assessment, 13,321 were active as of the end of our evaluation period, meaning that their post-test data might be collected upon PEI completion (outside the date range of our data set).

The analytic sample is composed of those who have both pre- and post-assessment values for at least one of a select group of outcome measures that we analyzed for this evaluation: the Y-OQ, PHQ-9, PTSD-RI, ECBI, or TSCYC. The low rate of completed outcome data (37 percent) raises concerns about the generalizability of our results. When we compare members of the sample who are included in the outcome analysis versus who are not, there are significant differences by race/ethnicity, language, and age but no differences by gender (see Table 2.2 for details). This highlights that the PEI impact evaluation based on the DMH Program Dataset is not representative of the sample as a whole. Thus, the results must be interpreted with caution. Data are not available to assess whether the absence of post-treatment clinical outcome measures corresponds to clinical needs being met early in care, poor adherence to recommended care but persistent need for care, or worsening of clinical functioning that might have negatively influenced engagement in care or indicate continued need for care. An additional limitation is that we do not have a comparison population, so we are unable to determine whether the changes are due to the PEI programs or some other factor.

Table 2.2. Characteristics of Youth PEI Clients by Outcome Assessment Status (comparison of overall clients in DMH Program Dataset and those with and without both pre- and post-assessments on Y-OQ, PHQ-9, PTSD-RI, ECBI, or TSCYC)

	% Overall (*N* = 73,456)	% Not Included in Outcome Analysis (*n* = 46,644)	% Included in Outcome Analysis (*n* = 26,812)	*p*-Value
Age, TAY				<0.001
0–15	79.4	77.6	82.7	
16–25	20.6	22.4	17.3	
Gender				0.073
Female	46.0	45.8	46.4	
Male	54.0	54.2	53.6	
Race/ethnicity (hierarchy)				<0.001
Hispanic	75.6	73.8	78.6	
Black or African American	15.0	16.7	12.2	
	1.7	1.7	1.8	
American Indian/Alaska Native	0.3	0.3	0.4	
Non-Hispanic white	7.4	7.6	7.0	
Language				<0.001
Any English (English only, English + other)	74.7	75.9	72.7	
Any Spanish (Spanish only, Spanish + other, no English)	24.2	23.1	26.1	
Other languages	1.1	1.0	1.2	

NOTE: Numbers might not sum to 100 because of rounding.

FSP Programs

Reach

We evaluated the reach and impact of FSP programs for three populations: children (ages 0–15), TAY (ages 16–25), and adults (age 26 and older). We evaluated three components of FSP reach: the number of clients, the type of clients, and the relationship between the clients served and the population of LA County. First, using FSP baseline assessment data and enrollment data, we calculated the total number of individuals served by FSP programs in each year and the number of newly enrolled clients in each year. Using the FSP provider location, we estimated the geographic reach of these programs by calculating client counts by service area. We used the demographic data we received from LAC DMH to describe the sociodemographic characteristics of FSP clients at enrollment. Finally, using data from the U.S. Census (2016 American Community Survey five-year tract-level averages) we compared the FSP clients with the population of LA County, especially the LA County population in poverty, to assess whether FSP programs are reaching a population that reflects the LA County population. There are no sources of data that we are aware of that clearly identify the population in need of FSP services

in LA County. The two primary factors that define eligibility for these programs are mental health status and housing status. Although there are sources that identify these two factors separately, there is none that identifies them both by age. Poverty status is not a proxy for poor mental health status, but it is a proxy for homelessness and higher risk of homelessness and for clients of LA County mental health services in general.

Impact

Two facets of impact were explored in this study. First, we used FSP assessment data and service claims data to estimate participation rates among those who had started FSP programs. We identified the number of clients who enrolled in an FSP program and had at least one follow-up assessment and one key-event-change record. This captures engagement in terms of participation through at least one follow-up assessment or participation that was long enough to observe at least one change in status. We also estimated the time spent in FSP programs using enrollment and disenrollment dates. The amount of time spent in an FSP program is presented as a measure of engagement, but it is not meant to serve as a measure of quality. FSP programs are not the same as the PEI programs described earlier. PEI programs are evidence-based, with recommended numbers of visits to a provider. FSP programs are designed to address the needs of clients and have some latitude in how those needs are met and are not visit-based, as PEI programs are. This means that, while FSP providers try to keep track of their efforts to address client needs, they do not necessarily have regular visits with clients. Furthermore, individuals in FSP programs have different needs, and some of these needs may be met quickly, while other needs may take longer to address.

The second facet of impact is change over time in the key outcomes for participants in FSP programs. We estimated the change in each outcome, from enrollment in an FSP program to the final observed assessment or event change record that can be observed in the data. Youth and adult FSP clients are given different assessments. There are some common items, but there are also differences. We therefore evaluated some outcomes for all three FSP client populations (child, TAY, and adult), but there are also some outcomes that are available only for child and TAY clients. Homelessness is not captured well in the FSP program data for child clients because of the way housing status is measured for children, so we do not evaluate homelessness for children. State direction for coding housing status for children emphasizes living with family over whether the child is homeless or not, so a child who is with one or more adult family members and homeless was coded the same way as a child who is not homeless but is living with one or more adult family members. Table 2.3 lists the outcomes we evaluate, the FSP clients for whom we can measure the outcome, and the timing of the measurement. We compared homeless status in the year prior with enrollment in any FSP program and the final observed residential status. We also compared the employment status at initial assessment with the final observed status for all FSP clients. We compared whether any client had a primary care physician at initial assessment and at the final completed assessment. We also compared inpatient stays for mental

health or substance use disorders in the year prior to enrollment and the year following enrollment for all FSP clients. For child and TAY clients, we evaluated potential changes in social engagement and additional activities.

Table 2.3. FSP Outcomes

		Measurement Timing	
Outcome	**FSP Clients**	**Pre**	**Post**
Homeless status	TAY and adult	12 months prior to enrollment	Final observed status
Detention within the justice system	TAY and adult	12 months prior to enrollment	12 months after enrollment
Social engagement			
Socializes	Child and TAY	At initial assessment	Final observed status
Has friends	Child and TAY	At initial assessment	Final observed status
Activity			
In school	Child and TAY	At initial assessment	Final observed status
Community involvement	Child and TAY	At initial assessment	Final observed status
Employed	Child, TAY, and adult	At initial assessment	Final observed status
Has primary care provider	Child, TAY, and adult	At initial assessment	Final observed status
Inpatient stays	Child, TAY, and adult	12 months prior to enrollment	12 months after enrollment

We compared the proportions of clients with each outcome pre- and post-participation in the FSP program and tested the statistical significance of any differences using Pearson's chi-square test. Because we performed multiple statistical tests of significance for each of the FSP populations, we adjusted our threshold of significance using the Bonferroni method. We performed up to eight separate tests for each population, so our adjusted threshold for significance is 0.006. Our analyses of outcomes based on FSP assessment data were limited by the fact that we could estimate only changes over time for the participants; we had no control group. Thus, we could not control for other non-FSP factors that could explain changes we observed. For example, a change in the rate of employment among FSP clients could be due to either participation in an FSP program or to changes in the economic conditions in LA County. The population that is eligible for FSP programs is defined by two key factors: mental health status and housing status. Using service claims data, we could potentially identify a comparison group based on mental health status among those who use services, but we have housing status information only for those who enroll. We were unable to properly identify housing status for a comparison group. Because we could not create a comparison group that was similar to FSP participants in all the ways that matter, we cannot be certain that we identified the true impact of FSP programs. We compared changes in outcomes by race/ethnicity to assess whether there were differences in program performance and used chi-square tests to test for statistically significant differences.

We did not have the same data-completeness limitation for our FSP analyses that we faced for our PEI analyses. All of the clients who start an FSP program have at least one service claims record following enrollment. Most have at least one follow-up assessment and at least one key-event-change record. These are the sources we used to analyze impact. Of the child clients who enrolled in an FSP program at some point between 2012 and 2016, 89.4 percent had at least one follow-up assessment, and 92.6 percent had at least one key-event record. Of the TAY clients, 86.5 percent had at least one follow-up assessment, and 88.2 percent had at least one key-event record. Of the adult clients, 88.0 percent had at least one follow-up assessment, and 89.1 percent had at least one key-event record. There are small differences between the populations with and without follow-up data. Table 2.4 summarizes the differences between these two populations on population demographics and a common outcome measure for all three FSP client groups. There were higher proportions of Hispanic clients and a higher proportion of clients with a primary care physician at baseline among those who had follow-up data.

Table 2.4. Comparison of Characteristics for FSP Clients With and Without Follow-Up Data

	Child			TAY			Adult		
	No Follow-Up (%)	Follow-Up (%)	*p*-Value	No Follow-Up (%)	Follow-Up (%)	*p*-Value	No Follow-Up (%)	Follow-Up (%)	*p*-Value
Gender			0.001			<0.001			<0.001
Female	42.9	42.2		38.5	41.1		40.9	43.5	
Male	54.0	56.4		57.0	58.0		57.6	56.0	
Other/missing	3.2	1.5		4.5	0.9		1.5	0.5	
Race/ethnicity (hierarchy)			0.0017			<0.001			<0.001
Hispanic	55.9	63.1		52.2	53.6		22.4	24.6	
Black or African American	23.6	19.3		24.3	23.6		35.0	32.6	
Asian/Pacific Islander	3.9	3.4		2.9	4.3		5.0	5.6	
American Indian/Alaska Native	0.0	0.3		0.0	0.5		1.0	1.0	
Non-Hispanic white	8.9	8.4		12.3	13.8		27.7	31.0	
Other	1.5	1.3		1.2	1.4		1.5	1.6	
Missing	6.2	4.2		7.2	2.7		7.4	3.7	
Language			0.0035			<0.001			0.0012
Any English (English only, English + other)	81.1	78.2		81.5	86.3		86.8	87.5	
Any Spanish (Spanish only, Spanish + other, no English)	14.3			12.0	10.5		7.1	7.0	
Other languages		1.8		0.7	1.6		3.8	4.1	
Missing	3.2	1.6		5.8	1.6		2.4	1.3	
Has primary care provider at baseline	89.9	93.9	<0.001	57.7	66.1	0.0009	51.8	59.9	<0.001

NOTE: Numbers might not sum to 100 because of rounding.

Qualitative Approach

To describe FSP and PEI programs from the client perspective, we sampled clients who had participated in adult FSP or youth PEI programs (including TF-CBT, MAP, SS, and a parenting program).

We used a purposeful sampling approach to assemble a sample with diverse perspectives. We recruited clients or parents and adolescents (>14 years old) from these MHSA-funded programs from a variety of clinic sites across service areas and sought diversity in the age of the child client, the gender of the adult, and levels of treatment engagement. Clinic sites distributed flyers to potential participants, who then contacted the research team to volunteer to participate. Interviews were designed to be conducted over the phone and audio-recorded. Procedures were developed in collaboration with a consumer task force and the study advisory board.

Recruitment took place from November 27 through December 23, 2017. The study received 48 referrals; reached 33 potential participants by phone; screened 28 individuals as eligible; and completed 26 interviews: 20 FSP, four parents (MAP, TF-CBT), and two adolescents (TF-CBT).

Interviews addressed two evaluation questions: (1) What impacts did the MHSA-funded program have on clients' daily lives? (2) What were clients' overall experiences of the MHSA-funded program, including its strengths and its areas for improvement?

Interviewers and research team members developed a coding strategy to mark key themes in the data. Transcripts and notes from interviews were marked to support coding categories, and cases were compared and contrasted to deepen conceptual similarities and identify disconfirming cases.

Finally, qualitative analyses are limited by small sample sizes. Given the reach of PEI and adult FSP programs across LA County, results from a small number of individuals from some clinic sites cannot be said to capture the full range of experiences in these programs. In addition, the sampling approach might have introduced bias. Although we sought diversity in terms of sites and levels of engagement, those individuals who responded to the invitation to participate may have been more engaged or satisfied with their services than individuals who did not respond. Moreover, almost 30 percent of referrals (15 of 48) could not be reached for screening. Although this drop-off rate is not unusual for study populations of this type, results might not reflect the perspectives of the most difficult-to-reach individuals.

3. Results: Reach and Outcomes of Prevention and Early Intervention for Youth

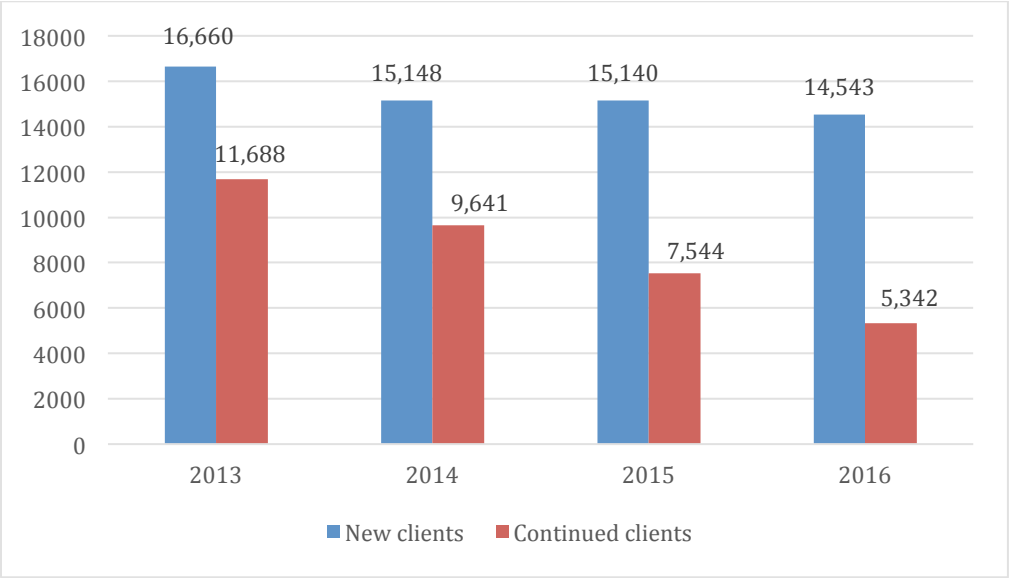
Reach of PEI Programs for Children and TAY: Which Clients Received Services?

Number of Child and TAY PEI Clients, 2012–2016

Overall, 129,684 children and TAY received any PEI services between 2012 and 2016, corresponding to 47 percent of the 275,959 clients ages 0–25 who received any MHSA-funded care.

Almost 65 percent (61,491 of 95,706; 64.2 percent) of the PEI clients were new child and TAY clients between 2013 and 2016. Overall, the distribution of new clients by service area and sociodemographic characteristics were similar to those of all PEI clients. Figure 3.1 summarizes the number of new clients receiving any PEI services and clients receiving continued mental health services (i.e., at least one claim for any mental health services in past 12 months), by year.

Figure 3.1. New Clients Receiving Any PEI Services Versus Clients Receiving Continued Mental Health Services, by Year, 2013–2016

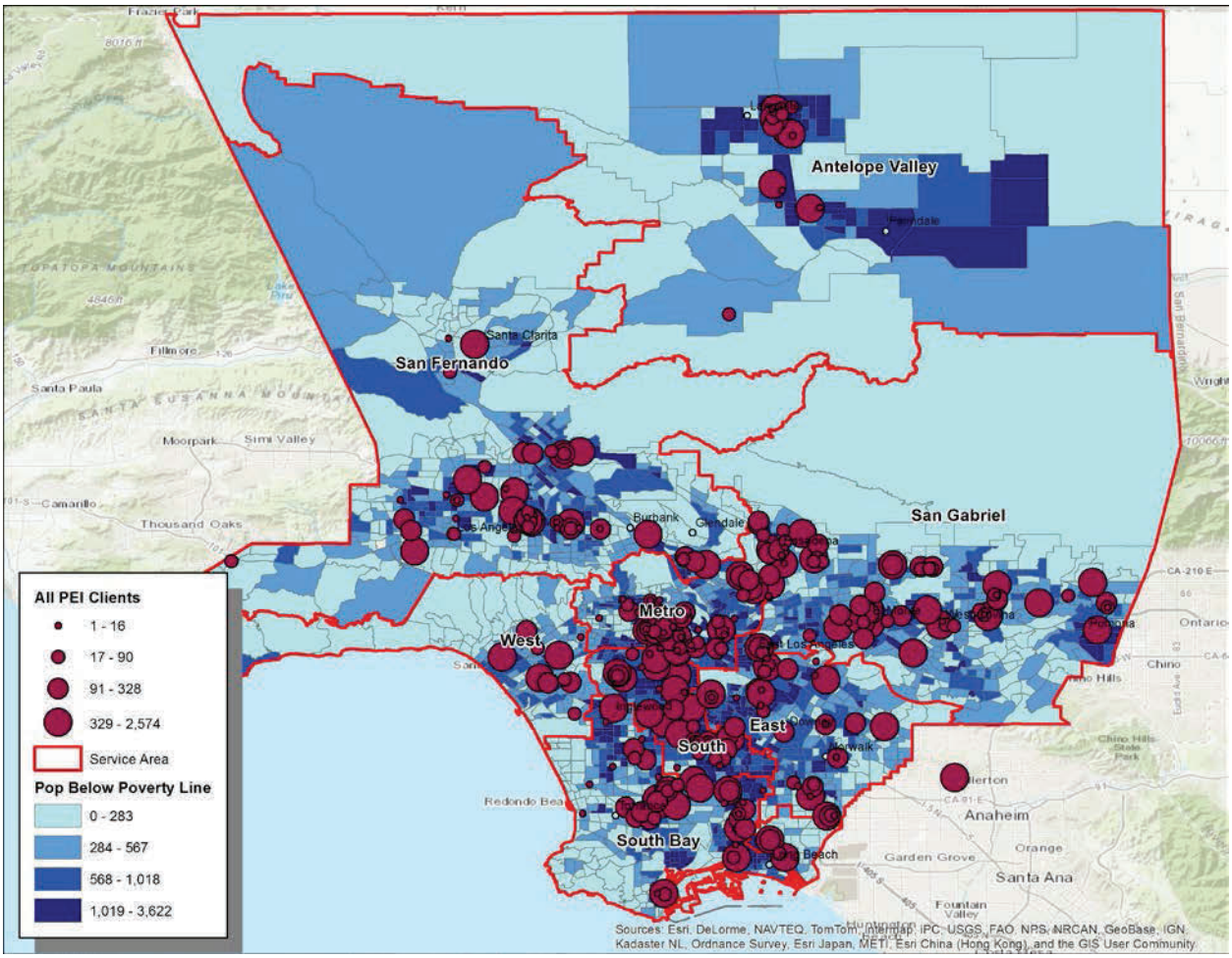


Overall, almost 18 million (N = 17,683,238) MHSA-funded mental health services were provided to children and TAY between 2012 and 2016. Of these, **more than 4.5 million services**

(*n* = 4,692,018), corresponding to more than one-quarter (26.5 percent) of all MHSA-funded services for this target population, were PEI services.

Figure 3.2 depicts the distribution of the providers delivering PEI care and the number of clients they each served between 2012 and 2016 within each service area. As the figure illustrates, **for every service area, providers of MHSA-funded PEI care were available, and the location of these providers generally aligned with communities with greater numbers of households at or below the federal poverty line.** PEI providers also clustered more tightly in the metro LA and South LA service areas, as well as the neighboring areas in East LA and South Bay, consistent with the distribution of households with incomes below the poverty line.

Figure 3.2. Child and TAY PEI Provider Locations

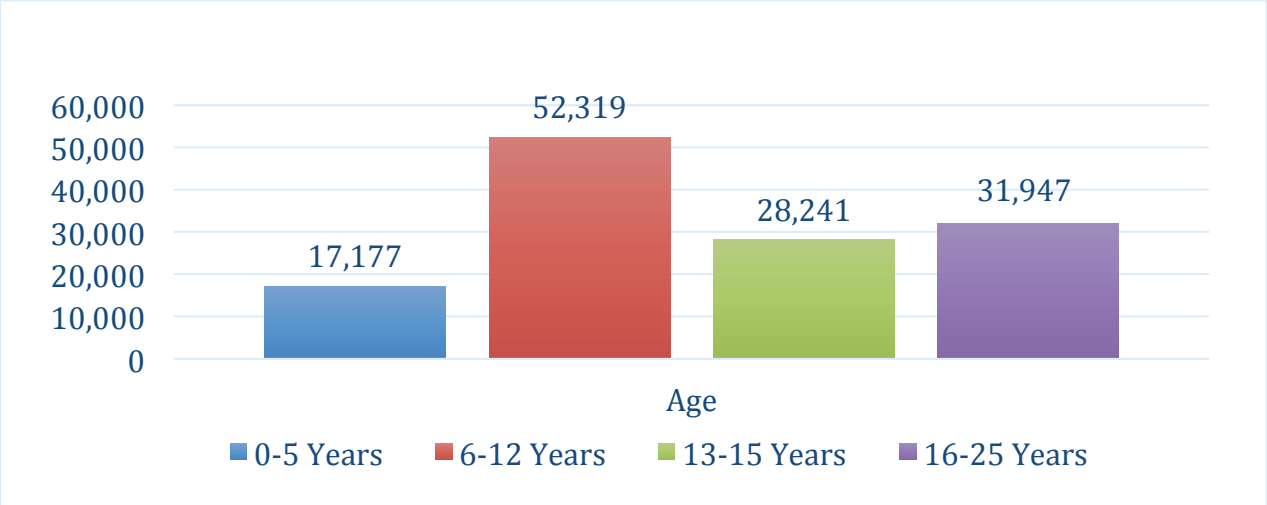


Client Characteristics

Figure 3.3 summarizes the ages of child and TAY PEI clients; the most common age range served was 6–12, corresponding to more than 50,000 children (*n* = 52,319; 40.3 percent).

Together with very young children, more than one-half (*n* = 69,496; 53.6 percent) of the children receiving PEI care were between ages 0 and 12; of these, three-fourths were between ages 6 and 12 (*n* = 52,319; 75.3 percent). In addition, almost 30,000 early teens, between ages 13 and 15 (*n* = 28,241; 21.8 percent), received PEI care. TAY, ages 16–25, composed almost one-quarter of the clients receiving any MHSA-funded PEI care (*n* = 31,947; 24.6 percent).

Figure 3.3. Clients Ages 0–25 Who Received Any MHSA-PEI Care Between 2012 and 2016, by Age



As shown in Figure 3.4, slightly more males (68,908; 53.1 percent) received MHSA-funded PEI care than females did (*n* = 58,774; 45.3 percent); less than 2 percent of cases (*n* = 2,002 children; 1.6 percent) had missing data for gender.

In addition, **92 percent of all children and youth served by PEI programs were from minority racial or ethnic backgrounds.** The majority of the children and youth receiving any MHSA-funded PEI care were Hispanic, as shown in Figure 3.5.

Figure 3.4. Clients Ages 0–25 Who Received Any MHSA-PEI Care Between 2012 and 2016, by Gender

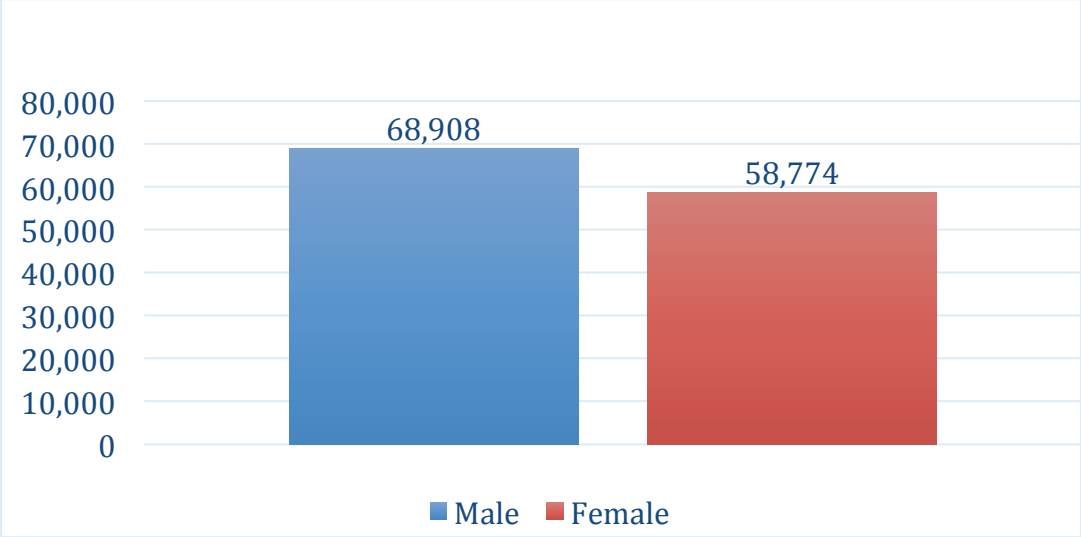


Figure 3.5. Clients Ages 0–25 Who Received Any MHSA-PEI Care Between 2012 and 2016, by Race/Ethnicity

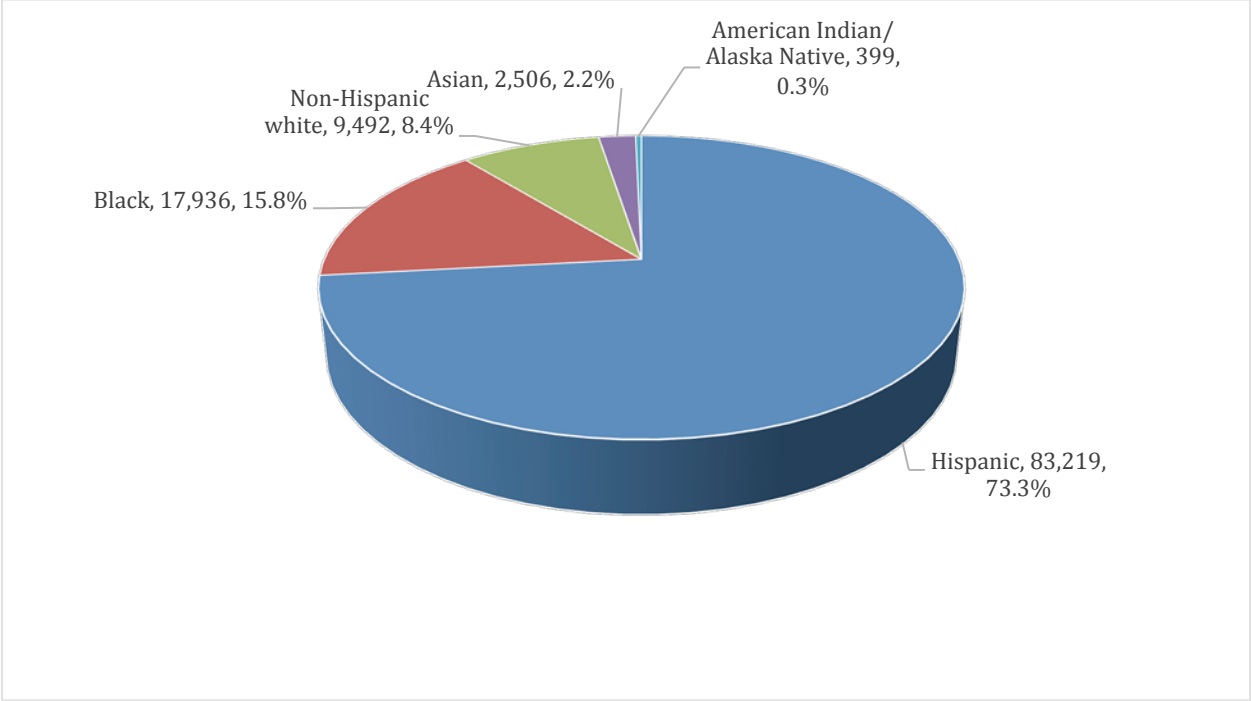


Table 3.1 gives a detailed breakdown of the race/ethnicity of children and TAY receiving new mental health services (i.e., no prior claim for any mental health services in the DMH Services Dataset) in PEI programs from 2013 to 2016 and compares those numbers with both the general population of LA County and the LA County population living in poverty. Comparisons among children and TAY clients identified as "other" should be made cautiously because inclusion criteria for "other" in the American Community Survey was likely different.

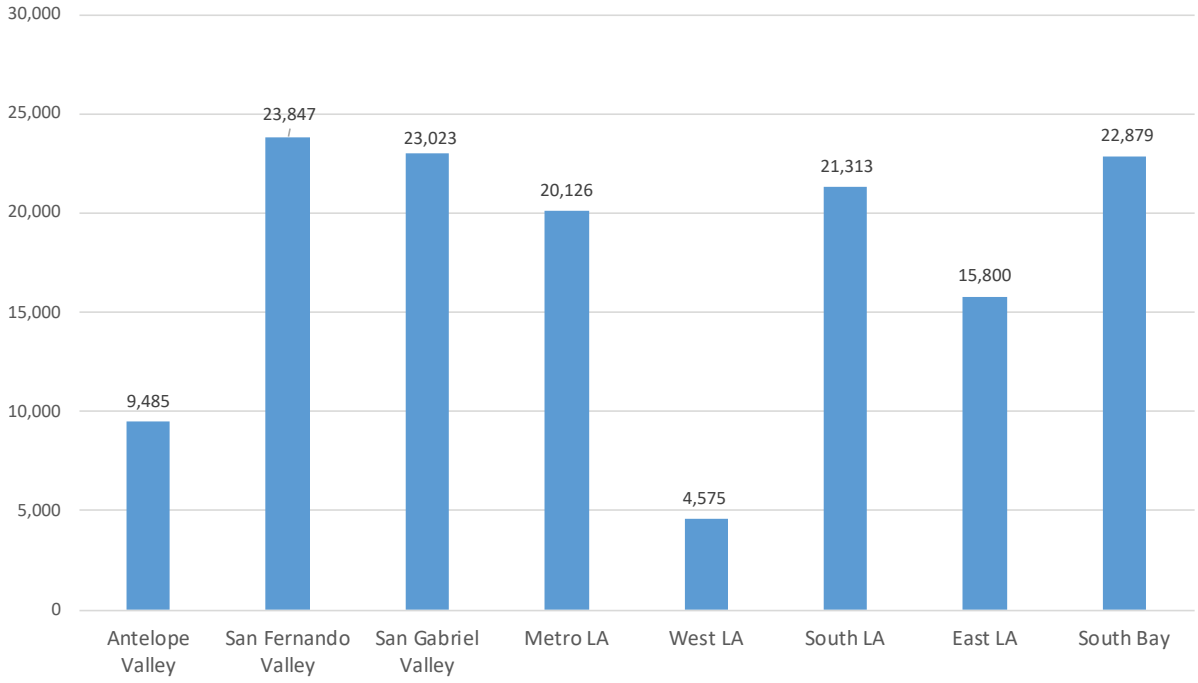
Table 3.1. Child and TAY PEI Client Demographics for New Enrollees

Demographic Category	Children and TAY in PEI Programs[a]	All Children and TAY in LA County[b]	Children and TAY in Poverty in LA County[c]
Gender			
Male	47.6%	51.0%	49.8%
Female	52.4%	49.0%	50.2%
Race/ethnicity			
Hispanic	64.2%	45.5%	52.3%
Black or African American	9.9%	6.2%	7.5%
Asian/Pacific Islander	2.2%	9.2%	5.5%
Non-Hispanic white	0.2%	15.1%	7.3%
American Indian/Alaska Native	6.7%	0.5%	0.5%
Other	1.5%	23.6%	26.9%
Missing	15.2%	N/A	N/A

SOURCE: LA County demographic data from American Community Survey five-year estimates.
NOTE: Numbers might not sum to 100 because of rounding.
[a] Clients enrolling in child PEI programs, 2013–2016.
[b] LA County residents ages 0–25 in 2016.
[c] LA County residents ages 0–25 in 2016 who live in households with income below the poverty level.

We examined the number of clients receiving MHSA-funded PEI services by the service area in which the provider was located. In doing so, a client could be counted more than once if the client received MHSA-funded PEI care from providers in more than one service area between 2012 and 2016. The number of clients served by service area is also slightly underestimated because 628 clients (0.4 percent) had missing data for the provider location. With these caveats, **141,676 children, adolescents, and TAY were identified as receiving any PEI services across eight service areas.** Figure 3.6 summarizes the number of MHSA-funded PEI clients served by service area between 2012 and 2016.

Figure 3.6. Number of MHSA-PEI Clients Served, by Service Area



Impact of PEI for Children and TAY

This evaluation examined short-term outcomes of PEI programs related to utilization of needed services; change in use of acute services, such as ER visits; and the impact on clinical symptoms and functioning (in the form of interpersonal relationships and social problems). We examined change within individual clients' episode of care.

The outcomes evaluation addresses the following questions:

1. What impact do PEI programs have on mental health service utilization and use of ER visits?
2. For those with subthreshold symptoms, do youth who attend PEI programs continue to be below clinical levels of symptoms and poor functioning, thus potentially decreasing the future need for intensive services and use of other sectors of care (justice, special education)?
3. For those who are already symptomatic when they attend PEI programs, do they improve their symptoms and functioning?

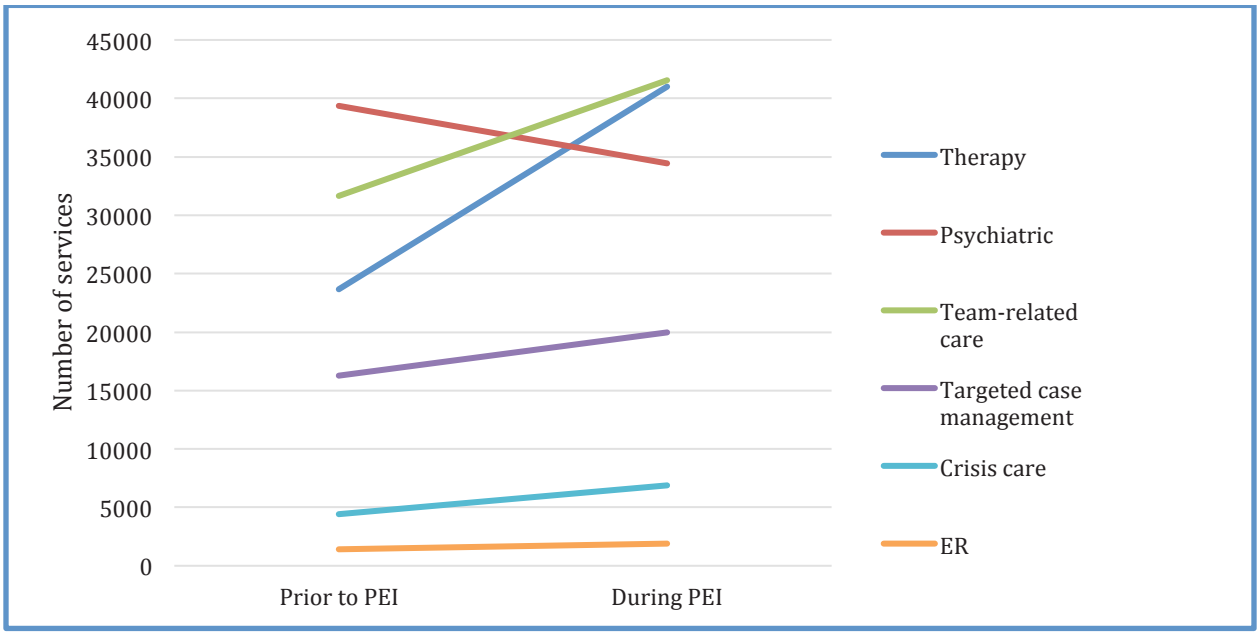
Finally, we compare the outcomes seen in this LA County evaluation with other published benchmarks of evidence-based interventions for youth to ask the following question:

4. Are these PEI outcomes similar to what is seen for dissemination efforts of other child mental health interventions?

PEI Programs Associated with Increased Therapy and Decrease in Psychiatric Services

Using the claims data set, we examined the number of DMH services billed by type of service: therapy (e.g., individual or family therapy), psychiatric care (psychiatric evaluation and treatment), team-based care, targeted case management, crisis care, and psychiatric ER visits. We compare services over the 12 months prior to entry into PEI with those services used during the 12 months after entry into PEI (see Figure 3.7).

Figure 3.7. Change in Service Use Before and During PEI Programs



Overall, utilization of almost all types of services increased, with the exception of **psychiatric care, which decreased** (from 39,366 to 34,443 services). Not surprisingly, therapy and team-based services rose the most. Psychiatric ER visits remained relatively low before and after PEI services.

PEI Program Outcomes: Measures of General and Specific Program Outcomes

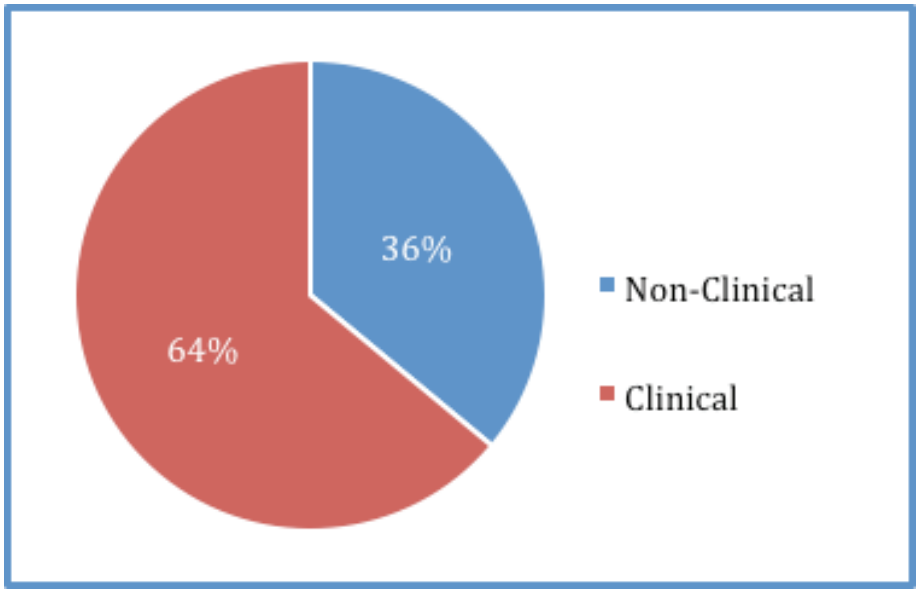
To examine PEI program outcomes, we analyzed both common and specific outcome measures collected by LAC DMH. Y-OQ measures such symptoms as behavioral problems, suicidality, aggression, arguing, somatic concerns, and emotional distress, and Y-OQ subscores for functioning assess interpersonal relations, such as interpersonal difficulty with family, adults, peers, and social problems (social problems are behaviors that violate social norms, such as vandalism or substance use). Of the specific program measures used in these analyses, the PHQ-9 assesses depressive symptoms, the PTSD-RI and the TSCYC both measure traumatic stress, and the ECBI measures disruptive behaviors. (See Appendix A for details on all programs and measures.)

PEI Program Outcomes Among Those With and Without Clinically Significant Symptoms at the Start of Treatment

This next set of results examines how youth who received any PEI program performed on general outcome measures (Y-OQ) among those who completed pre- and post-evaluation (N = 26,277 PEI treatment cases), divided into two groups (see Figure 3.8):

1. nonclinical: those youth at baseline who did not have clinically significant symptoms (n = 9,574; 36 percent)
2. clinical: those youth at baseline who did meet clinical cut-offs for symptoms (n = 16,703; 64 percent).

Figure 3.8. PEI Cases at Baseline, by Y-OQ



PEI Programs: Nonclinical Youth Continue to Stay Well

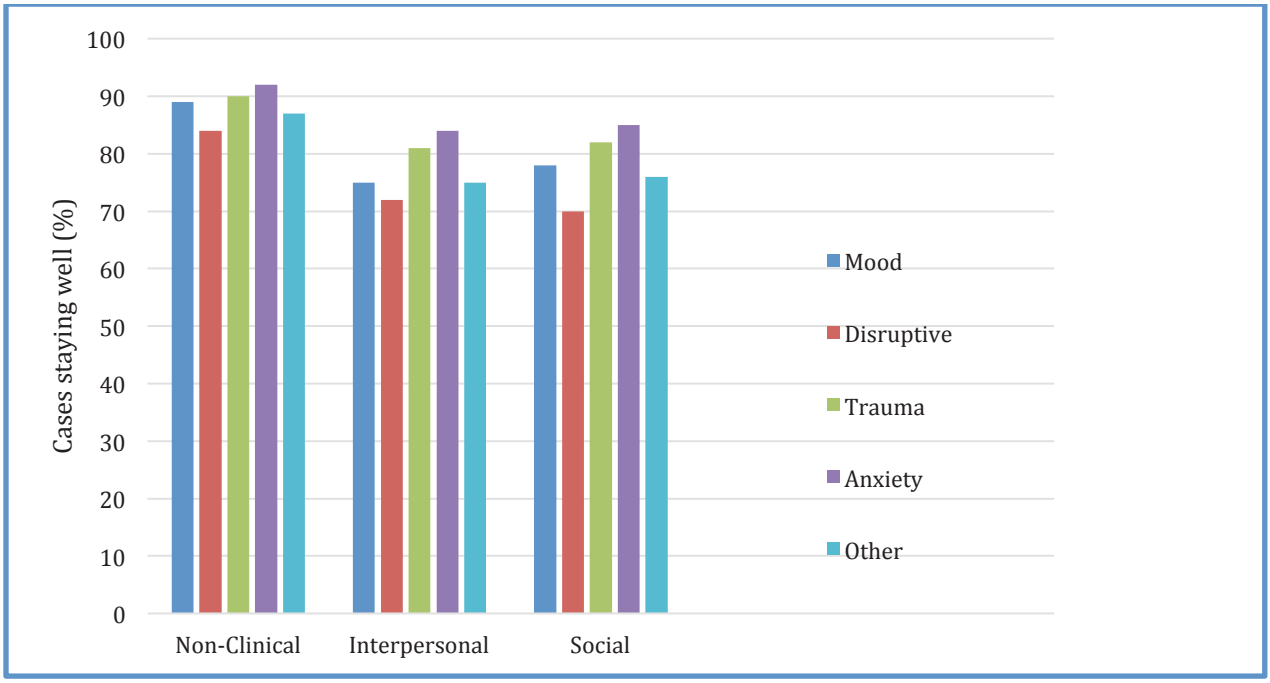
One important function of PEI programs is to "catch" youth before major mental illness affects social and emotional development. For some youth, PEI providers focus on at-risk populations (e.g., those living in poverty) and intervening even when assessment measures indicate that youth are below clinical thresholds. This first set of stratified outcome evaluations described youth who are preclinical at baseline on the Y-OQ—those who are not yet considered impaired.

For those without clinical symptoms, **88 percent continued to remain well** at post-test after receiving PEI services. In terms of functioning, **78 percent continued to do well with interpersonal relations and did not have significant social problems at follow-up**. In other words, the majority of cases remained in the nonclinical levels at follow-up. We found that females did slightly better than males did in remaining nonclinical at post-test (89 percent versus

87 percent; $p < 0.001$), interpersonal relations (79 percent versus 76 percent; $p < 0.001$), and social problems (80 percent versus 76 percent; $p < 0.001$), and children and adolescents did better than TAY did on nonclinical symptoms (88 percent versus 86 percent; $p < 0.001$) but not on interpersonal relations or social problems. Across racial/ethnic groups, Hispanic youth did better than black youth did on all three measures ($p < 0.001$), and Hispanic youth did better than non-Hispanic white youth did on two items (nonclinical symptoms and interpersonal relations) but not on social problems.

When comparing those who stay well by **prior primary diagnosis (see Figure 3.9), there were significant differences across diagnosis categories (anxiety, 92 percent; traumatic stress, 90 percent; mood, 89 percent; disruptive, 84 percent; other types, 87 percent; $p < 0.001$). Similar diagnostic differences were observed for those who remain unimpaired on interpersonal and social functioning.**

Figure 3.9. Percentage Staying Well (without symptoms or impairment at post-test) Following PEI Programs, by Prior Primary Diagnosis



We also compared those who completed PEI treatment with those who did not complete treatment. Of those who completed versus did not complete PEI, 89 percent versus 80 percent were nonclinical at baseline and remained at nonclinical levels at post-test ($p < 0.001$).

When we examined **specific outcome measures** by case characteristics, Hispanic youth did better than black youth did on the PTSD-RI (95 percent versus 92 percent remained below clinical levels; $p = 0.001$). No differences by age or gender were seen on the specific outcome measures.

For Clinical Youth at Baseline: PEI Treatment Associated with Symptom Improvement

This section focuses on youth who started PEI programs with clinically significant symptoms and functional impairment at pre-test. We then assessed to what extent these youth progressed to nonclinically significant levels at post-test. Of all youth with outcome data available, **64 percent (*n* = 16,703) entered PEI programs with clinically significant symptoms.**

Overall, of those with clinical symptoms before PEI program participation, **51 percent progressed to nonsignificant clinical symptoms at post-test.** Of those who had functional impairment at pre-test, **39 percent improved their interpersonal relations** and **42 percent improved their social problems** at post-test.

There were **no significant differences by gender for those who progressed from clinical to nonclinical levels of symptoms or for improvement in interpersonal relations**. However, for **social problems, females significantly improved more than males did** (see Table 3.2 for details). In examining differences by **ethnicity**, **Hispanics and Asians improved in clinical symptoms, interpersonal relations, and social problems more than black and non-Hispanic white youth did.**

There were significant differences by PEI completion status among the percentages of those who progressed from clinical to nonclinical levels of symptoms; **56 percent of completers got better** and **31 percent of noncompleters got better**, with similar results for interpersonal relations and social problems.

In evaluating **specific outcome measures**, there were no differences by gender across measures. Significant differences were seen on the PTSD-RI by age and race, with younger children doing better than TAY did and Hispanics doing better than blacks did. Among those who completed and those who did not complete their courses of PEI services, completers did better than noncompleters on the PHQ-9, the PTSD-RI, and the ECBI.

Table 3.2. Percentage of Youth with Clinical Levels at Baseline but Nonclinical Levels at Follow-Up on General and Specific Outcomes, by Sociodemographic Characteristics

Client Characteristics	Y-OQ	IR	SP	PHQ-9	PTSD-RI	TSCYC	ECBI
Gender (males versus females)	NS	NS	39% of males versus 46% of females	NS	NS	NS	NS
Age (children versus TAY)	NS	40% of children versus 36% of TAY	43% of children versus 38% of TAY	NS	79% of children versus 69% of TAY	NS	NS
Race/ethnicity	53% of Hispanics and 47% of Asians versus 40% of blacks and 38% of non-Hispanic whites	41% of Hispanics and 40% of Asians versus 29% of blacks and 29% of non-Hispanic whites	44% of Hispanics and 41% of Asians versus 31% of blacks and 34% of non-Hispanic whites	NS	78% of Hispanics versus 67% of blacks	NS	NS
Completers versus noncompleters	56% of completers versus 31% of non-completers	43% of completers versus 22% of non-completers	46% of completers versus 26% of non-completers	77% of completers versus 50% of non-completers	82% of completers versus 57% of non-completers	NS	58% of completers versus 27% of non-completers

NOTE: NS = not significant at $p < 0.001$.

PEI Programs Associated with Clinical Improvement and Improved Functioning

To understand the impact of PEI programs on overall symptoms and functioning, we also compared the percentage of cases that were in the clinical range from pre-test to post-test; using McNemar's test of paired proportions allowed us to determine whether these changes were significant. In examining the five most common PEI practices, all programs resulted in a significant improvement in symptoms, with a range of 29–32 percent reduction from baseline (see Appendix B for a summary of reductions in clinically significant symptoms for PEI practices). When we compared the pre- and post-tests by racial/ethnic groups, we found, similarly, that all racial/ethnic groups had significantly improved symptoms, ranging from 18 to 30 percent reductions from baseline (American Indian/Alaska Native, 18 percent; black, 20 percent; non-Hispanic white, 21 percent; Asian/Pacific Islander, 25 percent; and Hispanic, 30 percent).

LAC PEI Comparison to Published Benchmarks of Clinical Improvement

Using a method developed to examine outcomes for LA-area community mental health centers (Weersing and Weisz, 2002), we compared the current evaluation findings with benchmarks indicating good improvement. We examined those youth who had significant clinical symptoms. We evaluated whether Y-OQ–SR total scores at post-treatment in the PEI

programs fell within the range of outcomes found in evidence-based care. We transformed the Y-OQ–SR total scores at post-treatment to a normative score that could be compared across different types of measures. We then examined whether the mean normative score at post-treatment fell within the range of scores with a 95 percent confidence interval for the CBT benchmark meant at post-treatment. In our analyses of 15 PEI programs for clinically symptomatic youth ages 12–18, those who received one of eight PEI programs reported post-treatment scores within the confidence interval of evidence-based care, indicating that care was within the range of what was found in randomized trials. These eight PEI treatments are MAP, Triple P, TF-CBT, Alternatives for Families–Cognitive Behavioral Therapy, Depression Treatment Quality Improvement, Individual Cognitive Behavioral Therapy–Anxiety, Individual Cognitive Behavioral Therapy–Depression, and Interpersonal Psychotherapy for Depression. Males and females; the child, adolescent, and TAY age groups; the four primary diagnosis groups (mood, disruptive, trauma, and anxiety), except for the "other" category; and Hispanic and American Indian/Alaska Native youth had outcomes within that interval. Non-Hispanic white, Asian/Pacific Islander, and black participants were just outside the range. Those who completed PEI had outcome scores well within the range of randomized trials, while those who did not complete the programs fell outside this range.

Client Experiences

We interviewed six individuals representing PEI programs: two adolescent clients enrolled in the TF-CBT (14 and 15 years old) and four caregivers (three parents and one adult sister) of clients in MAP or TF-CBT. All interviewees were female; two described themselves as African American, two described themselves as Caucasian, one described herself as Hispanic, and one interviewee did not report. These six interviews demonstrated (1) a high degree of distress and disadvantage among PEI-treated children and families, (2) substantive emotional and functional improvements as a result of treatment, and (3) a supportive treatment climate in which clients and caregivers gain considerable knowledge of mental health symptoms and the role of treatment. Each aspect is described in turn below.

The families we interviewed indicated that children treated in PEI programs have experienced severe trauma or are exhibiting serious symptoms that interfere with learning, family functioning, and emotional development. One mother described her eight-year-old son enrolled in a MAP program as experiencing behavioral problems, including aggression; altercations with peers, teachers, and other adults at school; arguments with authority figures; poor school performance; inattention; dishonesty; and strained relationships with family members. She said, "I was overwhelmed a lot. Every time I would get a call from the school, I'd be like . . . 'What did he do now? Why does it have to be my son?' . . . I did feel so overwhelmed and embarrassed." Another mother enrolled her 11- and eight-year-old children in a TF-CBT program one month after the murder of her father. A 14-year-old client came into a TF-CBT

program because of sexual abuse by her father. A 15-year-old client came to a TF-CBT program after what her caregiver described as "extreme lying," having a sexual relationship with an older boy, truancy, and disappearing from her home at night.

Both caregivers and clients described coming to these PEI programs with a lack of knowledge of the beneficial role of mental health treatment. The mother of the eight-year-old MAP client who described feeling overwhelmed said, "When we first started, I felt I did have a lot of questions with his therapist. I just asked her like, 'What is the success rate because I just feel like, you know, from how my son is, I don't know, like can he change? Will it help? Is there help?" The 15-year-old TF-CBT client said, "When I first started therapy, it was a little bit weird because . . . I didn't know how it was going to be, but now I really like it."

All parents and clients interviewed described substantive benefits as a result of treatment. The mother of the eight-year-old MAP client described a dramatic improvement in her son's behavior, school functioning, peer relationships, and family relationships. She said:

> In school, definitely. . . . He is listening well, he's not talking back and he's, just, you know, accepting of what he's told to do. He's not getting into fights with, you know, his peers and he's not argumentative at school. He just, you know, he's playing with the kids just fine. At home, he, you know, sometimes he is more willing like to do more. You know, life is better. He's been loving. And I feel like he's much happier.

She continued, "I do see these changes. His teacher, his grandparents, everybody sees it. It's changing him."

A 14-year-old TF-CBT client said when she first began treatment, "I didn't feel safe," but "now I'm not worried about [the traumatic event] no more" and "I don't feel, like, weird about it, what happened." In addition to lessening her shame, her treatment helped with her anger: "I take deep breaths and it helps me control myself." She described her therapist as effective: "She's helping me control my anger."

A 15-year-old TF-CBT client said, "I've been better at communicating with family" as well as at being "more organized" than usual. She said that, as a result of therapy, "you understand more things better." She described her progress particularly in the areas of anger, coping skills, and communication. She added, "Some kids my age, when they're going through things, they don't really like to open up about it. It does help."

A parent of a nine-year-old MAP client said that, since enrolling, her child has "more friends" and "better self-esteem"; she is "not throwing tantrums like she used to." "Rather than crying like she used to," she now "expresses her emotions more" and tells her mother what she needs. By learning relaxation techniques, her daughter has learned "to have a positive outlook on actions before acting" and to avoid harming herself or others. Like other clients and parents, this mother said these changes improved school functioning: her "grades are going up a lot."

Caregivers and clients described other benefits of PEI programs. One mother said that the PEI program helped her obtain emergency financial assistance. In addition to symptom

improvements, caregivers and clients said that the PEI program lessened their isolation and made them feel that others were committed to their well-being. The mother of the eight-year-old MAP client said, once she and her son had engaged in the program, "I felt like I was not alone and I did feel a lot of support and encouragement. I feel like, there's like a system where I feel like I can talk to them. . . . It was awesome." Another mother, of a nine-year-old MAP, client said, "They make you feel like part of the family." There is "no judgment, no attitude" from anyone on the staff. She said that there are "very kind people there." A 15-year-old TF-CBT client said, "My therapist, she's really cool and I trust her a lot." A 14-year-old adolescent TF-CBT client echoed these ideas, saying that her TF-CBT helped her "a lot." She said, "I like my therapist. She teaches me the correct things. She's nice."

Key Takeaways

- **LAC DMH provided PEI services to almost 130,000 youth, the vast majority of whom were members of ethnic minority groups.** Furthermore, the intent of PEI is to reach youth who have not previously gotten care. In this aspect, PEI is working as intended. Almost 65 percent of the unique clients receiving PEI care between 2013 and 2016, corresponding to **more than 60,000 children and youth, were new clients.**
- **Utilization of treatments, such as therapy and case management, increased with use of PEI services.** However, psychiatric care decreased, perhaps indicating that youth who receive PEI services were more likely to receive a trial of a psychosocial treatment before assessment for medications.
- **PEI is associated with staying well and getting better.** Of those receiving care preventively (i.e., those who scored below a widely used threshold for psychological distress at entry into care), 88 percent of this high-risk group remained below the threshold for clinically significant symptoms over time. Of those who had symptom levels above a clinical cut-off for psychological distress at the start of their PEI services, 51 percent no longer had clinically significant symptoms at the conclusion of care. After benchmarking the clinical care to randomized trials, we found that most practices fell within the same range of clinical response as did the trials, suggesting that the evidence-based care offered by PEI services is effective among this population.
- **Hispanic and Asian youth responded particularly well to PEI services**, in comparison to non-Hispanic white and black youth. However, all racial/ethnic groups experienced significant improvements in symptoms.
- **PEI services have significant impacts on children and families beyond symptomatic relief.** The qualitative interviews suggested that youth receiving PEI services have multiple impairments that the programs address. Future evaluations should capture the broad range of potential outcomes resulting from PEI services, including functioning, school, and impact on families.

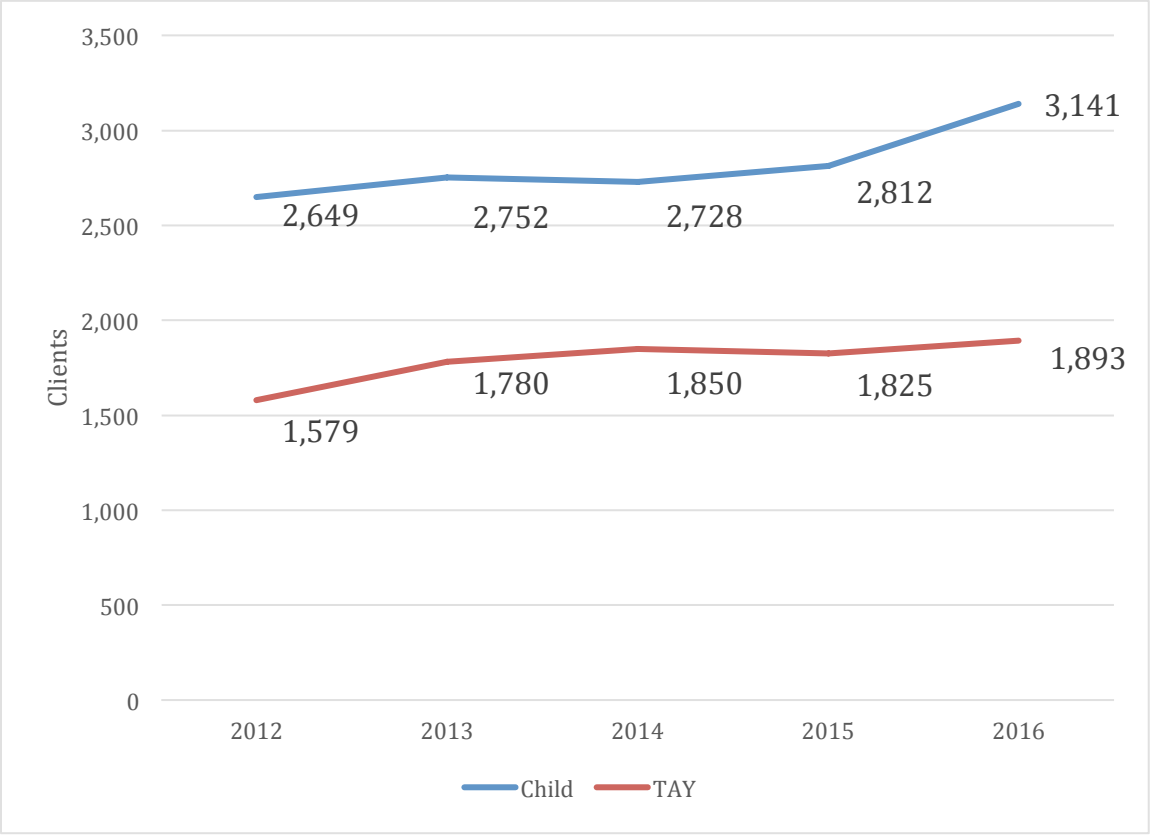
4. Results: Reach and Outcomes of Full-Service Partnerships for Children and Transition-Age Youth

Reach of FSPs for Children and TAY: Who Received Services?

Number of Child and TAY FSP Clients, 2012–2016

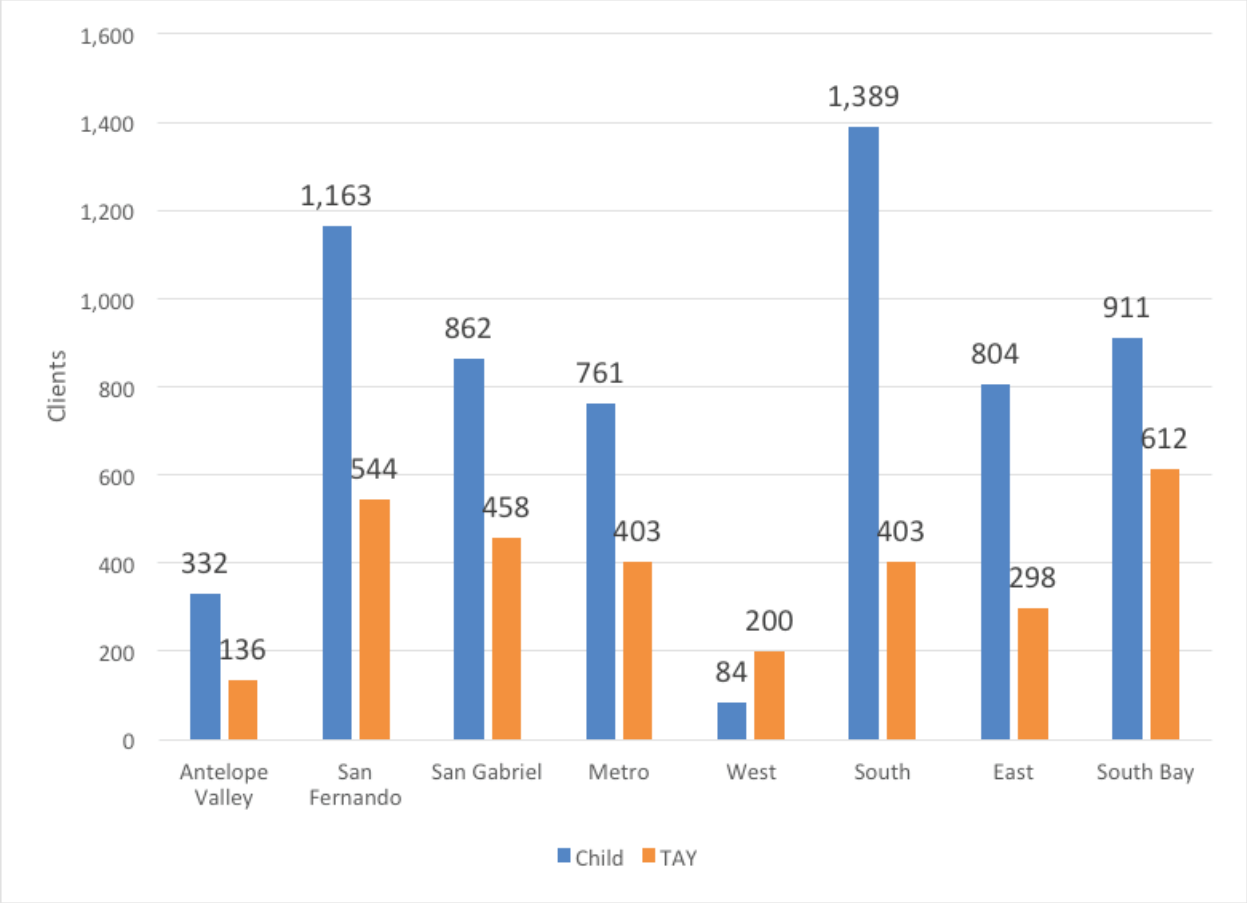
In total, LAC DMH served 24,282 clients through its FSP programs from 2012 to 2016. One-half of those clients (50 percent) were adults. Children made up 32 percent of FSP clients, and TAY made up the remaining 18 percent. In this chapter, we focus on the child and TAY clients. From 2012 to 2016, the total number of child and TAY FSP clients served each year has increased. Figure 4.1 shows the trend in the total number of clients over time. The number of child clients increased from 2,649 in 2012 to 3,141 in 2016, while the number of TAY clients increased from 1,579 to 1,893 over the same period. Most of the clients active from 2012 to 2016 enrolled for the first time during this period. There were 6,306 new child enrollees and 3,054 new TAY enrollees between 2012 and 2016.

Figure 4.1. Annual Child and TAY FSP Clients, 2012–2016



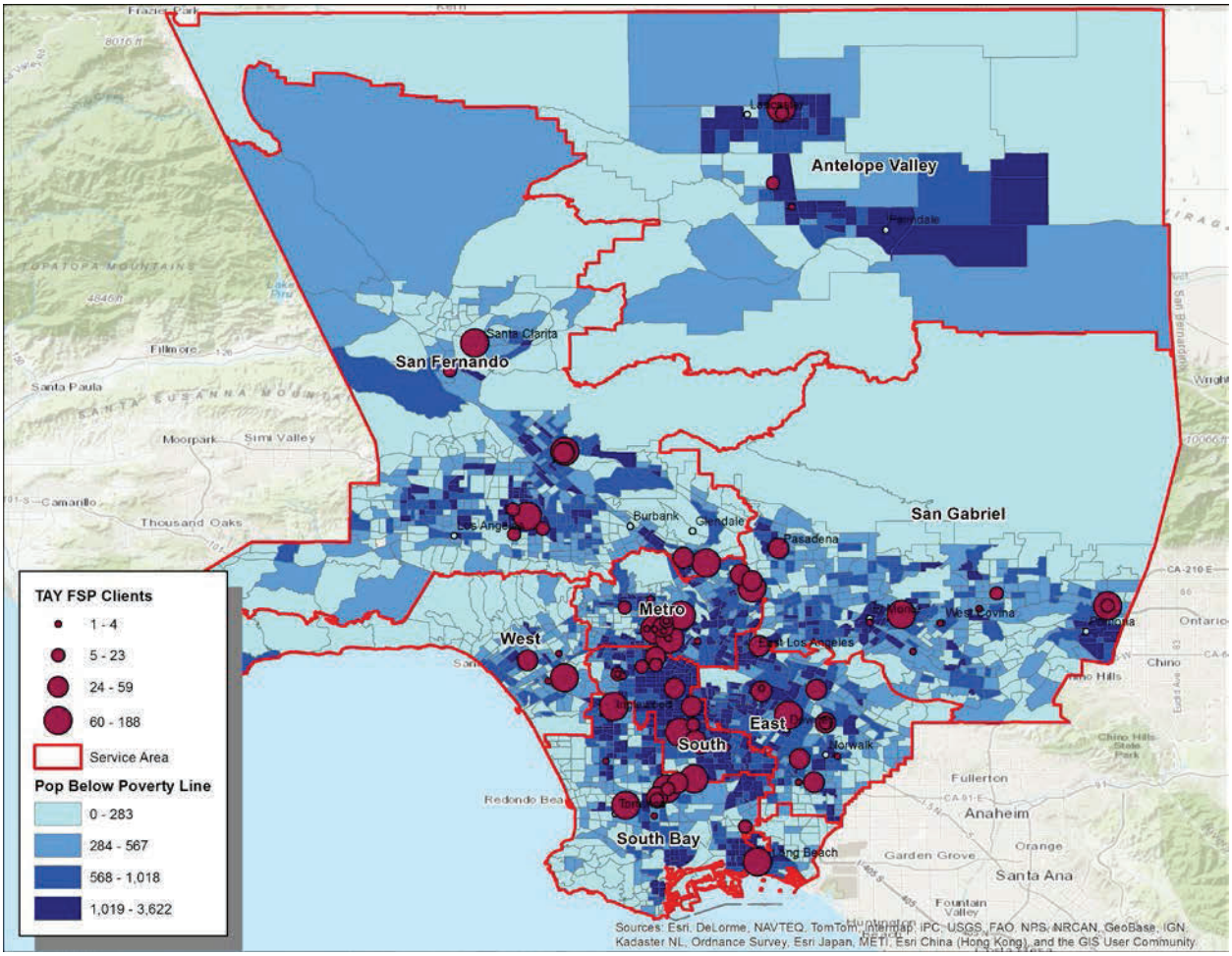
LAC DMH saw newly enrolled child and TAY clients in each of its eight service areas around the county (Figure 4.2). The South, South Bay, and San Fernando Valley service areas had the most child and TAY clients. The West service area had the fewest new child clients (84), while the Antelope Valley service area had the fewest new TAY clients (136).

Figure 4.2. New Child and TAY FSP Enrollees, by Service Area



Child and TAY FSP clients receive services from providers located throughout the county—but primarily in areas with more people living below the federal poverty level (Figure 4.3). Providers are located primarily in or near tracts with the highest proportion of households with incomes at or below the poverty level.

Figure 4.3. Child and TAY FSP Provider Locations



Client Characteristics

In Table 4.1, we present a comparison of the child and TAY FSP client populations with the population of LA County and the population of LA County living in poverty, all from 2016. Compared with the LA County population, child and TAY FSP clients were more likely to be male; 56.2 percent of child clients were male, compared with 51.0 percent of children ages 0–15 in LA County and 50.9 percent who lived in poverty in LA County. And 57.8 percent of TAY clients were male; comparatively, 51.1 percent of LA County residents ages 16–25 were male, and 47.4 percent of male LA County residents ages 16–25 lived in poverty. In addition, there was a much higher proportion of Hispanic clients than the proportion of Hispanic children and TAY in LA County: 62.4 percent of child FSP clients were Hispanic, compared with 47.6 percent of Hispanic children in LA County ages 0–15 and 56.1 percent of Hispanic children in LA County ages 0–15 in poverty. There was also a higher proportion of black child clients ages 0–15 than there were black children in LA County and black children in LA County who lived in

poverty (19.7 percent versus 5.9 percent and 7.1 percent). For both Asian/Pacific Islander and non-Hispanic white clients, there were lower proportions of these races/ethnicities in FSP programs than among the LA County child population, but there were higher proportions of these races/ethnicities in FSP programs than among the LA County population in poverty. There is a similar pattern for TAY clients, with relatively more Hispanic (53.3 percent in FSP programs versus 41.9 percent in LA County and 45.7 percent in poverty) and black (23.7 percent in FSP programs versus 6.6 percent in LA County and 8.2 percent in poverty) clients. There were relatively fewer non-Hispanic white clients than among the full population ages 16–25, but there were more than those who lived in poverty. There were relatively fewer Asian/Pacific Islander clients than among the full population and the population in poverty. Most child clients were between ages 6 and 15, with 46.2 percent ages 6 to 12 and 38.6 percent ages 13 to 15 (not shown in Table 4.1). Most TAY clients were age 18 or older (74.1 percent; not shown in Table 4.1).

Table 4.1. Child and TAY FSP Client Demographics for New Enrollees

Demographic Category	Children in FSP Programs[a]	All Children in LA County[b]	Children in Poverty in LA County[c]	TAY in FSP Programs[d]	All TAY in LA County[e]	TAY in Poverty in LA County[f]
Gender						
Male	56.2%	51.0%	50.9%	57.8%	51.1%	47.4%
Female	42.2%	49.0%	49.1%	40.8%	48.9%	52.6%
Missing	1.6%	N/A	N/A	1.4%	N/A	N/A
Race/ethnicity						
Hispanic	62.4%	47.6%	56.1%	53.3%	41.9%	45.7%
Black or African American	19.7%	5.9%	7.1%	23.7%	6.6%	8.2%
Asian/Pacific Islander	3.5%	8.1%	3.3%	4.1%	10.8%	9.3%
Non-Hispanic white	8.4%	13.1%	4.4%	13.8%	18.4%	12.2%
American Indian/Alaska Native	0.3%	0.5%	0.6%	0.4%	0.5%	0.5%
Other	1.4%	24.8%	28.5%	1.4%	21.7%	24.1%
Missing	4.4%	N/A	N/A	3.3%	N/A	N/A

NOTE: N/A = not applicable.
[a] Clients enrolled in child FSP programs, 2012–2016.
[b] LA County residents ages 0–15 in 2016 (American Community Survey five-year estimates).
[c] LA County residents ages 0–15 in 2016 who lived in households with incomes below the poverty level (American Community Survey five-year estimates).
[d] Clients enrolled in TAY FSP programs, 2012–2016.
[e] LA County residents ages 16–25 in 2016 (American Community Survey 5-year estimates).
[f.] LA County residents ages 16–25 in 2016 who lived in households with incomes below the poverty level (American Community Survey five-year estimates).

Most child and TAY FSP clients had some type of health insurance at enrollment: 92.0 percent of child and 78.1 percent of TAY clients had health insurance. Almost all were covered by Medicaid or the Children's Health Insurance Program (CHIP). Most clients also had support from family or caregivers: 98.6 percent of child clients reported having support, and 88.9 percent of TAY clients reported having support.

Table 4.2 shows the distribution of primary diagnoses for child and TAY FSP clients. It is possible for clients to have more than one primary diagnosis because data are compiled over time, and primary diagnosis may change; indeed, 35 percent of child clients and 33 percent of TAY clients had more than one diagnosis. Depressive disorders and schizophrenia or other psychotic disorders were the most common nonmissing diagnoses for both populations: 26 percent of child clients had a depressive disorder, and 18 percent had schizophrenia or another psychotic disorder. Among TAY clients, 23 percent had a depressive disorder, and 19 percent had schizophrenia or another psychotic disorder.

Table 4.2. Diagnoses for Child and TAY FSP Clients

Diagnosis Category	Child Percentage	TAY Percentage
Depressive disorders	26	23
Schizophrenia spectrum and other psychotic disorders	18	19
Trauma and stressor-related disorders	15	13
Disruptive impulse control and conduct disorders	14	11
Anxiety disorders	9	7
Attention deficit hyperactivity disorder	7	6
Bipolar and related disorders	5	5
Other	18	15
Missing diagnosis	25	34

Impact of FSP Programs for Children and TAY

FSP programs are designed to address many different needs of the people they serve. This includes addressing not only behavioral health treatment but also the social determinants of health, such as housing, education and employment, and social connection. We evaluated the short-term changes in these outcomes and the level of engagement of clients with FSP programs.

FSP Program Participation

Between 2012 and 2016, 36.5 percent of clients of child FSP programs successfully met their goals and disenrolled from the FSP program (see Table 4.3), and 35.5 percent were still active at the end of 2016. On average, clients of child FSP programs who completed a program spent 1.4 years in that program (range: 0.2 to 5.3 years; not shown in Table 4.3). The most common reason

for leaving the program was the client's decision to discontinue (11.0 percent). One-half of those who left the program spent less than 0.76 years in the FSP program (range: 0.01 to 4.6 years; not shown in Table 4.3).

We found that 26.0 percent of TAY FSP clients completed the program at some time between 2012 and 2016; 26.1 percent were still active at the end of 2016. TAY clients who completed their programs spent an average of 1.7 years (range: 0.2 to 6.4 years; not shown in Table 4.3) in their programs, and 15.9 percent decided to discontinue their FSP programs. And 20.7 percent either moved away or could not be contacted after repeated attempts. As with the child clients who left the program, one-half of TAY clients who left spent less than 0.83 years in the program (range: 0.01 to 5.6 years; not shown in Table 4.3).

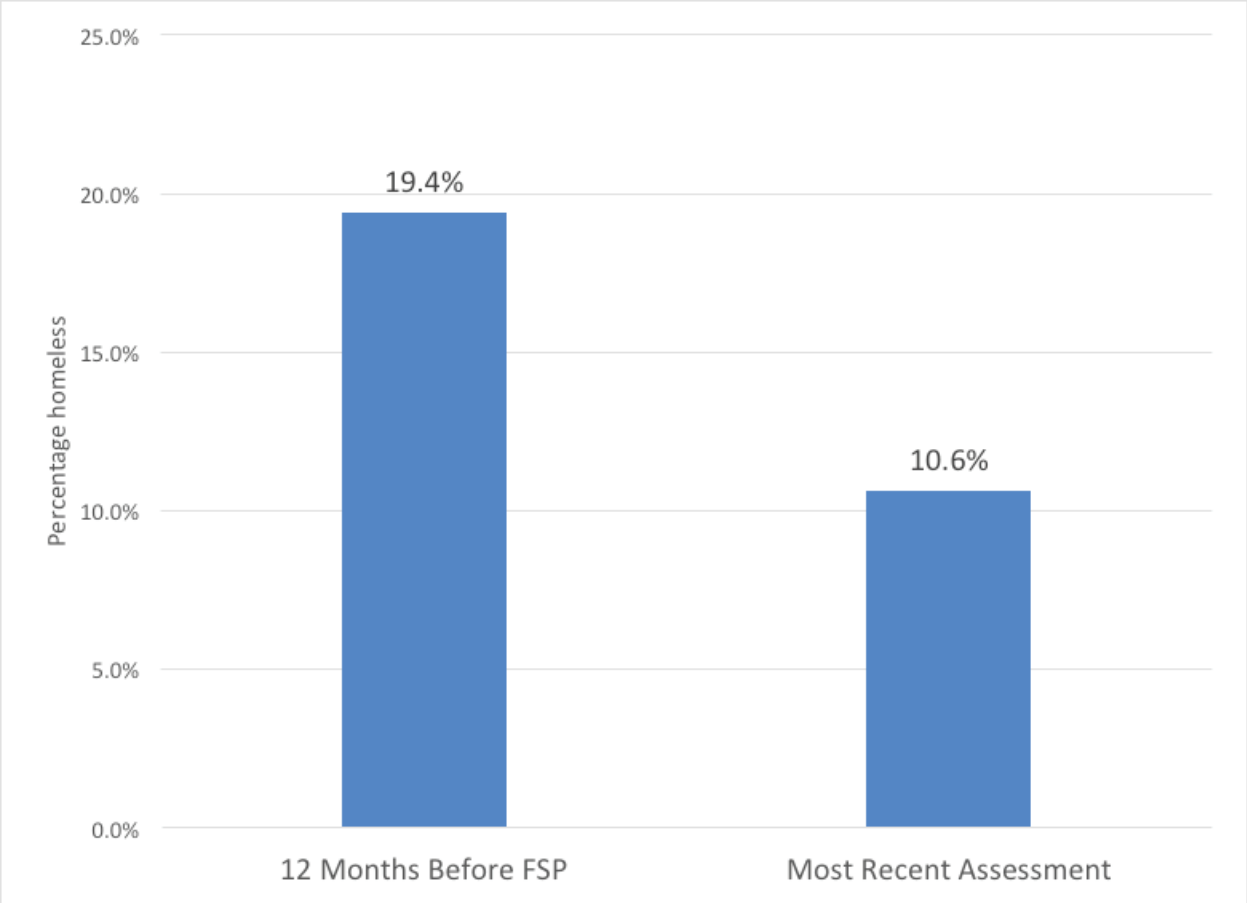
Table 4.3. FSP Participation Status

Status	Child	TAY
Client still active	35.5%	26.0%
Successfully met goals and disenrolled	36.5%	26.1%
Client decided to discontinue	11.0%	15.9%
Client moved	5.9%	8.0%
Unable to contact client	3.6%	12.7%
Client needed residential or institutional mental health services	4.0%	4.7%
Client detained (juvenile detention, jail, or prison)	1.7%	5.1%
Other	1.8%	1.5%

Outcomes

TAY FSP clients experienced improvements in housing status. In the year prior to enrolling in an FSP program, 19.4 percent of TAY clients experienced some period of homelessness (see Figure 4.4). That dropped to 10.6 percent by the final observed housing status. Some of this change occurred by the time the clients enrolled in an FSP program. In addition, 11.1 percent of TAY clients were homeless when they enrolled (not shown in Figure 4.4). While overall there was a decline in the proportion of TAY clients who are homeless, some individual clients became homeless. Of the TAY clients who were not homeless at enrollment, 88 (3.3 percent) were homeless by the most recent observed housing status (not shown in Figure 4.4). Of the 336 TAY clients who were homeless at enrollment, 103 (30.6 percent) were no longer homeless by the most recent observed housing status, but 22 of these were in jail or prison (not shown in Figure 4.4).

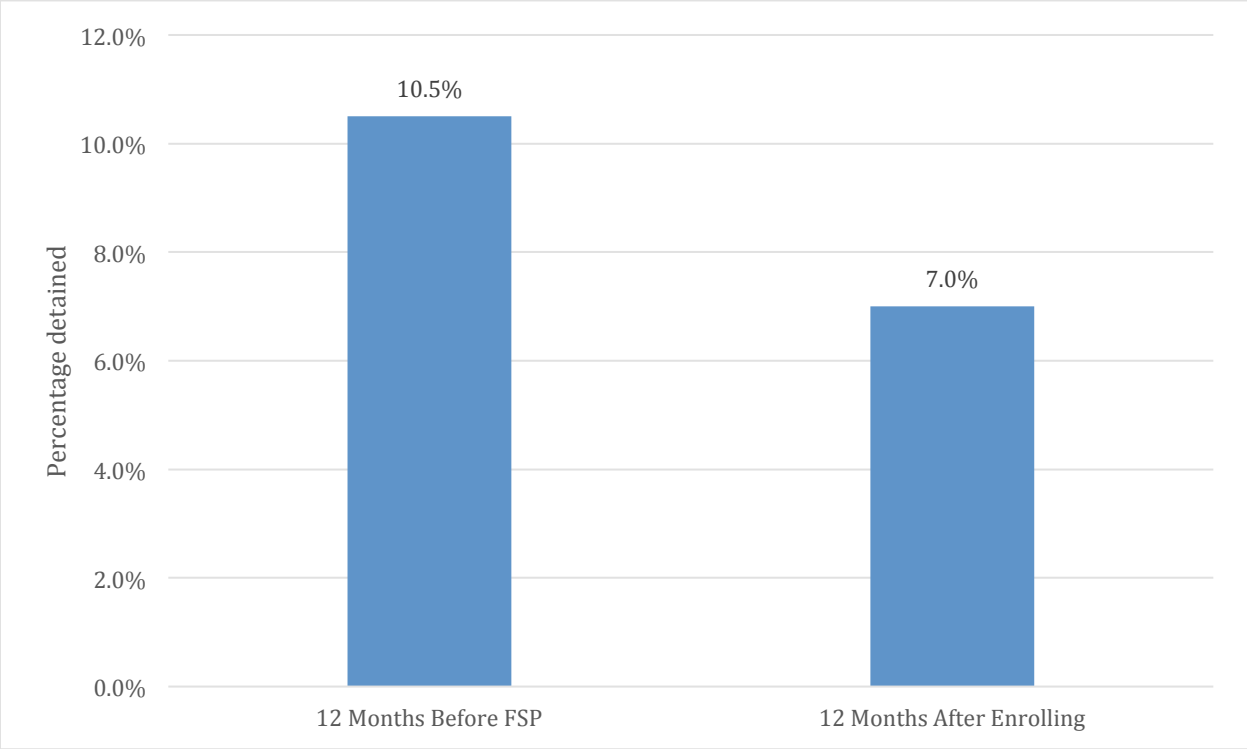
Figure 4.4. TAY FSP Programs Associated with Reduction in Homelessness



There was a small increase in the percentage of child clients who said that they had a primary care physician (93.3 percent to 96.4 percent) and an increase for TAY clients as well (64.8 percent to 65.5 percent).

There was a significant decline in the percentage of TAY clients who were detained by the justice system (jail, prison, or juvenile detention). In the year prior to enrollment in an FSP program, 10.5 percent of TAY clients were detained (see Figure 4.5). In the year following enrollment, 7.0 percent were detained (see Figure 4.5).

Figure 4.5. TAY FSP Programs Associated with Reduction in Detention Within Justice System



The number of child clients who had an inpatient stay for mental health or substance use disorders declined from 15.6 percent in the 12 months prior to FSP enrollment to 11.3 percent in the 12 months following enrollment, but the median number of inpatient days for those who had at least one stay increased from 8.0 to 9.5 (see Table 4.4). The number of TAY clients with an inpatient stay for mental health or substance use disorders declined from 26.3 percent in the 12 months prior to FSP enrollment to 19.6 percent in the 12 months following enrollment. The median number of total annual inpatient days for those who had at least one stay declined from 14.0 to 10.0 (see Table 4.4).

Table 4.4. FSPs Are Associated with Fewer Inpatient Stays

	Child		TAY	
Inpatient Stays	12 Months Before Enrollment	12 Months After Enrollment	12 Months Before Enrollment	12 Months After Enrollment
Any inpatient stay (%)	15.6	11.3	26.3	19.6
Median number of inpatient days	8.0	9.5	14.0	10.0

Table 4.5 summarizes changes in social engagement and productive activity. Overall, there were small improvements (less than 1 percentage point increases) in the two social engagement items for both child and TAY clients. There were also small changes in overall activity. There was an increase in the proportion of child clients engaging in community-involvement activities (47.5 percent to 54.4 percent). As expected, fewer TAY clients were in school, and that declined slightly over the period in which they were engaged in FSP programs (45.5 percent to 44.2 percent). This is likely because TAY clients age out of school years. Community involvement increased slightly for TAY clients (34.2 percent to 35.2 percent), and employment also increased (13.2 percent to 15.3 percent).

Table 4.5. Social Engagement and Activity

	Child		TAY	
Outcome	Initial Program Assessment (%)	Most Recent Assessment (%)	Initial Program Assessment (%)	Most Recent Assessment (%)
Social engagement				
Socializes	81.4	81.8	66.5	66.7
Has friends	66.2	66.6	55.7	56.0
Activity				
In school	99.7	99.3	45.5	44.2
Community involvement	47.5	54.4	34.2	35.2
Employed	N/A	N/A	13.2	15.3
Any of the above	99.8	99.6	64.3	64.9

We found no significant differences in changes in outcomes for child and TAY FSP clients by race/ethnicity.

Key Takeaways

- **Child and TAY FSP enrollment increased over the five years evaluated**; more young people were being served by 2016. Further, the majority of those enrolled actively engaged in the program.
- **Child and TAY FSP programs served vulnerable and diverse populations.** The programs are located throughout the county, but they are primarily in areas with more households in poverty, where LAC DMH services are likely to be needed the most. The individuals served by the programs tend to have serious mental disorders, and more than one in five of the TAY served had experienced homelessness at the start of the program. Finally, the programs predominately served racial/ethnic minorities, particularly Hispanic and black youth.
- **There is some evidence that youth who participated in FSP programs experienced improvements in their life circumstances and mental health.** Most notably, rates of

homelessness and mental health inpatient stays significantly decreased for both children and TAY. Rates of detention or incarceration within the justice system also significantly decreased for TAY.

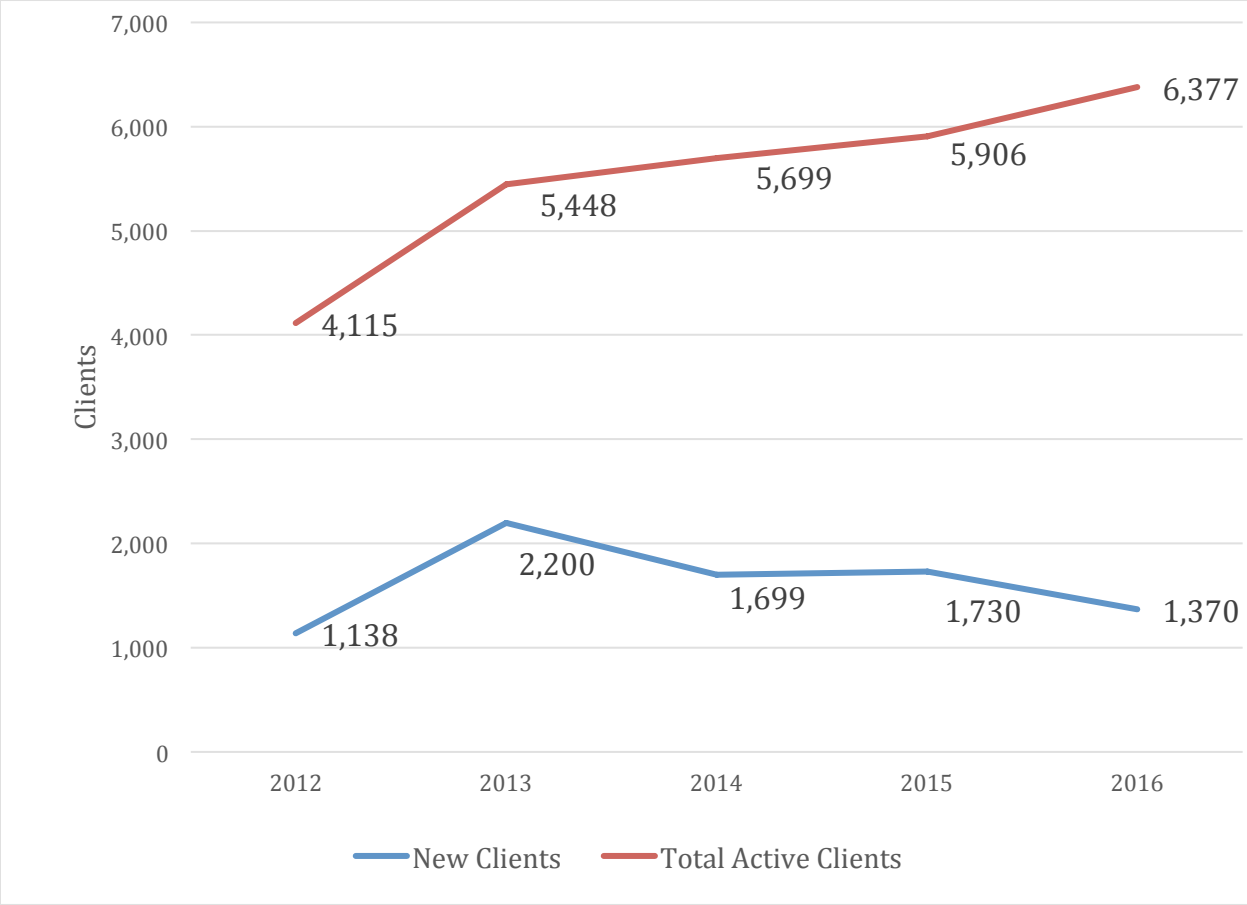
5. Results: Reach and Outcomes of Full-Service Partnerships for Adults

Reach of FSP Programs for Adults: Who Received Services?

Number of Adult FSP Clients, 2012–2016

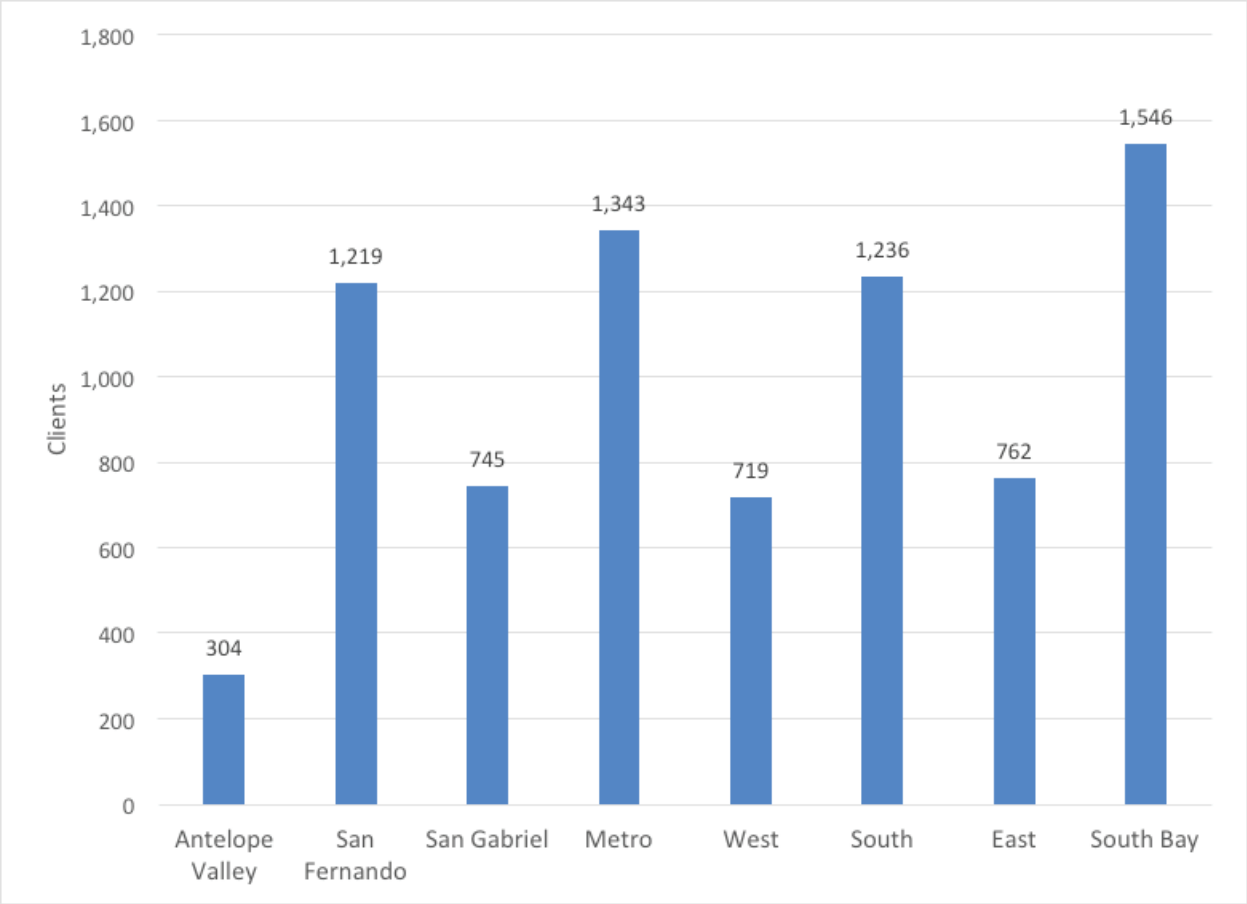
From 2012 to 2016, the total number of adult FSP clients served each year increased. Figure 5.1 shows the trend in the total number of clients over time. The number of total active adult clients increased from 4,115 in 2012 to 6,377 in 2016. The number of new clients enrolling each year has fluctuated, with the highest enrollment in 2013.

Figure 5.1. Annual Adult FSP Clients, 2012–2016



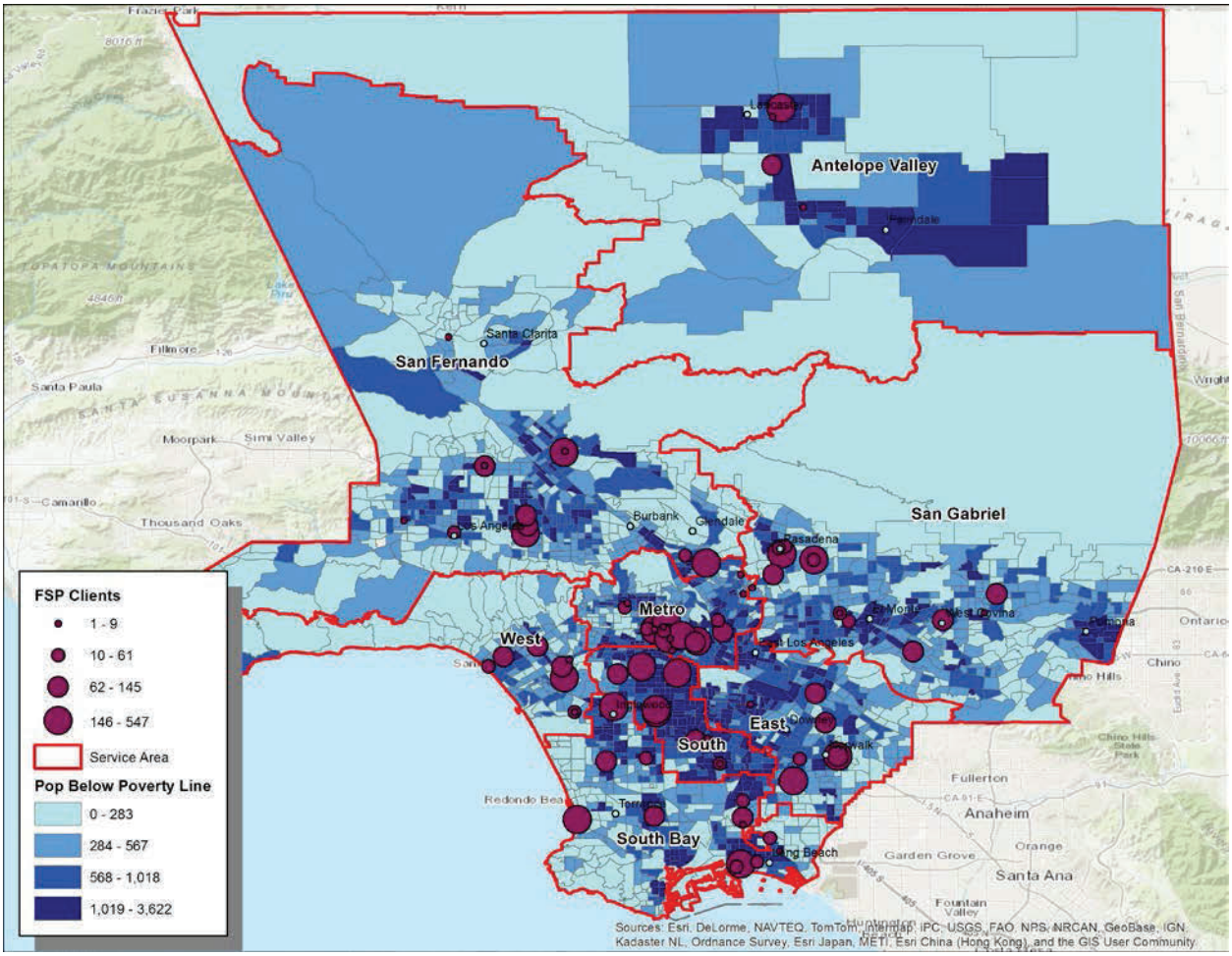
LAC DMH saw new adult clients in each of its eight service areas around the county (see Figure 5.2). The South Bay, Metro, and South service areas had the most new adult clients. The Antelope Valley service area had the fewest new clients (304).

Figure 5.2. New Adult FSP Enrollees, by Service Area



Adult FSP clients receive services from providers located throughout the county, but they were primarily in areas with more people living below the federal poverty level (see Figure 5.3). Providers are located primarily in or near tracts with the highest proportion of households with incomes at or below the poverty level.

Figure 5.3. Adult FSP Provider Locations



Client Characteristics

In Table 5.1, we present a comparison of the adult FSP client populations with the population of LA County and the population of LA County living in poverty. Compared with the 2016 LA County population, adult FSP clients were more likely to be male (Table 5.1): 56.1 percent of clients were male, compared with 48.2 percent of adults age 26 and older in LA County and 42.0 percent of adults age 26 and older who lived in poverty. In addition, there was a lower proportion of Hispanic clients than the proportion of Hispanic adults in LA County: 24.3 percent of adult FSP clients were Hispanic, compared with 34.8 percent of adults in LA County and 42.3 percent of adults who lived in poverty in LA County. There was a higher proportion of black clients than in the LA County population (33.0 percent in FSP programs versus 7.2 percent in LA County and 9.3 percent in poverty), and there was a higher proportion of non-Hispanic white clients (30.4 percent in FSP programs versus 27.1 percent in LA County and 16.8 percent in poverty). There were a lower proportion of Asian/Pacific Islander clients than in the underlying population

(5.5 percent in FSP programs versus 13.9 percent in LA County and 9.8 percent in poverty). Most adult clients were between ages 26 and 59 (81.7 percent; not shown in Table 5.1).

Table 5.1. Adult FSP Client Demographics for New Enrollees

Demographic Category	Adults in FSP Programs[a]	All Adults in LA County[b]	Adults in Poverty in LA County[c]
Gender			
Male	56.1%	48.2%	42.0%
Female	43.2%	51.8%	58.0%
Missing	0.6%	N/A	N/A
Race/ethnicity			
Hispanic	24.3%	34.8%	42.3%
Black or African American	33.0%	7.2%	9.3%
Asian/Pacific Islander	5.5%	13.9%	9.8%
Non-Hispanic white	30.4%	27.1%	16.8%
American Indian/Alaska Native	1.0%	0.5%	0.7%
Other	1.6%	16.5%	21.2%
Missing	4.2%	N/A	N/A

NOTES: N/A = not applicable. Numbers might not sum to 100 because of rounding.
[a] Clients enrolling in adult FSP programs, 2012–2016.
[b] LA County residents age 26 and older in 2016 (American Community Survey five-year estimates).
[c] LA County residents age 26 and older in 2016 who lived in households with incomes below the poverty level (American Community Survey five-year estimates).

Most adult FSP clients had some type of health insurance at enrollment: 69.3 percent of clients had health insurance, with 67.1 percent covered by Medicaid.

Table 5.2 shows the distribution of primary diagnoses for adult FSP clients. It is possible for clients to have more than one diagnosis, because diagnoses may change over time; 45.5 percent of clients had more than one diagnosis. We found that 68 percent of adult FSP clients had schizophrenia or other psychotic disorders, 37 percent had depressive disorders, and 25 percent had bipolar and related disorders.

Table 5.2. Diagnoses for Adult FSP Clients

Diagnosis Category	Percentage
Schizophrenia spectrum and other psychotic disorders	68
Depressive disorders	37
Bipolar and related disorders	25
Substance-related and addictive disorders	7
Other	19
Missing diagnosis	6

Impact of FSP Programs for Adults

We evaluated the level of engagement of clients with FSP programs and key short-term outcomes—specifically, housing, employment, and access to physical health care.

FSP Program Participation

Between 2012 and 2016, 19.2 percent of clients of adult FSP programs completed the program (see Table 5.3); 41.0 percent were still active at the end of 2016. On average, clients who completed the program spent 1.7 years in the program (range: 0.2 to 5.5 years; not shown in Table 5.3). And 39.8 percent left the program; the most common reason was that the client could not be reached after repeated attempts at contact (12.1 percent). One-half of those who left spent less than 0.77 years in the FSP program (range: 0.0 to 6.9 years; not shown in Table 5.3).

Table 5.3. Adult FSP Participation Status

Status	Percentage
Client still active	41.0
Successfully met goals	19.2
Client decided to discontinue	9.9
Client moved	6.1
Unable to contact client	12.1
Client needed residential or institutional mental health services	3.8
Client detained (juvenile detention, jail, or prison)	4.4
Other	3.5

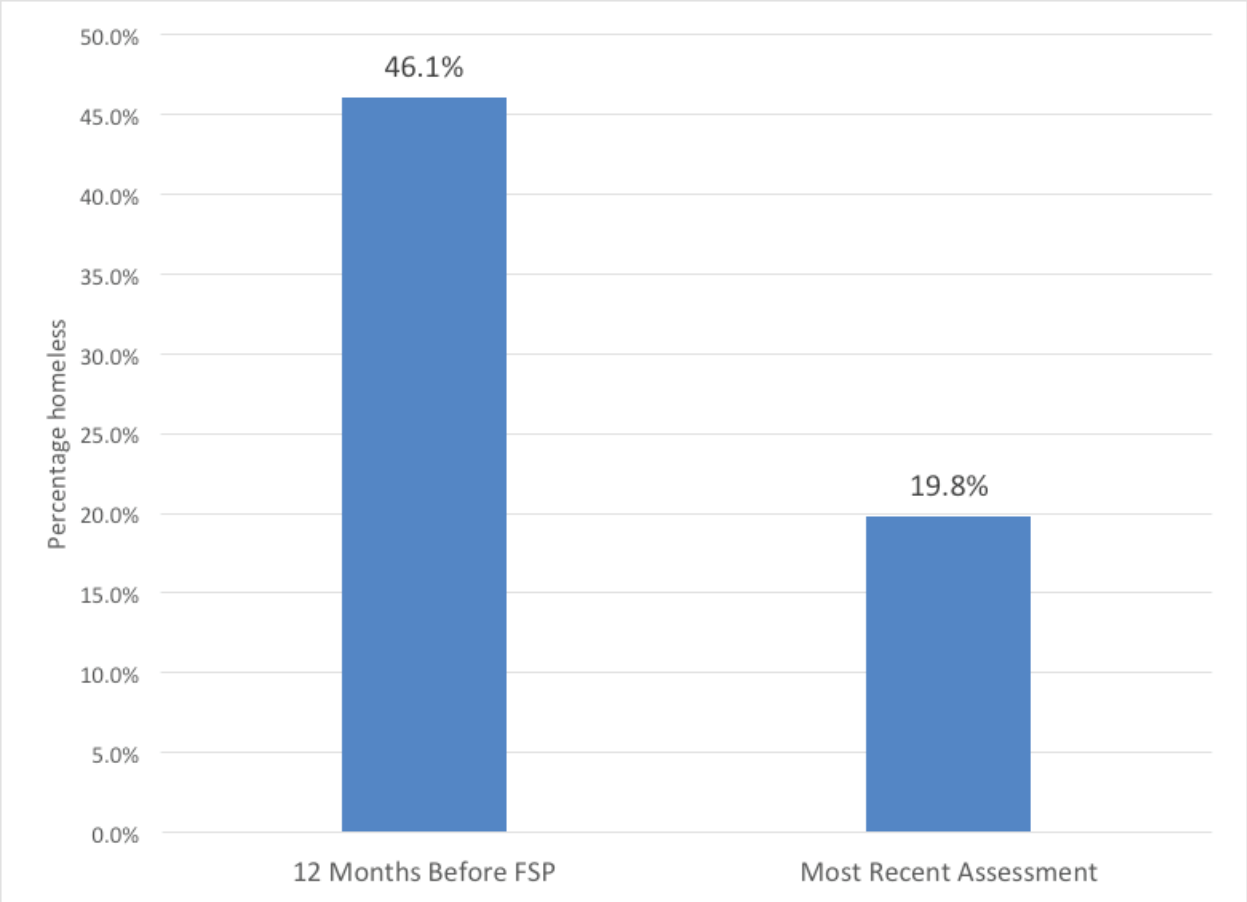
Outcomes

We observed improvement in all of the outcomes we evaluated. Employment improved from 5.3 percent at the initial assessment to 8.3 percent by the final observation we have for adult clients. Although the overall rate of employment for the population served by FSP programs is very low, this change represents a 56.6 percent improvement in employment. The overall employment rate in LA County improved from 88.1 percent in January 2012 to 95.3 percent in December 2016, an 8.2 percent improvement. This is not a perfect comparison, since the population served by FSP programs is not the same as the general population of LA County; however, it does provide some evidence that FSP programs may improve employment.

In the year prior to enrolling in an FSP, 46.1 percent of adult clients experienced some period of homelessness (see Figure 5.4), and the rate of homelessness dropped to 19.8 percent by the final recorded status. We found that 29.1 percent of adult clients were homeless when they enrolled (not shown in Figure 5.4), so some of the improvement occurred by the time they were

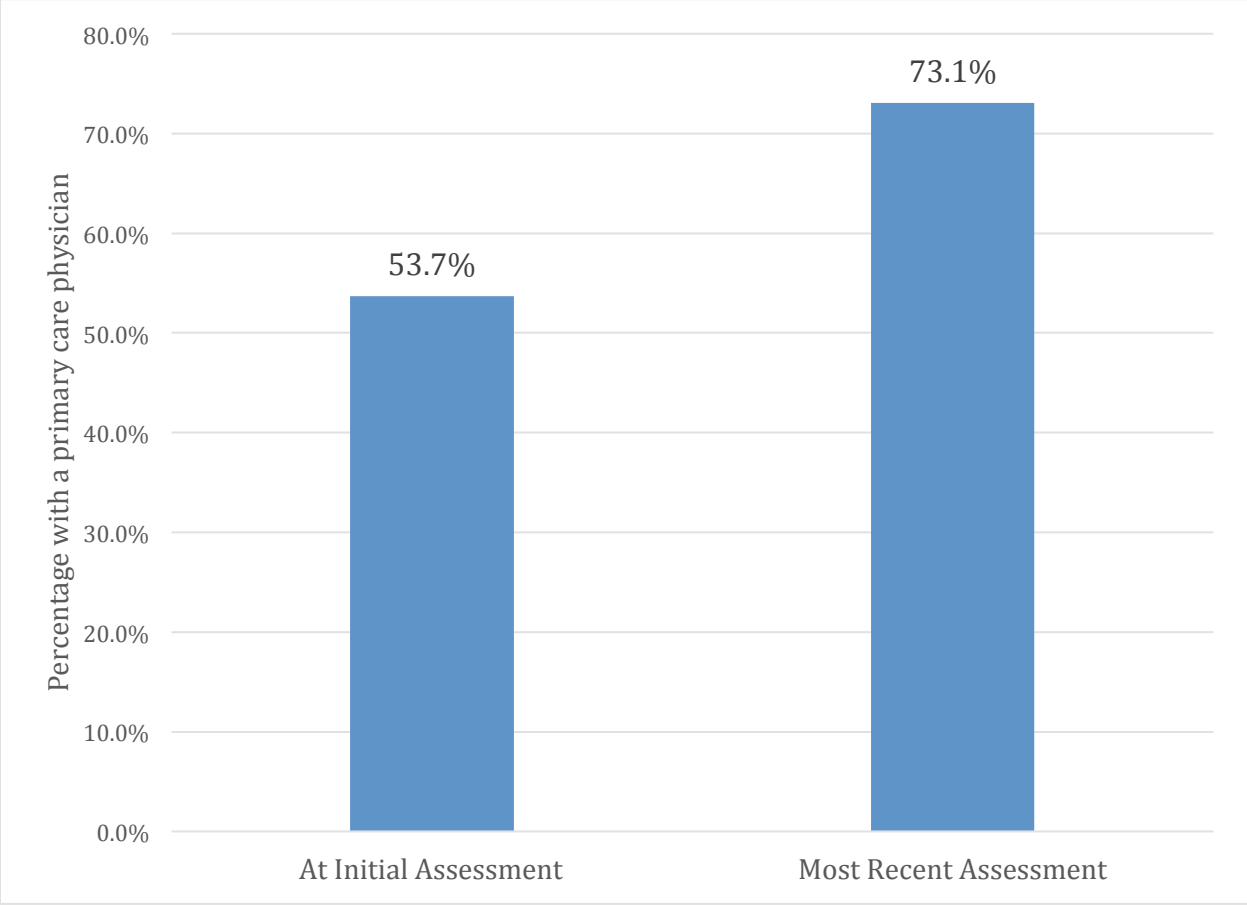
assessed. Overall, there was a decline in the proportion of adult clients who were homeless, but some individual clients became homeless. Of the adult clients who were not homeless at enrollment, 4.2 percent were homeless by the most recent observed housing status (not shown in Figure 5.4). Of the adult clients who were homeless at enrollment, 45.8 percent were no longer homeless by the most recent observed housing status.

Figure 5.4. Adult FSP Programs Associated with Reduction in Homelessness



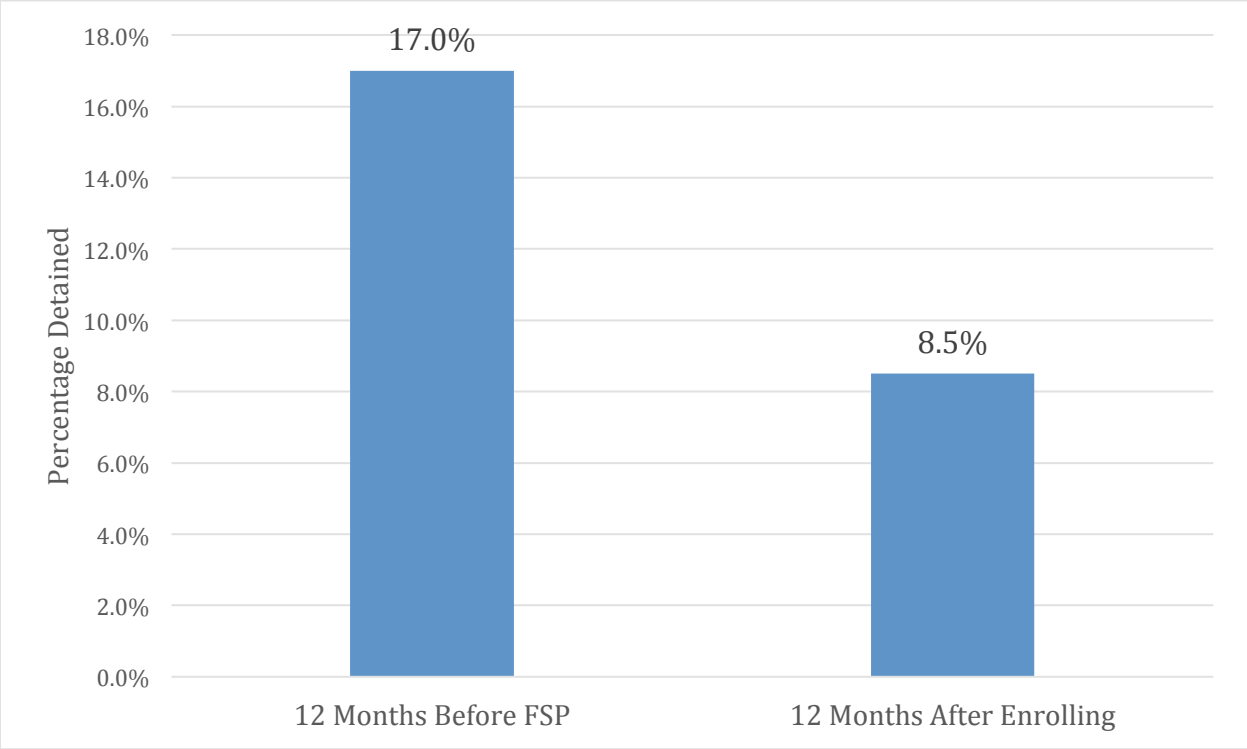
There was an increase in the percentage of adult clients who said that they had a primary care physician, from 53.7 percent to 73.1 percent (see Figure 5.5).

Figure 5.5. Adult FSP Programs Associated with Increased Rates of Having a Primary Care Physician



There was a significant decline in the percentage of adult clients who were detained in jail or prison (see Figure 5.6). In the year prior to enrollment in an FSP program, 17.0 percent of adult clients had at least one stay in jail or prison. In the year following enrollment, only 8.5 percent were detained.

Figure 5.6. Adult FSP Programs Associated with Reduction in Detention Within Justice System



The number of adult clients who had an inpatient stay for mental health or substance use disorders declined from 22.2 percent in the 12 months prior to FSP enrollment to 16.2 percent in the 12 months following enrollment (see Table 5.4). The median number of inpatient days for those who had at least one stay decreased from 17 to 14.

Table 5.4. Rate and Duration of Inpatient Stays Decreased

	12 Months Before Enrollment	12 Months After Enrollment
Any inpatient stay (%)	22	16.2
Median number of inpatient days	17	14

We evaluated the outcomes by race/ethnicity for the three largest groups: black, non-Hispanic white, and Hispanic. All three groups experienced significant improvements in all outcomes examined, and the degree of improvement was similar among the different groups, with one exception: Hispanic clients had less reduction in homelessness than the other groups did. However, Hispanic clients had the lowest rate of homelessness both prior to and after FSP enrollment.

Client Experiences

We interviewed 20 FSP clients from seven clinic sites. The average time in an FSP program was 5.5 years (standard deviation = 7.7 years). The average age of interviewees was 48.7 years (standard deviation = 13 years). Twelve interviewees were female, and eight were male. Six interviewees described themselves as Caucasian, five as African American, five as mixed race or other, and four as Hispanic.

Interviews with adult FSP clients revealed three salient characteristics of the program. First, clients enrolled in FSP programs experience high burdens of physical, mental, and social disadvantages. Second, FSP interventions address both health and social challenges in ways that are synergistic. However, some clients feel that housing resources are focused too exclusively on those who are homeless, rather than on those who hope to improve their housing. Third, FSP clients develop supportive, meaningful, and enduring relationships with both FSP providers and FSP peers; consequently, staff turnover poses particular challenges for clients. Each characteristic of FSP programs is described in turn below.

FSP Programs Treat Clients with Severe Physical and Mental Disabilities and Multiple Social Vulnerabilities

All 20 FSP clients we interviewed explained that physical, mental, or social hardships were addressed in their FSP treatment. Many described extremely severe disabilities and comorbidities at intake to the program. For instance, one 72-year-old FSP client reported a 23-year history of homelessness; an extensive history of sexual assault, by a stranger and a spouse; a family history of suicide (her mother's); and a medical history of arthritis, anemia, and chronic pain. A second client carried diagnoses of bipolar disorder, chronic suicidality, congestive heart failure, pulmonary embolism, and chronic pain and had a history of physical abuse by a spouse. A third client described housing instability, chronic unemployment, a history of physical assault by a spouse, severe PTSD, and surgical history of a hip replacement. A fourth FSP client described multiple poorly controlled medical conditions, severe depression, and homelessness upon intake to the program.

Clients described the FSP intervention as critical to addressing the distress and disability associated with these multiple vulnerabilities. One FSP client said that being homeless and mentally ill is "worse than hell." The client continued, "I would be dead or a criminal without [FSP]." Another client described that her paranoia and anxiety made it impossible for her to walk even a block; the FSP intervention taught her to express herself and avoid conflicts with friends and neighbors and accomplish a goal of staying out of the psychiatric hospital for one month. A 21-year-old FSP client with a six-year history of justice involvement and residential treatment and an infant child had dropped out of treatment but ultimately returned: "I wasn't listening so I ended up getting homeless. I lost all resources. . . . And like when I was 19, I wanted to go back

to [a specific clinic] because they're the best. That program, actually, out of every other mental health therapists I ever had, [that clinic] was one of the best ones."

FSP Programs Play a Key Role in Addressing the Interrelationship Between Mental Illness and Social Vulnerability Leading to Substantive Life Changes

FSP clients reported that the FSP intervention addressed social needs (e.g., housing, benefits, social support, food, transportation) in ways that were synergistic with and added value to their mental health treatment. For example, one interviewee said, "I got my life back" as a result of the FSP intervention, referencing both the resolution of his chronic homelessness *and* the treatment of his psychotic disorder. Another FSP client described that she was unwilling to take psychiatric medications when enrolled in the program, but once her FSP providers helped her find new housing after she was evicted, she felt that she could trust the staff and began to take their advice regarding medications. Another FSP client described that her relationships with FSP providers are very good because her faith is respected and supported, which was not true of past providers; as a result, she engaged in case management, socialization activities, and a supported employment intervention that helped her return to work after 16 years of unemployment. Of the providers in the program, she said, "[They] help me out a lot because I have a lot of medical conditions. So, I'm constantly leaning on them for help with not just transportation but just like, little questions that I have. They've been very helpful."

Multiple FSP clients described the support of the FSP intervention as critical to ending their homelessness, but the program provided more than just housing support. For instance, one FSP client said that FSP providers needed to encourage him to become housed ("they pushed me"), saw him through three or four housing placements before he became comfortable, and then helped him negotiate with a difficult landlord. Another FSP client said that he had been sober for five years because FSP providers helped him find not just housing but also a group of friends "affiliated with that [sober] lifestyle" and then assisted him in maintaining those friendships by "filling out documentation for simplistic transportation" so that he could easily hang out with "people like" him. Another FSP client said that, at a point at which she was despondent at being evicted from her housing, her FSP providers "calmed [her] down by saying, 'Relax. You and your baby are not going to be living on the streets. We're going to find a shelter or something for you guys to stay, but not on the streets.'" She continued, "So then that, like, really opened my heart and I was really, I was very grateful for that." Other social services that FSP clients described receiving via their FSP programs included transportation to the clinic ("If it was up to me I'd have them pick me up every day. . . . I know I need the help. Without the help I won't do any good."), advocacy to receive Access paratransit support, temporary job placements, a computer center, financial services, transportation to food supplements, support to quit smoking, support for benefits and personal documents, and socialization and physical exercise activities. However, two FSP clients voiced complaints that FSP housing assistance was primarily available

to those individuals who are homeless, leaving FSP clients in suboptimal housing with little support to improve their situation.

Providers in FSP Programs Demonstrate Their Commitment to Clients by Developing Strong and Enduring Therapeutic Relationships That Fuel Clients' Success

FSP clients described the relationships they formed with FSP peers and providers as compensatory for gaps in their natural support systems. In addition to describing the relationships as warm (one said, "people love me" at the FSP program, and he described his time with the program as "friendly, happy; people cared about us"), FSP clients emphasized the ways these relationships reduced stigma and social isolation. One FSP client said, "[In groups,] I get to be with people that are like me [who have] the problems I have. They understand because they are friends." Another said that, in her FSP program, "they don't make us feel embarrassed about what's going on. They treat us like we're human, and they're very nice. . . . They just allow us to be ourselves. We can go there and hang out and talk to someone whenever we need to . . . and they never make us feel bad about who we are or what we're going through. They always answer our questions. Whatever we need help with, they're there for us. And it's really cool." Another FSP client said, "I have never had family, so they are like family to me. They support me, tell me when I am doing good." Two FSP clients described their care in the FSP program as highly personalized. For instance, one interviewee said, "Trauma is not a one size fits all" diagnosis, and the medicine prescribed by the FSP program "is actually working for me more better than it was before. The doctor's like very, she knows what she's doing. Like some doctors, they're good, but they kind of don't really know, they don't really get into what's going on with your body. They just prescribe you anything."

Many FSP clients who described histories of interpersonal conflict reflected on the ways learning to trust their relationships with FSP providers became a gateway to recovery. One FSP client said about exiting the cycle of chronic homelessness that it was incredibly important to have someone who is "hanging in there with you" even when "you are the worst person that you can imagine yourself being." Another FSP client described her FSP providers as "eyes on you all the time, but in a good way." Several FSP clients described how these relationships turned their treatment around, such as the FSP client who said, "When we first started . . . I was in the mood like, 'I don't want to do this program. This is dumb. I don't want to take medicine, I don't gotta see nobody, I know nothing's wrong with me.' So now I'm just like 'Oh my god. I'm very grateful for their help.' I can't believe they're so willing to help me." Another FSP client said that she was grateful that her FSP provider "lays down the law." The interviewee said, "She'll tell me if I'm in the wrong. . . . "I know I've been there for a little bit of time, but I really, really want to continue with them for a while until I get better." Relatedly, FSP clients' most common complaint was about FSP provider turnover. As one FSP client said, "people come and go" without explanation. This client advocated for increased transparency about staff departures.

Other FSP clients also mentioned difficulties when moving out of the catchment area of their FSP programs or losing access to their programs for such other reasons as major challenges.

Key Takeaways

- **The total number of adult clients enrolled in FSP programs has been increasing over time**—over the five-year period we examined, the total number of clients increased from 3,973 to 6,345. Most enrolled clients actively engaged in treatment.
- **The program is serving a vulnerable and diverse population.** A mapping of FSP clients onto households in poverty shows a higher density of services being provided where there is a higher density of low-income residents. Adult FSP clients have serious mental illness; almost seven out of ten had been diagnosed with schizophrenia or another psychotic disorder. About three in ten FSP clients were homeless upon enrollment in the program, and more than nine in ten were unemployed. Qualitative interviews also revealed that FSP clients were simultaneously experiencing serious mental health, physical health, and social problems. In these ways, LAC DMH seems to be reaching a hard-to-reach population. The program also predominately serves racial/ethnic minorities, with black clients, in particular, being served with greater frequency than expected based on the LA County population.
- **Adult FSP clients experienced improved outcomes in key areas of functioning.** Most notably, FSP clients experienced decreased rates of homelessness, decreased rates of incarceration or detention within the justice system, increased rates of having a primary care provider, and decreased utilization of inpatient hospitalization for mental health.
- **FSP programs simultaneously and synergistically address mental health needs and social needs** (e.g., housing, benefits, social support, food, transportation), according to participants in qualitative interviews. Clients also reported developing close relationships with FSP providers, which facilitated their recovery.

6. Lessons Learned, Recommendations, and Conclusions

LAC DMH requested the current evaluation of selected MHSA-funded programs to help understand whether these programs are meeting the needs of the people of LA, with the aim of using what it learned to inform quality-improvement efforts. The evaluation specifically focused on PEI programs for youth and FSP programs for youth and adults. Overall, there is evidence that MHSA-funded LAC DMH services are reaching the people they intend to reach and that those reached are benefiting from the services provided.

What We Learned

In total, LAC DMH served almost 25,000 clients through its FSP programs and about 130,000 clients through its youth PEI programs, from 2012 through 2016. This number does not include outreach, primary (i.e., early) prevention, social marketing efforts, PEI services provided to adults, or services not funded by the MHSA.

LAC DMH is providing mental health services to vulnerable and diverse populations in LA County. Its programs are serving typically hard-to-reach and at-risk populations that might not otherwise have access to mental health care.

Across the programs evaluated, LAC DMH is serving more clients in areas where there are more residents living at or below the poverty line. FSP programs treat a seriously ill population with severe diagnoses and challenging life circumstances; adult FSP clients, in particular, have high rates of psychosis, unemployment, and homelessness upon entering the program, and qualitative interviews revealed that co-occurring physical health problems are also common, consistent with a large body of research literature that has found increased physical health problems among individuals with serious mental illness (see De Hert et al., 2011, for a review). The youth PEI program seems to be meeting its goal of treating individuals who are at high risk for mental illness, distress, and social problems. Furthermore, youth PEI programs are successfully reaching individuals who have not previously received mental health care; almost one-half of youth PEI programs had not previously received mental health services through LAC DMH. Across the different programs evaluated, the vast majority of LAC DMH clients are members of racial or ethnic minorities; youth PEI services are particularly engaging a large number of Hispanic youth, and FSP programs are particularly engaging a large number of black clients, relative to LA County demographics.

Clients of the LAC DMH programs evaluated experienced improvements in homelessness, interaction with the justice system, service utilization, and functioning. We found evidence that most clients are actively engaging in PEI and FSP programs, which seem to be helping them.

A stable living environment is key to well-being. To this end, we found evidence that participation in adult and TAY FSP programs is associated with decreased rates of homelessness. Another key aspect of functioning is engaging in purposeful activity; to this end, we found modest evidence for increased employment among adults who participate in FSP care. Further, we found that rates of incarceration or detention within the justice system for both TAY and adults declined.

We found evidence that participation in LAC DMH programs is associated with increased utilization of appropriate mental and physical health care. Adults who participated in FSP programs had significantly increased rates of having a primary care provider. The change is salient in light of evidence that people with mental illness have increased physical health problems and, on average, die ten to 25 years sooner than those without mental illness (e.g., De Hert et al., 2011; Druss et al., 2011). Connecting individuals with mental illness to a primary care provider may help address these large and concerning disparities in physical health.

Although FSP clients had increased access to primary care, they also had decreased utilization of mental health inpatient care. With the support of FSP programs, more clients are able to avoid inpatient hospitalizations for their serious mental health issues.

Taken together, FSP clients' decreased rates of homelessness, increased employment, increased access to primary care, and decreased mental health hospitalizations paint a picture of increased stability despite chronic and serious mental health problems—an indication of recovery.

Serving young people with early signs of mental illness is important, because it represents an opportunity to affect the trajectory of their lives and potentially put them on paths where they experience less suffering, better relationships, and more success in life, in line with some of the goals of the MHSA. To this end, participants in LAC DMH's PEI programs for youth are associated with increased utilization of psychotherapy and case management care and improvements in symptoms and social and relationship functioning. Further, youth who did not have significant symptoms when starting PEI programs largely stayed well, despite being at risk. We found that Hispanic and Asian youth had particularly good outcomes in comparison with other groups, but all racial/ethnic groups experienced improvements in symptoms and social functioning. The outcomes we found for the PEI interventions evaluated are consistent with and bolstered by evidence from the research literature, which similarly found reductions in symptoms and improvements in behavior problems, parenting-related stress, and functioning (e.g., Allen and Hoskowitz, 2017; Ippen et al., 2011; Najavits, Gallop, and Weiss, 2006; Sanders et al., 2014; Southam-Gerow et al., 2014).

Limitations

Our evaluation has some limitations. First, we do not have complete outcome data, particularly for the youth PEI analyses. We found that clients with available follow-up data are

somewhat different from the overall population served, with respect to their demographics (i.e., age, race/ethnicity, and language), which means that they are not representative of LAC DMH clients as a whole. We do not know how these missing data may or may not have affected our evaluation findings, so they should be viewed with this limitation in mind.

Second, we did not have a comparison group that did not receive LAC DMH services. To address this limitation, we compared LAC DMH outcomes with benchmarks from rigorous studies. Comparing to benchmarks builds our confidence that the observed improvements in outcomes are due to the services received. However, we cannot rule out the possibility that some of the changes we observed over time would have occurred even without treatment.

Recommendations

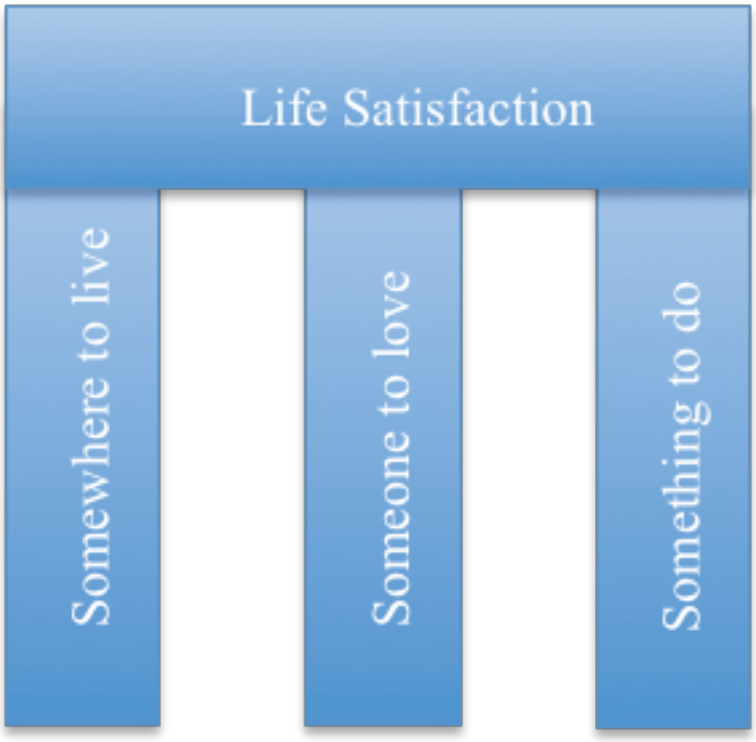
LAC DMH should continue its efforts to reach vulnerable populations across LA County and improve outcomes for diverse racial/ethnic groups. There is evidence that LAC DMH programs are already reaching at-risk individuals across the county, with increased enrollment in FSP programs over time. LAC DMH already predominately serves racial/ethnic minorities; however, there is some evidence from our evaluation of PEI programs that, while all racial/ethnic groups experience improvement, outcomes are better for Latino and Asian youth than for non-Hispanic white and black youth. Future evaluation should focus on understanding the unique PEI needs of different racial/ethnic groups, and LAC DMH should use these evaluation findings to inform quality-improvement efforts for groups not faring as well.

Facilitate future outcome-monitoring and quality-improvement efforts by retooling the approach to measuring outcomes. LAC DMH should consider refining *which* outcomes it measures, *how* it measures them, and *how often* it measures them, for both FSP and PEI programs.

Which Outcomes Are Measured

LAC DMH leadership is interested in affecting three key aspects of its clients' lives, which are often described as the pillars of life satisfaction: whether they have "somewhere to live, someone to love, and something to do" (see Figure 6.1).

Figure 6.1. Key Outcomes to Measure



LAC DMH already collects some data to address all three pillars, but some new data collection is needed to really understand how clients are doing in these key respects. Data on whether clients have somewhere to live are collected for FSP clients but not for PEI clients. Regarding whether clients have someone to love, a relationship functioning subscale is collected for PEI clients, but only very basic yes/no questions are asked about FSP clients' relationship functioning. We recommend that all clients complete social support measures on an ongoing basis to inform treatment, evaluation, and quality-improvement efforts. Regarding whether clients have something to do, again, basic yes/no questions are asked of FSP clients, and this is not assessed among PEI clients. We recommend that LAC DMH administer a more thorough assessment of engagement in meaningful activities to all clients across different kinds of programs.

The three pillars can be considered aspects of recovery from serious mental illness. However, recovery is a broader concept that also encompasses such concepts as hope for the future, self-empowerment, coping with and adapting to symptoms, and quality of life. We recommend that LAC DMH add a broader measure of recovery to its assessments.

How Outcomes Are Measured

Once LAC DMH has determined which outcomes it wants to measure, it is important to consider the best way to measure them. For PEI programs, there may be substantial barriers in

collecting complete outcome measures, given our findings that there are significant missing assessment data. Investigating ways to simplify data collection by providers and agencies, especially through the use of technology, can improve the ongoing evaluation of these programs. For the FSP programs in particular, LAC DMH has chosen outcome measures that minimize the burden on patients and clinicians. It is important to minimize burden, because burdensome measures may have lower completion rates. However, the disadvantage to some of these brief measures is that they may not adequately capture current client functioning or may change so slowly that they are not ideal for measuring change over time. Benchmarks may not be available, so even when there is change, it may be hard to determine whether the change is meaningful. For instance, although social engagement is currently an important goal of FSP programs for children and TAY, this area was not a focus of data collection when initially designed. Therefore, single-item yes/no measures were used to measure socialization with others, the development and maintenance of friendships, and whether the client has involvement in the community. We did not observe much change in these measures, but we would not necessarily expect to see much change in single yes/no items such as these. If LAC DMH instead used reliable, valid, multi-item scales with known benchmarks for good or improved scores, it would be easier to capture and interpret changes in social engagement, which would inform both individual-level client treatment and program-level evaluation.

How Often Outcomes Are Measured

Another important consideration is the frequency of the assessments. Although many outcomes are examined at three-month intervals, others are noted only when they occur. Specifically, key-event forms are completed only when there are important occurrences, such as changes in housing status. The issue with this approach is that it is impossible to tell how complete the data are; if a client does not have a life event noted within a certain period, we cannot tell whether the client did not experience any life events or whether the form was simply not completed. Therefore, we recommend that data on key events also be collected at three-month intervals, along with other outcomes that are already queried on a regular basis. However, many elements of FSP data are collected at state-mandated intervals, so advocacy may be needed on the state level to adjust data-collection requirements.

LAC DMH should also explore how to make data collection more consistent at these regular intervals, because there is quite a bit of missing data even for the regularly collected measures.

Of course, all of these considerations for measure selection and data collection need to be balanced with considerations of minimizing the burden on clients and clinicians. That said, high-quality measures that take more time to administer might not seem burdensome if they are integrated into treatment as part of an evidence-based cognitive behavioral approach.

Consider measuring *processes* of care and using these data for quality improvement. The outcomes described above are the changes that result from care. But it is difficult to understand outcomes of care without first understanding processes of care—what interventions

people are actually getting. In particular, LAC DMH implements a broad and impressive variety of EBPs, but it is unclear whether these practices are implemented with fidelity—in other words, implemented as the developers of the practice intended. Given the large number of different practices that LAC DMH providers use, it may be helpful to focus on evaluating the fidelity with which the most frequently used interventions are implemented.

Another important aspect of processes of care is clients' satisfaction with the care they received. Given the racial/ethnic diversity of the population served by LAC DMH, it may be helpful to specifically query patients' impressions of providers' cultural competency.

These process measures could be used to provide real-time feedback to providers and to inform continuous quality-improvement efforts.

Finally, while processes of care are important in and of themselves, they could also be examined as potential predictors of client engagement, retention, and outcomes.

Examine provider-level differences in engagement and outcomes. The current evaluation took a bird's-eye view at the programs of interest. A logical next step would be to examine whether outcomes vary across different providers. If some providers are better at engaging clients and getting positive results than others, this would be instructive regarding where to focus quality-improvement efforts and how to encourage best practices. We recommend developing key performance indicators with benchmarks for quality care, which can be used to set goals for improving providers' services. This examination of how performance indicators vary across providers should control for other variables that vary across providers, such as levels of client poverty, homelessness, unemployment, and mix of diagnoses; otherwise, it is easy to mistake treating more-challenging clients for lower performance.

Conduct cost-effectiveness and cost-benefits analyses. We examined the reach and outcomes of key programming, so a logical next step would be to examine the resource investments in these programs in relation to the social and economic benefits associated with those investments.

Conclusions

The current evaluation found evidence that LAC DMH is reaching the highly vulnerable population it seeks to reach with its FSP and youth PEI programs. Furthermore, those reached by the programs experience improvements in their mental health and life circumstances. Refining data collection will enable more-thorough evaluations of processes of care and whether clients have "somewhere to live, someone to love, and something to do," which would inform the program's quality-improvement efforts.

Appendix A. Clinical Data Set

Table A.1. Number of Cases with Both Pre- and Post-Measures, by the Five Most Common Practices and All Other Practices, 2012–2016

	Analytic Sample, Cases with Pre- and Post-Measures					
	General Measure[a]	Most Commonly Used Specific Measures				Sample
	Y-OQ	PHQ-9	PTSD-RI	ECBI	TSCYC	(*n*)[b]
Overall	26,277	3,483	7,113	7,779	840	29,237
5 most common practices (total)	19,776	2,268	6,677	5,024	699	21,705
Child Parent Psychotherapy (CPP)	472	0	0	0	699	764
Managing and Adapting Practice (MAP)	10,721	2,268	354	3,649	0	11,578
Triple P—Positive Parenting Program	1,355	0	0	1,375	0	1,512
Seeking Safety (SS)	2,650	0	2,019	0	0	2,807
Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)	4,578	0	4,304	0	0	5,044
28 other practices (total)	6,501	1,215	436	2,755	141	7,532
Aggression Replacement Training (ART)	850	0	0	545	0	968
Aggression Replacement Training–SkillStreaming (ART)	32	0	0	26	0	33
Alternatives for Families–Cognitive Behavioral Therapy (AF-CBT)	398	0	372	0	0	417
Brief Strategic Family Therapy (BSFT)	72	0	0	0	0	72
Caring for Our Families (CFOF)	168	0	0	78	0	178
Center for the Assessment and Prevention of Prodromal States (CAPPS)	64	0	0	0	0	64
Cognitive Behavioral Intervention for Trauma in Schools (CBITS)	39	0	35	0	0	42
Crisis Oriented Recovery Services (CORS)	902	0	0	0	0	902
Depression Treatment Quality Improvement (DTQI)	502	386	0	0	0	539
Dialectical Behavioral Therapy (DBT)	3	0	0	0	0	3
Families OverComing Under Stress (FOCUS)	143	0	0	0	0	143
First 5 Parent–Child Interaction Therapy (PCIT)	0	0	0	341	141	345
Functional Family Therapy (FFT)	656	0	0	0	0	656
Group Cognitive Behavioral Therapy for Major Depression (Group CBT for Major Depression)	39	56	0	0	0	56
Incredible Years (IY)	833	0	0	821	0	904
Individual Cognitive Behavioral Therapy–Anxiety (CBT-Anxiety)	108	0	0	0	0	108
Individual Cognitive Behavioral Therapy–Depression (CBT-Depression)	205	209	0	0	0	230
Individual Cognitive Behavioral Therapy–Trauma (CBT-Trauma)	33	0	29	0	0	45
Interpersonal Psychotherapy for Depression (IPT)	633	564	0	0	0	681
Loving Intervention Family Enrichment (LIFE)	164	0	0	126	0	172
Multidimensional Family Therapy (MDFT)	24	0	0	0	0	24
Multisystemic Therapy (MST)	43	0	0	0	0	43
Parent–Child Interaction Therapy (PCIT)	389	0	0	640	0	664
Prolonged Exposure for PTSD (PE)	1	0	0	0	0	1
Promoting Alternative THinking Strategies (PATHS)	69	0	0	70	0	75
Reflective Parenting Program (RPP)	65	0	0	85	0	91
Strengthening Families Program (SFP)	50	0	0	0	0	50
UCLA Ties Transition Model (UCLA Ties Transition Model)	16	0	0	23	0	26

[a] The Y-OQ could be the parent or self-report version.
[b] The column indicates the number of cases that had one or more outcome measures available.

Appendix B. Reduction of Clinically Significant Symptoms from Baseline for PEI Practices, Using General and Specific Outcome Measures

Table B.1. Percentage of Clinically Significant Symptoms at Pre- and Post-Test, by PEI Practices

	N	Pre-Test	Post-Test	Change from Pre-Test to Post-Test	*p*-Value[a]
General outcome measures[b]					
Aggression Replacement Training (ART)	850	64.59%	50.24%	(14.35%)	<0.001
Aggression Replacement Training–SkillStreaming (ART)	32	84.38%	46.88%	(37.50%)	<0.001
Alternatives for Families-Cognitive Behavioral Therapy (AF-CBT)	398	67.59%	31.66%	(35.93%)	<0.001
Brief Strategic Family Therapy (BSFT)	72	63.89%	27.78%	(36.11%)	<0.001
Caring for Our Families (CFOF)	168	61.31%	41.07%	(20.24%)	<0.001
Center for the Assessment and Prevention of Prodromal States (CAPPS)	64	81.25%	54.69%	(26.56%)	<0.001
Child Parent Psychotherapy (CPP)	472	51.69%	20.13%	(31.57%)	<0.001
Cognitive Behavioral Intervention for Trauma in Schools (CBITS)	39	56.41%	35.90%	(20.51%)	0.011
Crisis Oriented Recovery Services (CORS)	902	66.19%	44.46%	(21.73%)	<0.001
Depression Treatment Quality Improvement (DTQI)	502	69.52%	33.27%	(36.25%)	<0.001
Families OverComing Under Stress (FOCUS)	143	53.15%	29.37%	(23.78%)	<0.001
Functional Family Therapy (FFT)	656	69.97%	44.82%	(25.15%)	<0.001
Group Cognitive Behavioral Therapy for Major Depression (Group CBT for Major Depression)	39	51.28%	35.90%	(15.38%)	0.109
Incredible Years (IY)	833	58.94%	37.82%	(21.13%)	<0.001
Individual Cognitive Behavioral Therapy–Anxiety (CBT-Anxiety)	108	67.59%	30.56%	(37.04%)	<0.001
Individual Cognitive Behavioral Therapy–Depression (CBT-Depression)	205	72.20%	35.12%	(37.07%)	<0.001
Individual Cognitive Behavioral Therapy–Trauma (CBT-Trauma)	33	66.67%	30.30%	(36.36%)	<0.001
Interpersonal Psychotherapy for Depression (IPT)	633	73.14%	37.60%	(35.55%)	<0.001
Loving Intervention Family Enrichment (LIFE)	164	66.46%	39.63%	(26.83%)	<0.001
Managing and Adapting Practice (MAP)	10,721	63.16%	34.50%	(28.65%)	<0.001
Multidimensional Family Therapy (MDFT)	24	87.50%	41.67%	(45.83%)	<0.001
Multisystemic Therapy (MST)	43	79.07%	39.53%	(39.53%)	<0.001
Parent–Child Interaction Therapy (PCIT)	389	62.21%	21.85%	(40.36%)	<0.001
Triple P—Positive Parenting Program	1,355	66.94%	36.24%	(30.70%)	<0.001
Promoting Alternative THinking Strategies (PATHS)	69	65.22%	42.03%	(23.19%)	<0.001
Reflective Parenting Program (RPP)	65	63.08%	50.77%	(12.31%)	0.033
Seeking Safety (SS)	2,650	68.83%	43.92%	(24.91%)	<0.001

	N	Pre-Test	Post-Test	Change from Pre-Test to Post-Test	*p*-Value[a]
Strengthening Families Program (SFP)	50	62.00%	56.00%	(6.00%)	0.467
Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)	4,578	58.08%	28.96%	(29.12%)	<0.001
PHQ-9[c]					
Depression Treatment Quality Improvement (DTQI)	386	43.01%	12.69%	(30.31%)	<0.001
Group Cognitive Behavioral Therapy for Major Depression (Group CBT for Major Depression)	56	60.71%	25.00%	(35.71%)	<0.001
Individual Cognitive Behavioral Therapy–Depression (CBT-Depression)	209	63.64%	28.71%	(34.93%)	<0.001
Interpersonal Psychotherapy for Depression (IPT)	564	47.70%	16.31%	(31.38%)	<0.001
Managing and Adapting Practice (MAP)	2,268	45.55%	15.56%	(29.98%)	<0.001
PTSD-RI[d]					
Alternatives for Families–Cognitive Behavioral Therapy (AF-CBT)	372	13.17%	6.18%	(6.99%)	<0.001
Cognitive Behavioral Intervention for Trauma in Schools (CBITS)	35	25.71%	17.14%	(8.57%)	0.18
Individual Cognitive Behavioral Therapy–Trauma (CBT-Trauma)	29	27.59%	3.45%	(24.14%)	0.008
Managing and Adapting Practice (MAP)	354	36.16%	13.56%	(22.60%)	<0.001
Seeking Safety (SS)	2,019	25.01%	13.37%	(11.64%)	<0.001
Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)	4,304	32.74%	9.57%	(23.16%)	<0.001
TSCYC[e]					
Child Parent Psychotherapy (CPP)	699	61.09%	30.33%	(30.76%)	<0.001
First 5 Parent–Child Interaction Therapy (PCIT)	141	55.32%	24.82%	(30.50%)	<0.001
ECBI[†]					
Aggression Replacement Training (ART)	545	54.31%	48.44%	(5.87%)	0.015
Aggression Replacement Training–SkillStreaming (ART)	26	92.31%	57.69%	(34.62%)	0.003
Caring for Our Families (CFOF)	78	55.13%	34.62%	(20.51%)	<0.001
First 5 Parent–Child Interaction Therapy (PCIT)	341	75.07%	17.60%	(57.48%)	<0.001
Incredible Years (IY)	821	70.28%	42.75%	(27.53%)	<0.001
Loving Intervention Family Enrichment (LIFE)	126	59.52%	27.78%	(31.75%)	<0.001
Managing and Adapting Practice (MAP)	3,649	70.46%	38.09%	(32.37%)	<0.001
Parent–Child Interaction Therapy (PCIT)	640	77.81%	28.91%	(48.91%)	<0.001
Triple P—Positive Parenting Program	1,375	73.09%	36.44%	(36.65%)	<0.001
Promoting Alternative Thinking Strategies (PATHS)	70	64.29%	48.57%	(15.71%)	0.008
Reflective Parenting Program (RPP)	85	52.94%	52.94%	0.00%	1
UCLA Ties Transition Model (UCLA Ties Transition Model)	23	34.78%	39.13%	4.35%	0.564

NOTE: Values have been rounded.
[a] *p*-values were based on McNemar's test for paired proportions.
[b] Any clinically symptoms on clinical cut-offs on the Y-OQ–Parent (total ≥ 46), Y-OQ–Self-Report (total ≥ 47), or OQ (total ≥ 64).
[c] PHQ-9 ≥ 10.
[d] Total score ≥ 60 (child/adolescent or parent).
[e] Total t-score ≥ 60.
[f] Any t-score ≥ 60 (intensity or problem).

References

Allen, B., and N. A. Hoskowitz, "Structured Trauma-Focused CBT and Unstructured Play/Experiential Techniques in the Treatment of Sexually Abused Children: A Field Study with Practicing Clinicians," *Child Maltreatment*, Vol. 22, No. 2, May 2017, pp. 112–120.

Brookman-Frazee, L., N. Stadnick, S. Roesch, J. Regan, M. Barnett, L. Bando, D. Innes-Gomberg, and A. Lau, "Measuring Sustainment of Multiple Practices Fiscally Mandated in Children's Mental Health Services," *Administration and Policy in Mental Health and Mental Health Services Research*, Vol. 43, No. 6, 2016, pp. 1009–1022.

Brown, E. G., Jr., D. S. Dooley, and J. Kent, *Mental Health Services Act Expenditure Report: Fiscal Year 2016–2017*, Sacramento: California Department of Health Care Services, January 2016. As of February 6, 2018: http://www.dhcs.ca.gov/formsandpubs/Documents/Legislative%20Reports/Mental%20Health/MHSAExpend_Report_Jan2016.pdf

Cashin, C., R. Scheffler, M. Felton, N. Adams, and L. Miller, "Transformation of the California Mental Health System: Stakeholder-Driven Planning as a Transformational Activity," *Psychiatric Services*, Vol. 59, No. 10, 2008, pp. 1107–1114.

Child Trauma Research Program, "Child-Parent Psychotherapy," webpage, undated. As of February 6, 2018: http://childtrauma.ucsf.edu/resources-0

Chorpita, B. F., E. L. Daleiden, and K. S. Collins, "Managing and Adapting Practice: A System for Applying Evidence in Clinical Care with Youth and Families," *Clinical Social Work Journal*, Vol. 42, No. 2, June 2014, pp. 134–142.

Cohen, J. A., A. P. Mannarino, and E. Deblinger, *Treating Trauma and Traumatic Grief in Children and Adolescents*, New York: Guilford Press, 2016.

De Hert, M., C. U. Correll, J. Bobes, M. Cetkovich-Bakmas, D. Cohen, I. Asai, J. Detraux, S. Gautam, H. J. Möller, D. M. Ndetei, and J. W. Newcomer, "Physical Illness in Patients with Severe Mental Disorders: I. Prevalence, Impact of Medications and Disparities in Health Care," *World Psychiatry*, Vol. 10, No. 1, February 2011, pp. 52–77.

Dopp, A. R., R. F. Hanson, B. E. Saunders, C. E. Dismuke, and A. D. Moreland, "Community-Based Implementation of Trauma-Focused Interventions for Youth: Economic Impact of the Learning Collaborative Model," *Psychological Services*, Vol. 14, No. 1, February 2017, pp. 57–65.

Druss B. G., L. Zhao, S. Von Esenwein, E. H. Morrato, and S. C. Marcus, "Understanding Excess Mortality in Persons with Mental Illness: 17-Year Follow Up of a Nationally Representative US Survey," *Medical Care*, Vol. 49, No. 6, 2011, pp. 599–604.

Gilmer, T. P., M. L. Katz, A. Stefancic, and L. A. Palinkas, "Variation in the Implementation of California's Full Service Partnerships for Persons with Serious Mental Illness," *Health Services Research*, Vol. 48, No. 6, Pt. 2, 2013, pp. 2245–2267.

Gilmer, T. P., A. Stefancic, S. L. Ettner, W. G. Manning, and S. Tsemberis, "Effect of Full-Service Partnerships on Homelessness, Use and Costs of Mental Health Services, and Quality of Life Among Adults with Serious Mental Illness," *Archives of General Psychiatry*, Vol. 67, No. 6, 2010, pp. 645–652.

Heinrichs, N., S. Kliem, and K. Hahlweg, "Four-Year Follow-Up of a Randomized Controlled Trial of Triple P Group for Parent and Child Outcomes," *Prevention Science*, Vol. 15, No. 2, April 2014, pp. 233–245.

Hien, D. A., A. A. Morgan-Lopez, A. N. Campbell, L. M. Saavedra, E. Wu E, L. Cohen, L. Ruglass, and E. V. Nunes, "Attendance and Substance Use Outcomes for the Seeking Safety Program: Sometimes Less Is More," *Journal of Consulting and Clinical Psychology*, Vol. 80, No. 1, 2012, pp. 29–42.

Ippen, C. G., W. W. Harris, P. Van Horn, and A. F. Lieberman, "Traumatic and Stressful Events in Early Childhood: Can Treatment Help Those at Highest Risk?" *Child Abuse & Neglect*, Vol. 35, No. 7, July 2011, pp. 504–513.

LAC DMH—*See* Los Angeles County Department of Mental Health.

Lang, J. M., and C. M. Connell, "Measuring Costs to Community-Based Agencies for Implementation of an Evidence-Based Practice," *The Journal of Behavioral Health Services & Research*, Vol. 44, No. 1, January 2017, pp. 122–134.

Lang, J. M., R. P. Franks, C. Epstein, C. Stover, and J. A. Oliver, "Statewide Dissemination of an Evidence-Based Practice Using Breakthrough Series Collaboratives," *Children and Youth Services Review*, Vol. 55, August 2015, pp. 201–209.

Lieberman, A. F., C. G. Ippen, and P. Van Horn, "Child-Parent Psychotherapy: 6-Month Follow-Up of a Randomized Controlled Trial," *Journal of the American Academy of Child & Adolescent Psychiatry*, Vol. 45, No. 8, August 2006, pp. 913–918.

Lieberman, A. F., P. Van Horn, and C. G. Ippen, "Toward Evidence-Based Treatment: Child-Parent Psychotherapy with Preschoolers Exposed to Marital Violence," *Journal of the American Academy of Child & Adolescent Psychiatry*, Vol. 44, No. 12, December 2005, pp. 1241–1248.

Los Angeles County Department of Mental Health, "Key California Legislation: AB 2034," webpage, undated. As of February 6, 2018: http://histpubmh.semel.ucla.edu/archive/key-california-legislation-ab-2034

———, *MHSA Annual Fiscal Year 2016–17*, Los Angeles, 2016. As of February 9, 2018: http://file.lacounty.gov/sdsinter/dmh/1004980_mhsaplanfy16-17oct13.pdf

Los Angeles Homeless Service Authority, "2016 Greater Los Angeles Homeless Count—Demographic Summary," webpage, undated. As of February 9, 2018: https://www.lahsa.org/dashboards?id=18-2016-greater-los-angeles-homeless-count-demographic-summary

Najavits, L. M., R. J. Gallop, and R. D. Weiss, "Seeking Safety Therapy for Adolescent Girls with PTSD and Substance Use Disorder: A Randomized Controlled Trial," *The Journal of Behavioral Health Services & Research*, Vol. 33, No. 4, October 2006, pp. 453–463.

Padgett, D. K., L. Gulcur, and S. Tsemberis, "Housing First Services for People Who Are Homeless with Co-Occurring Serious Mental Illness and Substance Abuse," *Research on Social Work Practice*, Vol. 16, No. 1, January 2006, pp. 74–83.

PracticeWise, "Managing and Adapting Practice (MAP)," webpage, undated. As of February 6, 2018: https://www.practicewise.com/Community/MAP

Roundfield, K. D., and J. M. Lang, "Costs to Community Mental Health Agencies to Sustain an Evidence-Based Practice," *Psychiatric Services*, May 2017.

Sanders, M. R., "Triple P-Positive Parenting Program: Towards an Empirically Validated Multilevel Parenting and Family Support Strategy for the Prevention of Behavior and Emotional Problems in Children," *Clinical Child and Family Psychology Review*, Vol. 2, No. 2, June 1999, pp. 71–90.

Sanders, M. R., J. N. Kirby, C. L. Tellegen, and J. J. Day, "The Triple P-Positive Parenting Program: A Systematic Review and Meta-Analysis of a Multi-Level System of Parenting Support," *Clinical Psychology Review*, Vol. 34, No. 4, June 2014, pp. 337–357.

Southam-Gerow, M. A., E. L. Daleiden, B. F. Chorpita, C. Bae, C. Mitchell, M. Faye, and M. Alba, "MAPping Los Angeles County: Taking an Evidence-Informed Model of Mental Health Care to Scale," *Journal of Clinical Child & Adolescent Psychology*, Vol. 43, No. 2, March 2014, pp. 190–200.

Spaite, P. W., and M. S. Davis, *The Mentally Ill and the Criminal Justice System: A Review of Programs*, Columbus: NAMI Ohio, 2005.

Treatment Innovations, "About Seeking Safety," webpage, 2016. As of February 6, 2018: https://www.treatment-innovations.org/ss-description.html

Wamser-Nanney, R., and C. E. Steinzor, "Factors Related to Attrition from Trauma-Focused Cognitive Behavioral Therapy," *Child Abuse & Neglect*, Vol. 66, April 2017, pp. 73–83.

Weersing, V. R., and J. R. Weisz, "Community Clinic Treatment of Depressed Youth: Benchmarking Usual Care Against CBT Clinical Trials," *Journal of Consulting and Clinical Psychology*, Vol. 70, No. 2, 2002, pp. 299–310.