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Moving from ‘Whatever it Takes’ to ‘What it Takes’: Examining a Policy-Driven Program for Engaging Underserved Children and Families into Mental Health Services

By

Katharan Duggento Cordell

A dissertation submitted in partial satisfaction of the requirements for the degree of

Doctor of Philosophy

in

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of the

University of California, Berkeley

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## Abstract

Moving from ‘Whatever it Takes’ to ‘What it Takes’: Examining a Policy-Driven Program for Engaging Underserved Children and Families into Mental Health Services

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Professor Lonnie Snowden, Co-Chair

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This dissertation examines the children’s public mental health Full Service Partnership (FSP) program established by the California’s Mental Health Services Act of 2004 in order to provide mental health and social services and supports not otherwise available to the underserved. Utilizing a California statewide dataset of all public county mental health system provisions linked from two sources of data, including FSP program exposure data (Data Collection and Report dataset) and mental health service data (Client Services Information dataset) from the California Department of Health Care Services (CDHCS), analyses compare the FSP program to usual care within county mental health systems. Synthesizing records summarizing each month a child was served, the final dataset encompasses 36 counties (61%) inclusive of 623,031 (70%) children (ages 6<18) served within county mental health systems over 102 months between July 1, 2004 and December 31, 2012, reflecting 15,723 children served by the FSP program. To evaluate whether the FSP program was meeting its goals as established in statute and guidelines, three research questions were addressed: 1) Do FSP programs reach underserved children, as intended? 2) Do FSP programs provide a different array of services as compared to usual care, as intended? 3) Does participation in the FSP program result in positive outcomes as intended, measured by a decrease in the use of mental health emergency service? Adjusting for demographics, indicators of clinical severity, and county of residence, three respective analytical models were developed to compare FSP served children to those in usual care including: 1) hierarchical logistic regression modeling for the odds of a child enrolling into an FSP versus remaining in the pool of those served by usual care in each county, 2) t-tests contrasting service provision arrays for FSP served children as compared to those in intensive (service on  $\geq$  four days per month) usual care, and 3) longitudinal hierarchical Poisson regression modeling the pre-post matched change in incidence rate of mental health emergency services use before, after and without FSP enrollment.

As intended by policy, results indicate that FSPs reach the underserved, provide a different array of service intensity and result in reductions of crisis care for the children and families it served. Compared to others concomitantly served in usual care, FSP enrollees had more clinical indicators of severe disorder and had encountered the mental health system at younger ages (OR=.94,  $P<.001$ ), but had received fewer total lifetime months of services before

enrolling into FSP (OR=.99, P<.001), especially in the six months before beginning an FSP program (OR=.19, P<.001). FSP served children also received an array of services generally more intensive than usual care, even when considering only those children served at least four days per month in usual care. The comparison of service types suggested that the FSP program followed policy guidelines which direct FSPs to offer a heightened focus on linkages to community resources (+80%, P<.001) and to support needs of caregivers and other family members (+60%, P<.001). Improved outcomes were evidenced by changes in emergency service use rates for FSP served children, given that before enrolling in the FSP program, these children showed increasing rates of mental health emergency service use over time which were then reduced or reversed after enrolling in FSP programming and throughout the remainder of the study period – a pattern unlike what was experienced by similar children in usual care. After enrollment, the older groups of FSP served children showed significant improvement in contrast to their mental health emergency service use rates before treatment and to rates of all other comparable children in usual care (ages 11<15 IRR=.83 , P<.001; and 15<18 IRR=.79, P<.001).

FSPs are customized programs which address, at least in part, two significant challenges in children’s mental health: (1) outreach and engagement of underserved populations and (2) provision of community-based stabilizing care for children at high risk for psychiatric crises. There is evidence that FSP programs might have benefits for children by (a) more effectively enrolling into care some of the 2/3 of the population with need who are unserved or underserved; (b) providing an intensive array of services inclusive of family care and linkages to external resources; and (c) resulting in improved crisis-related outcomes for children and families. FSP programs incorporate a variety of innovate components, any of which could contribute to increased success in identifying, enrolling and engaging underserved children; improving the availability of an appropriate intensity of services; or delivering positive outcomes across a lasting developmental trajectory.

Left unserved and underserved, children with severe mental disorders and their families may lack the appropriate tools to manage or improve symptoms of the disorder leading toward a progression into mental illness in adulthood. A key aspect of FSP programs is their ability to provide a combination of social and mental health services, likely helping underserved families living in poverty to overcome prior barriers to treatment. Supported by the existing infrastructure built around the FSP program, research in California is poised to make a significant contribution toward evidencing methods which increase successful treatment of undertreated children’s mental disorders potentially altering their progression. Results from this dissertation provide justification for putting effort forth toward further evaluation to identify the FSP program components which result in these program successes.

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## **Chapter 1: Historical Developments Leading to Full Service Partnerships**

A majority of children with mental disorders are untreated or undertreated for their disorders (Kataoka, Zhang, & Wells, 2002), and thereby experience substantial risks to health and social wellbeing. This poses a challenge to mental health care systems in California and throughout the United States to innovate new methods to reach and engage the underserved into adequate treatment. In California, there are over six million children ages 6 to 17 (U.S. Census, 2014), of which approximately 8% (~500,000) have been diagnosed with depression or anxiety and 4% (~250,000) have been diagnosed with behavioral or conduct problems (Ghandour, Kogan, Blumberg, Jones, & Perrin, 2012), which are serious mental health related disorders which disrupt individual functioning, family stability and healthy growth (Human Services Research Institute, Technical Assistance Collaborative, & Holzer, 2012). Some of these children (approximately 225,000) are served through California's county mental health systems each year (Substance Abuse and Mental Health Services Administration, 2011), while others are served through schools or privately insured healthcare, but a majority are underserved or remain unserved (Kataoka et al., 2002). In California's public mental health system, a recent Full Service Partnership (FSP) program directed to embody "whatever it takes" (California Department of Mental Health, 2005, page 7) seeks to innovate individualized strategies to reach and engage into care the underserved, and this dissertation research is the first of its kind to study the effects of this policy on children and families.

Left undertreated, children and youth with functional mental health related impairments are at greater risk for academic failure (Osher & Osher, 2002), justice system involvement (Odgers, Burnette, Chauhan, Moretti, & Reppucci, 2005), removal from home (Pecora, White, Jackson, & Wiggins, 2009), running away/homelessness (Tucker, Edelen, Ellickson, & Klein, 2011) and suicide (Nock & Kessler, 2006). Identifying strategies which reach and engage children with serious mental health disorders is a vital step toward reducing the devastating health and social consequences which result when children who are most in need are ignored. Research should move us from a loosely defined 'whatever it takes' policy of care applicable to anyone served toward an evidenced understanding of 'what it takes' for whom, and this dissertation research poses the first questions toward understanding if FSP programs are delivering what it takes to improve the lives of children and families. In order to identify whether FSP programs are meeting the needs of unserved and underserved children as intended by policy, this research asks: (1) if the innovation within FSP programs is helping to reach the underserved, identifying how those reached differ from children served by similar policies and initiatives, (2) if an array of services and supports are delivered to children in FSP programs which are not otherwise available through alternative sources, and (3) whether there is evidence to suggest that FSP programs are indeed changing the trajectory of the devastating health and social consequences due to untreated mental disorder.

### **1. A Problem Spanning Barriers to Locate and Comprehensively Serve the Underserved**

Research from The National Comorbidity Survey Adolescent Supplement (NCS-A) estimates that only one third to one half of adolescents with a diagnosable mental health disorder receive any mental health services for their symptoms (Green et al., 2013; Merikangas et al., 2011). In addition, since disabling adult mental illness frequently emerges in childhood (Merikangas et al., 2010), early treatment aimed at reducing risks for mental illness and strengthening protective factors for mental health can potentially modify the progression toward

disabling mental illness over the course of a lifetime (Greenberg, Domitrovich, & Bumbarger, 2001). However, the children's mental health system is largely a collage of disjointed services and has historically been a footnote in a larger plan for adult mental health (Saxe, Cross, & Silverman, 1988). As a result, children with the greatest mental health and social service needs are often left without the comprehensive care essential to support a life course trajectory toward wellbeing.

**Public mental health is a focal system for reaching the underserved.** In California, one primary place to address the problem of underservice is through the public county mental health system, which is a major source of children's mental health services, especially for children who are underprivileged, uninsured, or publicly insured via Medicaid. The children's public mental health system in California, like many States, is a patchwork of federal and state policies, Medicaid and Medicaid waivers (Mann & Hyde, 2013), initiatives from multiple sectors including departments for mental health, child welfare, education and juvenile justice, and case law resulting from state lawsuits seeking to fill unjust holes in treatment systems (General Accounting Office, 2001). For children and families with crucial needs for a comprehensive set of family services, it is conceivable that this assorted system of care sometimes presents gaps in eligibility, or when eligible, provides insufficient accommodations to overcome barriers related to language, culture, stigma or social economic status; presents a mismatch between need and resourced care; or confers a lack of continuity.

**Public mental health's crisis services present opportunities to locate the underserved.** Those with serious mental disorders who are left untreated or undertreated for these or other reasons may escalate toward acute psychiatric emergencies, which include uncontrolled aggressive behavior (Röll, Koglin, & Petermann, 2012), self-harming behavior (Nock & Kessler, 2006) and running away (S. J. Thompson, Cochran, & Barczyk, 2012). These events necessitate emergency mental health services for intervention to prevent harm to self or others. Studies have found that 35-40% of children presenting for psychiatric emergencies were not receiving outpatient mental health services at the time of the emergency (Frosch, DosReis, & Maloney, 2011; Goldstein, Frosch, Davarya, & Leaf, 2007), and approximately 20% had a prior psychiatric emergency within the last six months (Goldstein et al., 2007). As signs of under-treatment, these events offer the mental health system an opportunity to identify, locate, reach and engage these children and their families into adequate care. While an ideal system would identify underserved children before acute crisis events demand a crisis response, initial crisis events represent an opportunity to treat those who present with substantial mental health service need. A first crisis event may represent a failure to locate the underserved, while subsequent crisis events represent failures to adequately treat the underserved once located.

Datasets for this research indicate that 60% (50,359 of 83,784) of children aged 15<18 who experienced a need for mental health emergency services through the county public mental health system between 2004 and 2012 had not received any planned mental health services in the preceding six months leading up to a crisis, which is slightly higher than published studies which indicate a rate of 40-55% for children under 18 who present in emergency departments for psychiatric evaluation (Grudnikoff, Taneli, & Correll, 2014; Mulkern, Raab, & Potter, 2007; Stewart, Manion, Davidson, & Cloutier, 2001). A study in California of crisis events from 1998 to 2001 found that between 41%-55% of Medicaid insured children (<18) who were not in foster care had received no outpatient mental health services in the 90 days before the event, with a

disproportionally decreased likelihood of pre-crisis care for minority children (Snowden, Masland, Fawley, & Wallace, 2009).

This presents both a challenge to locate underserved children before they reach crisis and an opportunity to treat them once they do. Evidencing that the public mental health system can locate at least the proportion of underserved children who experience crisis events, barriers must still remain for providing or engaging families in comprehensive mental health services designed to address symptoms, behaviors and circumstances which are associated with increased risk for psychiatric crisis.

**The Mental Health Service Act augments the public mental health system.** In an attempt to address mental health underservice, in November of 2004 California voters passed Proposition 63, the Mental Health Services Act (MHSA or the Act), to finance mental health services not already funded from other sources. MHSA imposes a 1% tax on incomes exceeding 1 million dollars in order to fund new programs, including a Full Service Partnership (FSP) program, which provides augmented and intensified community-based services and supports not already available through other sources, offering a potential to fill eligibility and service gaps. Components of the MHSA include: Innovation (INN), Prevention and Early Intervention (PEI), Workforce Education and Training (WET), Capital Facilities and Technological Needs (CF/TN) and the largest (80% by funding) component of Community Services and Supports (CSS), within which FSP programs are encompassed. A majority of CSS funding must be put towards FSP programming (Brown, Dooley, & Douglas, 2013), ensuing that at least 40% of MHSA funding is directed toward FSP programs.

MHSA introduced FSP programs in particular in order to provide integrated mental health treatment with comprehensive health, human, and social services within a philosophy of ‘whatever it takes’, while giving priority to those designated as unserved (receiving no care or only crisis-related care), and underserved (receiving mental health care but failing to make adequate progress toward wellbeing). Mandates directed that FSP program “funding provided through the MHSA [would] be used to transform the current mental health system from one that focuses primarily on clinical services into one in which county mental health programs can enter into partnerships with clients, their families and their communities to provide, under client and family direction, whatever it takes to enable people to attain their goals” (California Department of Mental Health, 2005, page 7). FSP programs were to be developed with “integrated service teams that provide comprehensive mental health, social, cultural, physical health, substance abuse and trauma (including intergenerational trauma) assessments which are strength-based and focused on engagement of the [consumer] and which can provide gender and cultural specific assessments” (California Department of Mental Health, 2005, page 29). FSP programs were envisioned as a mechanism which would begin as a program for seriously mentally ill underserved individuals but would eventually engineer a transformation of approach to care for the entire mental health system.

**MHSA allows for the integration of mental health and social services.** Success or failure of an integrated ‘whatever it takes’ community-based mental health and social welfare program targeting the underserved has implications within California as well as throughout the United States. One barrier of serving individuals with serious mental health disorders and their families revolves around the multidimensional needs of the service population. Before community-based care, institutionalization was often considered the solution to address mental

disorder complicated by social welfare concern, but a nationwide movement has relocated mental health treatment back into the community rather than within hospitals or institutions. This movement, however, has been hindered by challenges of scope and funding for community-based care which can address not only the mental health treatment needs but also the related human and social service needs of the population.

## **2. The History of Mental Health Policy and the Innovation of FSPs**

In order to understand the current state of children's publicly insured mental health, it is important to consider how community-based public mental health was developed to replace historic methods of institutionalization.

**Community-based centers became an alternative to institutionalization.** Among early influential forces for public community-based mental health as an alternative to institutionalization, President Harry Truman enacted the National Mental Health Act (NMHA) which led to the National Institute of Mental Health (NIMH) in 1949. The NIMH provided funding for training, research and services for mental health, emphasizing community centers rather than institutions as places to provide mental health services. However, as a consequence of this development, psychotherapeutic services became available not only as an alternative to institutionalization for those with seriously disabling disorders, but psychotherapy spread broadly as a treatment for individuals with a wide range of mental health issues, allowing for the treatment of a greater number of individuals, including those with conditions which were less severe than those which were traditionally treated inside institutions.

Further encouraging the shift toward community-based mental health services, the Mental Health Study Act of 1955 resulted in a six year study which afforded recommendations for a national health program comprising community mental health clinics centrally established in catchment areas (Joint Commission on Mental Illness and Health, 1961). In response, President Johnson enacted the Mental Retardation and Community Mental Health Centers (CMHC) Construction Act in 1965, providing funding and staffing for the community centers. Temporary seed funding was provided directly to communities, bypassing state government, with the idea that community centers would eventually procure state and local financial resources to replace federal funds over the next years (Pickren & Schneider, 2005).

However, financing community mental health centers proved to be difficult, and the struggle over the financial responsibility of community services caused vacillation in the goals of the centers. After federal funding ended, some of the most costly services, such as children's services, were reduced or eliminated (Gould, Roberts, & Beals, 2009). To complicate the issue, deinstitutionalization (discharging people from institutions into community settings), began to overwhelm a nascent community mental health system. Due to the complex needs of the service population, it became unclear whether the primary objective of community mental health was to provide social welfare or mental health care for those in need of treatment (Grob, 1995).

**Community-based centers struggled to meet the social service needs of a growing service population.** A variety of factors led to deinstitutionalization, but the effects of the reduction of individuals served by mental health institutions meant that community mental health centers served a greater number of individuals with more severe mental illnesses. Owing to injustices found in mental hospitals, the introduction of psychotropic drugs, and the civil rights

movement, the federal government strongly encouraged the treatment of mental illness in the community (Frank & Glied, 2006b; Grob, 1995). The welfare needs, including housing, clothing, food and employment, often extended beyond the capabilities of the centers (Grob, 1995; Pickren & Schneider, 2005). In the 1970s, programs, such as Social Security Disability Insurance (SSDI) and Supplementary Security Income (SSI) provided welfare services, allowing some individuals with severe mental illness to more successfully reside within the community.

In 1977, President Carter executed an executive order to create a President's Commission on Mental Health (PCMH). The President's goals included expanding services beyond serious and persistent mental disorders and changing the approach to incorporate a public health model, which included social services, prevention and embraced concepts of person-in-context (Grob, 2005). The name of the commission espoused the shift from mental illness to mental health. By this time, there was a general perception that a disjointed mental health system was not adequately serving those who needed it most, including those with severe and persistent mental illness; the elderly; children and adolescents; rural populations; and those in the criminal justice system (Grob, 2005). The commission noted that there was also a need for community centers to integrate social supportive services, such as housing, vocational rehabilitation and nutritional education, and their report emphasized the need to provide appropriate care in the least restrictive setting at a reasonable cost. However, the commission could not adequately address how to finance these recommendations within community mental health (Frank & Glied 2006).

**States were left to identify their own solutions to meet the challenges of mental health services within the community.** Subsequently, President Reagan enacted the Omnibus Budget Reconciliation Act of 1981 to rescind prior community mental health legislation and instead provide a lump sum block grant to each state to finance their own mental health, alcohol abuse and drug abuse services (Frank & Glied, 2006a; Pickren & Schneider, 2005). Thus, the federal government no longer planned mental health services through national policy, but states formulated their own plans for mental health. The block grant provided only minimal funding, and California and other states were left to identify ways to formulate, define and finance community-based mental health services.

### **3. The Evolution of California's Public Children's Mental Health System**

In California, the most populous state in the union, publicly funded specialty mental health services are provided through managed care systems operated by each county's mental health department. In the early 1990s, counties financed their own mental health plans through realigned block grant funding, federal Medicaid (termed Medi-Cal in California) and county funding. Children and youth ages 0-21 with Medi-Cal coverage meeting the mental health medical necessity criteria (i.e., having a mental health diagnosis and impaired functioning), were served through the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) benefit, which offered a menu of mental health services (individual therapy, group therapy, family therapy, crisis counseling, case management, special day programs and medication for mental health) designed to "correct and ameliorate" mental illness (Schneider & Garfield, 2002, page 56). However, a lawsuit in 1995 (*T.L. v. Belshe, 1995*) found that California had failed to provide adequate EPSDT services to children, and beginning in 1995, state general funding was provided to counties to augment funds used to deliver EPSDT services. Between 1995 and 2011, with a 50% match from federal funds, California State funded 45% of EPSDT services above a set baseline, with counties picking up the remaining 5%. Wraparound programs deliver integrated health

services to more children in need because beyond the 5% disbursement, counties no longer needed to limit service provisions and caseloads to fit within the financial barriers of counties' budgets.

**Newer programming integrates mental health with social services for children and families in California.** In addition to services available through Medi-Cal EPSDT, Senate Bill (SB) 163 of 1997 permitted counties to participate in California Department of Social Services (CDSS) pilot projects supported by Aid to Families with Dependent Children-Foster Care (AFDC-FC) dollars. These pilot projects offered Wraparound services to families of children who had been placed in group homes, at imminent risk of placement in group homes, or to families of children with serious emotional disturbances who had been voluntarily placed out of home. In 2010, Assembly Bill (AB) 1758 adopted SB 163 Wraparound programs from pilot to permanent statewide programs.

Wraparound, originally developed as a mental health focused strategy (Ferguson, 2007), is a philosophy of care which bundles a variety of family-centered services, including linkages to social services. Established through memorandums of understanding between departments of mental health, social services, and probation, SB 163 Wraparound programs deliver integrated services within the community, designed to provide the supports necessary to move children to a less restrictive residential setting or maintain children within their home. SB 163 provides a flexibly funded Wraparound model, adapted for child welfare, under the direction of the Department of Social Services in California. In the absence of Department of Social Services involvement, however, Wraparound services for mental disorders remain difficult to finance in California due to Medi-Cal EPSDT reimbursement limitations for the flexible funding and team-oriented strategies prescribed by the model (Pires, Koyanagi, & Bruns, 2011).

**Expanding the availability of integrated mental and social services.** In a similar time frame, a seemingly unrelated bill, Assembly Bill (AB) 34 of 1999, provided \$10 million in funding for a pilot program to serve homeless adults and older adults in three counties of California (Stanislaus, Los Angeles, and Sacramento). California, like other states, was still struggling to identify the best way to utilize the services offered by community-based providers in order to meet the multidimensional needs of clients with the most severe and debilitating mental illnesses. The pilot program included flexible funding to provide integrated services for social welfare and mental health treatment. Upon evaluation, the program was deemed an overwhelming success, reducing the number of days participants spent homeless, incarcerated or in the hospital, and through AB-2034 in the following year, the program was expanded statewide, funded with \$55-65 million per year over the next three years (Davis, Johnson, & Mayberg, 2003). Shortly thereafter, President Bush's New Freedom Commission (NFC) on Mental Health in 2003, which emphasized a need for a more cohesive system of programs and a focus on recovery, made recognition of California's AB-34 pilot as a model program which provided innovation through "...comprehensive services, 24/7 availability, partnerships with community providers, and real-time evaluation...[and] flexible funding, not driven by eligibility requirements...California's AB-34 program, designed to meet the needs of adults with mental illnesses who are homeless, demonstrates that services provided through programs that allow flexibility in financing care do, indeed, produce positive outcomes that benefit individuals, families, and society while most efficiently using resources" (NFC, 2003, page 44). Although not designed for children, this pilot program would later become the basis for California's



commissioned and MHSA financed FSP program for adults, older adults, youth and children, alike.

#### **4. Innovation of California's Mental Health Services Act**

As described, California voters passed MHSA in 2004, which imposed a state tax to provide increased funding of services for individuals with mental disorders. As part of this act, the FSP program, based on the design of the AB-34 pilot, was funded in order to provide 'whatever it takes' community-based programming for adults and children with the most severe mental illness (SMI) or serious emotional disturbances (SED). Between 2004 and 2012, the act raised over 8.3 billion dollars (Mental Health Services Oversight and Accountability Commission, 2013), and in 2012, this source of funding made up approximately 1/6<sup>th</sup> of California's budget for public mental health services (Arnquist & Harbage, 2013); by 2014, it made up approximately one quarter of the budget (Nava et al., 2015). Led by the California Health and Human Services Agency, a Mental Health Service Oversight and Accountability Commission (MHSOAC) was established to guide regulatory and evaluation activities for programs and services generated through MHSA dollars. The Act funded, and continues to fund, prevention and early intervention programs, innovative programs, workforce education and training, technology improvements, and oversight and accountability.

In California today, state-based funding, including MHSA, is distributed to Mental Health Plans (MHPs) based on demographic and other local factors of need. There are 59 MHPs (56 counties + Yuba/Sutter combined counties + Berkeley City region + Tri-City region), which will be referred to as "counties" hereafter. Counties blend state and local funding to build an array of mental health services, supports and programs to serve individuals and families in need of mental health service. The FSP program fits within each county's service array as a potential 'stop gap,' intended to make available to clients services which were not otherwise accessible or existing.

## Chapter 2: Policy & Program Framework

FSP programs resemble intensive community-based and locally specific models of care where community providers address a catchment area's unique needs (Buck, 2003). FSP programs' community-based model of care—which provides for outreach tailored to local populations—is intended to provide flexibility beyond that of centralized health plan models. The FSP's 'whatever it takes' philosophy encompasses mental health and non-mental health domains of service in order to address strengths and needs toward a set of client-specific customized goals. The general principles of the FSP program focus on recovery and rehabilitation (Davis et al., 2003), but counties build customized programs to meet the needs of local populations (Felton, Cashin, & Brown, 2010). The following chapter focuses on identifying possible mechanisms of action for *what it takes*, while taking a closer look at requirements and guidelines establishing this 'whatever it takes' program and highlighting possible theories which help support its proposed interventions.

### 1. Stakeholder Designed Models

While the State supplies guidelines for FSP program components, the authority to design and implement FSP programs occurs at the county level – each county submits a Three-Year Program and Expenditure Plan to the State with annual updates. A Community Program Planning Process (California Code of Regulations (CCR) Title 9 §3300) and a Local Review Process (CCR Title 9 §3315) are required to include a diverse and representative set of stakeholders, including mental health services consumers. Estimates suggest that over 100,000 Californians have participated in this process at one time (Felton et al., 2010). The planning process includes isolated development within each county, and a certain level of variability between counties is expectedly inherent to FSP programs. A review of 12 county plans from 2006-2007 revealed that the “local planning process generated consistency across counties in establishing full-service partnerships with a ‘whatever it takes’ approach to providing goal-directed services and supports to consumers and their families. There was, however, little convergence around the specific strategies to achieve this vision, reflecting both the local planning process and a relative lack of clear policy and guidance on evidence-based practices” (Cashin, Scheffler, Felton, Adams, & Miller, 2008, page 1107). Despite this variability, however, a goal to collaboratively integrate social welfare and mental health services was noted to be universal across all programs.

### 2. Eligibility Requirements

While statute sets minimal requirements for eligibility, counties may add additional requirements, set priorities for who is served, or otherwise limit enrollment via waiting lists or other mechanisms in accordance with county priorities and available resources. FSP program capacity is limited by available funding, and the total number of children served by the program may not reflect the total population with eligibility or need for the program. In other words, unlike Medicaid, the FSP program is not an entitlement which is granted via eligibility.

Eligibility requirements minimally set by statute include that children and their families may qualify for the program if children are identified to have serious mental health issues and other characteristics related to risks for suicide, violence, residential instability, criminal justice involvement, or involuntary hospitalization. According to the MHSA, children (ages 0-15) and

their families qualify if they are identified to be serious emotionally disturbed (SED) and fall into one or more of three groups defined by Welfare and Institution Code (WIC) Section 5600.3(a). Within the first group, children have impairment as a result of a mental disorder in at least two of the following areas: self-care, school functioning, family relationships, or ability to function in the community. In addition, children in the first group must either be at risk or have been removed from the home, or must have mental disorder/impairments which have existed for six months or are likely to exist for one or more years. Children in the second group display one of the following features: psychotic, suicide risk, or risk of violence due to mental disorder. In the third group, children meet California Government Code §26.5 for special education eligibility. Transition age youth (TAY, ages 16-25) must meet all of the following three requirements: 1) TAY fall into at least one of the three groups identified for children; and 2) They are underserved or unserved; and 3) They have one of the following situations: at risk of or currently homeless, aging out of children's mental health system, aging out of the child welfare system, involved in criminal justice system, at risk of involuntary hospitalization, have experienced an episode of serious mental illness (SMI).

For all age groups, regulations CCR Title 9 §3620.05 emphasize a priority toward unserved or underserved. “‘Unserved’ means those individuals who may have serious mental illness and/or serious emotional disturbance and are not receiving mental health services. Individuals who may have had only emergency or crisis-oriented contact with and/or services from the County may be considered unserved” (CCR Title 9 §3200.310). Underserved individuals include those who may have received mental health services but who did not progress in their goals toward wellness and/or recovery, often due to early termination of a program or discrepancies between needs and care.

### **3. Program Availability**

Within the limits of resourced funding, counties control the availability of FSPs for children, identifying the type and level of programming. Regulations define four age groups for FSPs, which include children and families (with children ages 0-15), TAY (ages 16-25), adult (ages 26 – 59) and older adult (ages 60+), although implemented programs can be limited to ages less inclusive than these groupings or can span across age groups. Counties are required to make FSP programs available to all age groups but can submit justification to exclude an age group based on adequacy of other service offerings (CCR Title 9 §3620). Counties vary widely in the amount of resources put toward FSP programming opportunities for children, and the proportion of child caseloads served via FSP programs varies from 0% to 30% between counties. County health officials take into account many factors when designing the capacity of FSP programs to allow for greater or fewer youth. Considerations include the county system's capacity for FSP programming, beliefs in the adequacy of Medicaid EPSDT or other usual care options, stakeholder/advocate opinions and competing programming priorities for other age groups. Some counties do not offer FSPs to children and families (UCLA Center for Healthier Children Youth and Families, 2013), thereby maximizing the provisions of FSP programming for older age groups.

A majority of counties offer some FSPs for children as seen in Figure 1. Among the population of children (ages 6 to <18) served by the 36 of 59 county mental health systems represented in this dissertation research dataset, the proportion enrolled in FSPs as the primary vector of service has increased steadily since the passage of MHSA. As of the end of 2012, nearly 5% of children

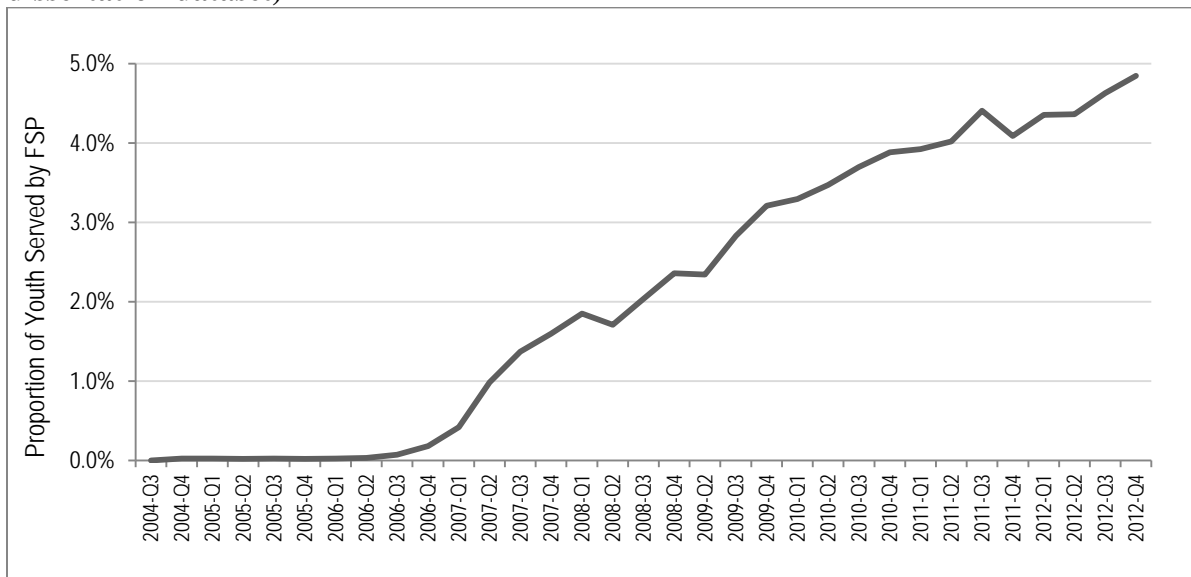
served in the county mental health system were enrolled in FSPs, and it is likely that the proportion has continued to increase. Considering the later years of the study period after which most counties had established an FSP program, 2010-2012, Figure 2 depicts the distribution of counties in the dissertation dataset by the proportion of monthly children's caseloads which were dedicated to serve clients through FSP programs. During that timeframe, two counties did not dedicate any resources toward children's FSP programs, eleven counties utilized FSPs to serve less than 2% of their caseload, 22 counties served 2%-14% of their caseload through FSPs, and one county utilized FSP programs to serve 28% of their caseload.

While the population of children who might be eligible for an FSP program may vary from county to county, it is reasonable to conclude that the level of commitment to making FSP programs available to those who are eligible varies to a greater degree, as it is unlikely that some counties have no eligible children while other counties serve caseloads in which over one quarter of children qualify for FSPs. In addition to a county's commitment to make FSPs available to children, the number of available FSP program spaces is limited by revenue generated by MHSA, which varies year to year, as well as by the competing priorities to serve older age groups within limited funds. It is expected that there are fewer FSP program spaces available than there are children who qualify for or could benefit from the program in most counties.

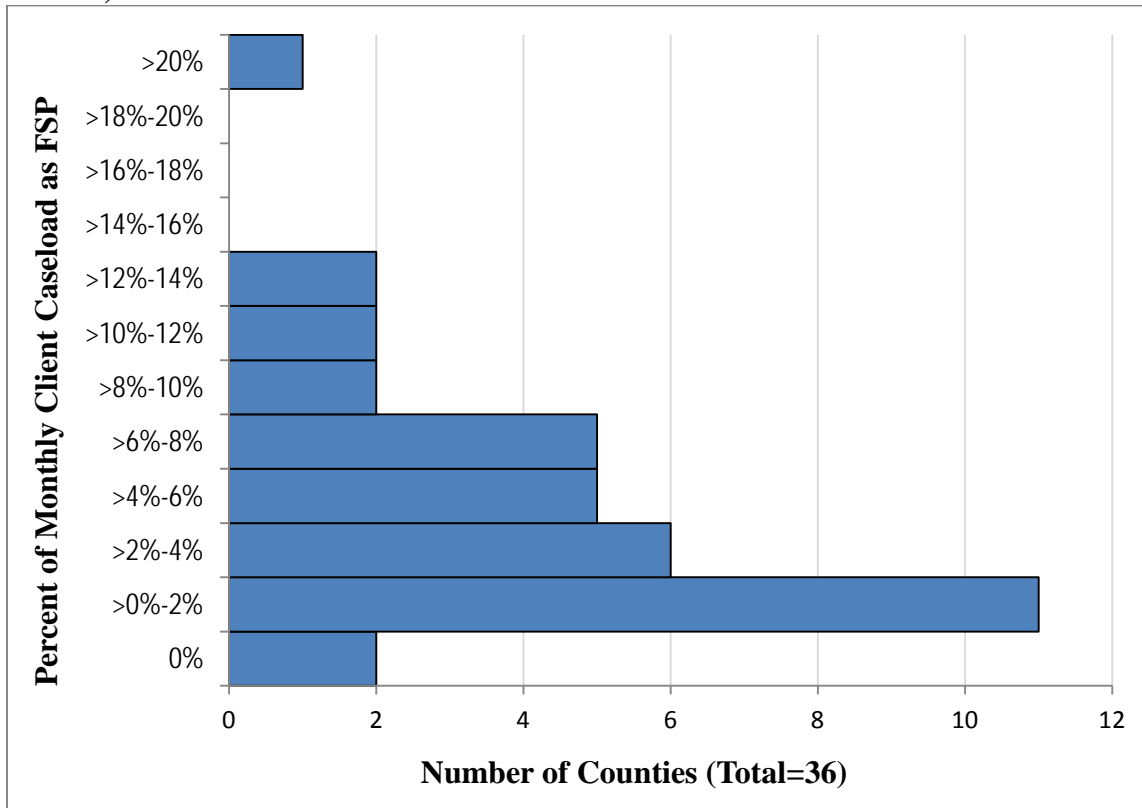
#### 4. Program Targets

Counties who offer FSP programs to children may choose to develop one or more programs which may more narrowly focus on specific target populations. During the Community Program Planning Process to design and develop FSPs, counties identify specific "targets" of FSP programs, which may include racial, ethnic or cultural targets; targets related to behavior or functioning (e.g., school attendance, justice involvement, or crisis events); targets related to

**Figure 1. Proportion of Children (Ages 6 to <18) Served by County Mental Health Who Were Served by FSPs, in Calendar Quarters after the Passage of MHSA in 2004 (Source: dissertation dataset)**



**Figure 2. Proportion of Monthly Children’s Caseload (Ages 6 to <18) Dedicated to FSP Programs within Each County Mental Health System, 2010-2012 (Source: dissertation dataset)**



residential stability (e.g., family homelessness, removal from home, or hospitalizations) or targets associated with disorders or disabilities (e.g., comorbid substance use, specific diagnoses, first break psychosis, or presence of a recognized disability) or any combination of these or other factors. The targets of the program likely reflect unmet needs within the county as well as the pressures exerted by vocal and influential stakeholders. Even within these focal target groups, however, counties are required to give priority to unserved and underserved children.

### 5. Required Program Components

Due to the community program planning process, the design of the FSP program, developed by health officials and local stakeholders, varies from county to county, as noted, but some components are required within all programs. According to regulations (CCR Title 9 §3620), FSP programs for children and families include a full spectrum of services, including: (1) mental health services and supports: treatment; peer support; supportive services for employment, housing, and education; wellness centers; alternative and culturally specific treatments; case management and linkage; needs assessment; individual services and supports plan; and family education services; (2) non-mental health services: food; clothing; housing, including residential drug/alcohol rehabilitation; health care treatment costs; co-occurring treatment costs; and respite care; (3) Wraparound services for children in accordance with Welfare and Institution Code (WIC) §18250; (4) a personal services coordinator (case manager)

available 24 hours a day, 7 days a week; and (5) short term acute inpatient treatment, as needed. A list of required components is itemized in Table 1.

**Wraparound process.** As part of the children’s FSP program, the Wraparound model provides a framework within which FSP required services, components and philosophies are embedded. With State oversight, guidelines allow counties to use the MHSA children’s FSP programs for either new county programming or for the expansion of SB 163 Wraparound programs. Therefore, Wraparound services within FSPs can be provided under the guidance of child welfare, as is the case with SB 163, or via mental health programs as a bundled set of wellness directed services. Wraparound is a team-based service planning and care coordination program model utilized as an approach to reduce the need for higher level group homes by keeping children in their homes or returning children to homes in their own community (Bruns, Suter, Force, & Burchard, 2005; Suter & Bruns, 2009). Wraparound emphasizes ten key principles of treatment (strengths & values based, individualized, team-based, unconditional, culturally competent, community based, family centered, collaborative, sustainable, and goal-driven) toward a goal to create permanency for children, which can refer to a youth’s emotional and social connection to committed caregivers and family supports, physical location (i.e., residential stability), relationship quality (i.e., committed, unconditional relationships), or legal guardianship status.

The Wraparound process is listed to have “Promising Research Evidence” by the California Evidence-Based Clearinghouse for Child Welfare (n.d.). In 2009, a meta-analysis of 802 children included in seven different research studies evaluated the effectiveness of Wraparound on various outcomes relating to living situation (more or less restrictive placements), mental health (emotional or behavioral changes), functioning (home, school and community functioning ratings), and assets/resiliency (Suter & Bruns, 2009). The meta-analysis found a significant effect size for mental health and child functioning but noted limitations in findings related to unreported fidelity for the Wraparound programs studied. It is likely that FSP programs suffer from similar implementation concerns for their Wraparound model.

**A partnership.** Guidelines for FSP programs emphasize teamwork with children and families who are considered partners in their service plan (California Institute for Mental Health, 2011). As required by regulation, children and families agree to be partners before enrollment. “The County shall enter into an FSP agreement with each client served under the FSP Service Category, and when appropriate the client’s family” (CCR Title 9 §3620). A partnership signifies that the program and the partner must work together in order for the program to be successful, potentially promoting self-efficacy (Godoy, Mian, Eisenhower, & Carter, 2014). In theory, a partnership based approach encourages children and families to take an active role in participating in their treatment.

**The FSP team.** FSP programs are encouraged to organize a multi-disciplinary team of staff for each child and family (California Institute for Mental Health, 2011). The team includes at least a case manager/personal service coordinator (PSC) and a therapist, but may also contain team members who are psychiatrists, nurses, clinical psychologists, peer specialists, parent advocates, child/youth advocates, certified alcohol and drug abuse counselors or other professionals as needed. Members of the team may have specialized roles, including perhaps a transition coordinator, cultural specialist, language translator, employment/education specialist, resource/linkage specialist, data/outcome analyst, outreach specialist, engagement specialist, life

skills coach, enrichment activity/group coordinator or other identified relevant focal responsibilities. Guidelines advise programs to create a formal approach to team meetings which include some or all of the multi-disciplinary staff as a means to plan and review each individual's services/supports (California Institute for Mental Health, 2011). Depending on the intensity of the services required for the population served, teams may meet daily, weekly, biweekly or monthly.

**Peer support in treatment.** FSP programs must offer peer support to families and children (CCR Title 9 §3620), and FSP service teams for children are urged to include a parent partner or family advocate to foster a collaborative relationship between staff and family (California Institute for Mental Health, 2011). Peer staff act as social/emotional supports and as system guides for the family. System guides, which have been shown to increase and extend family engagement with mental health service (Koroloff, Koren, Elliott, & Friesen, 1994), can lead families to resources, navigate external agency systems (e.g., child welfare, court, or financial support systems), identify viable transportation or childcare options, or locate suggested appropriate community supports, among other assistances.

**Child and family goals in the program.** An Individual Services and Supports Plan (ISSP) is required and must include a full range of community services to meet the client's own goals (CCR Title 9 §3200.150). However, beyond the requirement for an ISSP, there is no standardized method to develop or identify client goals. Programs may implement various techniques, including motivational interviewing (Scott & Dadds, 2009), goal building worksheets, and suggestive lists to develop client goals. Goals may include symptom reduction as well as any aspect of the child's or family's life which supports recovery, wellness and resilience and need not directly relate to diagnosis, symptom or mental-illness related behavior. For example, a child could set a personal goal of becoming elected as his/her school's class president. Once goals have been identified, an ISSP specifies the services and supports necessary to help progress toward those goals.

**Non-mental health services and supports.** The FSP team is tasked to assist the child and, when appropriate, the family, to access needed mental health, medical, educational, family, social, vocational, rehabilitative, substance abuse, and other resources to address needs and strengths necessary to reach personal and family goals. FSP programs sometimes address caregivers' needs, such as for substance abuse, financial management, or unemployment, and these services provided for caregivers are termed 'collateral services.' The ISSP may necessitate linkages to services and supports external to the program, such as those available within the community. These types of resources are commonly sought through program activities termed as 'linkage/brokerage services.' Over time, many FSP programs may have found vendors and organizations which work well with the population of children and families served by the program, and some programs create a manual of child and family resources as a way to organize and capitalize on successful linkage pathways within the community.

**Access to 24/7 intervention services.** A key component of the FSP is access to intervention services 24 hours per day and 7 days per week (CCR Title 9 §3620). FSP programs are encouraged to help children and families create safety plans early after enrollment, helping children and families to create a list of potential de-escalation strategies to attempt when recurring crisis events begin to arise (California Institute for Mental Health, 2011). All FSPs are required to plan for some form of afterhours care, and statute emphasizes, but does not require,

afterhours care to contain staff known to the child and family: “In the event of an emergency when a Personal Service Coordinator/Case Manager or other qualified individual known to the client/family is not available, the County shall ensure that another qualified individual is available to respond to the client/family 24 hours a day, 7 days a week to provide after-hour intervention” (CCR Title §3620). During business hours, case managers may act as primary contacts for children and families with escalating crises, however, FSP programs fulfill after-hours requirements in various ways. Sometimes, the client’s primary contact remains ‘on call’. In other cases, the program identifies a group of rotating team members who are known by the child and family to receive incoming after-hours calls. Another option to respond to afterhours need for care includes coordinating a set of rotating program staff who may not be known by the child or family but who is familiar with the child or family ISSP via team meetings or case review activities. Finally, direct access to intervention service afterhours may entail the use of professional or peer staff (e.g., hotlines or warmlines) within or outside the program who may not be familiar to the child or family or with the ISSP.

**Flexible funds.** Flexible funds within the program can be used to fund mental health or non-mental health care not otherwise sourced, which includes, but is not limited to the items listed in Table 1. Additional state guidelines list a broader range of options for utilizing the flexible funds (California Institute for Mental Health, 2011), but each program may identify its own criteria for use of the flexible funds in order to support the child and family in reaching their goals. Programs may allocate a specified amount of flexible funds per client or use the funding as a pooled resource to support all of the clients being served.

**Housing.** Through the non-mental health services and supports, FSP programs emphasize the importance of housing, including safe and reliable housing (CCR Title §3620). Programs are encouraged to enable rapid access to temporary and longer term housing for families struggling to find or maintain housing (California Institute for Mental Health, 2011). Separate components of the MHSA, the Mental Health Services Act Housing Program and General System Development components, provide resources for the county to create and fund housing options which can be utilized by FSP and other county mental health program clients. When short term housing options are not available, programs may use flex funds to place families in motel rooms until an alternative housing option is identified.

**Wellness and enrichment.** FSP programs must provide wellness centers (CCR Title §3620) which integrate mental and physical health, often providing group activities, such as art, music, exercise, support or other wellness-oriented activities. Although not available in all communities, some communities may offer a wellness center which families and children can utilize irrespective of mental health program enrollment. Within FSP programs, children and families may also gain access to other community-based facilities or activities, such as group, individual or family wellness activities.

**Program completion.** Guidelines direct programs to work with children and families toward fostering independence, lessening reliance on program staff, and building informal and natural supports within the community, and consequently, programs sometimes adjust the intensity of services over time (California Institute for Mental Health, 2011). Some programs provide for phases, with methods and goals to step down the program’s intensity, or with gradual titration of intensity or type of service. When the child and family have met the goals identified at the beginning of the program and agree that they are ready to continue building wellness on



**Table 1. Select Required Components of Children’s FSP programs from California Statute and Code of Regulations**

<p><b>Mental Health Services and Supports (9 CCR §3620)</b></p>	<p><b>Non-Mental Health Services and Supports (9 CCR §3620)</b></p>	<p><b>Wrap-around Services to Children/youth (WIC §18250 et. seq, community-based intervention services emphasize strengths of child/youth and family and include delivery of coordinated, highly individualized unconditional services to address needs and achieve positive outcomes)</b></p>
<ol style="list-style-type: none"> <li>1. Mental health treatment, including alternative and culturally specific treatments</li> <li>2. Peer support</li> <li>3. Supportive services to assist the client, and when appropriate the client's family, in obtaining and maintaining employment, housing, and/or education</li> <li>4. Wellness centers</li> <li>5. Alternative treatment and culturally specific treatment approaches</li> <li>6. Personal service coordination/case management to assist the client, and when appropriate the client's family, to access needed medical, educational, social, vocational rehabilitative and/or other community services</li> <li>7. Needs assessment</li> <li>8. Individual Services and Supports Plan (ISSP) development (the plan developed by the client and, when appropriate the client's family, with the Personal Service Coordinator/Case Manager to identify the client's goals and describe the array of services and supports necessary to advance these goals based on the client's needs and preferences and, when appropriate, the needs and preferences of the client's family)</li> <li>9. Crisis intervention/stabilization services</li> <li>10. Family education services</li> </ol>	<ol style="list-style-type: none"> <li>1. Food</li> <li>2. Clothing</li> <li>3. Housing, including, but not limited to, rent subsidies, housing vouchers, house payments, residence in a drug/ alcohol rehabilitation program, and transitional and temporary housing</li> <li>4. Cost of health care treatment</li> <li>5. Cost of treatment of co-occurring conditions, such as substance abuse</li> <li>6. Respite care</li> </ol>	<ol style="list-style-type: none"> <li>1. A process for parent support, mentoring, and advocacy that ensures parent understanding of, and participation in, wrap-around services programs</li> <li>2. A planning and review process to support and facilitate: <ul style="list-style-type: none"> <li>• Focusing on an individual child/youth and family through the creation of service plans designed specifically to address the unique needs and strengths of each child/youth and his or her family</li> <li>• Providing services geared toward enabling children/youth to remain in the least restrictive, most family-like setting possible</li> <li>• Developing a close collaborative relationship with each child’s/youth’s family in the planning and provision of wrap-around services</li> <li>• Conducting a thorough, strengths-based assessment of each child/youth and family that will form the basis for the development of the individualized intervention plan</li> <li>• Designing and delivering services that incorporate the religious customs, and regional, racial, and ethnic values and beliefs of the children/youth and families served</li> <li>• Measuring consumer satisfaction to assess outcomes</li> </ul> </li> <li>3. Written interagency agreements or memorandums of understanding between the county departments of mental health, social services, and probation that specify jointly provided or integrated services, staff tasks and responsibilities, facility and supply commitments, budget considerations, and linkage and referral services</li> </ol>

their own, with the help of community-based resources or in a less intensive program, they discharge or ‘graduate’ from the FSP. Alternatively, the client may choose not to continue the program with the option to return later, may become un-locatable, or may enter an institution within which FSP services cannot be provided for a prolonged length of time, as defined by each county or program. Children and their families can return within one year to re-enroll in their FSP, but lapses of more than one year require the child and family to begin a new partnership (Mental Health Data Alliance LLC, 2012) . Based on datasets used for this dissertation research, on average, children and families spend 10.9 [ $\pm$ 9.6 standard deviations (SD)] consecutive months in an FSP program.

**Program data reporting.** In addition to the description of FSP programs within Three-Year Program and Expenditure Plan and annual updates, counties are also required to report to the State on FSP client outcome data (CCR Title 9 §3620.10). Counties collect information from each partner at the start of the partnership, quarterly and as key events occur, including: general administrative data including admission status and discharge disposition; residential status, including hospitalization or incarceration; educational status; employment status; legal issues/designation; sources of financial support; health status; substance abuse issues; assessment of daily living functions, when appropriate; and emergency interventions. Data are reported to the Department of Health Care Services and stored in the FSP Data Collection and Reporting (DCR) system (Mental Health Data Alliance LLC, 2012).

## **6. Program Guidelines**

In 2005, California provided formal guidelines instructing counties on how to prepare three-year program plans for FSP programs (California Department of Mental Health, 2005), and in 2011, the State released a Child and Family FSP Tool Kit as guidance for counties implementing children’s FSP programs (California Institute for Mental Health, 2011). In the formalized guidelines of 2005, California called for a transformation of the mental health delivery system. “MHSA funds are to be used to fundamentally transform how mental health is conceptualized and delivered in California. The transformation of public mental health and the key goals have been articulated within the President’s New Freedom Commission on Mental Health, the six aims of the Institute of Medicine’s Crossing the Quality Chasm report, and the California Mental Health Planning Council’s Mental Health Master Plan. These will serve as guiding documents for the implementation of the MHSA in California” (California Department of Mental Health, 2005, page 6). As part of the transformation process, California intended FSP programs, which included individualized and flexible care for an initial population of underserved clients, to act as a transformational tool to usher a new standard of care throughout the entire mental health delivery system. FSP programs were not enacted as entitlements, but were envisioned as supplemental supports to entitlement programs to allow for system transformation. “A transformed mental health system will require new and innovative activities and services not currently funded through Medi-Cal and other public or private payers and will include individuals not currently eligible for Medi-Cal funding. However, MHSA funds can be used as match to Medi-Cal or Healthy Families Program federal financial participation for those services consistent with the MHSA requirements” (California Department of Mental Health, 2005, page 9).

The Tool Kits describe the Wraparound process along with other philosophies for “no fail” unconditional care, strength building, safe environments, and natural and community

support networks. Based on guidelines and recommendations, FSP programs are designed to address strengths, needs and goals in partnership with the child and family, while giving contextual consideration to circumstances which may affect those goals, embracing the notion that it is the entire family which is viewed as the client. However, like many programs which are not measured for fidelity, the extent to which FSP programs adhere to guidelines is not known.

**Whatever it takes.** FSP programs for children provide individualized care, including both mental health and non-mental health services, directed to wrap around the child who is living with family or care providers. A ‘whatever it takes’ philosophy means that program services and supports are not limited by provider offerings but must be creatively designed to meet the specific needs of the child and family. Inclusive of social and welfare supports, the services within FSP programs often extend beyond those which are typically reimbursable within other county mental health programs.

**No fail policy.** Seeking to avoid an outcome in which vulnerable children are further distressed by a number of failed placements and unsuccessful treatments, the FSPs programs are advised to adopt a commitment to a ‘no fail’ policy (California Institute for Mental Health, 2011). In essence, a no fail policy means that the child cannot be removed from the FSP program due to their lack of response to the intervention, but rather, the intervention should be adjusted to do whatever it takes to provide the child and family with the necessary resources for success. Program case managers and their team are to support the family’s success by removing barriers to service and success, such as concrete barriers (e.g., transportation and scheduling), contextual barriers (e.g., community safety and location-related welcoming environments or confidentiality concerns) and agency obstacles (e.g., limitations of service offerings which fully meet consumer needs, McKay & Bannon, 2004). A ‘no fail’ policy also means that the pace of the program is determined by the family and children, that missed appointments are met with further accommodations, that setbacks in progress are acceptable and allowed, and that crises happen, but that they are mitigated through emergency plans.

**Family-centered, strength-based care.** Espousing a family-driven care model (Kilmer, Cook, & Palamaro Munsell, 2010; Osher & Osher, 2002), guidance for counties directs the FSP programs to incorporate the identification of strengths, skills or talents; common goals for families, children and clinicians; and supportive resources for caregivers and children (California Institute for Mental Health, 2011). To this end, it is recommended that partnerships begin with a strengths assessment in order to identify protective factors existing within the family or held by the child or siblings, which could be bolstered to promote wellbeing. FSP staff are encouraged to help children build and discover spiritual, personality, vocational and enrichment skills as building these skills is thought to help promote resiliency, self-efficacy and self-sufficiency for children (Saleebey, 2012).

Beyond a primary focus on the child, FSP program staff are encouraged to work with caregivers to reduce stress, address parental symptoms of mental illness and improve parenting strategies (California Institute for Mental Health, 2011). A home life with a parent or caregiver with reduced functioning due to distress or mental illness may negatively affect the child’s outcomes (Joiner & Wagner, 1996). For example, there is strong evidence of a link between maternal depression and children’s mental health, and there is reason to believe that improvements in maternal functioning might result in improvements in children’s mental health (Kilmer et al., 2010). As a child develops mental disorder symptoms, parental distress and

symptomology may escalate due to the increasing challenge to provide care for the child, and caregivers may model poor coping strategies (Greenberg et al., 2001). Therefore, it is theorized that FSP programming which concomitantly addresses the needs of caregivers when coordinating access to services for children with mental disorder will result in improved outcomes for the child.

Guidance for the FSP program emphasizes joint decision making between the child, caregiver(s) and the service team, in order to develop treatment plans and program goals which are consistent with the child's and family's spiritual beliefs, value system, and culture (California Institute for Mental Health, 2011). Families hold unique value systems, and caregivers are key resources for designing culturally appropriate, family-centered services for children (Kazak et al., 2010). Caregivers possess knowledge of their children's history, symptoms, strengths, motivational factors and value systems, and are vital resources when designing interventions (Osher & Osher, 2002; Spencer, Blau, & Mallery, 2010). Additionally, caregivers may have insight into strengths within the family which could be harnessed in order to improve strengths within the treated child.

Caregivers who share in decision making and believe that a therapy has the potential to result in positive changes are more willing to follow advice and adjust parenting practices in response to interventions (Hogue et al., 2006; Tolan et al., 2002), which can potentially enhance treatment effectiveness and benefit the child (Morrissey-Kane & Prinz, 1999; Tolan & Dodge, 2005). In addition, caregiver alliance with a service provider has shown a unique contribution toward positive children's outcomes (Hogue, Dauber, Stambaugh, Cecero, & Liddle, 2006; Tolan, Hanish, McKay, & Dickey, 2002). The therapeutic alliance between a caregiver and a provider relies on the caregiver's involvement and the caregivers' belief in the utility of the treatment. Conversely, an absence of caregiver alliance with a provider may lead to increases in treatment dropout rates, as caregivers are important gatekeepers to child program attendance (Gopalan et al., 2010).

**Addressing environmental factors.** Grounded in concepts established by Bronfenbrenner & Morris (1998) regarding the importance of environmental factors for the promotion of mental health, FSP programs are directed to offer to children and families services which improve the surrounding physical environment (California Institute for Mental Health, 2011). The following list of recommended FSP service considerations is noteworthy because these recommendations generally fall outside of the scope of services reimbursed by Medi-Cal EPSDT specialty mental health, the major financier of county-provided children's mental health programs.

FSPs are not housing programs, but providing "whatever it takes" services can include helping families quickly find affordable temporary and permanent housing. In addition to financial assistance, the FSP team is prepared to make referrals to community resources for housing and supported living assistance with which it is familiar.

Make referrals to shelters that best meet the family's immediate need; Take into account neighborhood safety issues, the primary language of the child or youth, respect of sexual identity, and

means to keep extended family members together when culturally congruent; Provide temporary financial assistance for rent, security deposits, and other necessary expenditures; Assist in navigating legal and social services; Connect families to community resources that offer assistance with rent, utilities, food, and other living expenses, and that assist families as well as children and youth; Assist the family in establishing a household, and obtaining furniture, appliances and other household items through financial assistance or solicitation of donations; Create safe play spaces the child, youth and family can use; Help the child, youth and family to develop and refine skills in cooking, cleaning, budgeting, decorating, basic home maintenance, and other functions that enable maintenance of a safe and successful home; Help gain access to low-cost or no-cost housing alternatives and/or housing assistance programs; Fund skill-building classes or lessons to assist the family in maintaining a successful living environment; Provide other specific traditional or non-traditional supports that promote safe and welcoming home environments for the child, youth and family (California Institute for Mental Health, 2011, pages 95-96).

Expanding beyond the boundaries of mental health services, FSPs are directed to address family needs by partnering with families to identify resources which address the core issues existing at the family system level – linking families to services in other sectors and resource systems (California Institute for Mental Health, 2011). Family-related factors, such as poverty, financial strain, unemployment, unsafe neighborhoods, family member separation/loss, and family member illness are associated with increased risks for mental health distress (Greenberg et al., 2001; Kilmer et al., 2010). For example, working with families to reduce poverty may have the potential to reduce children’s psychiatric symptoms for disruptive behavior (Costello, Compton, Keeler, & Angold, 2003). Programs are advised to address other family factors by making available marriage counseling, financial counseling, employment services, and links to safer housing, income supports, and health insurance options (California Institute for Mental Health, 2011).

**Building natural supports.** FSP program staff are encouraged to help children and families build natural supports through relationships with family, community groups and teachers (California Institute for Mental Health, 2011). When therapeutically and culturally appropriate, program participants may be encouraged to invite natural supports to attend program meetings or activities. For example, a natural support might be a child’s school teacher, a family friend, or a trusted relative. Fostering relationships with natural supports is thought to provide children and families with a reduction in stigma and a lessened desire to isolate and hide during the process of recovery or resiliency building (Cox, 2005; Kernan & Morilus-Black, 2010). This in turn allows a child and family to exhibit help-seeking behavior as problems arise, allowing earlier interventions which are more likely to keep a child and family on the path to wellness.

## **7. Program Variability**

Variability between FSP programs presents a significant challenge toward evaluating the impact of the policy on children's outcomes. Central ways in which programs may vary include: the amount of effort put towards outreach and engagement of underserved individuals; focal or specialized populations targeted; the number of clients served and the flow of clients into and out of the program; the ability to provide in-field services to the client, such as case management, therapy, psychiatry or medication administration; the ability to provide continuous services when the client is incarcerated or hospitalized; the assignment of specific team member roles, such as a life skills coach or school liaison; the function of peers; the after-hours availability of someone known to the client; the availability of short and long term housing options within the county or through MHSA housing programs; the strength of the linkage relationships the program has built with community-based resources; the rules for flexible fund utilization; the methods to identify and track client goals or shared decisions; the theoretical models espoused by the program; the ability to provide evidence-based practices with fidelity; the use of progress assessment tools, and the overarching program goals.

These variations and other factors could contribute to the effectiveness of the program, and it is possible that even for required components, counties' implementation fidelity may also vary. However, challenges with variability across programs are not unlike those faced by other child and family community-based programs, such as the Wraparound process, which has been noted to suffer from wide variation in implementation and fidelity (Grosz, Schutte, & Walker, 2002; Walker & Koroloff, 2007; Walker & Schutte, 2005). For example, Bruns, Suter, & Leverentz-Brady (2006) found the system contextual factors such as flexibility in funding, interagency relationships, and standards for caseworker caseload sizes significantly affected the quality and fidelity of Wraparound programs. It is expected that FSP programs, built upon Wraparound principles, would be subject to similar concerns. In light of these and previously stated concerns about FSP programs, research is needed to identify if the public policy directing FSP programs provides effective and efficient services for children and families, as intended.

## **8. Existing Research on FSP Programs**

Despite the fact that enormous effort and funding have created this statewide approach to serving children with a very high level of mental health service need in California, no research has been performed to identify the actual program components nor investigate the effectiveness of FSP programs for children. California spends over 100 million dollars each year serving children (ages 0-15) and TAY (ages 16-25) through FSP programs (UCLA, 2012), but counties budget less funding on average to serve children and TAY in comparison to adults (ages 26-59, Felton et al., 2010). Other sources, such as the MHSA PEI component, which establishes mental illness prevention services within schools in 93% of counties (Lee, 2011), and Medi-Cal EPSDT programs, which provide generous programming for children with mental disorders and their families, potentially offset the need for FSP programs for this age group. Despite this, FSP programs served over 24,000 of California's children between 2004 and 2012, and the program continued to enroll over 4,000 children annually, with counties opting to serve on average 4-5% of children within their mental health services caseloads via FSP programming as a supplement to usual care services. Usual care services, described in detail in Chapter 4, primarily include Medi-Cal EPSDT (Table 4), SB 163 Wraparound (Table 5) and Katie A. Subclass (Table 6). Given that FSP programs were originally conceptualized as programs for adults, which have

since been extended to children, Felton, Cashin, & Brown (2010) made a call to monitor the effectiveness of children's FSP programs to ensure children are receiving adequate and appropriate service. There has, however, been no answer to this call to date.

Despite the obvious challenges in evaluating the FSP programs due to their diversity, FSP programs have been shown to effect positive outcomes for adults (Brown, Chung, Choi, Scheffler, & Adams, 2012; Brown, Hong, & Scheffler, 2013; Gilmer, Stefancic, Ettner, Manning, & Tsemberis, 2010). Brown et al. (2013) found FSP participants (ages 18+) between 2005 and 2008 experienced 33.4% ( $P < .01$ ) improvements of perceived outcomes over 16 months of service as compared to clients in usual care. Perceived outcomes included perceptions of improved symptoms, ability to deal with daily problems and crises, ability to handle relationships and social situations, functioning in job/school, and satisfaction with housing situations. In addition, Brown et al. (2012) found that FSP-served adults (ages 18+) from seven California counties were 54% less likely to utilize mental-health related emergency room services during the quarters surveyed between January 2007 and June 2008 as compared to Medi-Cal clients receiving usual care mental health services, while controlling for individual fixed effects. In San Diego County, Gilmer et al. (2010) found that FSP-served adults (ages 18+) between 2005 and 2008 received fewer inpatient, emergency and justice services and spent fewer days homeless as compared to a propensity score matched comparison group. Like the AB-34 pilot, the FSP program for adults implemented through MHSA has been associated with successful results for the adults it served, despite the lack of documented fidelity. Similar research for children does not yet exist.

## **9. Study Overview: Applying Policy to Problem**

The FSP program provides flexible funding to address both social welfare and mental health needs in order to support treatment within the least restrictive setting, the community. Since the deinstitutionalization movement over 50 years ago, California, like other states, has struggled to integrate services in a way which best serves and supports those with severe and disabling mental illness while they remain in the community. As evidenced through EPSDT-related lawsuits of the 1990s and corroborated through subsequent research (Sturm, Ringel, & Andreyeva, 2003), children with mental health related issues in California have been especially underserved.

While the expansion of EPSDT in the 1990s was a step toward improving access to mental health services for children, there is question as to whether the array of usual care services has supported underserved children and families in need of intensive services. Raising public awareness, a recent headline highlighted that California's data showed that psychiatric hospitalizations for children/youth under 21 had increased by 38% between 2007 and 2012, and it suggested that there was a continuing failure to treat children within the community, inciting critics of the system to suggest that there has been a shortage of integrated care which was more intensive than a menu of weekly EPSDT services, and less restrictive than hospitalization (Weiner & Reese, 2014). In the places where Medi-Cal-reimbursable usual care fails to support the needs of children, MHSA-funded FSP programs may act as an available resource for counties to augment services and welfare supports, thereby creating a more comprehensive array of community-based care, potentially leaving fewer children underserved. It is conceivable that children's FSP programs could engage children and families into care when the intensity of their needs falls into this gap, but research is needed, and multiple causes of underservice exist.

Regardless, MHSA, with its key programs for children, remains an understudied policy which strongly influences the mental health and welfare services provided to California's population of children and youth with severe mental health related disabilities.

Since 2006, the State of California has collected outcome data for children served through FSPs stored in a data repository described as the Data Collection and Reporting (DCR) system at the State of California Department of Health Care Services (CDHCS). These FSP outcomes data, however, are largely flawed by an indeterminable amount of underreporting of outcomes, and the data do not include information regarding service exposure. Therefore, this dissertation research avoids the use of these FSP DCR outcomes data, and instead utilizes a linkage between this DCR system and another CDCHS repository for county services, known as the Client Service Information (CSI) system, in order to assess whether FSP programs served children in accordance with its intended goals. In this way, the DCR data was used solely to identify which children were enrolled in FSP programs while the CSI data provided the bulk of the dataset in the form of children's service arrays and clinical profiles for FSP and non-FSP served children.

Over a nine year period beginning in 2004, before FSP became broadly available to children in 2007, and continuing through 2012, hundreds of millions of services were delivered to hundreds of thousands of children in California, allowing children's service experiences to be followed over many years before and after possible FSP program exposure. This linked dataset uniquely allowed the determination of a child's longitudinal service history as well as potential underservice in relation to clinical severity or need for intensive or emergency services. The research protocol for this study was granted exemption under category 4 of the federal regulations by the University of California Office for the Protection of Human Subjects.

Utilizing this linked dataset, this study poses three research questions:

- Research Question 1: Do FSP programs reach underserved children?
- Research Question 2: Do FSP programs provide a different array of services as compared to usual care?
- Research Question 3: Does participation in the FSP program decrease the use of mental health emergency services?

It was hypothesized that after controlling for clinical severity and earliest known age served in the county's mental health system, children served by FSP programs would appear to be underserved as compared to children in usual care, in that, as compared to children with similar indicators of clinical need in usual care, children in FSP programs would have had less total lifetime months of and less recent (past 6 months) mental health service exposure at the time they began the FSP program. It was also hypothesized that due to the non-mental health support services prescribed by the program, children served by FSP programs would receive more intensive collateral and linkage/brokerage services during months of FSP enrollment as compared to usual care. After controlling for clinical severity, it was expected that children who participated in FSP programs would experience declines in rates of services for mental health emergencies. It was further hypothesized that the decline in rates would continue throughout adolescence due to the enduring supports initiated during the FSP program, which likely remained long after the program had ended.



In the spirit of the act, FSP programs are intended to help reach underserved children with prominent mental health services needs in order to provide ‘whatever it takes’ to engage them into comprehensive care, to produce positive outcomes and improved functioning, and to build strength within children and their families which sets children on a trajectory toward wellness into adulthood, but these aims are not yet evidenced. This study is a first step toward identifying whether this policy-originated program, stemming from an adult initiative, positively impacts children and families as intended.

### **Chapter 3: Reaching Underserved Children in Need**

There are many possible reasons why children remain unserved or underserved, and unserved children with severe mental health issues are an especially difficult population to reach and engage into services (U.S. Department of Health and Human Services, 2001). Children may be underserved due to a host of reasons, some of which include financial barriers, family knowledge of or belief in mental illness, fear of stigma, or competing stresses and priorities within the family (U.S. Department of Health and Human Services, 2001). Addressing underservice requires locating and assessing children and families with need and then overcoming existing barriers to engage them into appropriate service.

One issue relating to underservice is that extensive effort is required in the community to locate and assess children who may be in need but who are not being served. It is possible, however, to quickly identify at least some of the underserved children with severe mental disorders, as severe mental disorder often results in one or more system encounters for urgent mental health care, thereby allowing some unserved children to be identified and assessed. For example, the dissertation dataset between 2004 and 2012 included 83,784 children served between the ages of 15-17 who received mental health emergency services. Beyond the use of emergency care, 28% received no other months of planned services between the ages of 15-17, an additional 12% received less than 3 months of planned services and an additional 11% received less than 6 months of planned services. This suggests that over half of the children 15-17 years old who were assessed and served via mental health emergency services were not engaged into a planned mental health care program which lasted at least six months. Certainly, the least desired way to reach children is after they have already experienced a psychiatric emergency, but when all other preventative measures, safety nets and points of access have failed, these events alert systems to the location and identification of underserved children with severe and debilitating mental disorders. That these children remain underserved gravely speaks to fundamental issues of availability or engagement of appropriate care.

The FSP program seeks to address problems of locating, identifying and engaging children into mental health care by utilizing a stakeholder informed outreach process, unconventional connections to community-based organizations and a culturally sensitive, family-centered approach (California Institute for Mental Health, 2011). Ostensibly, success in reaching the underserved would result in an FSP service population which would appear different from those more often engaged in usual care, representing children who, having been underserved, have more severe mental disorders and experience less exposure to the mental health care system overall. Children who are unserved or gravely underexposed to service would have very little exposure to services despite indicators of great need. Children who are ineffectively served likely experience a pattern of sporadic episodes of care without improvement to clinical indicators. As compared to those with similar indicators of clinical severity who are engaged in care and improving, these children would be characterized by longer past histories of interaction with the system while totaling less exposure to services without improvements in indicators of clinical severity. In this next section, I begin with a review of how and why children with mental illness may remain undertreated in order to inform a further conversation about identifying ‘what it takes’ to engage children into care.

## 1. Framework and Theory for Unserved and Underserved

Within the pathway which leads a child toward initial enrollment into a treatment program appropriate to meet the needs of the child and family, Figure 3 illustrates many factors which might relate to enrolling unserved and underserved children into appropriate care. Andersen's Behavioral Model and Access to Medical Care provides a framework upon which mental health services research has investigated potential influences and barriers to accessing care (Andersen, 1995). Within that model, environment, population characteristics (predisposing characteristics, enabling resources and need), and health behavior affect services access. Adding further the concept that the engagement requires that care and approach must be available and appropriate to meet the need of the child and family, Figure 3 helps to conceptualize the reasons why children and families with significant need may be underserved.

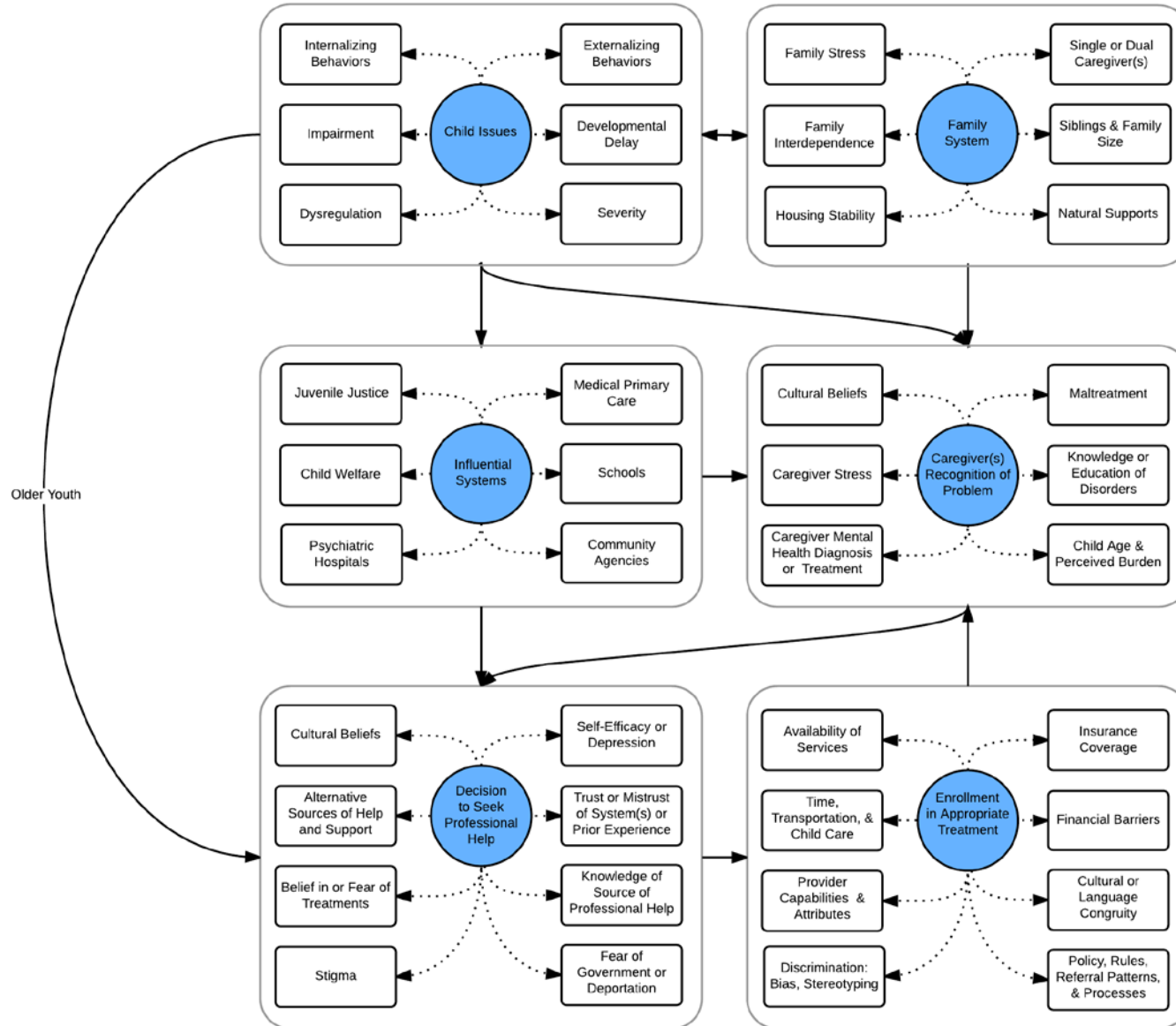
**Recognizing need, seeking and finding care.** Engaging children and families who are unserved and underserved entails overcoming a number of obstacles which have prevented prior successful treatment. The pathway to treatment includes recognizing a problem exists, deciding to seek professional help, and finding and accessing available and appropriate care. Each of these steps is influenced by an array of factors.

**Recognizing need.** Recognizing that an issue exists is one limiting step to accessing care (Teagle, 2002). For younger children, caregivers must discern that an issue exists, but older youth may invoke self-awareness leading to issue recognition. Believed to impact problem recognition are the severity of the issue and its impact on caregivers' stress, family functioning and school achievement (Alegría et al., 2004; Farmer, Stangl, Burns, Costello, & Angold, 1999), but differences may exist across culture and race (Banta, James, Haviland, & Andersen, 2013). For example, beliefs about passing childhood phases, etiology, or the existence of mental illness are often embedded in one's culture and may delay or deflect problem recognition (U.S. Department of Health and Human Services, 2001). However, interference with school or family functioning may pressure caregivers to seek help to resolve these manifestations of a child's developing mental health disorder.

The likelihood of problem recognition is also influenced by the caregivers' knowledge of mental health disorders, either through their own direct experience, secondary experiences or through their education (Breland et al., 2014). Studies find that caregivers are more apt to recognize an issue for children with externalizing disorders over internalizing disorders (Godoy et al., 2014; Gudino, Lau, Yeh, McCabe, & Hough, 2008), likely due to pressures to address the social disruptions at home and in school which are often associated with externalized behaviors. Additionally, schools, child welfare, juvenile justice and other systems which may provide specialized services for a child with externalizing behaviors may also compel caregivers to recognize a mental health concern for their child (Martinez, Gudiño, & Lau, 2013).

Other factors, such as family size and function, interdependence, or sole caregiver constructs can affect a family's ability or desire to solve matters within the internal system of the family, impacting the ability to recognize that a problem warrants external support or treatment (Bear, Finer, Guo, & Lau, 2014). Family supports, such as friends, relatives and community leaders can provide advice either to encourage or discourage the recognition of a problem decidedly severe enough to seek professional help (Brown, Girio-Herrera, Sherman, Kahn, & Copeland, 2014). Sadly, maltreatment behaviors at the hands of caregivers, such as neglect, may

**Figure 3. Factors for Engaging Unserved or Underserved Children into Appropriate Mental Health Care**



inhibit their ability to recognize an issue (Martinez et al., 2013).

**Seeking care.** Following problem recognition, the decision to seek professional help is influenced by self-efficacy, culture, stigma and distrust. In order to believe that seeking help is worthwhile, caregivers and/or children require self-efficacy, or the belief that the child and family has the ability to change (Godoy et al., 2014). According to Albert Bandura's self-efficacy theory (Grusec, 1992), parents embrace beliefs about either their own or other's ability to effect change in specific life domains, such as their child's social, emotional or behavioral reactions – beliefs built on culture and experience, either direct or observed. Some caregivers lack belief in or even fear Western medicine treatment approaches (U.S. Department of Health and Human Services, 2001). Disproportionately affecting minorities, some families may mistrust or have prior negative experiences with the systems which offer care (U.S. Department of Health and Human Services, 2001). Stigmatizing attitudes such as the fear of being blamed or labeled also dissuades some caregivers from reaching out for professional help for their acknowledged needs (Banta et al., 2013; U.S. Department of Health and Human Services, 2001). Some caregivers simply prefer to rely on alternative sources of support, such as friends or spiritual leaders.

**Finding care.** Caregivers or their support network require the knowledge of where or how to seek adequate and appropriate professional help. When sought, professional mental health services are provided through three main sources: specialty mental health service sector, schools and primary care. For children with a diagnosed disorder who receive services and attend school, primary medical healthcare serves approximately 11%, while the remaining served are equally split between specialty mental health and schools (Green et al., 2013). Mental health services provided within schools are typically administered as pull-out services, removing children from classrooms for individualized services (Teich & Robinson, 2007) and are unlikely to consist of empirically supported mental health services (Adelman & Taylor, 2006; Kataoka, Rowan, & Hoagwood, 2009; Weist, 2005). Primary medical healthcare emphasizes a public health approach for physical health (e.g., including screening, prevention and tiered intervention), but mental health services delivered through primary care are often much less organized, generally not ascribed by a systematic model (Kazak et al., 2010). For example, studies have described cases of caregivers who have sought help from primary care and encountered physicians who could not provide direct care and who had inadequate knowledge of community resources or referral pathways, potentially delaying or deterring further help-seeking (Brown et al., 2014).

After having recognized a problem and having decided to seek professional help, a caregivers' ability to enroll a child into an appropriate treatment program depends on a complex set of interweaving factors. First, an appropriate program may not exist within an accessible geographical area. If one does exist, limited resources in mental health services may mean that the program is already filled to capacity. Provided that the program exists in an area and has a vacant space, the caregiver and child may face additional barriers related to transportation, time or care for other family members. The child may lack insurance coverage appropriate for the program or the family may be unable to afford copayment or associated supplemental costs. The referral pathway, paperwork, processes or rules associated with the program may be burdensome or inhibitive. Referral to appropriate care may be hindered by systematic bias in referrals or referral patterns guided by entrance points into the system from primary care, juvenile justice,

child welfare, crisis centers, school or self/family (Yeh et al., 2002). Children may be referred (or not referred) for care based solely on common patterns, therefore limiting the likelihood of program appropriateness for the child and family. Providers receiving the referrals may not be appropriately equipped to meet the family needs, either through insufficient array of services or through capacity to accommodate language or cultural sensitivity needs (Snowden & Yamada, 2005). When children's and families' needs are mismatched to providers, this can lead to a loss of the families' engagement in care, reduced self-efficacy, dropping out of care, and subsequent resistance to further seeking of professional care (Gopalan et al., 2010).

**Policy can affect a system's ability to reduce underservice.** Any of these factors may pose a threat to adequate care for children with mental disorders and likely all of them contribute in part to the majority who remain underserved. Addressing all of these issues may seem overwhelming, but by reversing our perspective and locus of control from a family to a system, we can see that national, state and local policies have the potential to fund community outreach and education, set program enrollment eligibility criteria, provide guidelines for program framework, affix requirements for minimal services adequacy and cultural sensitivity training, and enhance a system's ability to reach the underserved (Snowden & Yamada, 2005). As with the case of MHSA and FSP programs, *policy* has the potential to drive innovative programming toward overcoming barriers and reaching underserved populations. States designing mental health systems, however, must recognize that their ability to adequately serve children and families with need relies on their ability to locate and reach out to those with need, make available a comprehensive network of care for the insured and uninsured, and sensitively engage families while considering culture, stigma and choice of alternative or holistic options. In a comprehensive system, outreach and engagement efforts need not turn away and forget about those who fall into service gaps due to an inability to meet specialized eligibility criteria, inappropriate or mismatched programming, or unavailability of appropriate programming due to waiting lists or physical barriers – those issues previously reviewed from a family's perspective. To address underservice, systems must be willing to do whatever it takes to identify, enroll and engage families into care – efforts which are, by and large, influenced by policy and by the consideration of a family's experience within a system.

## **2. How FSP Programs Might Reach the Underserved**

FSP programs plan and allot funding for locating and assessing children and families with significant need. In addition, FSP programs intend to address service engagement factors which propagate underservice, including those related to a caregiver's recognition of a problem, decision to seek professional help and ability to find and enroll into appropriate treatment.

**FSPs actively recruit the underserved.** Rather than waiting for children to present or refer to a clinic or emergency department for mental health services, one way in which FSP programs reach the underserved is by going out into the community in search of children and families with significant mental health concerns. Some of the funding for FSP programs is diverted toward outreach and engagement activities to locate the underserved (CCR Title 9 §3640). Guidelines encourage programs to include processes which engage with community emergency shelters, organizations supporting the homeless, homeless tenting sites, schools, cultural/faith based organizations, tribal communities, community leaders, county incarceration facilities, and other community-based organizations in order to identify and refer underserved children appropriate for the program (California Institute for Mental Health, 2011) – reaching

children and families where they live and recreate. For example, in Sutter-Yuba Counties, the MHSA Ethnic Outreach Team includes bilingual Latina, Asian Indian, and Hmong providers who perform outreach activities at schools, homes, local primary care clinics, and community agencies to engage potentially underserved children and families (County of Sutter-Yuba, 2013). In Ventura County, a Children's Intensive Response Team reaches out to families of children with recent crisis events to engage families into mental health programs by providing 30 day post-crisis follow up care in the form of home stabilization services, resiliency planning and linkage to community or faith based serves (Ventura County Behavioral Health Department Mental, 2012).

**FSPs create specialized programming for vulnerable populations.** In some cases, a Community Program Planning Process has identified vulnerable populations for focused outreach efforts, and a focus on a targeted population facilitates the ability to address perspectives of stigma and to specialized services and supports to meet population needs. For example, one Collaborative Courts FSP program targets children and TAY between the ages of 12 to 21 who have been involved with Juvenile Drug Court or Truancy Court (Orange County, n.d.; A. Sutherland & R. Chalmers of Community Services Programs, personal communication, January 28, 2015). Within this program, outreach staff spend one to two days a week within the courts building relationships with judges, probation officers and mental health officials in order to identify children/youth (with a relevant mental health diagnosis) and families most appropriate for the program. Voluntarily assenting children/youth enter the program on the day they are released from custody, and program staff travel to the facility to enroll the child/youth and caregiver(s) (when under 18) into the FSP.

As an example of a program which focuses on helping families overcome cultural or language barriers to enrolling or engaging in mental health care, one FSP program in Los Angeles for children/youth (ages 0-15) focuses on serving those who are Asian Pacific Islander (Pacific Clinics, n.d.; C. Hsieh, A. Tieu & C. Hsu, personal communication, February 4, 2015). The program includes staff who speak Cantonese, Chiu Chow, Khmer/Cambodian, Korean, Mandarin, Spanish, Tagalog, Taiwanese, and Vietnamese. Based on its focus, the program has built relationships throughout its county over time with schools, temples and cultural organizations through which stigma is addressed and children/youth and families are educated about mental health programs. While not all programs can accommodate all preferred languages, programs are encouraged to hire a diverse staff covering multiple languages, or to create focused programs meeting local language needs.

Out in the community, outreach staff may address a caregiver's ability to recognize children's mental health issues by providing education about children's mental disorders in a manner which is sensitive toward and congruent with cultural beliefs, by providing respite care to reduce caregiver stress, or by establishing linkages to other outlets which could alleviate caregiver stress, address caregiver mental illness, or treat caregiver substance use disorders. To help persuade caregivers' to seek professional help for their children with need, outreach staff might address fears and stigma, show sensitivity and respect for cultural beliefs when identifying feasible treatment options compatible with beliefs, promote a belief in self-efficacy, build trust and rapport over time and multiple visits while not rushing families into treatment, and embrace alternative or non-traditional sources of support within a service plan. For example, outreach efforts may necessitate multiple visits with a family to describe the program and its potential

benefits for the child and family. Based on assessment of the child and family needs, a determination is made on whether the FSP is the appropriate level of care for the child and family.

**FSPs address concrete and contextual barriers to care.** If an FSP program is identified as appropriate for a child and family, many common barriers to enrollment are addressed as the program requires no specific insurance coverage by statute, is encouraged to make available transportation and child care, and often assists in the development of a family financial plan which is considerate of home, employment and treatment goals. Further, FSP programs provide assistance to families to navigate not only the mental health care system, but also other public systems to access needed family supports, such as health insurance coverage, food stamps or housing supports, thereby reducing competing priorities and stressors of family welfare.

### **3. Research Question 1: Do the FSP Programs Reach Underserved Children as Intended?**

Despite EPSDTs generous funding, studies suggest that children in California have been found to have some of the highest rates of unmet need for mental health care among the thirteen largest states in the United States (Sturm et al., 2003). I hypothesize that FSP programs reach a proportion of underserved children most in need, which could occur through FSP's increased ability to identify the underserved through funded outreach activities; increased ability to enroll the underserved through flexible funding to reduce barriers related to insurance coverage, financial costs of treatment, transportation or other concrete barriers; and increased ability to engage families into care by embracing philosophies of unconditional care and cultural humility. I hypothesized that, in accordance with the policy, children enrolled in FSP programs would show evidence of being underserved at the time of enrollment, such that after controlling for age and severity at enrollment, FSP children would be less likely to have received recent mental health services and would have had less exposure to care in the county mental health system, on average. In addition, controlling for prior services, I hypothesize that children served within the FSP would have more characteristics of severity as compared to children served by other county mental health programs, including a greater likelihood of having had a recent crisis event; an indication of substance abuse; or a diagnosis including psychosis, bipolar disorder, or conduct disorder.

### **4. Question 1 Method**

To test whether FSPs serve more unserved and underserved children than usual care, I modeled the odds of enrolling into an FSP program versus receiving non-FSP usual care services in mental health system in that same county and same month during an enrollment period between January 1, 2007 and December 31, 2012. Logistic regression with repeated sampling of new FSP entrants fixed within each county identified the severity and service exposure of children enrolled into the FSP program compared to concurrently served children remaining in usual care in the county mental health system during that same month. Some FSP entrants were enrolled in the first month they were exposed to the county mental health system and some were recruited from usual care, which was adjusted for using within-child clustering.

**Subjects and data sources.** Obtained from the California Department of Health Care Services (CDHCS), the Client Services Information (CSI) dataset contained service records for county mental health services delivered to children between ages 6<18 between January 1, 2004



and December 31, 2012. The study dataset included children who received county mental health services and were insured by Medicaid or were uninsured. The CSI dataset had been linked utilizing a hierarchical deterministic linkage algorithm to the Data Collection and Reporting (DCR) dataset, also obtained from CDHCS, such that FSP program enrollment starting and ending dates could identify a child's program exposure. After identifying the earliest known age served in the county's mental health system, the total months of service, and six-month client histories utilizing the full dataset, the dataset study period of enrollment months was limited to January 1, 2007 through December 31, 2012 in order to create a minimum 3-year history period (2004-2007) for all children. This resulted in the exclusion of 125 (<1%) FSP enrollments which occurred before 2007. The linked dataset provided information on months in which a child was served in the county mental health system, the crisis services received, as well as on the characteristics of the child, including age, gender, ethnicity, diagnoses, indications of substance use or trauma, and county of service. The final dataset was restricted by county to include only records for months in which a county enrolled children into a new FSP, and months without new enrollments for the county were dropped from the final dataset.

**Dependent variable.** The dichotomous indicator of whether a child was enrolled into a new FSP during the month (1 = Enrolled and 0 = Not Enrolled) acted as the dependent variable. After the first time a child was enrolled in an FSP, the child was dropped from the dataset as s/he was no longer available for a first enrollment into an FSP program. All children who received county mental health services in the same month were identified as potential clients who were not enrolled into the newly available FSP program client slot during that same month.

**Independent variables of exposure to service.** Variables of interest included those which suggested the child was underserved, including the earliest known age the child received mental health services in the county along with recent and total months in which the child was exposed to standard county mental health care before enrollment into an FSP.

***Age first served in county mental health.*** The age a child was first served by the mental health system may be related to a child's severity of mental illness, as well as the child's and caregivers' exposure to, access of, and knowledge about mental health programming. Thus the analysis included the earliest known age the child was served within the county's mental health system at the client level.

***Number of prior months served.*** As an indication of exposure to prior service, the total months a child received any services within the county mental health system at the time of potential enrollment was calculated and included in the model.

***Any service in six months prior.*** After sensitivity testing, services in the prior six months were coded to exclude the month immediately preceding current month because it often included pre-enrollment activities for new FSP enrollees. Thus, for each child at each month, a code of 1 was given if the child had received any services in the six months before the current month, and 0 if not, excluding the month immediately preceding the current month.

**Independent variables of need.** Control variables of interest included indicators which suggested that children enrolled in FSP met policy guidelines of severity, including serious mental health issues and other characteristics related to risks for emergency care. Indicators obtainable which related to these policy guidelines included recent use of crisis services, indication of substance abuse or trauma history, and diagnosis.

**Substance abuse history.** For each client month, Substance=1 if a substance abuse diagnosis or the clinician indicator for substance abuse was identified in the present month or the six months prior to the present month. For this and other clinical indicators, the prior six months were examined because diagnoses and clinical indicators may appear on some but not other service records, despite the continual presence of the issue. These rolling six month histories served to smooth variability in reporting of current clinical issues. The reference category was no substance abuse indicated (Substance=0).

**Trauma history.** For each client month, Trauma=1 if a PTSD diagnosis or the clinician indicator for trauma was identified in the present month or the six months prior to the present month. The reference category was no trauma indicated (Trauma=0).

**Diagnosis history.** In the same manner as substance abuse and trauma history, the analysis controlled for a rolling six month history of each of the following diagnoses independently: psychosis, bipolar disorder, depression, conduct disorder, adjustment disorder, anxiety disorder, attention deficit and hyperactivity disorder (ADHD), and oppositional defiant disorder (ODD) / disruptive behavior disorder (DBD) with 1= presence of diagnosis in the present month or the preceding six months, and 0 as no presence of diagnosis.

**Crisis services use in last 6 months.** Approximately 8-10% of children served by county mental health each year experience the need for crisis services, which are commonly referred to as crisis intervention and crisis stabilization services in California (Snowden, Masland, Wallace, & Evans-Cuellar, 2007). Crisis intervention services are provided face-to-face or by telephone, last less than 24 hours and target conditions deemed to require an immediate response. Crisis stabilization services target the most serious crises and are provided in an emergency department or elsewhere at a facility with 24 hour treatment capacity (Scott-Lee, 2007).

Months in which clients had recent crisis services were identified if crisis services were received in the month of potential enrollment or within the six previous calendar months, with 1= recent crisis services, and 0 as no recent crisis services.

**Control variables.** Variables of age, gender, race and county acted as controls for service need and for the likelihood of enrollment in FSP.

**County of service.** County served as a clustering unit to control for correlation related to county planning processes which influence FSP enrollment criteria and county infrastructure / processes which affect diagnostic and severity reporting standards.

**Month of service.** The month of service within the time frame of the study (January, 2007 through December, 2012) was used as a control for the repeated within subject sampling.

**Age at month of service.** The child's age was controlled at each month during which the child was served and a concurrent FSP space was newly filled in his/her county.

**Gender.** Gender was controlled at the client level as Female (1) and Male (0).

**Race/ethnicity.** Race/ethnicity for children was controlled at the client level as Latino, African American, Other/Unknown (including all other categories of race/ethnicity or unknown race/ethnicity) and White (reference).

**Sample preparation and sample size.** Due to known county-to-state data transmission issues, the dataset was reviewed for county-level consistency in reporting of counts of children and services over the period of the study, and based on data quality, 36 of the 59 available California counties were selected for inclusion. All data quality issues were communicated to California Department of Health Care Services, who were actively working on improving the data transmission process. These counties represent approximately 70% of the total population of

children served statewide during the study period. One of the 36 counties enrolled no children in an FSP program during the study period.

I processed the data to synthesize records summarizing each month a child was served in the county mental health system. Summary client by month records included the child's demographics; recent clinical diagnoses, trauma indication, substance abuse indication; and current service provisions for the month of service. Also included in the child by month records were use of emergency services from the prior six months. Additional indicators identified the earliest known age the child was served in the county's mental health system as well as whether the child received any type of services in the prior six months (not including pre-enrollment activities in the month directly prior).

For the model, children were considered newly enrolled in FSP for the first month in which they participated in an FSP. All subsequent monthly records for a child after which that child was first enrolled into an FSP were excluded from the analysis dataset, as the child would have no longer been available for a new enrollment. The complete dataset included 1,906,382 client-by-month records in which FSP enrollment occurred for 15,598 children and never occurred for 273,100 children treated exclusively via usual care. There were 282,178 children who remained in usual care when another child was selected for FSP. In other words, 9,078 (58%) children who were eventually enrolled in FSP spent time in usual care and were passed over for an FSP program opening at some point before they were subsequently enrolled in FSP. Therefore, 6,520 (41%) children enrolled in FSP had never been passed over for an opening in an FSP program.

**Analysis.** Descriptive statistics were prepared for children who remained in usual care and children who enrolled at any time in FSP. To collapse repeated measurements for children across multiple time points for display, prior to creating group statistics, the means for prior months of service and for age were calculated per child for all service months included in the model. Thus, group statistics represent the mean and standard deviation of the mean age per child at potential enrollment and the age the child was first served. Descriptive statistics also include the proportion (%) of children by race/ethnicity and gender, and the proportion of months of service in which there was a recently (past six months) identified severity indicator or diagnosis. Due to the broad distribution of values, the mean number of prior months served is displayed as the values delimiting the 25%, 50% and 75% quartiles.

Service exposure (age first served, service in last six months and total months served) and severity indicators (six-month history of substance abuse, trauma, diagnoses and crisis services) were regressed using logit on the dichotomous variable of enrollment into FSP program each month, with repeated sampling by person within fixed county effects while controlling for age, gender, and race/ethnicity. All analyses were performed using Statistical Analysis Software (SAS) 9.3, Cary, NC

## 5. Question 1 Results

Table 2 compares characteristics of FSP enrolled and usual care treated children for each month in which a county enrolled anyone into a new FSP. A lower proportion of newly enrolled FSP children had received services in the prior six months (57.5% vs. 88.2%, respectively), while more had reported traumatic experiences (36.4% vs. 27.8%, respectively), had received

recent crisis services (20.9% vs.13.5%, respectively) or were diagnosed with bipolar (20.9% vs. 15.4%, respectively), depression disorders (35.4% vs. 29.7%, respectively), or ODD/DBD disorder (35.1% vs. 29.5%, respectively) as compared to children concomitantly served in usual care.

Table 3 presents results for odds of enrollment in an FSP during counties' FSP enrollment months. Although FSP enrolled children tended to be older than others concurrently served in usual care at the time of their enrollment (Odds Ratio (OR) 1.22 P<.001), they were more likely to have first received usual care services at a younger age (OR=.94, P<.001), nevertheless to have received fewer total months of usual care service exposure (OR .99, P<.001), with much lower odds of having received usual care services in the prior six months (OR=.19, P<.001), and with more odds of having received recent crisis services (OR 1.61, P<.001). They also were more likely to have indications of trauma (OR 1.22, P<.001), substance abuse (OR 1.20, P<.001) and all diagnoses other than adjustment disorder.

## **6. Question 1 Conclusions**

FSP programs are intended to emphasize outreach, engagement, stigma reduction and an atmosphere of cultural sensitivity in order to identify, enroll and engage underserved populations of children and families. Programs are encouraged to establish relationships with community organizations where underserved children are likely to be present, to recruit diverse program staff and to cross-train teams of staff in ways which allow them to sensitively connect with children of diverse cultures (California Institute for Mental Health, 2011). The successful effects of the recommended program might address barriers to mental health services, including those related to knowledge of disorders and sources of treatments; belief in treatment; cultural and language congruence; stigma; mistrust or fear of service systems; and burdensome or biased referral pathways. Conceivably, a program which addressed some of these barriers might succeed in enrolling children less likely to have received comprehensive services through usual care, as supported by the model.

FSP enrolled children experienced less prior treatment but more severe mental disorder. As compared to others concomitantly served in usual care, FSP entrants were older, yet had first encountered the mental health system at younger ages, had fewer months of overall service, and in the prior six months, were less likely to have had any planned treatment despite an increased likelihood of emergency mental health services. In other words, although they were not recently engaged in service, FSP served children accessed mental health service at younger ages, illustrating a circumstance in which engaging children and families in accessible services likely represents a greater obstacle for usual care, beyond identification and enrollment challenges.

Controlling for service exposure and demographics, FSP entrants were more likely to have any of the diagnoses studied, except adjustment disorder exclusively, and to have concerns related to trauma or substance abuse, affirming that FSP programs enroll children with serious and complex needs, as intended by policy.

Children who were enrolled into FSPs appeared to be significantly different from other clients served in the same month within the county mental health system. The combination of underservice and greater clinical severity for FSP entrants argues against potential criticisms that FSP programs serve a convenient sample of usual care participants. Statutes and regulations

**Table 2. Descriptive Statistics for Children Who were Not Enrolled or Enrolled in FSPs (2007 - 2012)**

	Not Enrolled in FSP, Remained Usual Care  (n=282,178)	Enrolled in FSP  (n=15,598)
Age		
Age at Potential Enrollment Month (mean±sd)	12.7±3.5	12.8±3.5
Age First Served in County Mental Health	11.4±3.5	11.1±3.4
Exposure to Usual Care		
Prior Months Served in County System (quartiles: 25%;50%;75%)	3;7;14	2;6;19
Received Any Services in 6 Months Prior (%)	88.2%	57.5%
Race		
Latino	48.0%	47.4%
African American / Black	8.7%	8.0%
Other / Unknown	35.8%	37.9%
White	7.5%	6.7%
Gender		
Female	41.7%	40.3%
Male	58.3%	59.7%
Severity Indicator in Last 6 Months		
Trauma	27.8%	36.4%
Substance Abuse	8.5%	13.5%
Recent Crisis Services	13.5%	20.9%
Diagnosis in Last 6 Months		
Psychosis	2.1%	4.1%
Bipolar	15.4%	20.9%
Depression	29.7%	35.4%
Anxiety Diagnosis	11.0%	10.9%
Conduct Disorder	4.2%	5.8%
Oppositional Defiant Disorder or Disruptive Behavior Disorder	29.5%	35.1%
Attention Deficit and Hyperactivity Disorder	29.4%	25.6%
Adjustment Disorder	17.6%	15.7%

**Table 3. Logistic Regression for Odds of FSP Enrollment vs. Non-Enrollment for Children Served during FSP Enrollment Months (2007 - 2012)**

	(n=288,698)		
	OR	95% CI	
Age at Enrollment Month	1.22	1.20	1.24 **
Service Exposure			
Age First Served in County Mental Health	.94	.83	.96 **
No. Prior Months Served	.99	.98	.99 **
Any Services in 6 Months Prior	.19	.18	.20 **
Race			
Latino	1.16	1.09	1.25 **
African American	1.10	1.01	1.20 *
Other / Unknown	1.09	1.02	1.17 *
White (ref)	1.00		
Gender			
Female	.99	.95	1.02
Male (ref)	1.00		
Severity Indicators in Last 6 Months			
Trauma	1.22	1.17	1.27 **
Substance Abuse	1.20	1.14	1.27 **
Recent Crisis Services	1.61	1.54	1.68 **
Diagnoses in Last 6 Months			
Psychosis	1.74	1.59	1.90 **
Bipolar	1.64	1.57	1.72 **
Depression	1.49	1.43	1.54 **
Anxiety	1.13	1.07	1.19 **
Conduct Disorder	1.59	1.48	1.72 **
Oppositional Defiant Disorder or Disruptive Behavior Disorder	1.55	1.50	1.61 **
Attention Deficit and Hyperactivity Disorder	1.18	1.13	1.23 **
Adjustment Disorder	.92	.88	.97 **

\*P<=.05; \*\*P<=.001

guiding the FSPs direct the program to target and serve children with the greatest need who are less likely to be served successfully with usual care. If FSP entrants had appeared similar in characteristic to the population served in usual care, this would suggest that counties may have used FSP funding to simply extend existing programming to the current caseload, circumventing the burden of developing the outreach efforts and selection criteria necessary to identify and screen for a population of underserved children. On the contrary, results suggest that FSPs are indeed reaching children who appear to be underserved in that enrolled children had younger lifetime encounters with the mental health system but yet experienced fewer overall months of treatment and no recent treatment as compared to those not enrolled, while controlling for severity indicators. The FSP also demonstrated increased enrollment of children from racial/ethnic minority groups as compared to White. Underserved children, by definition have received inadequate care, frequently due to difficulties in service engagement associated with race, ethnicity, culture or stigma (Hu, Snowden, Jerrell, & Nguyen, 1991; Kodjo & Auinger, 2004; Yeh et al., 2002). While underserved children had previous encounters with the system, barriers likely prevented these children and their families from obtaining comprehensive care, as illustrated in Figure 3.

Simply reaching an underserved child does not satisfy the policy guidelines, as the underserved child enrolled ought to also represent those who are the most in need of comprehensive services which address both social welfare and mental health concerns. Once again, the model appears to support this guideline, suggesting that even though enrolled children were less likely to have received recent mental health services, they were more likely to have received recent crisis services, to have one or more mental disorder diagnoses and to have concerns related to trauma or substance abuse. Policy and guidelines direct programs to offer integrated services for mental health and co-occurring substance abuse issues, and this focus is apparent in the characteristics of the population served.

Trauma, on the other hand, is only briefly mentioned in guidelines as a topic in order to raise staff awareness of the impact of trauma on child/youth and family functioning (California Institute for Mental Health, 2011). The significant presence of trauma within the population of children enrolled likely reflects its strong association to the characteristics utilized for targeting and enrolling children into the program but may also represent the target of some programs to focus on families experiencing and handling trauma. Children and families with reactions to trauma often internalize behaviors and withdraw from support systems, challenging others to identify or recognize an issue before the level of need requires urgent response (Gopalan et al., 2010). That these families are enrolled into FSPs in greater proportions is likely demonstrative of the program's active stance toward recruitment of and focus on more often underserved target populations.

One limitation of this analysis is that sufficient information is not available at the individual level to make determinations of program eligibility. Available characteristics suggest that, generally, the policy is being implemented as intended and that it is reaching the target population, but it remains unknown to what extent the target population is being served. The analysis does not assess eligibility for those who were left untreated in the community. On the one hand, many of the most seriously mentally ill children will have required at least crisis interventions at some time and would have appeared in the dataset for that reason. Nonetheless,

identifying the number of eligible children served versus those still being left to cope with less than adequate care would strengthen the interpretations of this analysis.

Additionally limiting, this analysis only evaluates children initially enrolled in FSPs and does not consider children's engagement and retention in the program for successful completion. It is possible that many underserved children fail to engage completely in the partnership and drop out of the program after short periods without a significant change in trajectory of wellbeing. Enrolling underserved children into a partnership is only the first step, after which services and supports must address potential barriers to ongoing engagement. Further research is needed to identify program characteristics which more effectively engage underserved children, supporting successful completion of the FSP program.

Also cautionary are the data transmission issues which limited the analysis to 36 out of 59 California counties. Data transmission issues are assumed to be non-biased as there is no reason to believe that FSP program enrollment would be related to the process of transferring data between county and state. However, it is possible that bias may still exist. Further, discussion and conclusions do not generalize beyond counties and county circumstances represented in the dataset.

Evidence suggests that when counties make FSP program spaces available for children and families, the policy helps reach underserved children in need of comprehensive care. The intention of the policy is to offer those enrolled an extensive scope of supports, including flexible funding for a broader range of services for children and families beyond usual care. Nevertheless, due to cost and competing priorities, the availability of these intensive partnerships is limited, likely leaving many other eligible high-risk children yet unserved or underserved.



## **Chapter 4: Availability and Accessibility of ‘Whatever it Takes’ Programming**

While evidence suggests that FSP programs reach and engage underserved children with mental health disorders as intended, another key consideration is whether programming provisions after enrollment provided for something different than what was already available to the children it served. In other words, perhaps the initial outreach to engage children and families into care was the efficacious component of innovation within the FSP program, after which eligible children and families might more aptly be funneled into existing programs. Other potentially overlapping programs delivering mental health services to a similar population of children include Medi-Cal EPSDT, inclusive of Emily Q Therapeutic Behavioral Services (TBS), SB 163 Wraparound services, and Katie A Subclass Member Services. One potential argument is that after the outreach period to identify, assess and enroll underserved children, FSP programs do not further innovate beyond the existing array of potentially ample programming.

For alternative programming to be accessible, however, all children enrolled into an FSP program would also need to meet the various eligibility requirements for the alternative programs. As described previously, California’s children’s mental health system has been accused of having gaps in available services (Weiner & Reese, 2014), and that might mean that adequate programming exists but is not broadly accessible to the population with corresponding need (typically owing to eligibility restrictions); or, as was suggested by critics, it may mean that programming of an adequate level of care does not exist at all, and there is simply nothing available to meet the needs of children who have a specified level of need (in a manner in which the level of care available is akin to the porridge in the fable of Goldilocks). Considering the availability and accessibility of comparable alternative county programming, this chapter moves beyond the considerations surrounding the identification, enrollment and engagement of children and families, and begins to explore access to the successive service provisions which might differ between FSPs and alternative programming.

FSPs were designed to be managed by county mental health plans in order to provide an otherwise unavailable array of community-based services and supports for children with mental health disorders, designed to fill any accessibility or availability service gaps (due to either eligibility or level of care incongruence), such that children with need could receive an appropriately intensive model of care. However, a counter argument is that FSP programs for children have unnecessarily replicated services which were already available to these same children through other programs existing in usual care, diverting MHSA funds away from more deserving adult populations. Findings supporting the counter argument would implicate policy changes focusing MHSA funding for FSPs toward adult persons who no longer qualify for Medi-Cal EPSDT and other child-serving programs. Evidence to suggest the former argument might result in recommendations to assess the extent to which FSPs serve the children in need of intensive services who exist within a service gap.

### **1. Research Question 2: Do FSP programs provide a different array of services as compared to usual care?**

FSPs are intended to be an augmentation to available services, in that MHSA funded programming may resemble existing programs for those who would not otherwise qualify or it may occur in coordination with existing programs as an augmentation. Reviewing existing public programming inclusive of mental health services for similar populations (Medi-Cal EPSDT,

including Emily Q TBS, SB 163 Wraparound services, and Katie A Subclass Member Services) and comparing the reported service arrays for children served through FSP or usual care, this chapter explores whether FSP programs provide a different array of publicly funded services as compared to usual care.

## 2. Comparing FSP to Medi-Cal EPSDT Services

Medi-Cal EPSDT is an entitlement available to all children/youth under 21 who have full-scope Medicaid eligibility, providing services based on medical necessity identified through a client plan. Medical necessity involves establishing an EPSDT ‘included’ Diagnostic and Statistical Manual of Mental Disorders (DSM) diagnosis, substantiating that the diagnosis has resulted in functional impairment, and identifying an intervention which will address the impairment (CCR, Title 9 §1810.205). Inclusive in the client plan for treatment are goals tied to the presenting behavior, diagnosis and a signature that the client will comply with treatment. Medicaid is the largest funder of mental health services in the United States (Substance Abuse and Mental Health Services Administration, 2013), and many children in the FSP program qualify for Medi-Cal EPSDT services, thereby offsetting the total draw of MHSA funds to support mental health services for Medi-Cal enrolled children in the FSP program.

Further detailed in Table 4, Medi-Cal EPSDT identifies a menu of available service categories to address the presenting behavior and diagnosis. Available to all are rehabilitative mental health services, targeted case management, and specialty mental health services, while supplemental specialty mental health services are available to a subclass of eligible Medi-Cal enrolled children/youth. During treatment, for a specific intervention/technique, such as a specific evidence-based practice, to be covered within the service array, it must be identified in the Client Plan and must fit within a service category. “[Services] provided must be specifically tied to the child’s diagnosis and matched to clear and measurable goals in the Client Plan to be considered claimable activities. The intervention/technique (i.e., modeling, coaching, cognitive-behavioral therapeutic action, redirecting) must be clearly documented” (Scott-Lee, 2007, page 44).

As described, prior to MHSA, lawsuits against California’s EPSDT programming have required county mental health systems to generously fund EPSDT services, compelling counties to enroll many children with mental disorders into comprehensive treatment. Critics argue that the sufficiency of existing care options along with these expanded EPSDT services (Felton et al., 2010) challenge FSP programs to make any further advancement toward reducing underservice for children.

**Supplemental specialty mental health services.** As previously described, as a consequence of the *Emily Q. v. Belshe* lawsuit, California’s Medi-Cal EPSDT offers one supplemental specialty mental health service, TBS. TBS is one of the most intensive community-based services provided by EPSDT, and it allows for up to 24 hours a day of intensive one-on-one short-term services to target diagnosis related behaviors, required to be provided in conjunction with and as a supplement to other categories of EPSDT services. In order to be eligible for treatment, children must be part of a specialized class at risk of group home placement or psychiatric hospitalization as described in Table 4. TBS is intended to be provided

**Table 4. Usual Care’s EPSDT Specialty Mental Health Services (CCR Title 9 §1810.247)**

<b>Rehabilitative Mental Health Services</b>	<b>Targeted Case Management</b>	<b>Specialty Mental Health Services</b>	<b>Supplemental Specialty Mental Health Services</b>
<ol style="list-style-type: none"> <li>1. Mental health services (assessment, plan development, therapy, rehabilitation, &amp; collateral)</li> <li>2. Medication support services</li> <li>3. Day treatment intensive</li> <li>4. Day rehabilitation</li> <li>5. Crisis intervention</li> <li>6. Crisis stabilization</li> <li>7. Adult residential treatment services</li> <li>8. Crisis residential treatment services</li> <li>9. Psychiatric health facility services</li> </ol>	<p>Targeted Case Management is defined as services that assist a beneficiary to access needed medical, educational, social, prevocational, vocational, rehabilitative, or other community services. The service activities may include, but are not limited to, communication, coordination, and referral; monitoring service delivery to ensure beneficiary access to service and the service delivery system; monitoring of the beneficiary's progress; placement services; and plan development)</p>	<ol style="list-style-type: none"> <li>1. Psychiatric Inpatient Hospital Services</li> <li>2. Psychiatrist Services</li> <li>3. Psychologist Services</li> <li>4. Psychiatric Nursing Facility Services</li> </ol>	<p>Therapeutic Behavioral Services (TBS): TBS is an intensive, individualized, one-to-one, short-term, outpatient treatment intervention to address specific behaviors identified in a written treatment plan; TBS is always used in conjunction with other specialty mental health services; clients must meet medical necessity and be a member of the following class:</p> <ul style="list-style-type: none"> <li>• placed in a group home facility of RCL 12 or above and/or locked treatment facility for the treatment of mental health needs</li> <li>• being considered by the county for placement in a facility described above</li> <li>• has undergone, at least, one emergency psychiatric hospitalization related to his/her current presenting disability within the preceding 24 months</li> <li>• has previously received TBS while a member of the certified class</li> <li>• is at risk of psychiatric hospitalization</li> </ul>

in conjunction with other specialty mental health services (California Department of Mental Health, 1999), and is meant to include behavioral analysis and positive behavioral interventions (California Department of Mental Health, 2002). TBS is a short term treatment, and plans for up to thirty days (for <12 hours of TBS per day) or sixty days (for >=12 hours of TBS per day) are authorized by the county. Continuation of treatment beyond these initial plans are reauthorized and justified as necessary.

Other bundled services, such as Wraparound, are not recognized as reimbursable unless unbundled into components which each fit within the service categories identified in Table 4. While many of the unbundled Wraparound activities can be billed to Medi-Cal EPSDT, there are two services within the model which have proven difficult in billing: team planning and intensive care coordination (Pires et al., 2011). Team planning meetings prove troublesome as they require multiple professionals to concomitantly bill for the same client while the client is often not present. To accommodate care coordination, the targeted case management service class [“services that assist a beneficiary to access needed medical, educational, social,

prevocational, vocational, rehabilitative, or other community services; the service activities may include, but are not limited to, communication, coordination, and referral; monitoring service delivery to ensure beneficiary access to service and the service delivery system; monitoring of the beneficiary's progress; placement services; and plan development” (CCR, Title 9 §1810.249)], serves as a potential option for billing, but reimbursement is limited to the activities performed which directly include the child or caregiver (CCR, Title 9 §1840.342), and the national administration has discouraged this option in the case of Wraparound services (Pires et al., 2011).

**Juxtaposing Medi-Cal EPSDT and FSPs.** Given California’s array of pre-FSP programming, inclusive of EPSDT and TBS, critics have argued that FSPs are redundant and that children’s FSP funding should be diverted to adult FSPs, as adults experience fewer programming options. Children in FSP programs receive a bundled set of activities adhering to Wraparound philosophies and support improved resilience and wellbeing for the child, while Medi-Cal EPSDT provides for individual services within service categories, including TBS category of supplementary services, which directly address an identified functional impairment. Whereas Medi-Cal EPSDT does not reimburse for activities which cannot be tied to a diagnosis, FSP programs encourage addressing social welfare and environmental factors, such as housing/homelessness, organization within a household, neighborhood safety, food and clothing. FSP programs urge addressing a caregivers’ needs, such as substance abuse, financial management, and unemployment, and although Medi-Cal EPSDT allows for collateral services provided to caregivers, the services must assist in achieving the goals in the child’s client plan as related to the child’s diagnosis (California Department of Mental Health, 2007). These contrasts suggest that FSP programming does not replicate that which is available through Medi-Cal EPSDT.

### **3. Comparing FSP to SB 163 Wraparound Program**

Another possibility is the FSP programs unnecessarily replicate SB 163 Wraparound programs. Adapted for child welfare, a flexibly funded Wraparound model became available in California through SB 163 of 1997 and the Intensive Services Component of the Title IV-E Child Welfare Waiver Demonstration Project in five counties (Alameda, Humboldt, Los Angeles, Sacramento, and San Luis Obispo) in 1998. Targeting children at risk of group home placement, Wraparound in California is a “family-centered, strength-based, needs-driven planning process for creating individualized services and supports for children, youth, and their families that facilitate access to normalized and inclusive community options, activities and opportunities” (SB 163 and Title IV-E Waiver Wraparound Standards, page 1). The specific target criteria for each type of Department of Social Services managed Wraparound program are listed in Table 5. With goals which include ensuring safety and promoting stability, standards for the program promote the creation of individualized child and family plans which identify strengths, needs, services, resources and strategies to meet meaningful and measureable goals. With flexible use of state foster care funds and Adoption Assistance Program funds, including the availability of up to \$500 within 2 hours and >\$500 within 48 hours of an approved request, this model states a ‘whatever it takes’ approach to keeping families safe and children within their homes (SB 163 and Title IV-E Waiver Wraparound Standards).

**Juxtaposing SB 163 Wraparound and FSPs.** As the FSP program specifically references statute (WIC §18250 et. seq) created by SB 163, the principles of Wraparound are

required to be the same between both types of programs. Differences, however, arise in the oversight of the model (by the Department of Social Services in the case of SB 163 versus the County Mental Health Plans in the case of FSPs), the source of the flexible funds (from the state foster care funds and Adoption Assistance Program funds for SB 163 versus MHSA funds for FSPs), the ability to use flexible funds towards housing within FSPs, the target population for the program (inclusive of children with risk of group home placement for SB 163 versus those with

**Table 5. California Wraparound Target Population**

<p align="center"><b>SB 163 Wraparound (WIC §18252)</b></p>	<p align="center"><b>Intensive Services Component of the Title IV-E Child/youth Welfare Waiver Demonstration Project (Profiles of the Title IV-E Child/youth Welfare Waiver Demonstration Projects)</b></p>
<ol style="list-style-type: none"> <li>1. A child/youth or nonminor dependent who has been adjudicated as either a dependent, transition dependent, or ward of the juvenile court pursuant to Section 300, 450, 601, or 602 and who would be placed in a group home licensed by the department at a rate classification level of 10 or higher.</li> <li>2. A child/youth or nonminor dependent who is currently, or who would be, placed in a group home licensed by the department at a rate classification level of 10 or higher.</li> <li>3. A child/youth who is eligible for adoption assistance program benefits when the responsible public agency has approved the provision of Wraparound services in lieu of out-of-home placement care at a rate classification level of 10 or higher.</li> </ol>	<ol style="list-style-type: none"> <li>1. Those at risk of out-of-home placement</li> <li>2. Those currently in out-of-home placement with the permanency goal of family reunification, adoption, or guardianship; and</li> <li>3. Other children/youth in out-of-home care who without intensive services would otherwise remain in care or move to a higher level of care.</li> </ol>

severe mental health disorder with functional impairment and a broader range of risks for FSPs), and the goals of the program (to ensure safety and promote stability for SB 163 versus to promote wellness and resiliency for FSPs).

Implementation of the Wraparound model, too, may be different between SB 163 and FSP programs. There is little known about the exact structure or components of either Department of Social Services managed Wraparound or County Mental Health managed FSP Wraparound models, and models likely vary between counties for both types of programs. For example, research on the implementation of Title IV-E Wraparound service model in several California counties noted that “Wraparound models will emerge with a degree of variation developing in response to local circumstances” (Ferguson, 2012, page 1336), and a national report noted that counties were challenged to implement Wraparound due to the identification of a primary caregiver for each child, maintenance of program staffing, and the creation of compatibility between accounting infrastructures in child welfare and mental health for the requirement of flexible spending (James Bell Associates Inc., 2013). In contrast, FSP programs’ flexible funds are managed by County Mental Health Plans and are available to mental health

care organizations and workers, possibly easing the administrative burden to oversee use of the funds toward welfare and mental health goals.

There are other significant differences in Department of Social Services Wraparound and FSP Wraparound models as well, most notably in target populations, implementation structure and program goals. Wraparound was originally developed as a mental health model and only later emerged as a process to serve child welfare populations, which were often overlapping and facing similar barriers to continuity of services (Ferguson, 2007). As stated by Ferguson (2007, page 104), the child welfare “Wraparound process is more child-centered than family centered than its counterparts in the typology, at least as it is being implemented in California... The majority of children in out-of-home placements are there because of the maltreatment they suffered while living with their biological parent(s). This means that a large number of children in foster care may not have a family to participate in the Wraparound process...” Thus, while both the SB 163 and FSP programs implement what is referred to as a Wraparound process, the definitions of the model are different when applied for purposes of mental health versus child welfare.

#### **4. Comparing FSP to Katie A Subclass Member Services**

Another potentially overlapping program with FSP is the Katie A Subclass Member Services program. A lawsuit filed in July of 2002 (*Katie A. et al. v. Diana Bonta et al.*) resulted in a settlement on behalf of a subclass of California children in or at risk of foster care placement. As part of the settlement, California agreed to provide this subclass an additional Medi-Cal EPSDT service within a Core Practices Model. Further detailed in Table 6, “the Core Practice Model (CPM) is a set of practices and principles for children served by both the child welfare and the mental health system that promote a set of values, principles, and practices that are meant to be shared by all who seek to support children and families involved in the child welfare system, including, but not limited to education, probation, drug and alcohol and other health and human services agencies or legal systems with which the child is involved” (California Department of Social Services & California Department of Health Care Services, n.d., page 4). Merging goals found within Medi-Cal EPSDT and SB 163 Wraparound, the Core Practice Model defines three new practice structures which help expand the service array of Medi-Cal EPSDT, including Child and Family Teams (CFT), Intensive Care Coordination (ICC), and Intensive Home Based Services (IHBS). All subclass members are to receive CFT and ICC, but IHBS is provided based on medical necessity. For the subclass served, these supplementary service structures eliminate the previously noted barriers in Medi-Cal EPSDT reimbursement which prevent billing of Wraparound team planning and intensive care coordination activities.

**Juxtaposing Katie A Subclass Member services and FSPs.** There are many similarities between the Katie A Subclass Member Services and FSPs, including the strengths-based and family-focused approaches which include child and family voice in service selection and goals. However, there are at least two key differences between Katie A Subclass Member Services and FSPs, and those include the eligible population and flexible funding for improving housing or the home environment. Unlike Katie A Subclass Member Services, the FSP does not require Medi-Cal coverage or an open child welfare case. The FSP program additionally provides flexible funding to address poverty-related barriers to success, including, for example, payment for

**Table 6. Katie A Subclass (California Department of Social Services & California Department of Health Care Services, n.d.)**

Core Practice Model Principles	Eligibility Criteria	Addition EPSDT Services
<ol style="list-style-type: none"> <li>1. Children/youth are first and foremost protected from abuse and neglect and maintained safely in their own homes.</li> <li>2. Services allow children/youth to achieve stability and permanence in their home and community-based living situations.</li> <li>3. Services are needs-driven, strengths-based, and family-focused from the first conversation with or about the family.</li> <li>4. Services are individualized and tailored to the strengths and needs of each child/youth and their family.</li> <li>5. Services are delivered with multi-agency collaboration that is grounded in a strong, shared preference for community-based services and resources, and reflected in alignment of all service plans.</li> <li>6. Family voice, choice, and preference are assured throughout the process and can be seen in the development of formal plans and intervention strategies where the child/youth and family have participated in the design.</li> <li>7. Services incorporate a blend of formal and informal resources designed to assist families with successful transitions beyond system services that ensure long-term success.</li> <li>8. Services are respectful of and informed by the culture of the children/youth and their families.</li> <li>9. Services and supports are provided in the child or youth and family’s local community and in the least restrictive and most normative settings.</li> </ol>	<ul style="list-style-type: none"> <li>• Are full-scope Medi-Cal (Title XIX) eligible</li> <li>• Have an open child welfare services case</li> <li>• Meet the medical necessity criteria for Specialty Mental Health Services (SMHS) as set forth in CCR, Title 9, Section 1830.205 or Section 1830.210</li> <li>• One of the following: <ul style="list-style-type: none"> <li>▪ Currently in or being considered for: Wraparound, therapeutic foster care, specialized care rate due to behavioral health needs or other intensive EPSDT services, including but not limited to therapeutic behavioral services or crisis stabilization/ intervention</li> <li>▪ Currently in or being considered for group home (RCL 10 or above), a psychiatric hospital or 24-hour mental health treatment facility (e.g., psychiatric inpatient hospital, community residential treatment facility); or has experienced three or more placements within 24 months due to behavioral health needs</li> </ul> </li> </ul>	<ol style="list-style-type: none"> <li>1. Child and Family Team (CFT) – comprised of the youth and family and all of the ancillary individuals who are working with them toward their successful transition out of the child welfare system</li> <li>2. Intensive Care Coordination (ICC) – managed by an identified ICC coordinator, targeted case management activities which are used to facilitate implementation of the cross-system/multi-agency collaborative services approach; service components/ activities include: assessing; service planning and implementation; monitoring and adapting; and transition</li> <li>3. Intensive Home Based Services (IHBS) - are intensive, individualized and strength-based, needs-driven intervention activities that support the engagement and participation of the child/youth and his/her significant support persons and to help the child/youth develop skills and achieve the goals and objectives of the plan. IHBS are not traditional therapeutic services</li> </ol>

utilities to restore electricity and phone services in a household or toward the purchase of working appliances to allow for food and meal preparation. It is conceivable that the FSP programming overlaps significantly with the Katie A Subclass Member Services programming, and further research is needed to identify if few key differences in services are influential on outcomes or whether key differences in eligibility allow for the programs to draw upon different populations in need who would not otherwise qualify for this type of programming.

## 5. Question 2 Method

FSP programming claims to provide extensive linkage and collateral supports to children and families in order to address the variety of social and poverty related concerns within the target population. Examining the service array provided to FSP served children in comparison to those of alternative programs, it was hypothesized children served by FSP programs would receive more intensive collateral and linkage/brokerage services during months of FSP enrollment as compared to other usual care programming.

While the specific components and structures of the programs discussed are not tracked or well documented, the linked FSP and CSI dataset can identify the types of mental health services that children received. As publicly funded mental health services are reported by County Mental Health Plans to CDHCS inclusive of both Medi-Cal EPSDT reimbursable and non-reimbursable (e.g., MHSA or otherwise funded ) services within defined service categories, children who received Medi-Cal EPSDT services, FSP mental health services and other county mental health services all exist within the dataset. Alongside this, the DCR system tracks FSP enrollment and discharge dates, along with other required assessments. Children enrolled in Katie A Subclass Services and SB 163 programs could not be identified in this dataset.

**Service type definitions.** Service types assessed in this analysis include the previously defined TBS, linkage/brokerage and collateral as well as outpatient mental health services, identified as all outpatient home or office-based visits to provide mental health services (but not TBS) or medication services. Planned days of service were calculated as days on which the child or family received any type of outpatient or day services other than crisis intervention or crisis stabilization services as previously defined.

**Sample and analysis.** Utilizing the client by month linked dataset created as described in Chapter 3, months of service in which children (ages 6<18) were served through FSP or usual care are contrasted. Months of service in which children were served by FSP on the 15<sup>th</sup> day of the month are classified as FSP months. Children served through FSP may have had months of usual care service before or after their FSP program, and may be represented in both columns based on receipt of the correspondingly categorized services. Contrasting services provided by FSP to those by usual care, t-tests were used to identify significant differences in the average monthly days of planned service and service minutes of outpatient mental health services, TBS, linkage/brokerage services and collateral services. Cochran's t-tests with pooled variance were used to identify significant differences between groups, and significant findings were confirmed with Wilcoxon rank-sum nonparametric tests.

One limitation to this comparison is the usual care group during all service months included a group of children whose needs may have necessitated only a few services or solely assessments to rule out potential disorder. In addition, for those served intensively, programming



intensity may fluctuate and adjust to meet lessening need, and as described within FSPs, intensity is intended to titrate down to less and fewer services throughout the program. Therefore, in order to address some of these concerns, another set of comparison groups was created to include only months of intensive programming, in which months for comparison were limited to only those in which children received services on four or more calendar days in the month. This level of intensity was selected based on FSP guidelines which suggest that there should be a minimum of weekly client contact (California Institute for Mental Health, 2011). In the same manner described previously, t-tests were used to compare intensive FSP services with those of intensive usual care programming.

## **6. Question 2 Results**

As seen in Table 7, there were 15,723 children who received FSP services, which included slightly more than the FSP enrollees evaluated in Chapter 2; and this is because 125 children served in FSPs between the ages of 6 and <18 were enrolled into FSP before the age of six or before the defined study period in Chapter 3.. These were compared to the 478,886 children who received usual care. The average days of planned service in a month was 6.5 ( $\pm 3.4$ ) days for FSP programs, which was significantly more than the 3.1 ( $\pm 2.5$ ) days of planned service within usual care ( $P < .001$ ). FSP served children received more than twice the average minutes of outpatient mental health services (577 vs. 256,  $P < .001$ ) as usual care children. For the 11.7% of FSP children who also received TBS, FSP enrolled children received the same amount of minutes of TBS service as compared to usual care served children receiving TBS services. Many more FSP served children received linkage/brokerage (76% vs. 51%) and similar proportions received collateral services (90% vs. 88%) as compared to children in usual care. Among those who received linkage/brokerage services, FSP served children received more minutes of linkage/brokerage service in a month as compared to usual care served children (200 vs. 93,  $P < .001$ ). Despite similar proportions served, when served with collateral services, FSP served children received 79% more minutes of collateral services than usual care served children (179 vs. 100,  $P < .001$ ).

When limiting the data to those children receiving minimally intensive services on four planned days of service each month, the data in Table 7 reveal that the previously noted trends persist. FSP served children receive planned services on 7.7 ( $\pm 3.0$ ) days which is significantly more than usual care intensively served children at 5.9 ( $\pm 2.7$ ) days with  $P < .001$ . The minutes of outpatient mental health service were also 60% greater for FSP served children as compared to usual care served children (667 vs. 415,  $P < .001$ ). There again was no difference in minutes of TBS service between those enrolled in FSP or a usual care program. Proportionally more FSP enrolled children receive linkage/brokerage services and at a greater intensity as compared to children in usual care programming ( $P < .001$ ), and collateral services still showed lesser differences in the proportion of children served between the two groups (87% vs. 80%), but continued to display the greater intensity of service when received for FSP enrolled children versus usual care served children (195 minutes vs. 122 minutes,  $P < .001$ ).

**Table 7. Monthly Service Array for Children Receiving FSP Programming or Usual Care**

	All Service Months		Service Months with $\geq 4$ Days of Service	
	FSP <sup>R</sup>	Usual Care	FSP <sup>R</sup>	Usual Care
Children Served	15,723	478,886	14,602	305,535
Average days with planned services	6.5 $\pm$ 3.4	3.1 $\pm$ 2.5 *	7.7 $\pm$ 3.0	5.9 $\pm$ 2.7 *
Average minutes of outpatient mental health service	577 $\pm$ 507	256 $\pm$ 231 *	667 $\pm$ 522	415 $\pm$ 303 *
Received Therapeutic Behavioral Services				
Percentage of total served	11.7%	2.9%	12.5%	4.4%
Average minutes of service	1435 $\pm$ 973	1397 $\pm$ 1051	1462 $\pm$ 976	1443 $\pm$ 1059
Received Linkage/Brokerage Services				
Percentage of total served	76.2%	50.8%	77.5%	56.0%
Average minutes of service	200 $\pm$ 220	93 $\pm$ 98 *	218 $\pm$ 231	122 $\pm$ 128 *
Received Collateral Services				
Percentage of total served	89.5%	87.7%	87.2%	80.2%
Average minutes of service	179 $\pm$ 158	100 $\pm$ 85 *	195 $\pm$ 167	122 $\pm$ 106 *

<sup>R</sup> =Reference Group

\* P<.001

<sup>ns</sup> =no significant difference from reference group

## 7. Questions 2 Conclusions

Other program options exist which can provide intensive mental health services to children in California, and these may be suitable alternatives to FSP programs, especially for children involved with Child Welfare. However, this analysis of policies revealed that there may be limitations to other programming options, both in service offering and in eligibility qualifications. Medi-Cal EPSDT does not support the provision of some intensive service components within models of intensive services, including team planning, intensive care coordination and flexible funding. SB 163 Wraparound focuses on child welfare goals and is administered by Department of Social Services with marginal collaboration of the State departments overseeing mental health services. Closest to FSP program offerings, Katie A Subclass Member Services programs incorporate collaboration between child welfare and mental health goals, but lack some flexibility in funding supports to address ancillary barriers to success.

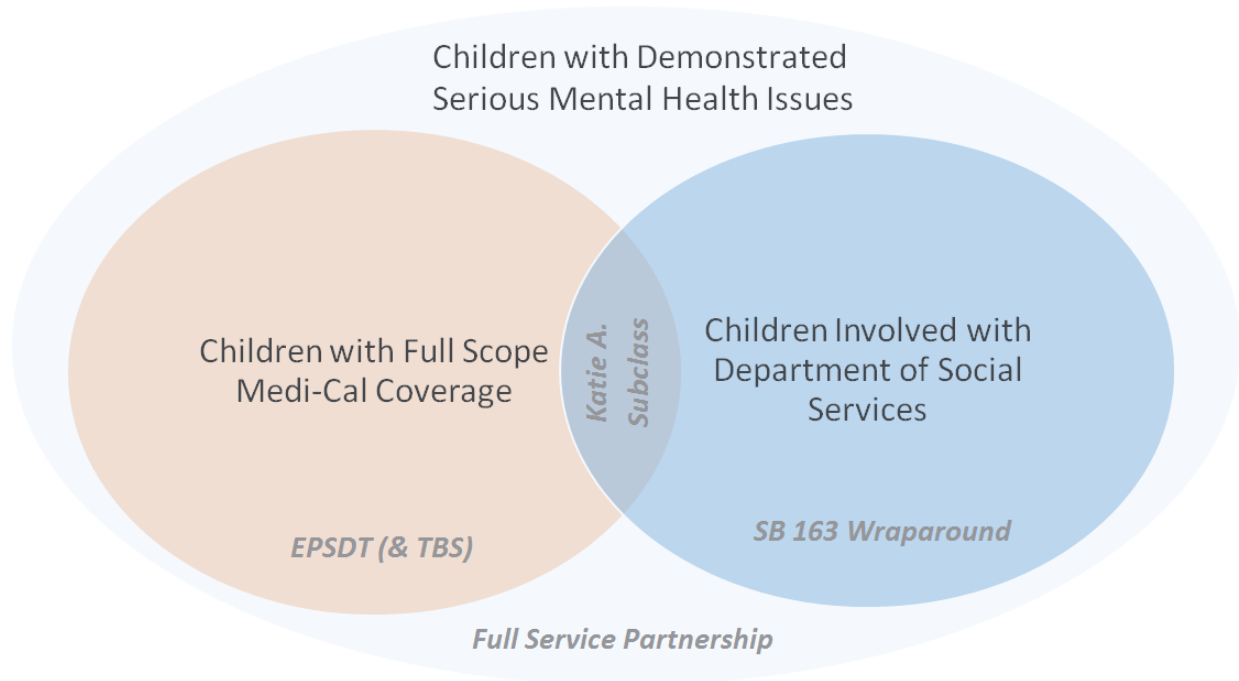
Figure 4 displays a Venn Diagram of eligibility overlap. The CDHCS and County Mental Health oversee all Medi-Cal EPSDT services and all FSP programs. The Department of Social Services oversees all SB 163 Wraparound programs. Coordination is required for children served by Katie A. subclass as CDHCS and County Mental Health oversee the provision of mental health services for Katie A., but children must also be served by the Department of Social Services. Many children served by the Department of Social Services receive Medi-Cal EPSDT services as needed based on presence of mental disorder. Some FSP served children are also served by the Department of Social Services, but this is not a requirement for FSP. It is likely that many FSP served children are covered Medi-Cal, but Medi-Cal coverage is not a state requirement for FSP eligibility.

From service data analysis, results suggest that FSP programs offer an array of mental health services generally more intensive than usual care, supporting a policy goal for FSPs to fill a service gap for community-based care. Among those intensively served with community-based mental health care, more FSP served children received linkage/brokerage and collateral services and with greater intensity than usual care served children, as hypothesized, supporting the policy guidelines which direct FSPs to offer a heightened focus on linkages to community resources and needs of caregivers and other family members.

There are many limitations to this policy and service data analysis. One limitation of this comparison is that children served through Department of Social Services programs may have received additional linkage and collateral services which were not provided or tracked through the mental health system. However, the number of children in these programs is only a fraction of the children represented in the usual care column.

A major limitation is that children enrolled in Katie A Subclass Services and SB 163 programs could not be directly identified. Research which initiates linkages between Department of Social Services datasets to FSP DCR and CSI datasets may further identify differences and similarities in service provision. Beyond those who are served, however, further research is needed to identify if gaps in eligibility between these programs leave children and families in need without intensive programming options and therefore, underserved. As intended, FSP programming is meant to provide for programming not otherwise available to those it serves, and further research is needed to identify if any children served by FSPs would more suitably be served elsewhere.

**Figure 4. Venn Diagram of Who is Eligible for Services and through Which Program**



Nonetheless, evident are the differences in eligibility criteria. SB 163 Wraparound and Katie A Subclass Member Services require Department of Social Services involvement, generally via open child welfare cases. Medi-Cal EPSDT and Katie A Subclass Member Services programs require children to be covered by full-scope Medi-Cal. But with a greater than national average of unmet mental health service needs (Kataoka et al., 2002), California had over one million uninsured children in 2012, of which about one-third were likely eligible for Medi-Cal, one-third for Healthy Families (less than full-scope Medi-Cal) and one-third likely ineligible for public health insurance coverage (California Healthcare Foundation, 2013). FSP programs have the potential to enroll children and families without coverage or to provide services before coverage is attained (e.g., language translation, referrals, system guidance, benefits education, etc.) which can assist families in acquiring other public benefits, such as Medi-Cal insurance coverage. Further, FSPs have the potential to reach families before a need for involvement of Department of Social Services, providing an opportunity to intervene with children and families earlier, possibly offsetting a trajectory toward family disruption and undesirable child outcomes.

Analyses hitherto suggest that FSP programs have provided an intensive array of services to an underserved population. The question remains as to whether some of these children and families may have otherwise qualified for similar programming. Preliminary findings demonstrated in this chapter help to justify further investigation into when and how FSP programs fill service gaps due to either eligibility or intensity shortfalls, thereby allowing FSPs to help reduce underservice for severely troubled children with mental disorder and their families.

## Chapter 5: Reducing Mental Health Emergency Services

An indicator of underservice, mental health emergency service use in response to psychiatric crisis is an undesired, costly and potentially hazardous event for children. Psychiatric crises may be a sign of failed care and result in increased risk that a child will be moved out of home (Lyons, Kisiel, Dulcan, Cohen, & Chesler, 1997). Psychiatric crises can pose an immediate danger to the child or others, and children experiencing psychiatric crises often present for mental health emergency services which are designed to stabilize the child's symptoms and refer the child for further services.

Because receipt of mental health emergency services signifies underservice before intervention as well as failure to maintain symptoms after intervention, a longitudinal evaluation of mental health emergency services provides a unique opportunity to identify underserved children early in a trajectory of increasing service need and to simultaneously measure the effectiveness of interventions aimed at changing this trajectory. Underserved and even untreated children with significant need can often be identified through their contact with mental health emergency services, allowing for comparisons of need before and after planned interventions.

The FSP program as an intervention provides mental health services, but also aims to insert supports and linkages intended to persist long after program participation has ended. Children and families actively served by FSP programs have around the clock access to staff as a means to reduce the need for mental health emergency services, including intervention and crisis stabilization during treatment, but success of the FSP program is expected to result in an *ongoing* reduced need for mental health emergency services long after discharge from the program. Hypothesizing that FSP programs alter a trajectory of increasing need for mental health emergency services, analysis in this chapter aims to compare trajectories of mental health emergency service use before and after FSP participation alongside trajectories of mental health emergency service use within usual care.

### 1. Framework for Psychiatric Crisis and Mental Health Emergency Services

Children with mental health disorders can experience an acute need for mental health emergency services during escalating psychiatric crisis events (Cicchetti, Ackerman, & Izard, 1995). During this period, children may temporarily lose the ability to regulate their emotions, process thoughts clearly and control their behavior. Children with severe mental illness often exhibit poor patterns of emotional regulation (e.g., Adrian, Zeman, & Veits, 2011; Hughes, Gullone, & Watson, 2011; Siener & Kerns, 2012; Zeman, Shipman, & Suveg, 2002), increasing their risk for events in which emotions escalate to a level where behavior becomes unpredictable and mental health emergency services are warranted.

**Emotional dysregulation leading to crisis events.** Emotions represent important adaptable systems which provide information to people about themselves, their environment and relationships within their environment (Zeman, Cassano, Perry-Parrish, & Stegall, 2006). Primarily, emotions serve to motivate behavior, and as such, emotions can help activate a response to impending danger (e.g., fight or flight) or enhance alertness, arousal or aggressiveness to support behaviors to achieve short-term safety (Cicchetti et al., 1995), but competent emotional regulation processes work to help individuals transform and cope with

these emotions in order to support constructive purposeful behavior, beyond emotionally driven impulsive reactions to environmental provocations.

During emotional dysregulation, emotions endure, interfere and are expressed with behaviors that have negative consequences (Röll et al., 2012). In extreme cases of emotional dysregulation, a child's behaviors may become dangerous to themselves or others, necessitating an emergency response. Risk of suicide, defiance and aggression are the most common presenting factors for mental health emergency services (Soto et al., 2009). It is theorized that children with internalizing disorders attempt to 'over control' high levels of emotional intensity while children with externalizing disorders 'under control' high levels of emotional intensity (Zeman et al., 2002). Nevertheless, these presenting "behaviors may well be the culmination of a crisis episode, rather than the episode in its entirety. Situations involving mental health crises may follow trajectories that include intense feelings of personal distress (e.g., anxiety, depression, anger, panic, hopelessness), obvious changes in functioning (e.g., neglect of personal hygiene, unusual behavior) or catastrophic life events (e.g., disruptions in personal relationships, support systems or living arrangements; loss of autonomy or parental rights; victimization or natural disasters)" (SAMHSA, 2009, page 3).

Thompson (1994, pages 27-28) describes that "emotion regulation consists of the extrinsic and intrinsic processes responsible for monitoring, evaluating and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals." Current research suggests that emotional regulation is a component of the emotional activation process which incorporates mechanisms to influence emotions before, during and after they have formed (Thompson, Lewis, & Calkins, 2008). For example, some emotional regulation processes work to avoid the formation of emotion in response to stimuli through attention shifting and situation avoidance or work to generate emotion in circumstances which trigger semantic memory (Cicchetti et al., 1995; Gullone & Taffe, 2012; Thompson, 1994; Thompson et al., 2008); other processes act to attenuate emotions during formation by reframing (e.g., altering one's perspective), substituting goals (e.g., changing one's expectations), or altering causal attribution (e.g., viewing an event as an accident rather than a personal affront; Siener & Kerns, 2012; Thompson, 1994); and examples of processes which regulate emotions after formation include effortful control to minimize (e.g., suppress), substitute (e.g., put on a happy face) or amplify (e.g., rumination) emotion (Thompson, 1994; Zeman et al., 2006).

Extrinsic factors influence emotional regulation, and context and situation provide informational input influencing the regulation process. In fact, developing strategies to regulate emotions is an interactive process which relies on exchanges between the child and his or her environment (Calkins, 1994). Extrinsic agents such as parents and caregivers, especially in early development, play a primary role in shaping the development of emotional regulation pathways in children (Adrian, Zeman, Erdley, Lisa, & Sim, 2011; Calkins, 1994; Greene et al., 2004; Thompson, 1994; Thompson et al., 2008; Zeman et al., 2006). While toddlers often express anger through aggression, typical development of emotional regulation pathways enable children entering kindergarten to control aggressive behavior and symptoms related to emotional dysregulation at age 5 are predictive of later childhood disorders (Dodge, Greenberg, & Malone, 2008).

**Definitions of crisis events requiring involuntary services.** The federal Substance Abuse and Mental Health Services Administration (SAMHSA) has established national

guidelines for identifying and responding to psychiatric crises, although each state develops their own laws and definitions for crisis care. When crisis events become extremely dangerous, an emergency response may result in involuntary detainment of a child. In California, this may happen when “any minor, as a result of mental disorder, is a danger to others, or to himself or herself, or gravely disabled” (California Welfare and Institution Code §5585.50). Children meeting this definition can be taken into custody for an involuntarily hold at a psychiatric facility for 72-hours for treatment and evaluation. Behaviors of suicidal ideation, gesture or attempt; self-harm, such as self-cutting; or running away as a result of mental disorder can be described as a danger to oneself. Behaviors of aggression, violence, homicidal thoughts or attempt as a result of mental disorder connote danger to others. Children who are gravely disabled may also include those who experience a psychotic episode, a catatonic state or severe shock due to a traumatic event (Edelsohn, Braitman, Rabinovich, Sheves, & Melendez, 2003).

**Definitions of crisis events requiring voluntary services.** Mental health emergency services such as crisis intervention and crisis stabilization are considered to be voluntary services which are designed to address escalating episodes of crisis with goals of ensuring safety, preventing psychiatric hospitalization and avoiding episodes necessitating involuntary psychiatric holds. Interruption of escalating crisis episodes can be achieved by caregivers or by crisis intervention teams within the community. However, severely escalating events may require crisis stabilization within an equipped emergency departmental setting. “Crisis Intervention is a service, lasting less than 24 hours, to or on behalf of a child for a condition that requires more timely response than a regularly scheduled visit. Service activities include, but are not limited to, one or more of the following: assessment, collateral and therapy...Crisis Intervention Services may either be face- to-face or by telephone with the child or the child’s Significant Support Person and may be provided anywhere in the community” (Scott-Lee, 2007, page 37). Crisis intervention services are measured in minutes and failed interventions may lead to the need for crisis stabilization services.

In escalating situations, a child will be transported to a facility where crisis stabilization services can be engaged. Crisis stabilization services are measured in hours and are distinguished from crisis intervention services by their staffing and site requirements. Crisis stabilization services are provided at a licensed 24-hour health care facility, a hospital outpatient program, or a certified provider site (CCR, Title 9, Chapter 11, Section 1840.338) and minimally require the presence of a physician, a nurse (registered nurse, psychiatric technician or licensed vocational nurse) and a four to one ratio of clients to staff (CCR, Title 9, Chapter 11, Section 1840.348).

A study in California of 351,174 children (ages <18) utilizing specialty public mental health services over a 3-year period found that crisis intervention was used by 10.7% of children while crisis stabilization was used by 1.6% (Snowden, Masland, Libby, Wallace, & Fawley, 2008).

## **2. Risk Factors for Mental Health Emergency Services Use**

Very little information has been published in regard to children’s mental health crises (Edelsohn, Braitman, Rabinovich, Sheves, & Melendez, 2003; Soto et al., 2009), and the number of children presenting for mental health emergency services is increasing (Breslow, Erickson, & Cavanaugh, 2000; Evans & Boothroyd, 2002). Further, even less research addresses mental health emergency services delivered to children while in school, home or other locations within

the community. Existing studies examine crisis response services in out-of-home residential settings (Greene, Ablon, & Martin, 2006; Harpaz-Rotem, Leslie, Martin, & Rosenheck, 2005; Martin, Krieg, Esposito, Stubbe, & Cardona, 2008; Masters & Bellonci, 2002) or in emergency department settings (Breslow, Erickson, & Cavanaugh, 2000; Dolan & Fein, 2011; Mahajan et al., 2009) and largely focus on clinical and demographic characteristics related to use of mental health emergency services.

Correlates of mental health emergency services use found in research investigations include aggression toward others (Edelsohn et al., 2003); suicide ideation, gesture, or attempt (Gould, Greenberg, Velting, & Shaffer, 2003; Spirito & Esposito-Smythers, 2006); adverse social/family circumstances, including homelessness (e.g., experiencing family residential instability, being kicked out of home, or running away; Lyons et al., 1997; S. J. Thompson & Pollio, 2006); and traumatic events (e.g., sexual assault and child abuse; Rotheram-Borus, 1993) and substance use (Breslow et al., 2000). The SAMHSA (2009, page 3) identifies additional predisposing factors for children's crisis episodes, including "disruptions in personal relationships, support systems or living arrangements; loss of autonomy or parental rights; victimization or natural disasters."

One of the few studies investigating crisis intervention within community-based programming found that emotional distress dispositions including distress related to anger, frustration and anxiety assessed upon entry into a community program conferred an increased risk for crisis service use within the first six months of the intervention program (Cordell & Snowden, 2015).

Additional predisposing personal characteristics related to mental health emergency services use include age, gender and race (Andersen, 1995). For children, risk factors for psychiatric crisis increase significantly with age, as from the ages 6-11 to ages 12-17 diagnoses of anxiety increase 1.4 fold and diagnoses of depression more than double (Perou et al., 2013). Additionally, suicide rates are 5.8 times higher among children ages 15-19 than for those ages 10-14 (Perou et al., 2013). These emerging risks with age present a challenge to interventions which hope to evidence a decrease in mental health emergency use, as they must first combat a trajectory of increasing risk before realizing any decrease in outcomes.

While often the case, the use of mental health emergency services is not always associated with an urgent need nor a psychiatric crisis (Edelsohn et al., 2003). Some studies find evidence that use of mental health emergency services may also relate to the unavailability of alternative community-based programs or barriers to accessing existing community care (Soto et al., 2009). In an assessment of over 1,000 psychiatric emergencies at one site in New York in 2002 Soto et al. (2009) found that approximately one third were not appropriate emergencies, and of those inappropriate, over one quarter were a result of school referrals and 12% were reportedly a result of referral or inability to obtain an appointment from a mental health provider.

As children spend much of the daytime in schools, naturally, schools play a key role in provision and linkage to mental health services, when needed. However, schools generally lack the expertise and formulated processes to facilitate access to service, which requires school staff to recognize, identify and refer youth in need to matching services (McKay & Bannon, 2004). In addition, direct mental health service provision within schools has been criticized as irregular and/or inadequate (Adelman & Taylor, 2006; Hoagwood, 2005; Kataoka, Rowan, & Hoagwood,



2009). A nationally representative survey of 800 schools found that 96% of schools had one or more staff (school counselors, nurses, school psychologists, or social workers) who were responsible for providing direct service or linkages to mental health services (Teich & Robinson, 2007). Seventy-one percent of schools reported having relationships with one or more community-based mental health providers, but over a third of those schools with relationships reported difficulty in making referrals to these providers (Teich & Robinson, 2007). Schools are often poorly equipped to assess severity of clinical functioning during an urgent event, and the result of this composite of factors is that schools often make inappropriate referrals for psychiatric emergencies (Grudnikoff et al., 2014; Soto et al., 2009).

### **3. Preventing Mental Health Emergency Services Use**

Mental health emergency services use often opens a doorway through which children are moved from a community setting into a hospital or residential setting for more intensive services (Lyons et al., 1997). While the use of high cost hospital or residential services is less desirable, there is lack of consensus on how to safely and effectively provide alternative community-based services (Collins & Collins, 2001). Ideally, preventing children's psychiatric crisis events could reduce the risk of injury to self or others, the need for mental health emergency services and the subsequent consideration of removal from home.

**Preventing crises in institutional and group home settings.** Most documented crisis avoidance techniques within the literature are designed for responding to escalating emotional states for children within institutions, such as those for children who are hospitalized, incarcerated or living in group homes. For example, the National Crisis Prevention Institute Program (CPI) for residential facilities serving high risk children emphasizes four levels of crisis and intervention (Masters & Bellonci, 2002). Within the first level, when the child exhibits high anxiety, agitated pacing or crying, staff are to intervene with active listening. At the second level, the child is defined as defensive, irrational or belligerent, and staff are to set limits, isolate the child from stimuli and plan for further de-escalation. Within the third level, the child is defined to be acting out, exhibiting aggressive behaviors or loss of control, and staff are to physically restrain and/or seclude the child. The fourth level occurs after successful de-escalation through restraint or seclusion, and staff are to renew rapport, explore alternative coping mechanisms and create behavior contracts. Restraints (the physical control of a child's behavior, often performed through manual holds of the child) and seclusion (the involuntary confinement of a child in a room), sometimes used as a method within mental health emergency services, are considered a method of last resort after all other interventions have failed, and federal initiatives have sought to reduce and eliminate this option for inpatient and community-based mental health settings as it is theorized to be counter-therapeutic (Curie, 2005; Martin et al., 2008).

**Preventing crisis in community settings.** However, new pressures to handle escalating crises in the community have arisen due to drastic reductions in inpatient stays. Facilities are discharging children into the community soon after acute de-escalation (Lyons et al., 1997; Masters & Bellonci, 2002), leading caregivers and community-based programs to take on a greater responsibility to stabilize children in community settings.

Research suggests that planned, community-based services *can* reduce the use of mental health emergency services. Research in California found that increases in case management and community mental health services led to significant reductions in crisis care (Snowden, Masland,

Wallace, & Fawley, 2009). Additionally, the rates of child crisis care were reduced from 10% to approximately 9% after California's 1995 enforcement of Medi-Cal's EPSDT requirements (Snowden et al., 2007), signifying that the availability of community-based Medi-Cal EPSDT services potentially reduced the need for crisis care. However, detail about the mechanisms for the reduction remains unknown.

Unfortunately, there is little available guidance identifying proven methods for caregivers or community-based program staff to utilize in order to recognize and defuse imminent psychiatric crises and prevent the need for mental health emergency services. One emerging strategy, and a strategy recommended for implementation within FSP programs (California Institute for Mental Health, 2011), is to create a crisis or safety plan for children and caregivers. In essence, a crisis plan is created, generally after a crisis event, through reflective appraisal of antecedents which may have led to the event. While the exact components of a crisis plan may vary, the plan essentially includes: recognizing warning signs of impending crisis, applying identified coping strategies, reaching out to social and/or family supports, contacting a mental health professional before an emergency response is required and seeking safety (i.e., avoiding potentially triggering or harmful environments and/or situations; Stanley & Brown, 2012). A safety plan may include all or some of the core elements or may be as simple as a set of identified phone numbers to call when crises begin to arise. Unlike other interventions developed for acute care settings, such as those incorporating restraint and seclusion, crisis plans can be used by community-based mental health staff and caregivers alike.

#### **4. Research Question 3: Does participation in the FSP Program decrease the use of mental health emergency services?**

Avoiding the need for mental health emergency services and their potentially negative consequences is vital to the success of a mental health intervention, especially for children. This chapter investigates the hypothesis that children in FSPs experience a lasting change in trajectory for mental health emergency service use after enrollment into FSP as compared to periods before enrollment, alongside a comparative perspective of trajectories for mental health emergency services use across ages for all other children in usual care.

#### **5. Question 3 Method**

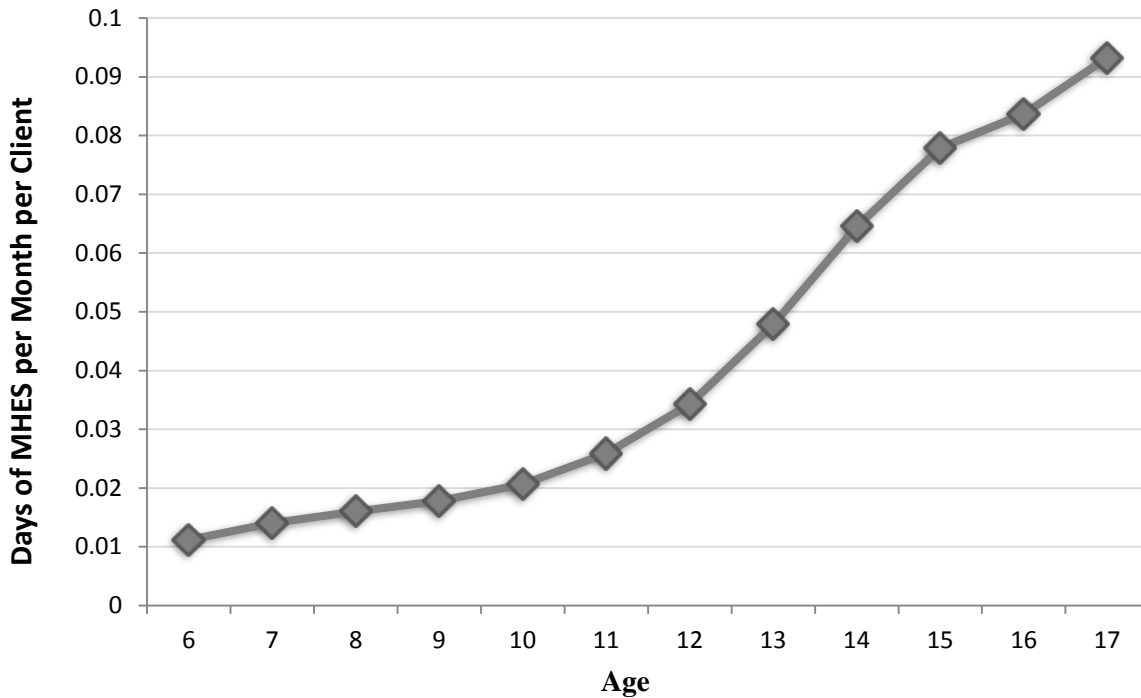
With potential to provide rich information about patterns and cycles of underservice, a longitudinal analysis of mental health emergency service use does present several challenges. First, while many children who receive mental health interventions in the county system likely present risk factors for crisis events, only a minority of those children receive mental health emergency services. Second, the risk factors for mental health emergency services use for children within the community are critically understudied and largely unknown and undocumented, preventing selection of an adequate comparison group. Third, as children age, their risk for using emergency mental health services increases, precluding simple pre-post comparisons of average use. And fourth, children may move in and out of state or otherwise be unavailable to the system for periods of time across a longitudinal timeframe. Despite these challenges, there are several advantages to a longitudinal analysis of mental health emergency services use, most notably that it can look at trajectories of emergency mental health services use long before enrollment into an intervention, and then again long after discharge in order to identify lasting changes in patterns and trajectories of need. It can also begin to evidence clinical

risk factors for mental health emergency service use for children who are served within community settings.

Each of the challenges above was addressed in the model formulation in this analysis. First, the dataset was divided into three age-related groupings to account for rates of increasing risk for mental health emergency services within age groupings. For example, as seen in Figure 1, there was an average of 1 day of mental health emergency service for every 50 ten-year-old children served but an average of 1 day of mental health emergency service for every 13 fifteen-year-olds. Based on age trends in Figure 5, age groups were identified for analysis as: 6<11 years, 11<15 years, and 15 <18 years.

The use of mental health emergency services was only measured for months in which the child accessed any type of services in the county mental health system, thereby establishing that a child had access to mental health emergency services, if needed. Repeated measures served to establish the changing rate of monthly mental health emergency services use during service periods of pre-FSP and post-FSP intervention for each child. Because a child only contributed data to the model during months in which s/he received some type of service in the county mental health system – for example, a child may have moved out of state after the three months of services – a child’s rate of mental health emergency services was modeled based on only the months the child was known to have access to county mental health services, producing an unbalanced panel of service month in which children were served by the system before or after a crisis event.

**Figure 5. Rates of Mental Health Services Use by Age**



Exemplifying the consequence of analyzing data for only the months in which a child accessed any type of services in the county mental health system, Table 8 and Figure 6 illustrate a simplified linear least squares graph of one hypothetical example child's raw data from age 11 through 15. As presented by the data in Table 8, the child received services through usual care from age 11 to 11.25 and then received no care through county mental health from ages 11.33 to 11.75. At age 11.83 the child accessed usual care services and at age 12 the child enrolled in an FSP program. The child received services while in the FSP program until age 13.17, after which the child received usual care (outside of FSP) through age 13.33. The child was not seen in the county mental health system again until age 14.50 through 14.92, when the child accessed usual care services (outside of FSP) once again. In the simple least squares linear model, as depicted in Figure 6, the Pre-FSP period includes ages 11 to 11.92, and the Post-FSP period begins with the first month of FSP service at age 12 and includes all months of services received whether in FSP or usual care through age 14.92. As seen through the combination of the table and the graph, the months in which the child was not served did not contribute to the model. The child, for example, could have spent the months from age 11.33 through 11.75 in a psychiatric hospital or juvenile justice facility, and the lack of mental health emergency services during these months is appropriately not assigned in the model, which is intended to include only community-based outcomes. As seen in Figure 6, the trend in rate of mental health emergency services use is modeled utilizing the data from before and after the missing months. While handling missing months of service in a similar fashion, usual care served children never participate in an FSP program during the 102 months of the study and all months of service are modeled by a single line for each child. While the example in Figure 6 is a simplified linear least squares for demonstration purposes, it should be noted that the final model utilized a Poisson distribution to accommodate modeling the probability of the number of events (as days of crisis services use) over fixed periods (of months).

Over an 8 ½ year period, hierarchical longitudinal Poisson mixed models were constructed within age groups to model counts of days on which mental health emergency services were provided during each known month of service use, with age during the month of service (time) at level 1 and child at level 2, creating individual growth trends across age with random time trends, tolerant of missing data during times without known service use. With the change in slope reflecting increasing need for mental health emergency use across age as the outcome of interest, I address the challenges of increasing risk while allowing a comparison of trajectory from pre to post FSP intervention. An underlying absence of effect would result in non-significant differences in trajectory or an increase in trajectory for mental health emergency services use with age from before to after the intervention. The hypothesis was that a significant decrease in trajectory would be evidenced after FSP participation as compared to the trajectory of use before participation, while controlling for relevant clinical factors, demographics, birth cohort (to control for system changes over study period) and fixed within county systems. This approach accommodated rare events, increasing risk for the event with age, missing data, and allowed pre to post comparisons within the treated group. The approach also accommodated modeling of trajectories of mental health emergency use for all other children served in usual care as a comparative benchmark, and by using random effects at the child level, it permitted the estimation of individual clinical characteristic risk factors for mental health emergency use within the community – a source of risk for children which is not adequately studied in the literature.

**Table 8. Example Hypothetical Data of One Child from 11 to 15 Years of Age**

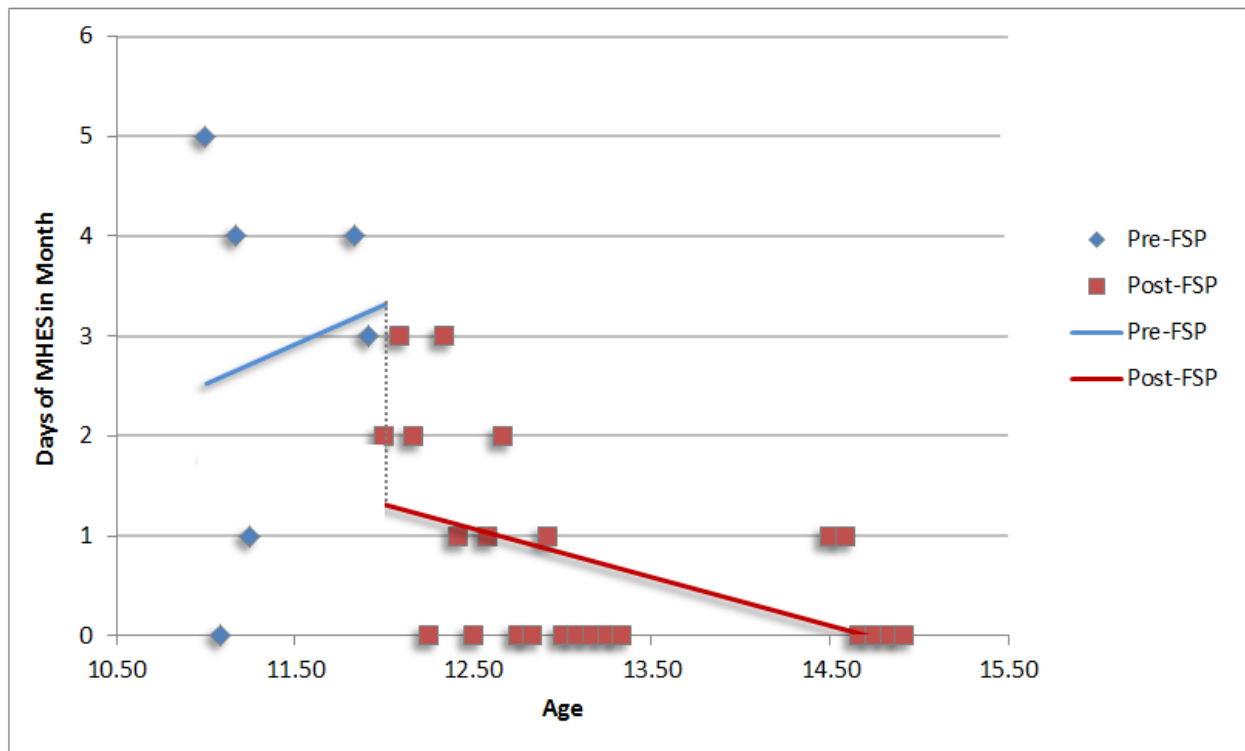
Year-Month	Age	Type of Care	Days of MHES	
			Pre-FSP	Post-FSP
2007-Month 01	11.00	Usual Care	5	
2007-Month 02	11.08	Usual Care	0	
2007-Month 03	11.17	Usual Care	4	
2007-Month 04	11.25	Usual Care	1	
2007-Month 05	11.33	None/Unknown		
2007-Month 06	11.42	None/Unknown		
2007-Month 07	11.50	None/Unknown		
2007-Month 08	11.58	None/Unknown		
2007-Month 09	11.67	None/Unknown		
2007-Month 10	11.75	None/Unknown		
2007-Month 11	11.83	Usual Care	4	
2007-Month 12	11.92	Usual Care	3	
2008-Month 01	12.00	FSP		2
2008-Month 02	12.08	FSP		3
2008-Month 03	12.17	FSP		2
2008-Month 04	12.25	FSP		0
2008-Month 05	12.33	FSP		3
2008-Month 06	12.42	FSP		1
2008-Month 07	12.50	FSP		0
2008-Month 08	12.58	FSP		1
2008-Month 09	12.67	FSP		2
2008-Month 10	12.75	FSP		0
2008-Month 11	12.83	FSP		0
2008-Month 12	12.92	FSP		1
2009-Month 01	13.00	FSP		0
2009-Month 02	13.08	FSP		0
2009-Month 03	13.17	FSP		0
2009-Month 04	13.25	Usual Care		0
2009-Month 05	13.33	Usual Care		0
2009-Month 06	13.42	None/Unknown		
2009-Month 07	13.50	None/Unknown		
2009-Month 08	13.58	None/Unknown		
2009-Month 09	13.67	None/Unknown		
2009-Month 10	13.75	None/Unknown		
2009-Month 11	13.83	None/Unknown		
2009-Month 12	13.92	None/Unknown		
2010-Month 01	14.00	None/Unknown		
2010-Month 02	14.08	None/Unknown		
2010-Month 03	14.17	None/Unknown		
2010-Month 04	14.25	None/Unknown		
2010-Month 05	14.33	None/Unknown		
2010-Month 06	14.42	None/Unknown		
2010-Month 07	14.50	Usual Care		1
2010-Month 08	14.58	Usual Care		1
2010-Month 09	14.67	Usual Care		0
2010-Month 10	14.75	Usual Care		0
2010-Month 11	14.83	Usual Care		0
2010-Month 12	14.92	Usual Care		0

Note: not contributing to model

Note: not contributing to model

Note. MHES = Mental health emergency services

**Figure 6. Linear Least Squares Graph of Hypothetical Data of One Child from 11 to 15 Years**



**Subjects & data sources.** This analysis used the linked CSI-DCR dataset containing service records of mental health services summarized into months for each child (6<18) served between January 1, 2004 and December 31, 2012. Totaling the days of mental health emergency services use within each month in which a child received any service in the county mental health system produced an unbalanced panel of information for active ‘service months’ by child. The dataset also identified children’s FSP program enrollment starting dates, with the first child enrolled in November of 2004. The staggered implementation of the FSP program for children provided a source of control, and the use of data back to January of 2004 provided a minimum of a ten month pre-period for all FSP-served children. One county included in this analysis did not serve any children, 19 counties served relatively fewer children in FSP programs (with an average of 2% of caseload served by FSP at end of study period) and 16 counties served a relatively greater proportion of their caseload via FSP programs (with an average of 8% of caseload at end of study period).

**Independent variables of care exposure.** The age-related change in level of need for mental health emergency services use (See Figure 5), led to the division of the dataset into age groups for analysis. This stratification was made after inspecting the distribution of mental health emergency services usage by age: children 6<11 experience similar rates of mental health emergency services, children between the ages of 11<15 experience an increasing rate of mental health emergency services with age, as children/youth presumably “age-into” crisis events of a severity requiring a professional response, and children between the ages of 15<18 experience a slowing growth in rate of mental health emergency services, meaning that although the risk of

crisis is still increasing during this age, it is not increasing as rapidly each year as it is in the 11<15 year age group.

Children between ages six and eighteen were considered FSP if they were ever enrolled in an FSP program during any of the 102 months within the study (Ever FSP=1 vs 0). Among those who were ever FSP, the pre-FSP months consisted of all months of usual care-type services before the first month of FSP program enrollment. Making a conservative assumption of intention to treat, months beginning with the first month of FSP enrollment were assigned as post-FSP months, whether or not the child continued in the FSP program for the remainder of the study. This decision was made because FSP programs were assumed to have lasting effects (e.g. social services, housing, material supports, collateral, and service linkages) which, once provided would remain. In this way, mental health emergency services which were rendered at any point after FSP enrollment contributed to the post-FSP slope, even if years had passed since FSP participation had ended for the child.

**Age trajectory.** The child's age at each month during which the child was served estimated changes over time. Age was transformed, and ages ranged continuously beginning at 0 for each model.

**Control variables.** Proclivity to be selected for FSP and to use mental health emergency services depends on factors related to the severity of a mental health disorder. Monthly client clinical characteristics were constructed and entered into the model as time-varying measures of illness severity. Client-level characteristics static across time also identified the lifetime determinants associated with mental health disorder.

**County of service.** Because programming infrastructure and county environments vary in California's decentralized county-level mental health treatment system, the county of service was identified for each child such that all static county-level fixed effects, observed or unobserved, were controlled.

**Cohort age.** The analysis controlled for the cohort age of the child on the last day of the study, December 31, 2012 in order to orient the child in time and control his/her likelihood of exposure to service offerings within an evolving county mental health system. This control also served to account for possible left censoring of information for earlier cohorts within the longitudinal study.

**Age first served.** The analysis controlled for the earliest known age the child was served within the county's mental health system at the person level.

**Gender.** The analysis controlled for gender at the person level as Female and Male (reference).

**Race/ethnicity.** The analysis identified the race/ethnicity for the child served at the person level as Latino, African American, Other/Unknown and White as reference (Andersen, 1995).

**Substance abuse history.** The analysis controlled for a rolling six month history of substance abuse diagnosis at the time-level, with children being flagged as Substance=1 if a

substance abuse diagnosis was identified in the present month or the six months prior to the present month or Substance=0 if not.

**Diagnosis history.** In the same manner as substance abuse diagnosis history, the analysis controlled for a rolling six month history of each of the following diagnoses independently: psychosis, bipolar disorder, depression, conduct disorder, adjustment disorder, anxiety disorder, ADHD, oppositional defiant disorder / disruptive behavior disorder, and PTSD with 1= presence of diagnosis in the present month or the preceding six months, and 0 as no presence of diagnosis.

**Dependent variable.** The number of days on which the child received mental health emergency services within each month the child accessed any type of services within the county mental health systems served as the outcome of interest. The two forms of urgent care for crisis treatment (crisis intervention and crisis stabilization) were combined, and the total number of days within a month on which crisis services were received was tallied as monthly days of mental health emergency services. Days of mental health emergency services ranged from 0 to 31. Months in which the child did not receive any county mental health services did not contribute to the model.

#### **Data analysis.**

**Sample preparation and sample size.** The dataset prepared as previously described with 36 of the 59 available California counties selected for inclusion, encompassing 623,031 total children served within the county mental health system over 102 months. These children represented approximately 70% of the total child population served statewide during this period. From the total children in the dataset, 15,723 were served by the FSP program. The complete unstratified dataset included 7,127,833 months of service, with each child/youth in the dataset receiving an average of 11.4 months of services within the county mental health system during the study period. Due to the change in risk for mental health emergency services by age (see Figure 5), the dataset was stratified by age group and analyzed independently.

**Regression analysis.** Utilizing a Poisson hierarchical longitudinal random effects model within age defined strata, I regressed monthly days of mental health emergency services during active service months on FSP- and usual care-served children. The model controlled for county, clinical and demographic variables, as defined previously. The equations modeled separate slopes and intercepts for each child to control for individual differences in mental health emergency service use likelihoods and trajectory across ages. Changing general rates of mental health emergency services use were modeled with an age trajectory term. Interaction terms modeled trajectory differences for pre-post differences between children who were FSP served. Analysis was performed using Statistical Analysis Software (SAS) 9.3, Cary, NC

## **6. Question 3 Results**

Table 9 presents characteristics for children who received usual care only or ever received FSP by age groups 6<11, 11<15, and 15<18. FSP-served children tended to have entered into services within the county mental health system at a younger age. In general, FSP programs served a greater proportion of children who had a diagnosis of psychosis, bipolar disorder, depression disorder, conduct disorder, anxiety disorder, ODD/DBD, ADHD, PTSD or substance abuse disorder. In addition, nearly twice the proportion of children served by FSP



programs used emergency mental health services as compared to children served by usual care for all age ranges (30% vs. 12% for ages 6<11, 51% vs. 27% for ages 11<15, and 57% vs. 33% for ages 15<18, respectively).

Table 10 presents full models for children's mental health emergency services use based on whether they were ever served by FSP versus usual care. As expected, children served by FSP had a greater need for mental health emergency services as compared to children served by usual care. While receiving only usual care before FSP enrollment, children during months in the Pre-FSP period had significantly higher rates of mental health emergency services: children in Pre-FSP months at age 6 (intercept) experienced 1.88 ( $P<.001$ ) increased incidence rate ratio (IRR) of mental health emergency service days per month as compared to usual care; children in Pre-FSP months at age 11 (intercept) had 1.79 increased IRR ( $P<.001$ ); and children in Pre-FSP months at age 15 (intercept) had an IRR of 1.42 ( $P<.001$ ) times more days of emergency services per month as compared to similar usual care served children, controlling for person and time-varying characteristics specified in the model.

As expected, children's clinical characteristics were associated with increased use of mental health emergency services use. Diagnoses of psychosis, bipolar disorder, depression, conduct disorder, and adjustment disorder all showed a positive association with use of mental health emergency services in all age strata ( $P<.001$  for all). Clinical indications or diagnosis of substance abuse related issues also conferred an increased use of mental health emergency services for all ( $P<.001$ ), as did earlier ages of entrance into the county mental health system (ages 6<11 IRR=1.28,  $P<.001$ ; 11<15 IRR=1.23,  $P<.001$ ; and 15<18 IRR=1.20,  $P<.001$ ).

Results for race/ethnicity reveal that in the younger two age groups, Latino and Black/African American minorities had lower rates of MHES as compared to White ( $P<.001$  for all), adjusting for all covariates in the model. In the oldest age group (15<18), however, Black/African Americans experienced higher rates of MHES as compared to White ( $P<.05$ ).

Age trajectories showed that children in usual care aged 11<15 experienced an increasing rate of mental health emergency services use, as expected, while children aged 6<11 and 15<18 experienced decreasing rates of mental health emergency services use, all with  $P<.001$  significance. For individuals in the 11<15 year old group, the Age Trajectory term showed that there was an increased IRR of 1.11 times more days of mental health emergency services per month, but children in the 6<11 group had fewer days per month (IRR=.97,  $P<.001$ ) and children in the 15<18 aged group experienced fewer days of emergency services use with each passing year (IRR=.86,  $P<.001$ ).

Conversely, however, the group of children served by FSP did not experience any declining rates of mental health emergency services use in periods before receiving FSP programming, as identified by the counter balancing positive Age Trajectory by Ever FSP interaction terms for children aged 6<11 ( $\beta=.04$ ,  $P<.05$ ) and 15<18 ( $\beta=.15$ ,  $P<.001$ ). Then after beginning FSP programs, the Post-FSP x Age Trajectory interaction terms show that FSP served children in the two older age groups experienced a reversal in trend toward declining use of mental health emergency services (ages 11<15  $\beta=-.19$ ,  $P<.001$ ; and 15<18  $\beta=-.23$ ,  $P<.001$ ). Identifying the resulting IRR during these periods requires combining the applicable age trajectory coefficients, as illustrated in the following example.

To facilitate interpretation of the analysis results, Figure 7 provides a graphical representation from simulations using regression equations to project age-related FSP and usual care trajectories. In this example, an FSP served child between the age of 6<11 models a sudden decline in mental health emergency services use from pre to post-FSP treatment beginning at age 8, but the likelihood of use post-FSP remained above that for usual care served children. For an FSP served child 11<15 years old, the child models an increasing pre-FSP mental health emergency services use but a declining post-FSP mental health emergency services use when enrolled in FSP at age 12. For an example FSP served child ages 15<18, the child models higher than usual care pre-FSP mental health emergency services rates which begin to decline post-FSP when enrolled at age 16, potentially converging with the also declining usual care served children's use trajectories by age 18, while controlling for other severity and system variables within the model.

### **7. Question 3 Conclusions**

This analysis examined individual's use of mental health emergency services over time during treatment within the California county mental health systems via usual care or via FSP programs. Before receiving FSP program treatment, pre-FSP months in both older age groups had increasing rates of mental health emergency service use over time while the child was receiving usual care type services. After beginning FSP treatment, these same children, now during post-FSP months, show decreasing rates of mental health emergency services over time, significantly improving at a more rapid rate compared to themselves before treatment and to all other children in usual care. Based on the strengths of the pre-post implementation control and the size and span of the study dataset, this provides strong evidence for the success of this aggressive FSP program approach in reducing the need for mental health emergency services for children's crisis events.

Results of this analysis of mental health emergency services use also show that children with diagnoses for depression, conduct disorder, psychosis, substance abuse or adjustment disorder all experience increased use of mental health emergency services. These results are supported by the literature reviewed herein which revealed the following presenting factors associated with a need for mental health emergency services: suicide ideation, gesture, or attempt; anger, frustration or anxiety management issues; psychosis; aggression; runaway behaviors or residential instability; substance abuse; and trauma or abuse. Despite the advancements made here toward our knowledge of clinical risk factors for mental health emergency service use within the community, an inability to identify family factors, residential stability, trauma and other community-based environmental risk factors within these data limits the ability to fully describe the circumstances which led to the mental health emergency events. Further research on community-based psychiatric crisis and mental health emergency care would help direct the development of critically needed community-based crisis intervention programs which could be utilized by mental health staff and caregivers alike.

Concordant with patterns noted in the literature (Snowden, Catalano, & Shumway, 2009; Snowden et al., 2008), African Americans experienced greater rates of mental health emergency services as compared to Whites, but only for the oldest age group. Prior research on children's (un-stratified children <18) Medicaid populations in California from 1999-2001 found that African Americans had an increased odds of requiring mental health emergency services but,

**Table 9. Characteristics of Children Served by FSP or Non-FSP County Mental Health Programs by Age Group Strata**

Characteristic	Ages 6 to <11				Ages 11 to <15				Ages 15 to <18			
	Usual Care Only (n=219,920)		Ever FSP (n=4,613)		Usual Care Only (n=253,856)		Ever FSP (n=7,098)		Usual Care Only (n=288,851)		Ever FSP (n=8,069)	
	N	%	N	%	N	%	N	%	N	%	N	%
Age (M ±SD)												
Mean Age	8.7±1.5		8.8±1.5		13.2±1.2		13.3±1.2		16.5±0.8		16.4±0.9	
Age First Served by CMH	8.2±1.6		7.4±1.5		12.1±2.2		10.7±2.5		15.3±2.1		13.3±2.6	
Cohort Age	12.7±3.3		10.6±2.3		17.5±3.1		15.4±2.2		20.8±2.8		18.3±1.9	
Gender												
Female	83,635	38.0	1403	30.4	108,236	42.6	2754	38.8	120,294	41.6	3663	45.4
Male	136,285	62.0	3210	69.6	145,620	57.4	4344	61.2	168,557	58.4	4406	54.6
Race												
White or Caucasian	20,877	9.5	281	6.1	30,606	12.1	470	6.6	36,415	12.6	618	7.7
Hispanic or Latino	106,029	48.2	2,177	47.2	118,266	46.6	3,248	45.8	128,384	44.4	3,828	47.4
Black or African American	17,774	8.1	407	8.8	24,727	9.7	627	8.8	31,695	11.0	642	8.0
Other/ Unknown	75,240	34.2	1,748	37.9	80,257	31.6	2,753	38.8	92,357	32.0	2,981	36.9
Diagnosis												
Psychosis	2,038	.9	137	3.0	4,974	2.0	317	4.5	9,064	3.1	555	6.9
Bipolar Disorder	13,911	6.3	902	19.6	30,025	11.8	1,975	27.8	44,374	15.4	2,675	33.2
Depression	36,366	16.5	920	19.9	88,152	34.7	3,109	43.8	117,932	40.8	4,360	54.0
Adjustment Disorder	68,888	31.3	1,148	24.9	60,540	23.8	1,302	18.3	58,245	20.2	1,307	16.2
Conduct Disorder	2,198	1.0	128	2.8	9,839	3.9	485	6.8	28,353	9.8	1,027	12.7
Anxiety Disorder	56,641	25.8	1,955	42.4	73,381	28.9	3,242	45.7	82,348	28.5	3,145	39.0
ODD/DBD	27,525	12.5	663	14.4	26,549	10.5	883	12.4	25,326	8.8	1,166	14.5
ADHD	68,324	31.1	2,035	44.1	60,157	23.7	2,286	32.2	40,278	13.9	1,865	23.1
PTSD	22,276	10.1	730	15.8	22,456	8.8	1,024	14.4	22,810	7.9	1,312	16.3
Substance Abuse	374	.2	21	.5	12,022	4.7	658	9.3	62,321	21.6	2,585	32.0
Indicators												
MHES During Age Range	27,223	12.4	1,384	30.0	67,237	26.5	3,583	50.5	96,162	33.3	4,604	57.1

Note: CMH = County Mental Health; ODD/DBD = oppositional behavior disorder/disruptive behavior disorder ADHD = attention deficit and hyperactivity disorder; MHES = Mental health emergency services; PTSD = Post traumatic stress disorder

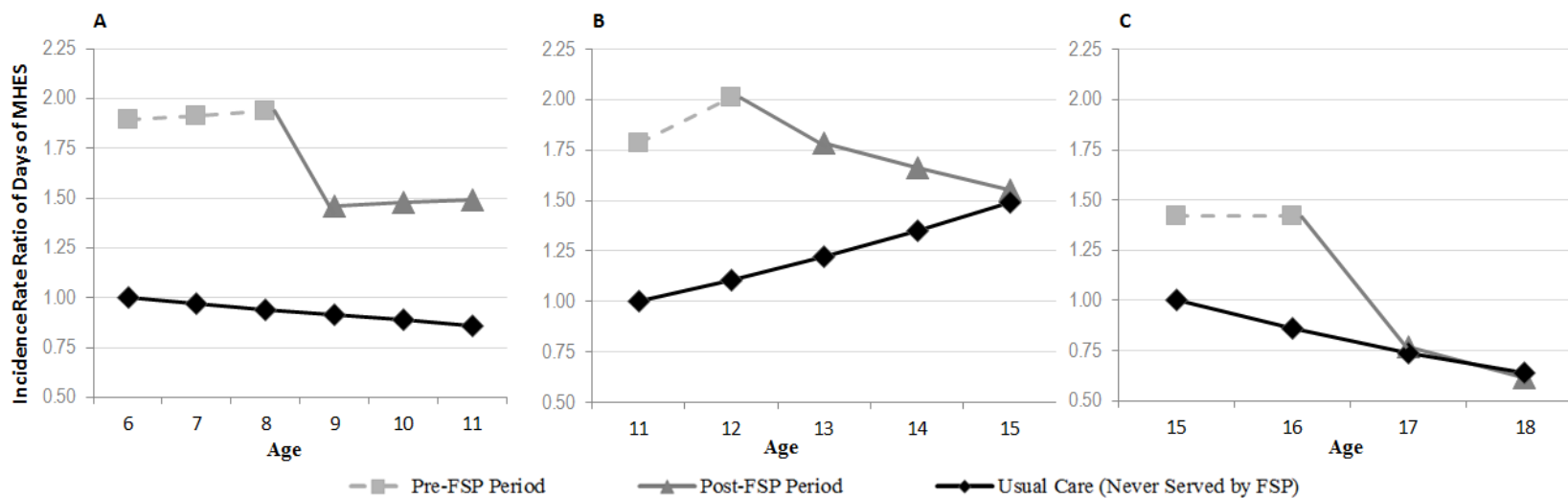
**Table 10. Poisson 2-Level HLM of Monthly Days of Mental Health Emergency Service by Month of Service Age Nested within Client, Controlled by Fixed County Effects**

Variable	Ages 6 to <11		Ages 11 to <15		Ages 15 to <18	
	$\beta$	IRR	$\beta$	IRR	$\beta$	IRR
Intercept	-					
Treatment	5.63***					
Ever FSP (reference: usual care)	.64***	1.88	.58***	1.79	.35***	1.42
Post-FSP Period (reference: pre-FSP period)	-.29***	.75	.14*	1.15	-.15**	.87
Age Trajectory						
Age Trajectory (Years)	-.03***	.97	.10***	1.11	-.15***	0.86
Age Trajectory x Ever FSP	.04*	1.05	.02	1.02	.15***	1.16
Age Trajectory x Post-FSP Period	0	1.00	-.19***	.83	-.23***	.79
Age Controls						
Age First Served by CMH	.25***	1.28	.21***	1.23	.19***	1.20
Cohort Age	-.06***	.94	-.05***	.95	-.01***	.99
Gender (reference: male)						
Female	-.18***	.84	.31***	1.37	.10***	1.11
Race (reference: White)						
Latino	-.50***	.60	-.24***	.78	-.08***	.93
Black/ African American	-.10**	.90	-.07**	.94	.04*	1.05
Other/ Unknown	-.24***	.78	.08***	1.09	.25***	1.30
Diagnosis Controls						
Psychosis	1.10***	3.02	.86***	2.37	.79***	2.20
Bipolar Disorder	1.15***	3.14	.88***	2.41	.58***	1.79
Depression	.55***	1.72	.48***	1.62	.26***	1.29
Adjustment Disorder	.26***	1.29	.20***	1.23	.30***	1.35
Conduct Disorder	.70***	2.00	.34***	1.40	.14***	1.15
Anxiety Disorder	0	1.00	-.32***	.73	-.34***	.71
ODD/DBD	.36***	1.43	.03**	1.03	-.06***	.94
ADHD	.03	1.03	-.32***	.73	-.43***	.65
PTSD	.34***	1.40	-.02	.98	-.16***	.85
Substance Abuse	.71***	2.04	.48***	1.61	.22***	1.25

\*p≤.05; \*\*p≤.01; \*\*\*p≤.001

Note: IRR = Incidence rate ratio; CMH = County Mental Health; ODD/DBD = oppositional behavior disorder/disruptive behavior disorder ADHD = attention deficit and hyperactivity disorder; MHES = Mental health emergency services; PTSD = Post traumatic stress disorder

**Figure 7. Regression-Estimated Incidence Rate Ratio of Mental Health Emergency Services by Age Group for Usual Care and Example Pre- and Post-FSP Periods**



when used, experienced lower rates of crisis intervention service (which make up about a 90% share of mental health emergency service category) as compared to Whites when adjusting for demographics and indicators of need. This dissertation research takes into account crisis services use rate along with the changing risk for crisis services use across age groups through stratification and via longitudinal age trajectory terms, and it finds that African Americans experienced greater rates of mental health emergency services especially between the ages of 15<18, adjusting for similar indicators of need. Further research is needed to identify the process which might occur to cause a shift toward disproportionality greater use of mental health emergency services in these later teenage years. A possible cause for this increased risk of exposure to mental health emergency service is that African Americans during these years become more underrepresented in preventative outpatient care, potentially due to increasing awareness of stigma, accruing negative experiences or increasing mistrust of governmental systems with age (Snowden, Catalano, & Shumway, 2009; U.S. Department of Health and Human Services, 2001). Another possibility is that there is increasing community intolerance of behavioral issues for older teenage African American children, resulting in increased community response precipitating crisis care (Snowden, Catalano, & Shumway, 2009). It is probable that the processes which influence use of mental health services in the earlier adolescent years transform as a child ages and gains autonomy. Extreme caution is needed in the interpretation of these results in consideration of the large proportion (approximately one third) of individuals with other or unknown race/ethnicity in this study. Results indicate that for African Americans, use of mental health emergency services may increase especially in later teenage years, but longitudinal studies are needed to identify any changes in this pattern across adolescence.

Despite careful considerations and planning to meet the challenges of this analysis, several limitations exist. First, the dataset for the analysis represent administrative data, devoid of some valuable measures of risk for mental health services use, which would be needed to select an alternatively treated control group with similar level of need. The usual care group included everyone served by the county mental health system, regardless of circumstance severity. While clinical level severity indicators were incorporated into the study, additional unmeasured factors, such as stability of housing or family functioning may have contributed to the proclivity for mental health emergency services and FSP enrollment, limiting this study's ability to select an independent matched comparison group from within the usual care group. Children who received mental health intervention services under the guise of SBC 163 and Katie A Subclass could not be identified in the dataset. In addition, a control group of untreated children could not be identified reliably, except when they interacted with the county mental health system for use of mental health emergency services. However, the repeated measures, independent slopes and pre-post methodology accommodated for this limitation by controlling for unmeasured client level factors, permitting the usual care group to provide perspective of general individual changes in risk of mental health emergency services across time for the majority of children served within the county mental health system.

This analysis contributes to the literature in several ways. First, descriptive analysis quantified an increasing risk for mental health emergency services use by age, portraying a steep incline in risk during the adolescent years of 11-15. Children's mental health programs are often difficult to assess because children 'age into' increasing risks for circumstances requiring the involvement of a professional response or intervention. As children mature, physically, socially, emotionally and intellectually, negative behaviors have the potential to become more complex,

more dangerous and more difficult to manage. While perhaps ameliorating even greater potential increases, well-intentioned intervention programs can still see increases in arrests, hospitalizations or emergency services use as children naturally develop more complex patterns of behavior with age. These results highlight the importance of considering both smaller age strata and *rates of change over time* as compared to more commonly used simplified cross-sectional pre- and post-test measurements.

Secondly, this analysis contributes methodologically to the literature, providing an example of a possible research design for maximizing the use of existing information within secondary administrative mental health services ‘big data’ in a way in which individual patterns of behavior can be modeled across ages for children, taking into account age-dependent risk in severity, missing data and access to system resources while demonstrating the potentially ameliorating effects of mental health interventions.

Additionally, the results further support that a planned community-based intervention can successfully reduce the need for mental health emergency services for high risk children. The present chapter evaluates individual improvement over time, identifying changing needs for mental health emergency services for individual children while controlling for natural variations in service use by age as well as by risk, treatment and system factors, and it finds that FSPs, in particular, promote reductions in mental health emergency service use for high-risk populations. That other available programs could offer similar reductions in service use for this population remains to be studied.

An additional limitation of this study remains as the length of enrollment in the FSP program was not considered. However, as previously described, many supports, especially non-mental health financial security increasing supports, are not intended to be limited to a scope within the program timeframe and are likely set into motion within the first few weeks of the program; community and natural supports can remain in place long after the program completes, thus limiting the value of direct program exposure measurements.

The use of mental health emergency services is a key outcome indicating lack or failure of planned mental health intervention services. A need for mental health emergency services is suggestive of increased risk of negative consequences toward the safety and psychological wellbeing of a child and his/her stability within the caregiver’s home. Despite increased risk with age, successful engagement into planned services can reduce the need for mental health emergency services over time for the individual child (Snowden et al., 2008; Snowden, Masland, Wallace, et al., 2009).

A majority of children with diagnosed mental disorders are underserved, and programs as complex as the FSP program – despite its success – may present limited capacity to drastically reduce this statistic. That FSP programs engage the underserved into care and evidence a change in trajectory of need offers clues toward what it takes to successfully reduce underservice for children. Key differences exist between FSP programs and usual care, such as the availability of social welfare supports, 24/7 availability of intervention services, team coordination, flexibly funded services and strength-based treatment plans, any of which may contributing to the ability of FSP programs to successfully reduce the need for mental health emergency services within a high risk population of children. There are likely key efficacious components or philosophies within the program which could be harvested for broader application, and the potential impact of

such simplified programs targeting underserved children with mental disorders justifies further research into how to uncover ‘what it takes’ embedded within ‘whatever it takes’ programming.



## Chapter 6: Discussion

Untreated and undertreated mental health disorder is a seriously troubling issue afflicting millions of children nationwide (Ghandour et al., 2012). With adequate treatment, children diagnosed to have mental disorders and their families are given the opportunity to learn how to address risk factors, manage symptoms of illness, build resiliency and improve outcomes into adulthood (Greenberg et al., 2001). Yet, for most, this opportunity is never realized due a host of possible causes related to underservice. Left unserved and underserved, children with severe mental disorders and their families may lack the appropriate tools to manage or improve symptoms of the disorder leading toward a progression into mental illness in adulthood (Merikangas et al., 2010). Addressing children's upstream under-treatment of mental disorder is likely the most efficient approach to reducing downstream adult mental illness and its costly consequences.

Despite this potential, there is a tendency for children's mental health programs to be an afterthought to adult programs (Saxe et al., 1988), as is the case for the FSP program. The FSP program was designed to reach the underserved, but it was modeled and pilot tested as a recovery-oriented intervention for adults. The *recovery* oriented nature of the FSP program speaks earnestly to adults' needs, yet *resiliency* is a preferred concept when modeling programs for children (Masten & Coatsworth, 1998). When the program was codified in regulations, programming for children was tacked on without additional piloting, and this has rightfully led to a debate in California questioning the legitimacy of the program for children. This dissertation research is the first study of its kind to address whether FSP programs reach and effectively serve undertreated children with severe mental disorders as intended by the policy.

To evaluate the policy, it is helpful to assess the potential benefits, if any, and hazards of the FSP program for children and families. With only a fraction of children in need of mental health services receiving adequate care, FSP programs might have benefits for children if FSPs (a) more effectively identify, enroll and engage into care some of the 2/3 of the population with need who are unserved or underserved; (b) provide more accessible or adequate services and supports for children and families; or (c) result in better outcomes for children and families as compared to alternative options.

### 1. Identifying, enrolling and engaging children and families

Results from the analysis in Chapter 2 suggest that FSP programs are reaching children and families who are underserved, but questions remain in regard to who is being reached and how. The served children and families appear to have struggled with mental health disorders for longer periods of time while having received less care as compared to the population of children receiving services in other county mental health programs, but how are FSPs reaching the underserved?

While further research is needed to identify outreach and engagement approaches of FSP programs which influence success in reaching the underserved, one possibility is that FSP programs emphasize cultural humility and language accommodation (California Institute for Mental Health, 2011) as enrolled children and families are more likely to be racial/ethnic minorities, often overrepresented in underserved populations (McMiller & Weisz, 1996), especially in California (Banta et al., 2013). By employing multi-lingual staff, culturally focused

FSP programs may address the English proficiency barriers affecting ethnic/racial minorities' ability to enroll and engage into care (Snowden & Yamada, 2005); the emphasis on culturally focused programs may also permit FSP programs to address potential clients' resistance to engage in treatment due to poor prior experiences or distrust for the service providing system (Snowden & Yamada, 2005; U.S. Department of Health and Human Services, 2001). Programming and outreach which also incorporates general education about mental illness and about *treatment of mental illness* (Alvidrez, Snowden, & Patel, 2010) in a culturally sensitive manner might help some families overcome barriers to disclosing personal circumstances and related need for care (Givens, Katz, Bellamy, & Holmes, 2007; Snowden, 1998).

To reach these underserved, FSP programs fund outreach activities in which staff travel into the community to educate vulnerable populations about mental health treatment concerns and promote reductions in stigmatization related to seeking treatment. FSP outreach staff visit community events and cultural community centers in order to promote culturally appropriate educational awareness (County of Sutter-Yuba, 2013). These or other understudied outreach approaches may help promote FSP programs' abilities to reach the underserved, yet more research is needed. Some data on referral sources does exist within the DCR data, and future research could assess pathways of referral for FSP program enrollees in order to formulate broader research questions on how FSP programs reach underserved children.

Another possibility is that FSP programs' ability to focus on a targeted population, such as juvenile justice involved youth, may permit the program to specialize in locating and engaging individuals with need in the target population by actively working closely with other involved agencies in the community, such as within juvenile courts. The county mental health service sector exists within a broader category of children's service providing sectors, often termed as *systems of care*, which provide community-based services to youth with mental health related issues (Kazak et al., 2010). Systems of care for children's mental health necessitates collaboration between up to six formal service-providing agencies/sectors, as their involvement is warranted in each case: education, specialty mental health, substance abuse, child welfare, juvenile justice and medical healthcare (Kazak et al., 2010). FSP programs' ability to focus on a targeted population along with its emphasis and flexible funding to provide linkages and support services may promote its ability to unite the systems of care for those it serves.

A third possibility is that FSP programs address poverty-related barriers to service through flexible funding of social service supports. Family stress theory postulates that economic stresses disrupt family processes leading to increased conflict and stress within the family which may influence the development and recognition of children's mental disorders (Conger, Rueter, & Conger, 2000). FSP programs offer extensive collateral services which promote the economic stability of the family, potentially incentivizing families who might otherwise heavily prioritize their time for activities which promote food and housing security, reducing stress related to resource constraints and allowing these families to engage into treatment. Families' economic stresses due to lack of telephone, gas for automobiles, household appliances, unpaid utilities and unpaid rent are all directly addressed through focal supports within FSP programs (T. Nielson of Tessie Cleveland Community Services Corporation, personal communication, February 4, 2015; C. Thompson of Amador County, personal communication, February 6, 2015). Importantly, a major overarching difference between FSP and usual care programs is that poverty-related family resource constraints are a key focus of FSP programs.

To study underservice for children and families, however, an operationalized standard of underservice is needed. Standards of adequate treatment have been devised, for youth with diagnosed depression disorder, for example, as episodes of initialized care containing four days of mental health service in 12 weeks combined with filled antidepressant prescription for 84 of the first 144 days of the episode (Stein et al., 2013); or for adults with diagnosed mood, anxiety, impulse control or substance disorder, for example, as past 12 months service including eight or more visits to a health care professional or at least two months of pharmacotherapy with four or more visits to a health care professional (Wang et al., 2005), thereby classifying all others as underserved. In comparison, this dissertation operationalized underservice based on current need relative to lifetime as well as recent history of service, conceptualizing adequate treatment of childhood disorders on a trajectory of increasing or decreasing need. Adult-oriented methods to operationalizing underservice may not easily translate comparatively to children and families. As discussed in Chapter 5, children develop and ‘age into’ risks for diagnosis of mental disorder, more complex arrays of symptoms and greater need for intensive services. Concepts introduced through this research suggest a fairly novel approach to considering children’s underservice but need refinement through further research.

The approaches within this dissertation highlight an achievable unmet opportunity of the current mental health system to decrease underservice by improving outreach to those it can already identify. The use of electronic health records recently demanded by the Patient Protection and Affordable Care Act could allow for future analyses of the lifetime trajectory of children’s mental disorders – permitting research which considers first encounters with mental health care systems and lost opportunities to engage families into care along the way. Yet, despite improvements in data collection by electronic health records, inadequate statewide information on outreach services, as well as on indicators of vulnerability, such as race, ethnicity, language, contextual circumstances and external systems of care involvement hinders the ability to ascertain historic underservice and effectiveness of methods utilized to overcome barriers to service for the previously underserved. Utilizing electronic health records to identify the underserved requires children to have had at least one lifetime encounter with the mental health care system and assumes that most children with severe mental disorders interact with the mental health care system at some point. There are, however, likely some remaining unserved children entirely unseen, the proportion of which is unknown and difficult to ascertain. To initiate a plan to identify the unserved children we know through the use of electronic health records is not to deny the need for additional efforts which reach beyond the serving systems into the community to locate those who are entirely unknown to this system.

In practice, the Patient Protection and Affordable Care Act Stage 2 meaningful use of data promotes 17 core objectives, three of which are apropos to this opportunity to reduce underservice. Objectives 11 (“generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach”), 12 (“use clinically relevant information to identify patients who should receive reminders for preventive/follow-up care”) and 17 (“use secure electronic messaging to communicate with patients on relevant health information”, EHR Incentive Programs, 2013, page 14) could all help reduce underservice for children and families who ever, even once, interact with the mental health care system. These approaches encourage care providers to conceptualize opportunities to decrease further development of a child’s disorder -- beyond treatment for the current episode -- toward treatment in the child’s lifetime, a transformation in approach desperately needed in order to reduce of

children's under-treatment of mental health disorders. These approaches highlight the opportunity for providers to reach out to families for children who were seen for emergency care, via phone, email or mail. Even after a successful treatment of an episode, providers can encourage ongoing care through annual service checkups, electronic health information exchange portals accessible to clients or direct email access to providers by clients. This type of transformation in approach to mental health care begins with conceptualizing a lifetime trajectory of cultivating wellness rather than an episode of care.

## **2. Making adequate services available and accessible**

A directive of the MHSA is to provide funding for the provision of public mental health services not available through other sources. It may be that some outreach and engagement processes of FSP programs are effective in recruiting underserved populations, but it is possible that once enrolled, these previously underserved children and families are receiving a set of identical services which could otherwise be funded through existing programs. If this were the case, policy might consider shifting MHSA dollars away from FSP intervention activities in order to focus solely on the set of outreach and pre-program engagement activities for children and families. In this scenario, counties would continue to implement innovative, culturally-sensitive, target focused, educative, community outreach to underserved populations, but would direct engaged children and their families to enroll in one of the other non-FSP programs serving children and families, such as a Medi-Cal EPSDT program, SB 163 Wraparound program, Katie A. Subclass Member Services or other alternatively available programs.

A question then becomes whether or not underserved children and families identified through the FSP outreach activities would qualify for existing programs matched to their needs or if alternative programs which match their needs even exist at all. Counties are allowed to provide justification for restricting FSP offerings to exclude age groups and some do not offer FSPs to children (UCLA Center for Healthier Children Youth and Families, 2013). In the absence of the FSP program, it would be beneficial to identify which alternative programs would equally serve children who now currently enroll in FSP programs. This dissertation begins to identify possible eligibility and service array discrepancies between FSP and usual care, but more research is needed.

Among children served with an equivalence of minimally intense services (services on  $\geq 4$  days per month), Table 7 in Chapter 3 shows that children in FSP receive planned services on almost two additional days each month and receive over 250 more minutes each month of outpatient community mental health services as compared to in usual care. FSP served children more often obtain linkage/brokerage and collateral services, also with greater intensity on average. This may be because, in part, children in FSP programs have more need for mental health service. However, this descriptive data, at a minimum, provides impetus for further controlled studies to identify whether children and families served through FSPs are indeed accessing more services than are commonly available through other county mental health programs for children with similar indicators of need. Further, it is necessary to also identify if the additional services are appropriate for successful care and result in greater positive outcomes as compared to a service structures with the intensity seen in usual care.

A limitation is that only broad categories of mental health services (e.g., community mental health, collateral, linkage/brokerage, for example) are reported to State data repositories,

and these categories do not fully capture the distinct character of each available mental health program. In addition, enrollment and discharge dates are not readily reported statewide for enrollment in programs other than the FSP program, such that data systems reflect haphazard usual care services delivered month to month without formal connections defined by usual care program enrollment. While the program service profiles appear to differ between FSP and usual care, the distinct differences in service arrays are difficult to describe utilizing the current statewide universally reported data elements. In order to evaluate and improve children's mental health program service quality, potentially efficacious service categories not currently specified should be tracked and reported. These include but are not limited to: team activities; intensive care coordination; services to build resiliency factors such as civic engagement, occupational competence (Yates & Grey, 2012), participation in interest groups and activities to promote self-esteem (Iwaniec, Larkin, & Higgins, 2006); client identified goal-oriented services; housing services; social services; transportation services; wellness services; and peer services. Future research efforts are needed to identify relevant categories of service which distinguish programs in order to support assessment and improvement of program service quality.

Further pressuring a need to evaluate the adequacy of community-based service options for children, is the trend to serve more children at home through community-based mental health programs; this has led to the reduction of residential spaces for children and has assigned a greater responsibility on families and community-based programs to provide comprehensive care for children with severe mental health disorders (Masters & Bellonci, 2002). As noted, a newspaper (Weiner & Reese, 2014) has reported reductions in residential beds and rising rates in emergency-related psychiatric hospitalizations for children, citing anecdotal evidence about quick discharges and lack of follow up care. Engaging families into follow up care after hospital discharge is reportedly problematic and inadequate (Stein et al., 2013). Initiatives, like the FSP-funded outreach program for children post-crisis (Ventura County Behavioral Health Department Mental, 2012) may help to address this concern in this county. However, research and policy should consider whether programs and services are available and accessible to compensate for the urgent needs of the entire statewide population.

### **3. Delivering positive outcomes**

The results illustrated in Figure 7 make a strong case for further evaluation of the effectiveness of the FSP programs for children and families before policy makers succumb to any pressures for policy changes. Policy changes may be warranted, but where possible, ought to be data-driven and evidence-informed. Controlled analyses herein suggest that FSPs may be benefitting children and families in need of intensive mental health services, many of whom were formerly unserved or underserved.

A limitation is that the mechanism for reducing mental health emergency services cannot be identified within this investigation. If future research efforts were to further substantiate that FSP programs proved to effect more positive outcomes for its targeted populations of underserved children and families with complex mental health related issues, there still remains the matter of determining why this might be the case. Identifying efficacious models of the program are thwarted by the diversity between programs and the lack of information regarding encompassed components within each stakeholder designed 'whatever it takes' FSP program. Identifying specific components within FSPs which might help account for the program's success could help to promote uniformity between FSP programs and inform policy aimed at

filling service gaps. Yet, available information in statewide repositories lacks sufficient detail to support the testing of hypothesized mechanisms of action. There are many possible components within the FSP programs which could contribute to the long term reductions of need for mental health emergency services for the children it serves, but not all programs likely implement all possibly efficacious components.

One possibility is that an immediate reduction in mental health emergency services after enrollment might arise due to the family safety plan along with the availability of 24/7 direct intervention services. Acute crisis avoidance might result in only a short term dip in rate of crisis rather than an extended decrease in need for crisis services over longer periods of time, and the latter pattern is suggested by results of this dissertation research. Through safety plans and team managed interventions, families may be learning to de-escalate psychiatric crises themselves before the need for a professional response (Stanley & Brown, 2012). Through strength building services within the program, families and children may be developing resiliency factors related to long term decreased risk for psychiatric strife (Bhana & Bachoo, 2011). By first addressing and stabilizing poverty-related factors such as housing, food, clothing and financial security, perhaps families are able to better concentrate on addressing mental health symptoms (Barnett, 2008). These or other factors related to the distinctive approaches of the FSP program may have contributed in some way to the evidenced sustained reduction in need for mental health emergency services use for children who participated in the FSP program, but more research which incorporates an understanding of the components implemented in successful programs is needed.

Nevertheless, this dissertation highlights the need for standardized community-based crisis averting approaches which reduce the use of mental health emergency services – advancements in service quality which could make contributions nationally to improve outcomes for children. Community-based program staff and caregivers nationwide have few documented or tested strategies for de-escalating impending crisis events (Cordell & Snowden, 2015), which often act as the precursors to psychiatric hospitalization and/or removal from home (Lyons et al., 1997). Restraints and seclusions, often a standard in residential facilities, are not highly feasible options within communities (Masters & Bellonci, 2001), and with more children with severe mental health disorders remaining in the care of parents and community-based programs, community-based strategies which de-escalate accelerating crisis events are urgently needed. Recommendations should encourage programs to universally incorporate safer strategies, such as standards which include safety plans or utilization of other non-physical techniques, such as verbal strategies which aim to help children/youth recognize stimulating triggers and learn to self-regulate emotions and subsequent behavioral responses (Greene, Ablon, & Goring, 2003).

For example, Cooperative Problem Solving (CPS) is a cognitive-behavior strategy for crisis intervention which is designed to avoid the need for potentially counter-therapeutic restraints and seclusion while teaching the child to self-regulate emotions and behavioral responses to emotions. CPS seeks to identify dysregulated cognitive and social pathways which are triggered by antecedent stimuli. CPS is based on the theory that youth can experience developmental delays in their ability to regulate emotions, often precipitated by trauma, or other known risk factors for child psychopathology. Through CPS, aggressive behavior is conceptualized as a behavioral response to emotional dysregulation resulting from a developmental delay of cognitive skills for (1) frustration tolerance, (2) flexibility and adaptability (i.e., changes in external and internal expectations based on context), and (3)

problem solving. CPS uses strategies which help model emotional regulation and which help the child recognize the stimulant, gain awareness and clarity of the emotion and its cause, understand the context-specific external behavioral expectations (e.g., different expectations exist for child behavior at school, in church or at a playground, for example), empathize with the concerns of others, and identify positive goal-oriented behavior toward resolution. In residential facilities, CPS has been shown to significantly reduce the need for restraints and seclusion when used as a crisis prevention or de-escalation strategy for at-risk youth (Greene et al., 2006; Martin et al., 2008). Research should test CPS or other verbal-based strategies as an option for community-based crisis response.

Commonly overlooked as a mechanism of action for program success, the data reporting requirements of the program may in fact influence positive outcomes for children within FSPs, via pressures to develop programs which perform positively over measured outcomes. The FSP program, funded by California tax payer dollars, emanates with heavy and often burdensome information and data reporting requirements in attempts to fulfill objectives for oversight and accountability to tax paying citizens. While seeming needlessly burdensome to some mental health service providers, it is conceivable that data reporting requirements of MHSA and the FSP, often greater than those in usual care, could contribute to its success. MHSA requires counties to develop a Three-Year Program and Expenditure Plan incorporating FSP program descriptions, and strategic mental health plans have been shown to improve the quality of mental health care (Pirkis, Harris, Buckingham, Whiteford, & Townsend-White, 2007). It is also conceivable that the FSP program's outcome collection and reporting requirements influence program participants and staff to place greater value on positive outcomes. As supported by systems theory, setting goals which integrate measured feedback on progress helps improve client and program performance (Stelk & Slaton 2010), and thus, the data reporting requirements for FSPs which include continuous assessment of client outcomes could also relate to improvements in program outcomes.

On the other hand, providers complain that the data requirements for the FSP are particularly and unnecessarily onerous, especially since in comparison, similar outcome reporting is not required for other child serving programs. Laborious processes for data collection and incremental costs related to information infrastructures likely lead providers to prefer programs with more lenient data reporting provisions. During MHSA oversight and accountability committee meetings, provider-representing stakeholders have pressed for the use of Medi-Cal EPSDT funded children's mental health service programs in place of the MHSA funded FSP programs for children (Mental Health Services Oversight and Accountability Commission, 2014), a request possibly influenced by desires for reduced reporting requirements associated with alternative funding streams. While outcomes reporting requirements are currently fewer for Medi-Cal EPSDT programs, with the passing of the Patient Protection and Affordable Care Act, there is increased movement toward pay-for-performance programming within Medicaid (James et al., 2012), which may soon result in relatively equivalent outcomes reporting requirements for all publicly funded mental health programs, diminishing this distinction between FSP and usual care.

Importantly, FSP has forged the first pathway for client outcome data elements to flow universally from client to provider to county and to the state, an invaluable data highway for the flow of key information rarely gathered on a statewide scale. However, the type and quantity of outcomes data elements collected needs to be reexamined and restructured. In order to preserve

this workflow process, the burden of data collected should be reduced to include only the elements which provide value to clinicians and clients while simultaneously supporting program evaluation and improvement efforts. Efforts should be made to improve the workflow and efficiency of data collection, improve clinical utility of the data through feedback loops and reduce the burden to child and family serving providers.

#### **4. Future directions**

An afterthought of an innovative adult program, FSPs for children and families may have serendipitously, or, more likely, through the creativity and hard work of its implementers, developed into a set of customized programs which address, at least in part, two significant challenges in children's mental health: (1) outreach to underserved populations and (2) provision of community-based stabilizing care for children at high risk for psychiatric crises. Table 11 lists a summary of the dissertation raised recommendations for research, policy and technical assistance to support improved outcomes for the children and families targeted by this program.

Unfortunately, appropriate data for much of the research recommended herein are not readily available, and historically, little attention has been devoted to evaluating FSP programs for children and families (Mental Health Services Oversight and Accountability Commission, 2014). Approximately 7-8% of all adults and older adults served by county mental health systems each month are served via an FSP program, which is nearly double the system penetration rate for children (~4%). However, based on these figures, one might expect that about half as many resources might be devoted to evaluating children's FSP programs as are devoted to Adult FSP programs. Yet criticisms have discouraged evaluation of FSPs for children and families, some of which include: that they are an extension of an adult program model which was not designed to meet the needs of children and families (Felton et al., 2010), that there is too much variation in the offerings of programs implemented by different providers, that other equally effective programs are or could be made available to children and families through Medi-Cal EPSTD or alternative sources, and that FSPs for children and families unnecessarily divert funds away from more deserving adult-serving programs. The controlled analyses of FSP programs in this dissertation are the first of its kind to address the effectiveness of this program for children and families, and it provides justification for further evaluation of children's FSP programs. For those it serves, the nagging question is whether FSP programs are filling a gap in eligibility, are filling a gap in service array, or are simply duplicative of alternative programming. Future research could benefit from interview of key county informants to identify important factors which drive county administrations to embrace or to evade FSP programming for children. It is likely that there are drivers based on local need as well as those reflecting local political attitudes.

As evidenced by the massive proportions of underserved children in every state (Ghandour et al., 2012), innovative programming is needed nationwide in order to engage more children and families with need into mental health care. California is in a position to contribute a vast amount of knowledge about ways to reach and serve underserved children and families who have substantial mental health service needs. That FSP programs vary adds strength to the ability to evaluate the effectiveness of individual components, and research might identify valuable ways in which similarly targeted outreach programs around the nation could be developed. Outlined in Figure 3 is a structural framework of factors related to underservice based on a



**Table 11. Summary of Recommendations**

#	Type	Focus	Description
1	Study	Outreach to Underserved	Assess pathways of referral for FSP program enrollees in order to formulate broader research questions on how FSP programs reach underserved children and families; perform research to determine the effectiveness of FSP outreach and pre-program engagement for reaching underserved children and families
2	Policy	Outreach to Underserved	Develop county and/or program standards for outreach to underserved populations of children and families; implement Patient Protection and Affordable Care Act recommended meaningful use of electronic data systems for outreach to identifiable underserved children and families
3	Technical Assistance	Characterize Underserved	Provide program staff with training and tools to promote accurate capturing and reporting of race, ethnicity, primary language, preferred language and other indicators characterizing underserved populations
4	Study	Eligibility Gaps	Perform evaluation to identify if FSP is serving children and families who would not otherwise qualify for similar services through other programs
5	Study	Outcomes	Perform evaluation to compare outcomes for children served by usual care or FSP programs
6	Study	Program Design	Perform controlled study to identify whether children and families served through FSPs are indeed accessing more or different services than are available to them through usual care
7	Study	Necessary & Distinguishing Service Components	Identify relevant categories of service which distinguish programs and which support evaluation and improvement of program service quality, which may include but are not limited to: team activities; intensive care coordination; services to build resiliency factors such as civic engagement, occupational competence, participation in interest groups and activities to promote self-esteem; client identified goal-oriented services; housing services; social services; transportation services; wellness services; and peer services
8	Study	Identify Efficacious Components	Identify efficacious components within more successful FSP programs

**Table 11. Summary of Recommendations**

#	Type	Focus	Description
9	Study	Crisis Averting Techniques	Identify community-based strategies which avert escalating crises and need for mental health emergency services
10	Policy	Crisis Averting Techniques	Develop program standards of safer strategies to de-escalated crises for children/youth while receiving care within the community
11	Study	Post-Psychiatric Hospitalization Care	Evaluate whether existing programs sufficiently serve children after discharge from psychiatric hospitals
12	Policy	Data Collection	Reexamine and restructure the type and quantity of outcomes data elements collected from programs; reduce the burden of data collected for child/youth clients to include only the elements which provide value to clinicians and clients through feedback loops while simultaneously supporting program evaluation efforts; efforts should be made to improve the workflow and efficiency of data collection, improve clinical utility of the data through feedback loops and reduce the burden to child/youth and family serving providers
13	Study	Embracing FSPs	Perform study to interview of key county informants to identify important factors which drive county administrations to embrace or to evade FSP programming for children.
14	Study	Operationalizing Underservice Measures	Perform research to identify standard methods to operationalize children’s mental health treatment underservice to support hypothesis testing and comparative research

review of the literature. Depending on the target population, innovative programming nationwide might focus on one or more of these factors to influence greater engagement into care. A key component of innovation within the FSP program is its ability to address poverty-related barriers, often an influential element related to factors within the framework for recognizing a need, and seeking and finding care. Programming in other states might benefit from studies which quantify the benefit of combining social services with mental health services in one program in order to engage underserved populations into care.

Although the FSP was originally targeted to adults without health insurance, the Patient Protection and Affordable Care Act is increasing the number of Californians with insurance coverage, possibly with an additional 3.9 million more covered (Lucia, Jacobs, Watson, Dietz, & Roby, 2013). Expanded coverage significantly reduces the burden on the MHSA to act as the sole provider of mental health care for many formerly uninsured adults and children. These new policies may free up FSP program resources formerly aimed at trying to fill client eligibility gaps to allow FSP programs to concentrate more on filling intensity gaps in existing service arrays. Moving forward, these changes in landscape must be weighed within policy recommendations for FSP programs.

There is evidence that FSP programs for children and families are successfully doing something different to reach and care for the underserved. California is poised to capitalize on silos of potential wisdom developed through 10 years of efforts via localized program initiatives. Structures are in place which set a foundation for collecting information to inform future statewide evaluation of this children's mental health program. California and other states could benefit from knowledge gained about what works and for whom among underserved children. Near the beginning of MHSA related efforts, President Bush's New Freedom Commission (NFC) on Mental Health in 2003 nationally recognized California for its comprehensive and innovative adult piloted FSP program. As was done for adults in California, there is a possibility for equal contributions toward advances in children's mental health, should stakeholders unite in statewide partnership to serve children otherwise forgotten.

## **5. Final Conclusions**

This examination of children's FSP programming represents the first controlled analyses evaluating this policy for children, producing data-driven results to inform policy recommendations. This analysis reveals that many underserved children with severe disorders and their families are currently identifiable within existing mental health information systems, and outreach efforts can successfully engage and enroll underserved children and families into a program of intensive care. Second, data suggest that there is likely a gap in availability or accessibility of adequately intense services for children, and counties' decisions to limit or exclude children from FSP programming should require sufficient justifications that all underserved children identifiable within county information systems are unreachable for reasons not related to eligibility for or adequacy of alternative programming. Lastly, there is a need to develop statewide program standards for safer strategies to de-escalated crises for children/youth while they receive care within the community. The FSP program's approach, inclusive of 24/7 access to care, typically involving the development of safety plans, evidences a significant reduction in need for mental health emergency services as compared to usual care, and research suggests that these types of reductions translate into a reduced need for psychiatric hospitalization and subsequent risk of removal from home.

FSP programs incorporate a variety of innovative components, any of which could contribute to its success in identifying, enrolling and engaging the underserved; making adequate intensity of services accessible and available to a targeted population with significant unmet need; and delivering positive outcomes for children across a lasting developmental trajectory. A key aspect of FSP programs is their ability to provide a combination of social and mental health services, likely helping underserved families living in poverty to overcome prior barriers to treatment. Supported by the existing infrastructure built around the FSP program, research in California is poised to make a significant contribution toward evidencing methods which increase successful treatment of children's mental disorders and reduce progression to adult mental illness. After 10 years of FSP programming, it's time for California to translate, for the benefit of children in California and nationwide, 'whatever it takes' more definitively into 'what it takes'.

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