Full Service Partnerships:

California's Investment to Support Children and Transition-Age Youth with Serious Emotional Disturbance and Adults and Older Adults with Severe Mental Illness

UCLA Center for Healthier Children, Youth and Families

EMT
EVALUATION • MANAGEMENT • TRAINING

The following report was funded by the
Mental Health Services Oversight and Accountability Commission

October 31, 2012

Table of Contents

Executive Summary

Proposition 63 (2004) provides increased funding through the Mental Health Services Act (MHSA) to support mental health services and promote innovative services and best practices for individuals with mental illness and inadequate access to the traditional public mental health system. Prop 63 funds are distributed to county departments of mental health to implement MHSA components. Components are: Prevention and Early Intervention (PEI); Workforce Education and Training (WET); Capital Facilities and Technological Needs (CF/TN); Innovation (INN); and Community Services and Supports (CSS), which includes the Full Service Partnership (FSP). CSS is designed to serve individuals with severe mental illness (SMI) or serious emotional disturbance (SED). [1]

The focus of this report is the Full Service Partnership (FSP), which is designed to serve Californians in all phases of life who experience the *most* severe mental health challenges because of illness or circumstance. This population has been historically underserved and has substantial opportunity for benefits from improved access and participation in quality mental health treatment and support.

FSP is grounded in earlier efforts, namely Assembly Bill 2034 (AB 2034) [2] and its predecessors. AB 2034 was unique in 1) its focus on serving homeless persons with serious mental illness; 2) the "*housing first*" mandate; 3) flexible funding; and 4) collection and reporting of client and system outcomes in "*real time*." The final analysis of AB 2034 reported a percentage of costs offset of 49.8 percent. [3]

FSP programs are a large portion of the Community Services and Supports (CSS) funding allocation from MHSA. CSS was designed to move the public mental health system beyond "*business as usual*" in order to improve access to more-effective services. CSS (particularly FSP) was intended to initiate significant changes, including: [4]

> Increases in the array of community service options for individuals diagnosed with serious mental illness and children/youth diagnosed with serious emotional disorders, and their families, that will allow them to avoid unnecessary institutionalization and out-of-home placements. (p. 3)

There is a requirement that most of the CSS budget be allocated to FSP, and that clients be served with "*whatever it takes.*" The remaining portions of CSS (up to 49 percent of county MHSA budgets can be devoted to CSS) are used to cover gaps in systems of care related to needs for supportive services, such as transportation or vocational training (which are typically unfunded), crisis intervention and treatment.

The focus of this report is twofold, and critically important.

- First, this report identifies the average statewide annual and per-day cost [5] of providing FSP services to clients in California. The costs of FSP services are calculated in two categories: program services – which include activities required under the Mental Health Services Act, as well as any evidence-based models and/or practices offered – and housing costs. [6] While FSP clients may be represented in marginal additional costs (e.g., outreach), there is not a feasible way of parsing these expenditures, and impacts on cost estimates would be minor.
- Second, this report identifies the cost savings [7] that society realizes because these services have been provided. Of course, these savings are not the sole justification of expenditures; the primary purpose of the law is to improve services to citizens with mental illness most in need of assistance. However, it is a primary purpose of accountable and transparent public service to demonstrate the impacts of this needed and individually tailored service on public concerns. Therefore, this analysis summarizes the savings that are incurred in a limited number of public services for the recipients of FSP services. To state this differently, this

analysis assesses the costs to society with respect to behavioral and physical health services that are incurred by persons facing severe mental health challenges and public costs incurred because of criminal justice system involvement attributable to these challenges.

It is important to note that the estimates of cost are conservative. [8] Costs that are not clearly attributable to FSP clients have not been included, and cost savings estimates have been indexed to conservative estimates of cost. As is widely recognized, estimating the costs of savings attributable to service is complex – from both a cost estimate and a savings estimate point of view. At each step in these estimation processes, we have consciously adopted a conservative approach.

In order to include a county in the FSP Costs and Cost Offsets Report, we needed Full Service Partnership costs broken out by age group. Per the MHSA Community Services and Supports Three-Year Program and Expenditure Plan Requirements, "*Each county must plan for each age group in their populations to be served*." (p. 13) [9] Age groups are defined as follows:

- Children, Youth and Families (CYF): Birth to 18 years, and special-education pupils from birth to age 21 (p. 21)
- Transition-Age Youth (TAY): 16 to 25 years (p. 21)
- Adults: 18 to 59 years [10]
- Older Adults: 60 years and older (p. 21) [11]

The only way to reliably and accurately obtain this information was to ask the counties directly. A web survey was launched in order to collect FSP Costs by Age Group. Almost all of the counties responded – 47 (81.0%). [12] In addition, calculations were successfully completed for three (3) additional counties that did not complete the web survey. These three counties aligned their CSS Plans, Annual Updates, and Revenue and Expenditure Reports (RER) in a consistent manner and broke out FSP programs into discrete age groups. Inclusion of the three (3) additional counties brings the total number of participants to **50** (**86.2**%). FSP Costs and Cost Offsets by Age Group for almost all of the counties are included in this report.

Cost of FSP Services

FSP services are intensive to meet the needs of FSP-targeted clients. This is driven primarily by the policy objective to meet the serious needs of the hardest-to-serve clients – those with severe mental illness. This policy objective includes meeting both the service and the quality-of-life needs of FSP clients and the social outcomes and services needs of California. To address this complex balance between policy objective and client needs, this study has assessed a broad range of costs to citizens of California that are a consequence of service delivery to mental health clients most in need.

As previously noted, almost all of the counties are included in this report (**N = 50; 86.2%**). [13] The populations of counties (numbers of persons residing in the counties according to census data) represented in this report comprise almost all of the State of California (95.0%). [14]

More specifically,

- Fiscal years included in the study period are Fiscal Year 2008-09 (FY 08-09) and FY 09-10. The two fiscal years were selected because:
    - Outcome data are most robust and complete in these two fiscal years, and
    - Revenue and Expenditure Reports in these two fiscal years are broken out by FSP program, allowing a drill-down (with county input) to cost by age group.
- Costs of service are program and housing costs for all clients in FY 08-09 and FY 09-10 as discussed above. Separate tables are provided for each fiscal year. Age groups are displayed on separate rows within each table.

- FSP clients represented in Tables 1 through 4 are people who received FSP services during the fiscal year. [15]
- The calculations shown in Tables 1 and 3 use *annualized cost per FSP client year* as a standard metric for service costs across counties. [16]

Table 1. *Full Service Partnership Services: Annualized Cost per-Client by Age Group (Fiscal Year 08-09)*

	Number Served	Sum of Days	Number of Client Years	Annualized Cost per-FSP Client	Daily Cost per-FSP Client	FSP Costs Total	% of Total FSP Costs
CYF	4,296	983,187	2,693.7	$ 21,931.29	$ 60.09	$ 59,076,305.79	19.0%
TAY	4,593	1,064,015	2,915.1	$ 18,553.96	$ 50.83	$ 54,086,655.41	17.4%
Adults	9,640	2,404,022	6,586.4	$ 26,737.23	$ 73.25	$ 176,102,066.30	56.7%
Older Adults	1,388	344,979	945.1	$ 22,303.26	$ 61.10	$ 21,078,807.79	6.8%
Total	**19,917**	**4,796,203**	**13,140.3**			**$ 310,343,835.29**	**100.0%**

Annualized cost is the total cost for an FSP client over a year (12 months).

The average annualized cost (across all age groups) for Fiscal Year 08-09 is $23,617.71.

The average daily cost (across all age groups) for Fiscal Year 08-09 is $60.31.

Table 2 shows overall Full Service Partnership program costs by age group for FY 08-09.

Table 2. *Full Service Partnership Services: Percent of Core Cost Components Devoted to FSP Clients, by Age Group (Fiscal Year 08-09)*

	CYF		TAY		Adults		Older Adults	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Housing	$ 2,600,274.29	4.4%	$ 3,421,055.77	6.3%	$ 20,137,423.03	11.4%	$ 1,020,646.55	4.8%
Program Services	$ 56,476,031.50	95.6%	$ 50,665,599.64	93.7%	$ 155,964,643.27	88.6%	$ 20,058,161.24	95.2%
Total	**$ 59,076,305.79**	**100.0%**	**$ 54,086,655.41**	**100.0%**	**$ 176,102,066.30**	**100.0%**	**$21,078,807.79**	**100.0%**

Table 3 displays the same type of cost information as in Table 1, but for Fiscal Year 09-10.

Table 3. *Full Service Partnership Services: Annualized Cost per-Client by Age Group (Fiscal Year 09-10)*

	Number Served	Sum of Days	Number of Client Years	Annualized Cost per-FSP Client	Daily Cost per-FSP Client	FSP Costs Total	% of Total FSP Costs
CYF	6,348	1,444,331	3,957.1	$ 17,481.79	$ 47.90	$ 69,177,192.53	18.3%
TAY	6,623	1,619,816	4,437.9	$ 13,741.40	$ 37.65	$ 60,982,974.12	16.1%
Adults	12,733	3,456,407	9,469.6	$ 23,626.13	$ 64.73	$ 223,729,986.45	59.1%
Older Adults	1,764	480,383	1,316.1	$ 18,785.22	$ 51.47	$ 24,723,227.99	6.5%
Total	**27,468**	**7,000,937**	**19,180.7**			**$ 378,613,381.09**	**100.0%**

The average annualized cost (across all age groups) for Fiscal Year 09-10 is $19,739.29.

The average daily cost (across all age groups) for Fiscal Year 09-10 is $50.55.

Table 4 shows overall Full Service Partnership program costs by age group for FY 09-10.

Table 4. *Full Service Partnership Services: Percent of Core Cost Components Devoted to FSP Clients, by Age Group*
(Fiscal Year 09-10)

	CYF		TAY		Adults		Older Adults	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Housing	$ 1,686,344.99	2.4%	$ 3,675,433.65	6.0%	$ 22,691,038.11	10.1%	$ 1,385,451.08	10.0%
Program Services	$ 67,490,847.54	97.6%	$ 57,307,540.47	94.0%	$ 201,038,948.34	89.9%	$23,337,776.91	90.0%
Total	**$ 69,177,192.53**	**100.0%**	**$ 60,982,974.12**	**100.0%**	**$ 223,729,986.45**	**100.0%**	**$24,723,227.99**	**100.0%**

The age breakouts reveal that FSP services for Adults account for most of the expenditures in both fiscal years.

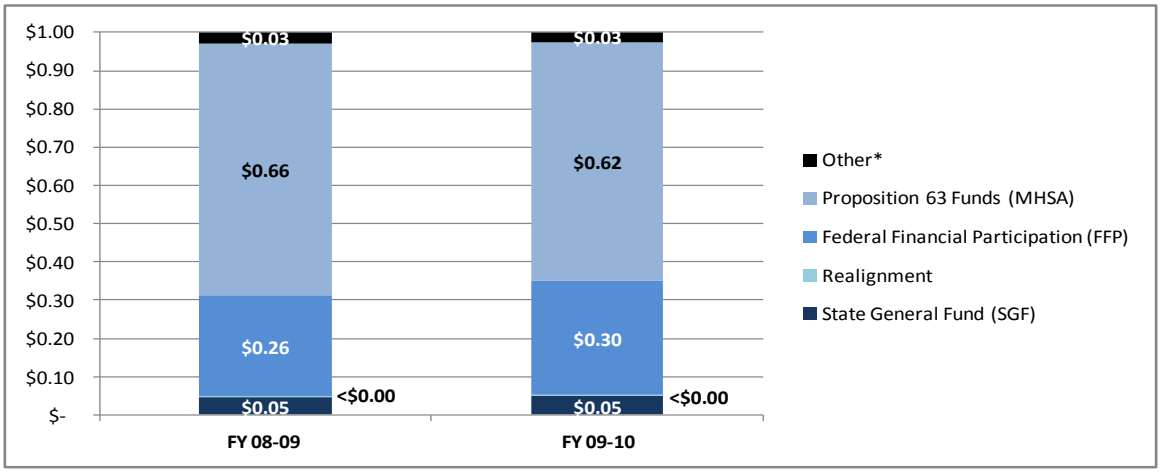
The expenditures for components authorized under the Mental Health Services Act comprise:

- Mental Health Services Act,
- State General Fund,
- Other State Funds,
- Medi-Cal Federal Financial Participation,
- Medicare,
- Other Federal Funds,
- Realignment,
- County Funds, and
- Other Funds.

Breakout by age group is not possible due to the limitations of the RER, discussed in the Full Report (see Chapter III and Appendix E).

Figure 1 displays FSP expenditures from all counties and municipalities that submitted a Revenue and Expenditure Report in FY 08-09 and/or FY 09-10. Therefore, the pool of counties/municipalities included in the analysis of proportion of FSP expenditures by funding source is slightly larger than the participant pool for the FSP Costs and Cost Offsets study (see Appendix E of the full Report).

Figure 1. *Proportion of FSP Expenditures by Funding Source*
(FY 08-09 & FY 09-10)



*Other Funds: Medicare, Other State, County, Other, Other Federal

MHSA expenditures on Medi-Cal increased in FY 09-10 compared with FY 08-09. The increase in MHSA expenditures on leveraged resources suggests that counties and municipalities are successfully leveraging MHSA in order to bring in additional federal dollars.

Cost Offsets of Full Service Partnership Services

Tables 5 and 6 represent costs of service and costs saved as a result of service for FY 08-09 (Table 5) and FY 09-10 (Table 6) new enrollees in FSP. Cost-offset analysis is limited to new enrollees for the following reasons:

- The baseline intake assessment (documented on the Partnership Assessment Form) contains questions about service use in offset categories of interest in the 12 months prior to FSP enrollment.
- The post-FSP period, therefore, should be equivalent to the pre-intake period (no more than 12 months), in order to compare the proverbial "apples to apples."
- Given that the two fiscal years of focus are 08-09 and 09-10, the logical groups for inclusion in analyses were new enrollees in FY 08-09 and new enrollees in FY 09-10.
- Cost offsets are calculated for each individual FSP client (e.g., number of inpatient psychiatric hospitalization days in the 12 months prior to FSP and the 12 months post-FSP enrollment). [17]

More specifically,

- Costs of service are program and housing costs for new clients in a given fiscal year as discussed above; and
- Cost offsets are the total differential between the cost of mental and physical health services, and criminal justice involvement costs, in the year prior to entry into FSP services and the average 12-month cost after entry into services. [18] This is the amount of public money in these areas that was saved after these clients had access to service. [19]

Full Service Partnership Cost Offsets by Age Group include: [20]

Physical Health

- Acute Care Inpatient Hospitalization (number of days)
- Skilled Nursing (Non-Psychiatric) (number of days)
- Emergency Room Visits (number of times)

Psychiatric Care

- Inpatient Psychiatric Hospitalization (number of days)
- Long-Term Care (number of days) [21]
- Skilled Nursing (Psychiatric) (number of days)

Criminal Justice Involvement

- Arrests (number of times)
- Division of Juvenile Justice (number of days)
- Juvenile Hall/Camp (number of days)
- Jail (number of days)
- Prison (number of days)

Table 5. *Total Full Service Partnership Services – Costs & Cost Offsets (Fiscal Year 08-09 New Enrollees ONLY)*

	Number of New Enrollees FY 08-09	Sum of Days	Total Cost for FY 08-09 New Enrollees	Total Cost Offset FY 08-09	Percent Offset FY 08-09
CYF	2,164	340,323	$ 20,450,009.07	$ 2,428,313.16	11.9%
TAY	2,327	371,250	$ 18,870,637.50	$ 22,437,417.44	118.9%
Adults	4,315	690,298	$ 50,564,328.50	$ 41,509,329.01	82.1%
Older Adults	582	91,220	$ 5,573,542.00	$ 5,421,665.55	97.3%
Total	**9,388**	**1,493,091**	**$ 95,458,517.07**	**$71,796,725.16**	**75.2%**

Table 6 displays comparable results for new enrollees in FY 09-10.

Table 6. *Total Full Service Partnership Services – Costs & Cost Offsets (Fiscal Year 09-10 New Enrollees ONLY)*

	Number of New Enrollees FY 09-10	Sum of Days	Total Cost for FY 09-10 New Enrollees	Total Cost Offset FY 09-10	Percent Offset FY 09-10
CYF	3,101	454,605	$ 21,775,579.50	$ 2,262,842.11	10.4%
TAY	2,977	496,190	$ 18,681,553.50	$ 27,501,007.94	147.2%
Adults	4,702	868,415	$ 56,212,502.95	$ 56,120,875.82	99.8%
Older Adults	645	103,459	$ 5,325,034.73	$ 3,857,684.17	72.4%
Total	**11,425**	**1,922,669**	**$ 101,994,670.68**	**$ 89,742,410.04**	**88.0%**

These findings support several important conclusions:

- Cost savings over the two-year period are consistent in relative magnitude across age groups. In particular, TAY consumers experienced the greatest cost-related benefits of service. Transition-Age Youth are at high risk for criminal justice and crisis management services, and FSP participation apparently has a significant impact on consequences for this age group.
- Cost offsets are dramatically lower for the CYF age group. This may reflect the more preventive orientation of services for children, which is not as clearly reflected in the short time line of the measured offsets. Savings for children may appear over a much longer period of time, outside the currently funded study period. In addition, the "*consequence*" nature of the offset categories examined (e.g., criminal justice involvement) is more relevant to older age cohorts. [22] Effects of service are sensitive to life maturation, indicators of service success and the time horizon of measured effects.
- Overall, across all age groups, 75 and 88 percent of FSP program costs for new enrollees in FY 08-09 and FY 09-10 (respectively) are offset by savings to the public mental health, health and justice systems. Although the argument of cost savings should never be advanced as the primary reason for providing public mental health services, results of this magnitude make a strong case for the wisdom of investing public resources in programs such as the Full Service Partnership.

In summary, this analysis of cost offsets in larger social costs attributable to participation in the FSP program documents positive results. Results for the TAY and Adult age groups, which account for the great majority of clients, are particularly positive. This reflects the greater risk for hospitalization and incarceration that exists in these age groups. These results are quite favorable when compared with those of AB 2034, a program charged with serving homeless (or at risk of being homeless) TAY and adults with severe mental illness – the final analysis reported a percentage of costs offset of 49.8 percent. [23] Overall, these results suggest a very positive treatment outcome, and return on investment, for FSP clients.

Table 7 illustrates cost offsets by age and offset category for new Full Service Partnership enrollees in Fiscal Year 08-09.

Table 7. *Full Service Partnership Cost Offsets by Age & Offset Category*
(Fiscal Year 08-09 New Enrollees ONLY)

	Psychiatric		Physical Health		Criminal Justice	
	Amount of Offset	Percent of Total Offset for Age Group	Amount of Offset	Percent of Total Offset for Age Group	Amount of Offset	Percent of Total Offset for Age Group
CYF	$ 425,079.62	17.5%	$ 908,053.24	37.4%	$ 1,095,180.30	45.1%
TAY	$ 8,426,402.27	37.6%	$ 482,463.53	2.2%	$ 13,528,551.64	60.3%
Adults	$29,718,862.23	71.6%	$ 964,209.28	2.3%	$ 10,826,257.50	26.1%
Older Adults	$ 3,845,911.36	70.9%	$ 1,095,025.10	20.2%	$ 480,729.09	8.9%
Total	**$42,416,255.48**	**59.1%**	**$3,449,751.15**	**4.8%**	**$ 25,930,718.53**	**36.1%**

Table 8 illustrates cost offsets by age and offset category for new Full Service Partnership (FSP) enrollees in Fiscal Year 09-10. [24]

Table 8. *Full Service Partnership Cost Offsets by Age & Offset Category*
(Fiscal Year 09-10 New Enrollees ONLY)

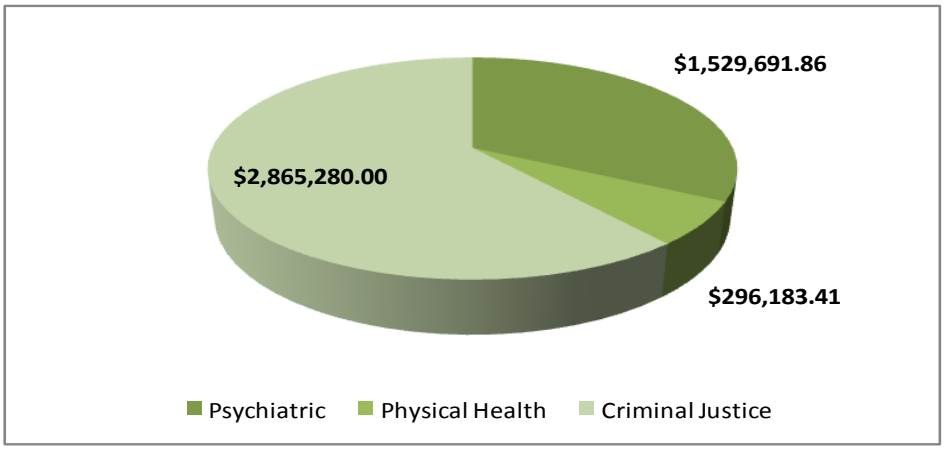
	Psychiatric		Physical Health		Criminal Justice	
	Amount of Offset	Percent of Total Offset for Age Group	Amount of Offset	Percent of Total Offset for Age Group	Amount of Offset	Percent of Total Offset for Age Group
CYF	$ 1,104,612.24	38.4%	$ (611,869.83)	-	$ 1,770,099.70	61.6%
TAY	$ 9,500,199.91	34.5%	$ 3,658,331.16	13.3%	$ 14,342,476.87	52.2%
Adults	$ 39,688,364.64	70.7%	$ 6,195,607.45	11.0%	$ 10,236,903.73	18.2%
Older Adults	$ 4,290,539.63	92.9%	$ (761,785.95)	-	$ 328,930.49	7.1%
Total	**$ 54,583,716.42**	**59.9%**	**$ 8,480,282.83**	**9.3%**	**$ 26,678,410.79**	**29.3%**

Findings as displayed in Tables 7 and 8 support the following conclusions:

- For Adults and Older Adults, the greatest proportion of offsets each fiscal year is accounted for by savings in psychiatric care (largely due to reductions in inpatient psychiatric hospitalization).
- Among TAY and CYF, the greatest proportion of offsets in each fiscal year is accounted for by criminal justice (incarceration and arrests, although largely due to reduction in the number of days incarcerated).
- Physical health (acute care inpatient hospitalization, skilled nursing – non-psychiatric, and emergency room visits) offsets increased substantially as a percentage of overall offsets between FY 08-09 and FY 09-10. Current primary care-mental health integration efforts underway will examine the medical needs of FSP clients in more depth and shed further light on how MHSA meets their myriad needs.

Exhibits 1 through 4 summarize the offset amounts for each age group and the areas examined (psychiatric care, physical health and criminal justice). Exhibit 1 displays how CYF combined offsets from FY 08-09 and FY 09-10 are broken out proportionally among psychiatric care, physical health and criminal justice. Results for CYF FSP clients whose data are displayed in Tables 5 through 8 (in the rows labeled CYF) are now summarized in Exhibit 1.

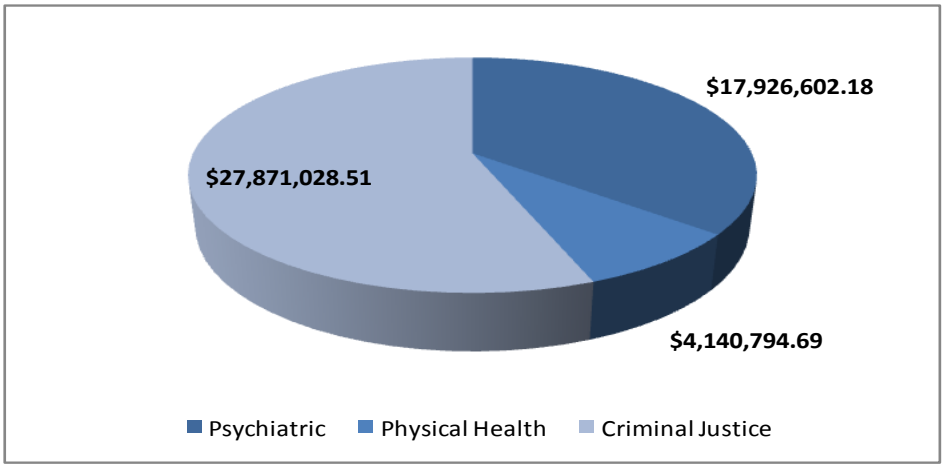
Exhibit 1. *Full Service Partnership Amount of Cost Offsets for CYF*
(FY 08-09 & FY 09-10 New Enrollees ONLY)



In FY 08-09 and FY 09-10, the total amount of costs to the public system that were offset for CYF in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $4,691,155.27 – $4.7 million. Most of the savings were due to reductions in days incarcerated.

Exhibit 2 displays how TAY combined offsets from FY 08-09 and FY 09-10 are broken out proportionally among psychiatric care, physical health and criminal justice. Results for TAY FSP clients whose data are displayed in Tables 5 through 8 (in the rows labeled TAY) are now summarized in Exhibit 2.

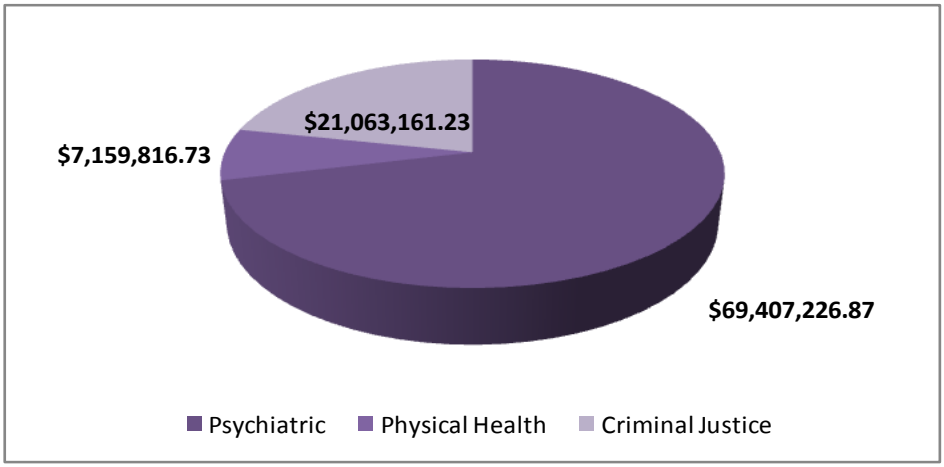
Exhibit 2. *Full Service Partnership Amount of Cost Offsets for TAY*
(FY 08-09 & FY 09-10 New Enrollees ONLY)



In FY 08-09 and FY 09-10, the total amount of costs to the public system that were offset for TAY in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $49,938,425.38 – $49.9 million. As with their CYF counterparts, most of the savings for TAY were due to reductions in days incarcerated.

Exhibit 3 displays how Adult combined offsets from FY 08-09 and FY 09-10 are broken out proportionally among psychiatric care, physical health and criminal justice. Results for Adult FSP clients whose data are displayed in Tables 5 through 8 (in the rows labeled Adult) are now summarized in Exhibit 3.

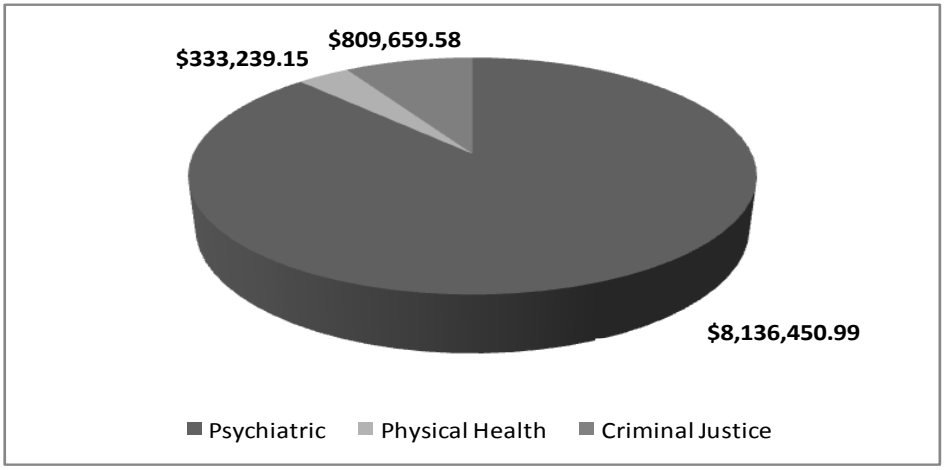
Exhibit 3. *Full Service Partnership Amount of Cost Offsets for Adults*
(FY 08-09 & FY 09-10 New Enrollees ONLY)



In FY 08-09 and FY 09-10, the total amount of costs to the public system that were offset for Adults in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $97,630,204.83 – $97.6 million. Most of the savings were due to reductions in days spent in inpatient psychiatric hospitalization.

Exhibit 4 displays how Older Adult combined offsets from FY 08-09 and FY 09-10 are broken out proportionally among psychiatric care, physical health and criminal justice. Results for Older Adult FSP clients whose data are displayed in Tables 5 through 8 (in the rows labeled Older Adult) are now summarized in Exhibit 4.

Exhibit 4. *Full Service Partnership Amount of Cost Offsets for Older Adults*
(FY 08-09 & FY 09-10 New Enrollees ONLY)

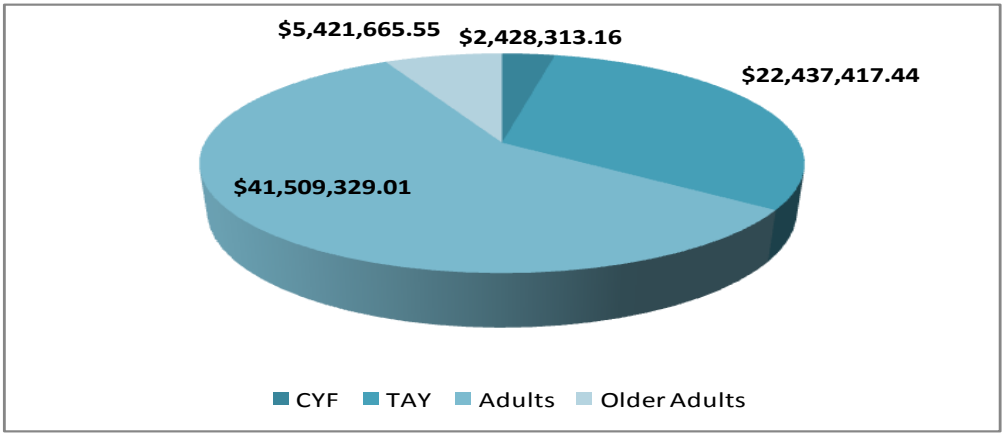


In FY 08-09 and FY 09-10, the total amount of costs to the public system that were offset for Older Adults in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $9,279,349.72 – $9.3 million. Most of the savings were due to reductions in days spent in inpatient psychiatric hospitalization.

Exhibits 5 through 7 summarize the offset amounts across the age groups and the areas examined (psychiatric care, physical health and criminal justice).

Exhibit 5 displays how all offsets from FY 08-09 are broken out proportionally by age group to show the total amount of offset. Results for all FSP clients whose data are displayed in Tables 5 and 7 are now summarized in Exhibit 5.

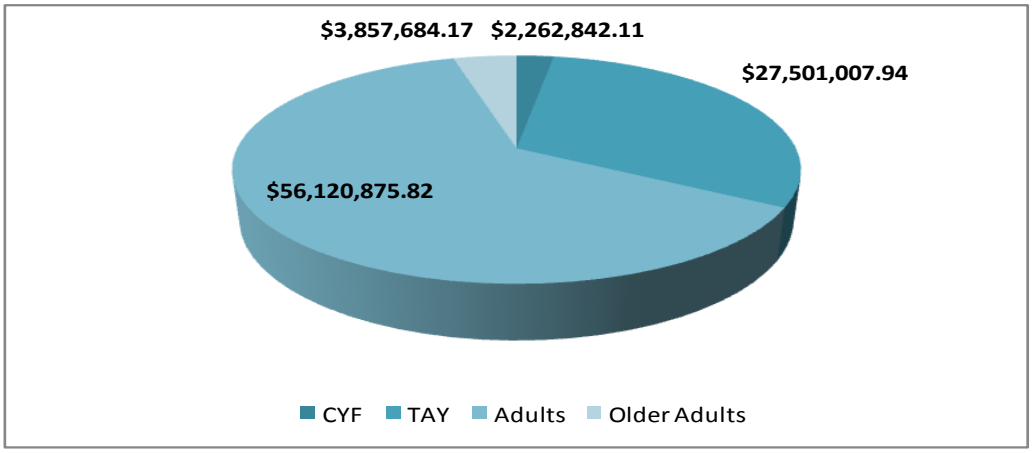
Exhibit 5. *Full Service Partnership Amount of Cost Offsets by Age Group (FY 08-09 New Enrollees ONLY)*



In FY 08-09, the total amount of costs to the public system that were offset across all age groups in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $71,796,725.16 – $71.8 million. Most of the savings were due to reductions in inpatient psychiatric hospitalization and incarceration among Adult FSP clients, followed by fewer days of incarceration among TAY FSP clients.

Exhibit 6 displays how all offsets from FY 09-10 are broken out proportionally by age group to show the total amount of offset. Results for all FSP clients whose data are displayed in Tables 6 and 8 are now summarized in Exhibit 6.

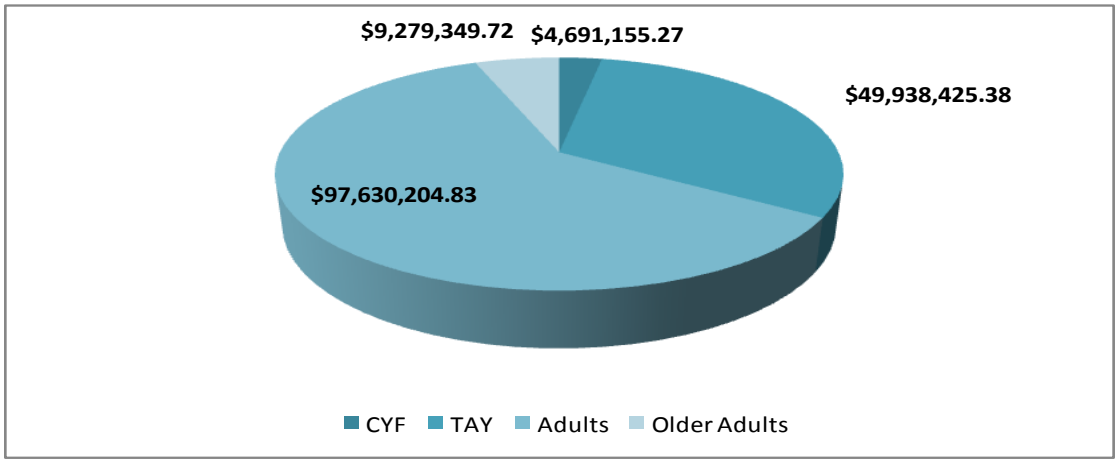
Exhibit 6. *Full Service Partnership Amount of Cost Offsets by Age Group (FY 09-10 New Enrollees ONLY)*



In FY 09-10, the total amount of costs to the public system that were offset across all age groups in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $89,742,410.04 – $89.7 million. As was observed with the previous fiscal year, most of the savings were due to reductions in inpatient psychiatric hospitalization and incarceration among Adult FSP clients, followed by fewer days of incarceration among TAY FSP clients.

Exhibit 7 displays all offsets from FY 08-09 and FY 09-10 broken out proportionally by age group to show the total amount of offset. Results for all FSP clients whose data are displayed in Tables 5 through 8 are now summarized in Exhibit 7.

Exhibit 7. *Full Service Partnership Amount of Cost Offsets by Age Group*
(FY 08-09 & 09-10 New Enrollees ONLY)



When the fiscal year totals are combined (above exhibit), the total amount of costs to the public system that were offset across all age groups in the three major categories analyzed (psychiatric care, physical health and criminal justice) is $161,539,135.20 – $161.5 million. In summary, most of the savings were due to reductions in inpatient psychiatric hospitalization and incarceration among Adult FSP clients, followed by fewer days of incarceration among TAY FSP clients.

When the total cost for new enrollees across both fiscal years ($197,453,187.75) is compared with the total amount offset, the percentage of costs offset is 81.8 percent.

Stakeholder Feedback Process

The Request for Proposal for the Expanded Statewide Evaluation of the Mental Health Services Act specifies:

For Deliverable 1 – Full Service Partnerships, establish and maintain stakeholder engagement in the evaluation that is representative of a wide scope of expertise, including:

- A process for input from individuals living with mental illness, family members/personal caregivers and representatives of culturally diverse unserved and underserved groups of all ages, and
- A process for input from researchers, data analysts and programmers who are responsible for local data evaluation efforts.

Our stakeholder engagement process involved seven key strategies:

1. Presentations to client and family groups/organizations representing unserved/underserved groups
2. Key stakeholder interviews with individuals representing client/family groups and organizations representing unserved/underserved groups
3. Presentations to associations/service provider agencies
4. Key stakeholder interviews with individuals representing associations/service provider agencies

5. Formation of an Evaluation Advisory Group
6. Key stakeholder interviews with peer advocates and parent partners
7. (*ongoing*) Product review/feedback: Stakeholder input was sought for two key deliverables:
    - The draft Executive Summary and the accompanying draft report
    - County-specific tables illustrating FSP costs and cost offsets[25]

The draft of this report [26] was released publicly at the Mental Health Services Oversight and Accountability Commission meeting on July 26, 2012.

As was previously noted, almost all of the counties are included in this report (N = 50; 86.2%). [27] The populations of counties (numbers of persons residing in the counties according to census data) represented in this report comprise almost all of the State of California (95.0%). [28]

County-specific matrices that replicate the tables in the draft report were distributed to participating counties on July 27, 2012. Counties were provided a 30-day review and comment period. Feedback was due to EMT Associates by August 27, 2012. The deadline was set in order to provide EMT with sufficient time to a) make necessary revisions and b) conduct cross-county analyses for the Final Report, due September 30, 2012. [29]

Counties with complete web survey data were analyzed and provided with a county-specific matrix, following the procedures described in the paragraph above. [30] Input from the counties through the web survey was essential in determining the breakout of Full Service Partnership expenditures by age group due to limitations in the Revenue and Expenditure Report data. In particular, the Revenue and Expenditure Reports were ***not*** designed with the requirement that expenditures be reported by age group:

- Children, Youth and Families
- Transition-Age Youth
- Adults
- Older Adults

A compendium of feedback submitted and the disposition of each stakeholder's comments is contained in Appendix F of the report. Feedback related to future studies, data collection efforts and/or reports is summarized below.

Future Considerations

Feedback included additional areas of focus for MHSOAC consideration when funding future Requests for Proposals (RFPs), ways in which existing data related to the current report can be analyzed to further answer questions of importance and suggestions for improvements to the data collection and reporting system.

New Study Areas

Three new studies emerged through the feedback process. The first emerged through feedback from peer partners and parent advocates, the second from the Evaluation Advisory Group and the third from county mental health associations/service providers.

Study #1: We recommend that the Mental Health Services Oversight and Accountability Commission consider funding a participatory evaluation to formally study the potential cost offsets as a result of peer networks. Such a study would provide a necessary balance to the preponderance of consequence-focused data currently gathered through the state's data collection and reporting system, and provide the needed peer and recovery perspectives. Indeed, in a recent

presentation to the Client and Family Leadership Committee about results from the 2011 Community Forum series, one key "*Finding prompting additional CFLC attention*" was:

> Forum participants reported terrific success when clients and family members were employed in the mental health system and significant success resulting from peer provider programs. [31]

Previous efforts to engage clients and families in meaningful ways have met with mixed success. Participatory evaluation stands alone in the following ways:

1. Clients and families are engaged in meaningful ways throughout all aspects of the study;
2. Client and family engagement is a project deliverable, thereby ensuring that the objective is met; and
3. Sufficient funding is provided to support meaningful involvement.

Consistent with these recommendations was a recommendation made by the Client and Family Leadership Committee, when summarizing the findings of the 2011 Community Forum series:

> Trends and findings identified in annual reports on the community forums should be considered when developing the Commission's Annual Work Plan. [32]

Two recent efforts include UC Davis' Community Engagement Study, which examined the ways in which unserved and underserved communities were involved in the planning and execution of MHSA, and the Statewide Participatory Evaluation, [33] which examined the impact of client and family involvement on the public mental health system. Although the latter study is contracted to examine the impact of Peer Support Services on 1) perception of access to services, 2) appropriateness of care, 3) continuity of care, 4) recovery orientation of services, 5) employment, 6) housing situation, and 7) consumer recovery/resilience and wellness, costs and potential cost offsets are not included as part of the evaluation.

In order for such a study as the one recommended to receive adequate funding and priority, it is recommended that it be issued as a stand-alone RFP, rather than as a component of a larger RFP or as an "add-on." By funding a participatory evaluation to investigate the potential cost offsets as a direct result of Peer Support Services, client and family engagement in evaluation will continue to move from an articulated value into action.

Study #2: The real costs incurred by clients and families in meeting their treatment needs and goals have not been addressed. For example, money spent on transportation. The burden is believed to be particularly heavy on parents and caregivers, for whom the true cost of care is probably much higher than has been documented through the process described in this Report. Their contributions to the care of their children and dependents bear further exploration.

Study #3: There is a great deal of interest in comparison of costs and offsets between county and contract providers. However, the current data systems readily available through the current Statewide Evaluation contract do not support analyses to shed light on the question. MHSOAC may determine that the question, "*Do county contractors (e.g., community mental health providers) provide MHSA services in a more cost-effective manner than the county?"* posed by community mental health associations/service provider agencies merits investigation, and may develop a Request for Proposal in order to thoroughly study the issue, keeping in mind the data requirements outlined in the full Report, Chapter II. [34]

However, increasing impetus to facilitate direct access to county cost data comes from the change in the Revenue and Expenditure Report (RER). The revised RER is a summary format that will make future cost-offset analyses of FSP

programs (or any other MHSA program, for that matter) extremely difficult without direct data collection from the counties.

Use of Existing Data

A number of interesting questions were posed related to the current deliverable, all of which can be answered using existing data. However, submission of new data by counties that had not previously participated in the study, up until two weeks before delivery of the draft report to MHSOAC, prevented any additional analyses from inclusion in this Report.

Future reports could answer key questions (most posed by Commissioners). Suggestions include:

- **Impact of FSP Activities on Costs and Cost Offsets**. Full Service Partnership service profiles have been developed for each county. The results present a fascinating description of FSP services across the state. Of additional interest is the potential impact on costs and cost offsets. For example, do certain types of service packages produce certain types of results? Such questions merit further investigation in a stand-alone report.
- **Impact of FSP Completion and Length of Treatment on Cost Offsets**. This brief could address these core questions posed by MHSOAC members.
- **Impact of Substance Abuse and Substance Abuse Treatment on FSP Costs and Cost Offsets**. This brief could address these core questions posed by a parent/family stakeholder. [35]

Data Collection and Reporting System

Challenges related to ease of using the statewide data collection and reporting system, particularly with the Key Event Tracking data and inconsistent/illogical values, represented but a few of the barriers encountered during the course of analysis and reporting (see Chapter III of the full Report).

Ongoing efforts sponsored by MHSOAC to promote data use (through the contract with California State University, Sacramento) and current efforts to examine data quality are therefore timely. To further the goal of improving both data quality and the timeliness with which data are accessible in a usable format to counties and constituents, we make the following recommendation:

- Conduct a thorough review of the Data Collection and Reporting System (DCR) in partnership with the Department of Health Care Services, the California Mental Health Directors Association and other relevant stakeholders and experts. This review should focus on a) clearly identifying the pattern of occurrence of specific data quality problems (e.g., missing demographic data); b) understanding the reasons that this occurs, including those that are specific to particular county contexts; c) identifying feasible solutions to address these reasons, and d) identifying a method that will enable *all* counties to easily upload data into the DCR (see Appendix D, which lists counties that are currently not in the state's DCR system). [36]

Definition of Terms

DEFINITION OF TERMS	
3M	Quarterly Assessment
AB	Assembly Bill
CF	Capital Facilities
CFTN	Capital Facilities and Technological Needs
CMHDA	California Mental Health Directors Association
CSA	Corrections Standards Authority
CSI	Client Services Information System
CSS	Community Services and Supports
CYF	Children, Youth and Families
DCR	Data Collection and Reporting System for MHSA FSP
DJJ	Division of Juvenile Justice
DMH	Department of Mental Health
DNR	Agency did not report costs
DOF	Department of Finance
EAG	Evaluation Advisory Group
ER	Emergency Room
FFP	Federal Financial Participation
FSP	Full Service Partner or Full Service Partnership
FY	Fiscal Year
GSD	General System Development
IMD	Institution for Mental Diseases
INN	Innovation
IMPACT	Improving Mood – Promoting Access to Collaborative Treatment
JHC	Juvenile Halls and/or Camps
KET	Key Event Tracking
LAO	Legislative Analyst's Office
LGBTQ	Lesbian, Gay, Bisexual, Transsexual/Transgendered and Questioning

DEFINITION OF TERMS	
MH	Mental Health
MHRC	Mental Health Rehabilitation Centers
MHSA	Mental Health Services Act
MHSOAC	Mental Health Services Oversight and Accountability Commission (also OAC)
NC	No Camp
NJH	No Juvenile Hall
NJHC	No Juvenile Hall or Camp
OA	Older Adults
OSHPD	Office of Statewide Health Planning and Development
PAF	Partnership Assessment Form
PEI	Prevention and Early Intervention
POQI	Performance Outcomes & Quality Improvement
RER	Revenue and Expenditure Reports
RFA	Request for Applications
RFP	Request for Proposal
SAMHSA	Substance Abuse and Mental Health Services Administration
SB	Senate Bill
SED	Serious Emotional Disturbance
SGF	State General Fund
SMA	Statewide Maximum Allowance
SMI	Severe Mental Illness
SMHA	State Mental Health Authority
SPSS	Statistical Package for the Social Sciences
TAY	Transition-Age Youth
TN	Technological Needs
WET	Workforce Education and Training
WIC	Welfare and Institutions Code
YSS	Youth Services Survey

DEFINITION OF TERMS	
YSS-F	Youth Services Survey for Families

[1] Per California's Welfare and Institutions Code, Part 4.5, Mental Health Services Fund. Specifically, Section 5850, Part 4, and 5800, Part 3. Requirements were also summarized in California Department of Mental Health (DMH) Letter 05-05, Three-Year Program and Expenditure Plan Requirements: Mental Health Services Act, Community Services and Supports, p. 1.

CSS requirements are further outlined in Section 5892, (a) (5).

[2] Per the Corporation for Supportive Housing (undated report), *AB 2034 Program experiences in housing homeless people with serious mental illness*:

The state legislature started laying the foundation for MHSA back in 1999 when it passed AB 34, which provided $10 million for pilot programs through the mental health departments in Los Angeles, Sacramento and Stanislaus counties. Based on the success of that effort, funding increased dramatically in FY 00-01 under AB 2034. AB 2304 provided the resources necessary to expand existing pilots and create additional programs statewide. (p. 1)

In summary, there are many predecessors to Prop 63. Others include AB 334 and AB 3777.

[3] California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author. (p. 3)

Data collected from November 1, 1999 – January 31, 2007. $55 million in costs, $27.4 million in offsets (psychiatric hospitalization, incarceration and emergency room use for psychiatric episodes).

[4] DMH Letter 05-05, Three-Year Program and Expenditure Plan Requirements: Mental Health Services Act, Community Services and Supports.

[5] Although the technically accurate term is *expenditure* based on the data sources analyzed, this term is cumbersome, and not user-friendly to the lay reader. Therefore, the term *cost* may be used in place of *expenditure* throughout this Executive Summary.

[6] Housing is defined as housing support, operating support and housing placement. It does not include the Governor's Housing Initiative. Housing support is the cost of housing subsidies for permanent, transitional and temporary housing; master leases; motel and other housing vouchers; rental security deposits; first- and last-month rental payments; and other fiscal housing supports. The operating costs of providing housing supports to clients include building repair and maintenance, utilities, housing agency management fees, insurance, property taxes and assessments, and credit reporting fees. Housing placement is assistance in securing housing, including supportive housing – permanent affordable housing with combined supports for independent living.

[7] The terms *cost savings* and *cost offsets* are used interchangeably throughout this Executive Summary. Depending upon the age group, savings were indeed identified when compared with cost. For Transition-Age Youth in particular, the savings exceeded the cost of providing services. For other age groups, cost *benefit* was identified – meaning that the dollar amount offset did not "*zero out*" the cost of providing service, but a benefit to society is provided, nonetheless, by reductions in hospitalization, incarceration, etc.

[8] The most conservative estimate of cost offsets would involve accessing consequence data directly from providers – jails, prisons, etc. However, this was not feasible from either a time or a study-cost perspective. Therefore, self-report data were relied upon in order to estimate days in jail, prison, etc. See Chapter II of the full Report for a suggested study option to more closely examine inpatient hospitalization costs by analyzing direct billing data from counties.

[9] http://www.dmh.ca.gov/dmhdocs/docs/letters05/05-05CSS.pdf
Children and adolescents identified as seriously emotionally disturbed (SED) are eligible for FSPs if they meet the criteria set forth in Welfare and Institutions Code Section 5600.3, Subdivision (a). Adults and older adults identified to have a serious mental disorder are eligible for FSPs if they meet the criteria set forth in Subdivision (b) of Section 5600.3.
http://www.leginfo.ca.gov/cgi-bin/displaycode?section=wic&group=05001-06000&file=5600-5623.5
California's Welfare and Institutions Code is posted in its entirety on the website cited above, absent page numbers. Click on the link and the section cited will appear on screen, verbatim, as quoted.

[10] Although the age range for Adults was not included in DMH Letter 05-05, it is defined in the California Code of Regulations, Title 9. Rehabilitative and Development Services, Division 1. Department of Mental Health, Chapter 14. Mental Health Services Act, Article 2: Definitions, Section 3200.010. Adult.

[11] http://www.dmh.ca.gov/dmhdocs/docs/letters05/05-05CSS.pdf

[12] Alignment of plan, update, RER, plus breakout of discrete FSP programs into distinct age groups was a rarity among the counties, but this should not be viewed as a "*negative*" on the part of the counties, because the original intent of the RER had nothing to do with breakouts by age group.

Note that one unique partnership of three municipalities was in start-up during the entire study period, and was therefore removed from the total N for purpose of calculation. This study site is one of two municipalities that optionally decided to apply for MHSA funds to better help serve their constituents. Therefore, the N = 58 (rather than 59). According to statute, county departments of mental health are *required* to deliver public mental health services.

[13] See the footnote above. The link to census data is:
http://www.census.gov/popest/research/eval-estimates/eval-est2010.html

[14] See Appendix D of the full Report for a list of county participants.

[15] Calculation of FSP participants is complex and the methodology too detailed for inclusion in an Executive Summary. In order to explain the process, a step-by-step procedural breakdown is provided in the Report, with examples to aid understanding. Previous iterations of the Report (with attempts at shorter, truncated explanations) were insufficient in terms of providing full understanding and comprehension of the methodology for the lay reader. Therefore, an abbreviated summary is not provided in this Executive Summary due to concerns that the methodology will be misunderstood or its application misinterpreted. Please refer to Chapter III of the full Report for details.

[16] Calculation of annualized cost per FSP client is complex and the methodology too detailed for inclusion in an Executive Summary. See above for the challenges encountered when earlier drafts of the Report were reviewed by key stakeholders. Please refer to Chapter III of the full Report for a detailed explanation of the methodology.

[17] For more details on methods related to the cost-offset study, see Chapter IV of the full Report.

[18] Annualization of the service period is the same methodology used by the California Department of Mental Health when evaluating and reporting on AB 2034 outcomes.

California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.

[19] Of course, cost savings in individual counties could be attributable to many plausible alternative influences other than FSP enrollment, particularly additional services from other programs in that county. However, these influences would not adequately explain aggregate state-level savings. This issue of diversity in county savings, and in county environments, will be addressed in greater detail in an upcoming analysis.

[20] Cost Offsets can be developed only for counties that submit data to the State Department of Mental Health's Full Service Partnership (FSP) Data Collection and Reporting System (DCR). All of the variables used in the FSP Cost Offset analysis are contained in the DCR. EMT does not have access to non-DCR data from counties.

The areas analyzed for savings are very similar to those analyzed in the evaluation of AB 2034 efforts, which included inpatient psychiatric hospitalization and incarceration. Emergency room use was also evaluated but was limited to psychiatric rather than physical health.

California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.

[21] Institution for Mental Diseases facilities/Mental Health Rehabilitation Centers. Key Event Tracking data do not distinguish between the two. Therefore, an average of the IMD and MHRC rates for the facilities contracted by each county was used as the basis for calculating the cost applied to the number of days in long-term care.

[22] Although indicators such as education are logical choices for Children and Youth, challenges inherent in the statewide data collection system related to floor effects and missing data made this variable unsuitable for analysis. See Phase II Deliverable 2.E – Priority Indicators Report.

[23] California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.

Data collected from November 1, 1999 to January 31, 2007. $55 million in costs, $27.4 million in offsets (psychiatric hospitalization, incarceration and emergency room use for psychiatric episodes).

[24] Physical Health amounts in FY 09-10 for CYF and Older Adults actually show a loss, or no cost offset. This means that there were more days of acute care hospitalization, etc., for physical health reasons among Children, Youth and Older Adults during their tenure as Full Service Partners than in the 12 months prior to intake into the program.

[25] The data contained in the county-specific tables form the basis for creation of the statewide data set, summarized and reported here.

[26] Phase III Deliverable 1.C. Initial written report that specifies the financial impact of outcomes achieved in comparison with expenditures for FSPs for each of the four age groups. Stakeholders were asked to submit comments in writing no later than August 26, in order to allow EMT sufficient time for revision to the Final Report due September 30, 2012.

[27] Calculations were successfully completed for three additional counties that did not complete the web survey. These three counties aligned their CSS Plans, Annual Updates, and Revenue and Expenditure Reports in a consistent manner and broke out FSP programs into discrete age groups. Alignment of plan, update, RER, plus breakout of discrete FSP programs into distinct age groups was a rarity among the counties, but this should not be viewed as a "*negative*" on the part of the counties, because the original intent of the RER had nothing to do with breakouts by age group. Inclusion of the three additional counties brings the total number of participants to 50 (86.2%).The link to census data is: http://www.census.gov/popest/research/eval-estimates/eval-est2010.html

[28] See Appendix D of the full Report for a list of county participants.

[29] Phase III Deliverable 1.B – Revised Deliverable 1.A in response to stakeholder input, and Phase III Deliverable 1.D – Revised Deliverable 1.C in response to stakeholder input.

[30] See footnote 27.

[31] Presentation dated July 25, 2012, slide printout p. 4.

[32] Ibid.

[33] Report forthcoming.

[34] For those wishing to seriously explore this question, it is critical that Chapter II receive a thorough review. There is a general misunderstanding that the County Cost Reports have the ability to answer these questions. However, the Cost Reports do not track individuals served. Only county cost records at the individual client level provide that level of granularity.

[35] The merits of analyzing the impact of substance abuse are also supported by Dr. Brian Yates, expert consultant in the area of cost-benefit analysis, American University.

[36] The California Association of Social Rehabilitation Agencies also recommends reviewing/revisiting the data collection and reporting arrangements for AB 34/2034. This task should focus on identifying components that prevented delays and enhanced data quality and on identifying solutions applicable to the current system.

In addition, a number of counties are advocating that the current "event-driven" system be replaced with a quarterly outcome-reporting system.

A particular question of interest is why any FSP has missing/unknown values for race/ethnicity. Due to the high percentage of cases with missing/unknown racial/ethnic data, analyses were not conducted for this study. The study of FSP Costs and Cost Offsets examined only those FSP clients with outcome data in the offset categories of interest. Therefore, the FSP client population of interest for the study is a much smaller group out of the larger population of FSPs. The sample was first narrowed down by:

1. Selecting only new enrollees in FY 08-09 and FY 09-10.

The sample was secondly narrowed down by

2. Examining offsets in the following categories:

a. Physical Health
b. Psychiatric Care
c. Criminal Justice

Racial/ethnic analyses were further hampered for the FSP Costs and Cost Offsets study by small sample size for FSP clients showing outcomes in many of the offset categories. Small sample size impacts the percentage of missing/unknown disproportionately. Again, note that in order to be considered for the racial/ethnic analysis, an FSP client had to show an outcome in the cost-offset area **and** have a valid ethnic/racial value in at least one of the fields for racial/ethnic background.

I. Introduction

Proposition 63 (2004) provides increased funding through the Mental Health Services Act (MHSA) to support mental health services and promote innovative services and best practices for individuals with mental illness and inadequate access to the traditional public mental health system. Prop 63 funds are distributed to county departments of mental health to implement MHSA components. The focus of this report is the Full Service Partnership (FSP), which is designed to serve Californians in all phases of life who experience the most severe mental health challenges because of illness or circumstance. This population has been historically underserved and has substantial opportunity for benefits from improved access and participation in quality mental health treatment and support. FSP programs are a large portion of the Community Services and Supports (CSS) funding allocation from MHSA. There is a requirement that most of the CSS budget be allocated to FSP, and that clients be served with "*whatever it takes.*" The remaining portions of CSS (can be up to 49 percent of county MHSA budgets) are used to cover gaps in systems of care related to needs for supportive services, such as transportation or vocational training (which are typically unfunded), crisis intervention and treatment. [1]

The Statewide Evaluation

UCLA's Center for Healthier Children, Youth and Families and EMT Associates, Inc., have been contracted by the Mental Health Services Oversight and Accountability Commission to conduct a statewide evaluation of the Mental Health Services Act. This evaluation is designed to be consistent with the intent of the Act "*to ensure that all funds are expended in the most cost-effective manner and services are provided in accordance with recommended best practices subject to local and state oversight to ensure accountability to taxpayers and to the public*."

The UCLA/EMT Evaluation will produce deliverables in several priority areas. The purpose of this report is twofold, to specify the: [2]

- Statewide and county-specific per-person annual cost [3] average for FSP Adults, Older Adults, Children and Transition-Age Youth and proportion of funding by revenue source. In plain language, ***the cost of providing FSP program services per person by age group,*** and
- Financial impact of outcomes achieved in comparison with expenditures for FSP clients for at least one of the four age groups. In the context of FSP impact, this report documents ***how FSP program costs are offset by savings*** [4] ***in actual dollar amounts as a result of reductions in inpatient hospitalization days (psychiatric and physical health) and number of days incarcerated***.

[1] For a more detailed discussion about CSS component expenditures, see: http://mhsoac.ca.gov/Announcements/docs/Evaluation_Deliverable1A_Brief1_CSS.pdf

[2] This report represents the combination of two Phase III contract deliverables: Phase III Deliverable 1.A – FSP Cost Report, which specifies the statewide and county-specific per-person annual cost average for FSP Adults, Older Adults, Children and Transition-Age Youth and proportion of funding by revenue source; and Phase III Deliverable 1.B – FSP Cost Offset Report, the Initial written report that specifies the financial impact of outcomes achieved in comparison with expenditures for FSP clients for at least one of the four age groups.

[3] Although the technically accurate term is *expenditure* based on the data sources analyzed, this term is cumbersome and not user-friendly to the lay reader. Therefore, the term *cost* may be used in place of *expenditure* throughout this Report.

[4] The terms *cost savings* and *cost offsets* are used interchangeably throughout this Report.

Report Overview

This report, *Full Service Partnerships: California's Investment to Support Children and Transition-Age Youth with Serious Emotional Disturbance and Adults and Older Adults with Severe Mental Illness*, contains four (4) chapters. A brief synopsis of each chapter follows.

Chapter I, Introduction, provides a brief introduction to the report and a short orientation for the reader to the contents of each chapter.

Chapter II, Involvement of Key Stakeholders, describes the process for obtaining input from expert evaluation advisors and people with lived experience, and recommendations for next steps in terms of a participatory evaluation of costs and cost offsets due to the impact of formal and informal peer networks.

Expenditures on Full Service Partnership Programs are presented in Chapter III. In plain language – this chapter contains the FSP cost per person by age group. There is a brief discussion of the methodology used to produce FSP cost per person, including the elements that went into compiling FSP cost. The calculation for participant service years is also presented. The statewide per-person annual cost average by age group is shown in a table.

Chapter IV focuses on Cost Offsets for Full Service Partnership Programs. In this chapter, findings from outcome analysis of psychiatric services, physical health services and criminal justice involvement are presented that illustrate how the savings due to reduction in number of days help pay for FSP programs.

II. Involvement of Key Stakeholders

The Expanded Statewide Evaluation of the Mental Health Services Act specifies that the evaluation team:

Establish and maintain stakeholder engagement in the evaluation that is representative of a wide scope of expertise. Engagement will include:

- A process for input from individuals living with mental illness, family members/personal caregivers and representatives of culturally diverse unserved and underserved groups of all ages, and
- A process for input from researchers, data analysts and programmers who are responsible for local data evaluation efforts.

The focus of this chapter is to describe the process and contribution of engagement of stakeholders through seven key strategies:

1. Presentations to client and family groups/organizations representing unserved/underserved groups
2. Key stakeholder interviews with individuals representing client/family groups and organizations representing unserved/underserved groups
3. Presentations to associations/service provider agencies
4. Key stakeholder interviews with individuals representing associations/service provider agencies
5. Formation of an Evaluation Advisory Group
6. Key stakeholder interviews with peer advocates and parent partners
7. Product review/feedback (further elaborated on in Appendix F, Key *Stakeholder Feedback*)

1. Presentations to Client & Family Groups/Organizations Representing Unserved/ Underserved Groups

Outreach to client and family groups and organizations representing unserved and underserved groups was conducted early in the evaluation process. [5] An offer was made to stakeholder groups for presentation about the Statewide Evaluation of the Mental Health Services Act in person, through conference calls or through webinars. [6]

A total of six (6) presentations were made during the spring/summer of 2011, during which feedback on the FSP Costs and Cost Offsets studies was actively sought. [7]

With respect to the FSP Costs and Cost Offsets studies, the following themes emerged:

- Client and family groups wanted to review the draft report and needed adequate time to do so: [8]
    - Reviewers want to know the disposition of their review comments (e.g., were they used in producing the Final Report, and if not, why not?).
- An emphasis on recovery and resilience is sorely needed:
    - Most of the data collected through the statewide Department of Mental Health system (the Data Collection and Reporting System, known as the DCR) are *consequence*-focused. In lay

[5] Late March-July 2011.
[6] The study as a whole was presented and feedback sought with the following considerations: a) reduce stakeholder burden (to avoid returning for every deliverable and thereby requiring multiple presentations/feedback sessions), b) budgetary constraints.
[7] See Appendix A for a list of organizations.
[8] Commitment was made by EMT Project Director Dr. Elizabeth Harris to each group of stakeholders that they would be sent a copy of the draft report for review and input.

terms, most of what is collected about FSP clients is negative (e.g., incarceration, hospitalization).
    - Clients and families would like to see positive outcomes documented and somehow tied to savings to the system. [9]

A key stakeholder group representing underserved and unserved individuals was very concerned that:

- *Communities of color are not served in proportion to their actual numbers by the Full Service Partnership program*.

The degree to which communities of color are being served by Full Service Partnerships merits investigation, and is a key question to be addressed in a separate MHSA Statewide Evaluation Deliverable. [10]

2. Key Stakeholder Interviews with Individuals Representing Client & Family Groups/ Organizations Representing Unserved/Underserved Groups

Stakeholder groups were contacted and offered participation in a presentation about the Statewide Evaluation of the MHSA, with an opportunity for comment and recommendation. The evaluation team met with four (4) organizations that requested in-person meetings to gain a better understanding of the study. Two agencies for Older Adults opted not to participate in presentations but made the following input:

- The needs of Older Adults are not addressed by every county:
    - A cost-offset study, therefore, may incorrectly assume that Older Adults do not have positive outcomes, when the real problem is that there are not programs in place to a) recruit them and b) to specifically address their needs.[11]
    - Among counties that do address the needs of Older Adults through Full Service Partnerships, some are implementing evidence-based practices (such as IMPACT). However, IMPACT is also being implemented by some counties under the Prevention and Early Intervention component. [12] This fragmentation of funding even under MHSA may make it difficult to determine the true cost offsets for Older Adults.

The evaluation team took these concerns into consideration when conducting analyses of FSP costs and cost offsets by age group, as the calculation of numbers served was critical to determining cost per client. In addition, see the discussion in this chapter under the *Evaluation Advisory Group* for the process developed for documenting and summarizing FSP services and strategies.

The potential positive impact of evidence-based practices on both costs and cost offsets should not be under-estimated. The following assumptions may be tested: [13]

[9] Examples include measuring indicators of recovery, and quality adjusted life years (QALYs).
[10] Phase II Deliverable 2.E – Priority Indicator Report planned for release on September 30, 2012. Subsequent reports are planned for December 31, 2012, and March 31, 2013.
[11] A thorough, systematic review of CSS Plans was conducted expressly for the purpose of identifying services for Older Adults, using a structured review tool, by one interviewee. She has given her permission to make the results available, on request.
[12] Specifically, under Early Intervention.
[13] Due to the review and feedback schedule, there was insufficient time to test these hypotheses in order to determine the potential impact on cost. Therefore, we propose exploration via an upcoming MHSA Cost Deliverable, in order to make full use of the data collected.

- Implementing an evidence-based best practice may be more expensive because of additional staff training and ongoing supervision requirements (costs), and
- Implementing a proven practice that has previously shown demonstrable outcomes is likely to produce the same positive outcomes with FSP participants (cost offsets).

3. Presentations to Associations/Service Provider Agencies

Outreach to service provider agencies and community mental health associations/agencies was also conducted early in the Phase III evaluation.[14] A total of six (6) presentations were made during the spring/summer of 2011, during which feedback on the FSP Costs and Cost Offsets studies was actively sought.[15] This was the area that generated the most interest and enthusiasm among community mental health associations. [16]

With respect to the FSP Costs and Cost Offsets studies, the following themes emerged:

- Service provider agencies/community mental health associations were interested in reviewing the draft report. [17]
- County contractors (e.g., community mental health providers) may provide MHSA services in a more cost-effective manner than the county. This hypothesis should be tested.

The latter concern has clear implications for conduct of the cost and cost-offset analyses. Accordingly, feasibility testing is discussed in the following section.

4. Interviews with Representatives from Associations/Service Provider Agencies

When the initial offer was extended to stakeholder groups for a presentation about the Statewide Evaluation of the MHSA, seven (7) organizations instead opted to meet in person or via conference call to gain a better understanding of the study. [18]

The California Mental Health Planning Council, which recommended the original MHSA performance indicators, was one. The focus of its meeting was on Phase II Deliverable 2 (*Statewide and County Indicator Report*).

The remaining organizational representatives were interested in the FSP Costs and Cost Offsets Report. The themes that emerged during the interviews echoed those discovered during presentations made to agencies/associations.

In the summer of 2011, the only available data source was the Revenue and Expenditure Reports. A link to the worksheet provided by the Department of Mental Health for documenting FSP expenditures by program is provided in Appendix E (*Revenue & Expenditure Reports*). The worksheet breaks out expenditures under FSP into *county* and *contractor*. Based on this initial information, we determined that the question posed by associations and service provider agencies merited feasibility testing:

[14] Late March-July 2011.
[15] See Appendix A for a list of organizations.
[16] MHSA coordinators were interested in the Statewide Evaluation as a whole. The main theme was informing them well in advance of any expectations involving data collection.
[17] Commitment was made by Dr. Harris to each group of stakeholders that they would be sent a copy of the draft report for review and input.
[18] The plan was that interviewees would report items of interest back to their constituency, given the busy agendas that most association meetings entailed. However, a subsequent presentation was scheduled for the California Mental Health Planning Council, following the initial interview.

- Do the available data support our ability to answer the question, "*Do county contractors (e.g., community mental health providers) provide MHSA services in a more cost-effective manner than the county?"*

We laid out several questions to be answered during our exploratory process:

1. Are contractors identified by a unique identification number in the Revenue and Expenditure Report?
    a. If yes, can this be tracked to individual client (services received) in the DCR?
2. Are contractors identified by name in the Revenue and Expenditure Report?
    a. If yes, can this be tracked to individual client (services received) in the DCR?

The answers to #1 and #2 were ***no***. In addition, we learned that although individual client service records in the DCR may specify the FSP "program" each person participated in, this "*program*" may have been implemented by any one of a number of contractors as well as the county itself. The DCR was not designed to capture detailed service-exposure level data.

The next step was to examine County Cost Reports, with the goal of answering the following questions:

1. Can FSP expenditures be disentangled out of the larger MHSA costs contained in the Cost Report?
    a. If yes, can individual contractor FSP billing be traced through the Cost Report (*thereby bypassing the Revenue and Expenditure Reports altogether*)?

After an exhaustive review of the Cost Report worksheets and consultation with a county fiscal expert (*who completes the Cost Report worksheets annually*), the answers were determined to be ***no***.

In summary, we learned the following:

- Individual FSP client data in the DCR contain the general "*program*" an individual person participated in, but not the individual contractor that delivered the services nor the number of contacts, amount of time of each contact, etc.
- Individual contractors are not identified in any systematic way in the Revenue and Expenditure Report (RER). There is no way to link RER expenditure data by contractor to either the DCR or the Cost Report.

Counties would need to turn over individual-level cost data to UCLA/EMT in order to answer the question as to whether contractors deliver FSP services in a more efficient manner compared with the county. We determined that requesting this level of participation from counties is not feasible for the following reasons:

- Burden on county mental health departments
- Confidentiality concerns
- Budget/time constraints

In sum, MHSOAC may determine that the question, "*Do county contractors (e.g., community mental health providers) provide MHSA services in a more cost-effective manner than the county?"* posed by community mental health associations/service provider agencies merits investigation and may develop a Request for Proposal in order to thoroughly study the issue, keeping in mind the data requirements outlined above.

5. Evaluation Advisory Group

The Evaluation Advisory Group (*see Appendix C*) explicitly advises on FSP costs and cost offsets. It is composed of nationally recognized evaluators and evaluation and fiscal staff from county mental health departments.

The group initially convened for an all-day meeting on November 3, 2011, in Anaheim. A follow-up meeting was held on February 6, 2012, in Encino. Each participant received a binder with PowerPoint slides that organized the meeting presentations and discussion, and backup materials for reference. The meeting produced two kinds of decisions:

1. *Recommended actions.* After presentation of a required step in the cost estimation process and a recommended action or alternatives, the group offered comment and deliberated. If consensus was reached, a recommendation for a preferred action was made.

   When consensus was not reached because of a need for further assessment, actions were recommended contingent on this assessment. Criteria for a final decision were typically identified.

2. *Recommendations for further information from counties.* In some instances it was necessary to get clarification on county data, fill gaps where information was missing in a county or gain clarification on critical points of information. The Advisory Group determined that it was appropriate to contact counties through e-mail to ask for clarifications or information specific to their county, as long as inquiries were brief and focused. When appropriate, the Advisory Group recommended queries to be made to selected counties. These Internet queries formed the basis of a web survey that was developed for county participation.

Evaluation Advisory Group input in the area of cost and cost-offset methodology is best understood in the context of chapters devoted to these topics. Refer directly to Chapters III and IV for further discussion.

Full Service Partnership Services Description

For the purpose of this report and recognizing the need to be responsive to key stakeholder feedback, the UCLA/EMT team faced an immediate need to systematically categorize services across counties/municipalities in order to subsequently link specific services to specific age groups. This is important for the following reasons:

- ***FSP costs vary by county and age group.*** One reason may be the depth and breadth of services offered under the Full Service Partnership Program.
- ***FSP cost offsets vary by county and age group.*** One reason may be the depth and breadth of services offered under the Full Service Partnership Program.

A report about FSP costs and cost offsets in the absence of information about FSP services and activities by age group is to present the proverbial *black box*. In addition, review of the Phase II Deliverable 1 MHSA Cost Report by county department of mental health stakeholders elicited feedback recommending description of Full Service Partnership programs, in order to provide the appropriate context within which to interpret findings.

Therefore, the Evaluation Advisory Group recommended documentation of FSP services by county and age group as an important analysis.

With the primary goal in mind of developing a standardized system of describing planned FSP services, the Community Services and Supports Plan (*CSS Plan*) and the attendant updates (*Annual Updates through FY 10-11*)

served as the basis for the initial FSP review and summary conducted by EMT Associates. The FSP Service Assessment for each county/municipality was conducted using a systematic review and summary tool developed by a consultant formerly employed with a large county department of mental health and directly involved in the evaluation of that county's MHSA program. The focus of the tool was straightforward – with instructions to trained reviewers to indicate whether planned services were present or absent in the CSS Plan and/or Annual Updates. The rating of "present" or "absent" avoided any judgment about quality, adequacy, etc., as such judgments are inappropriate absent on-site observation.

The strategy of document review and summary was selected following discussion with the FSP Evaluation Advisory Group, [19] due to budget limitations and concerns about county/municipal burden inherent in a site visit/on-site service observation. The draft FSP Service Summary tool was reviewed at a FSP Evaluation Advisory Group meeting, and refined following that meeting.

Following the FSP Service Summary, counties/municipalities had the opportunity to review their individualized FSP Services Assessment, and to provide supplementary documentation for consideration in the event that critical services were not documented in the CSS Plan or Annual Updates. For example, one county submitted its FSP Implementation Manual for inclusion in its FSP Service Summary. When supplementary documentation was provided by a county or municipality, its specific, individualized FSP Service Summary was updated to reflect new information. The FSP Service Summary includes documentation of the source material, for county/municipal reference.

We have reviewed every county's Full Service Partnership Plan and Annual Updates in order to generate a county-specific FSP Service Summary. [20] The FSP Service Summary indicates whether a planned service/activity was present or absent for each age group.

The FSP Service Summary tool was first developed by an expert consultant and pilot tested on one county. The tool was then reviewed by the Evaluation Advisory Group. [21] Revisions were made to the tool based on feedback from the advisory group.

FSP Service Summaries were sent back to each county, along with the source location (basis for the present/absent rating). [22] Counties were provided the opportunity for review/feedback, which included submission of documentary evidence to support FSP activities/practices in place. [23]

County feedback was incorporated, and the FSP Assessments updated accordingly. However, due to the length of this report, and the importance of the topic as it relates to cost (*and potentially to cost offsets*), we propose that a summary of FSP Services and the potential impact on FSP Costs and Cost Offsets be explored in a stand-alone report.

[19] See Appendix C for a list of Evaluation Advisory Group members.
[20] The decision was made to use available data (rather than conduct site visits to each county) in order to avoid burden to the counties and due to budgetary considerations.
[21] Our consultant had worked as a Full Service Partnership Coordinator for a large county. The county reviewed was the one she had worked for, with its permission. Counties were provided the opportunity to provide additional documentary evidence because services may have changed following plan submission or a service may have inadvertently been left out of the plan – in short, the Evaluation Advisory Group noted that the Plans and Updates were not designed to capture everything offered through the Full Service Partnership, and therefore the opportunity to augment with additional data must be offered to counties.
[22] For example, the page number in the original FSP Plan. We provided the source location to make it easier for counties to follow the logic for our ratings of whether a given service (e.g., wraparound) was present or absent.
[23] One county requested a site visit in order to update its FSP Assessment. The FSP Assessment matrix accompanied the site visitor and was updated following the visit based on qualitative survey results (interview data with FSP staff).

6. Interviews with Peer Advocates & Parent Partners

Following the series of presentations and interviews, the MHSA Statewide Evaluation team launched a participatory evaluation (*Phase III Deliverable 2*). In order to avoid burden on clients and families (and not work at cross-purposes with the participatory evaluation), the Phase III Deliverable 1 process focused on methodology and input from the Evaluation Advisory Group during the period of intensive data collection for the participatory evaluation.

By June 2012, the participatory evaluation survey data collection period was winding down. A brief presentation was made to the Participatory Evaluation Consumer Advisory Board via conference call on June 5, 2012. The request was simple:

> *How can we learn more about the positive ways that FSP clients and families are contributing to their care, as they progress in their recovery* (i.e., ***offsetting costs***)?

We chose an exploratory approach for a number of reasons:

1. The Costs and Cost Offsets Deliverable had ample opportunities for review and feedback from all stakeholder groups, throughout all phases of development.
2. Clients and families clearly expressed the need (*this speaks to the type of data currently collected under the DCR*) to focus on positive outcomes. [24]
3. Clients and families are in the best position to inform us about what to look for in terms of potential offset areas.
4. Budget limitations and time constraints due to the nature of the deliverable and contract prevented us from launching a second participatory evaluation in which primary (*new*) data collection from clients and families could be the focus.

Therefore, the parameters of an exploratory approach required that no more than nine (9) peer advocates/parent partners be interviewed, and that one general question be posed (*What are some of the ways you have seen people contribute to their care as they progress through recovery?*), to be answered in no more than 15 minutes. A $25 gift certificate would be provided in appreciation for participation in the telephone interview. Peer advocates and parent partners were deemed excellent sources of information, given both their lived experience and the numbers of individuals and families mentored through the Full Service Partnership program.

Many wonderful examples of success emerged during the interviews, including a budding entrepreneur who had formerly been homeless. However, an unanticipated theme surfaced across the interviews. The potential for cost offsets to the system is great, but it is not being documented due to deficits in the DCR (see the graphic below):

- Peer networks (*informal and formal*): A recurring theme was the power of peers. Connection to others with lived experience was cited as the reason individuals:
    - Became engaged in mental health services (*where previous efforts had failed*)
    - Were no longer homeless (*able to maintain independent living*)
    - Could "*step down*" in service intensity (*presumably resulting in savings of county staff time, or opening a slot for a new client*)

[24] Previous research by an Evaluation Advisory Group member on a subset of counties (representing the majority of the state's population) using DCR data revealed that there is little change in employment and education outcomes, at least in the manner in which they are currently collected under the DCR paradigm. Therefore, it did not seem a worthwhile use of our resources to reinvent this particular wheel. There is no reason to expect that we would have found different results.

- Stayed out of the hospital (*thanks to informal intervention by peers*)
- Transported their SED children to enrichment activities (*thanks to peer carpooling*)

These were but a few examples cited by the peers (*employed by county mental health departments and county contractors*).

The Key Event Tracking Form within the DCR requests that FSP clients be queried about time spent in volunteer activities. ***It fails to ask what volunteer activity they are engaged in.*** Therefore, time spent by FSP clients acting as informal peers/mentors for others is not documented.

Peer advocates indicated that many FSP clients do not engage in paid employment during their first year of recovery. Nonetheless, the time spent volunteering as a peer advocate provides a critical service on two fronts:

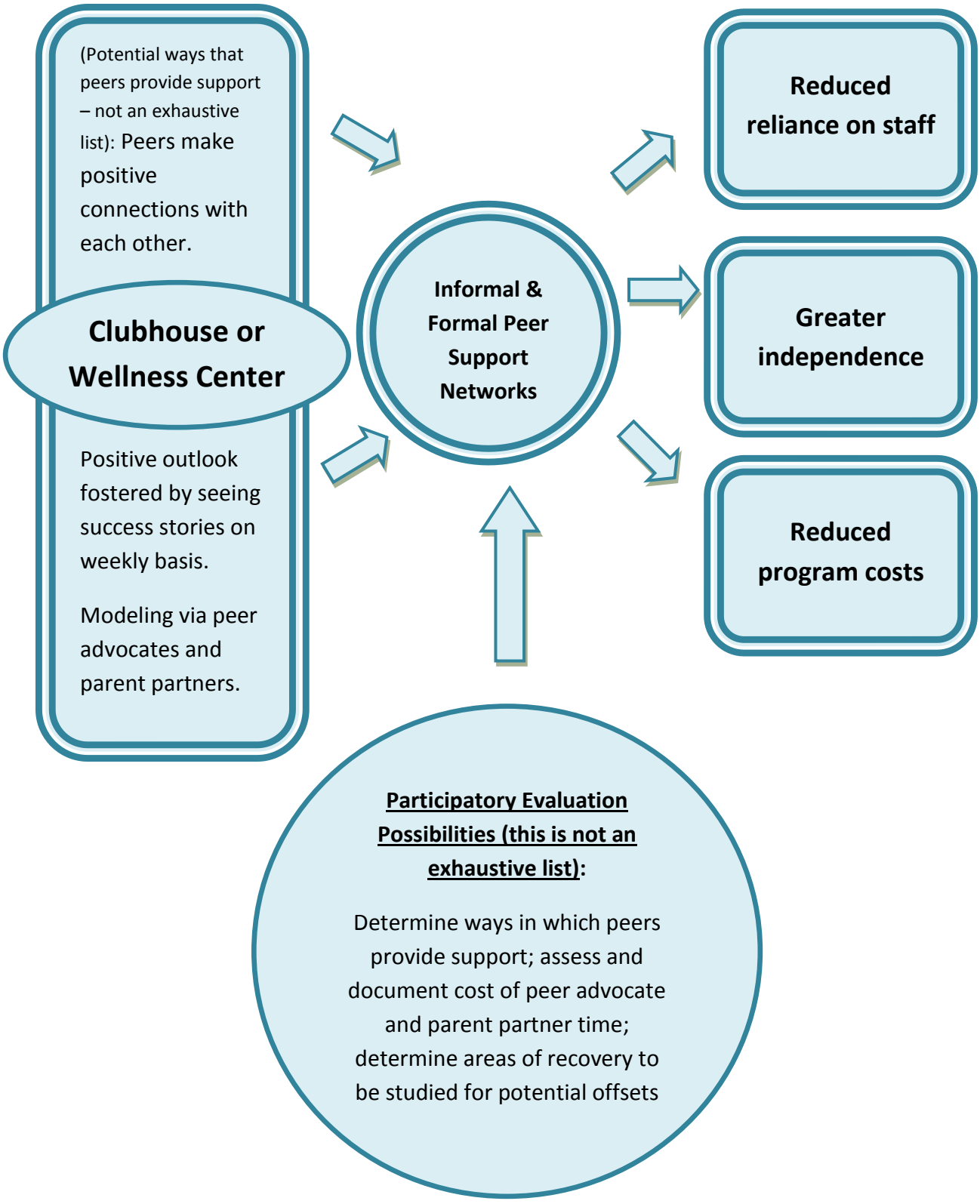
- An informal peer network is established within the county, providing a needed support system.
- Costs to the formal mental health system presumably are offset by the informal (and formal) peer support systems.

Time spent working in a formal peer support system is likewise not documented. The Key Event Tracking Form within the DCR requests that FSP clients be queried about time spent employed. ***It fails to ask about the nature of the employment the FSP clients are engaged in.***

We recommend that the Mental Health Services Oversight and Accountability Commission consider funding a participatory evaluation to formally study the positive impact of peer networks. Such a study would provide a necessary balance to the preponderance of consequence-focused data currently collected through the state's DCR system.

Exhibit II.1

Full Service Partnership Program – Hypothesized Relationship between Peer Networks and Cost Offsets



7. Involvement of Key Stakeholders: Summary

In all, 23 presentations, interviews and conference calls were held with key stakeholders representing clients and families, service providers and community mental health associations from the end of March through July 2011.

An Evaluation Advisory Group was established, representing nationally recognized experts in cost evaluation and county department of mental health evaluators and fiscal staff. The group held two formal meetings and continues to deliberate via e-mail.

Peer advocates and parent partners were interviewed in order to gain the perspective of individuals with lived experience on potential offsets that FSP participants contribute as they progress in recovery. Their input revealed a remarkable and unmeasured resource represented by peer networks. A recommendation has been advanced to formally study the impact of peer networks on the mental health system.

All stakeholders were provided the opportunity to review and comment on this report. The process for doing so is described in Appendix F, *Key Stakeholder Feedback*.

III. Expenditures on Full Service Partnership Programs

Full Service Partnership expenditures [25] are the focus of this chapter. [26] Translated into plain language – what was spent on Full Service Partnership programs?

This deliverable is defined simply as follows:

> ***Initial written report that specifies:***
>
> 1) ***The statewide and county-specific per-person annual cost average and range for FSP Adults, Older Adults, Children and Transition-Age Youth, and***
> 2) ***The proportion of revenue by funding source.***

The chapter opens with a description of our methodology – how we went about calculating the cost of Full Service Partnership programs. The chapter closes with statewide Full Service Partnership costs by age group.

a. Methodology

Expenditures on Full Service Partnerships (FSP) were analyzed and reported (through Fiscal Year 08-09) as part of the Phase II Statewide Evaluation of the Mental Health Services Act, Deliverable 1. [27] The primary data source for determining FSP cost was the Revenue and Expenditure Reports. [28] Revenue and Expenditure Reports are completed by each county mental health department, and they document all monies spent and were available to be spent on mental health services through the Mental Health Services Act.

In the process of completing Phase II Deliverable 1, the UCLA/EMT Team summarized all public mental health expenditures on Full Service Partnerships documented in the Revenue and Expenditure Reports (RER). [29] Therefore, the RERs were deemed a logical data source to start with.

The initial question to be answered, in order for the analysis to proceed, relates directly back to the deliverable language (above):

> Can ***FSP costs by age group*** be calculated using the RERs?

Without the ability to determine age-group-specific expenditures, the county-specific and statewide cost average and range ***for FSP Adults, Older Adults, Children and Transition-Age Youth cannot be determined.***

[25] Although the technically accurate term is *expenditure* based on the data sources analyzed, this term is cumbersome, and not user-friendly to the lay reader. Therefore, the term *cost* may be used in place of *expenditure* throughout this Report.
[26] Phase III Deliverable 1.A. Initial written report that specifies 1) the statewide and county-specific per-person annual cost average and range for FSP Adults, Older Adults, Children and Transition-Age Youth and 2) the proportion of revenue by funding source.
[27] http://mhsoac.ca.gov/Announcements/docs/Evaluation_Deliverable1A_Brief2_FSP.pdf
California's Investment in the Public Mental Health System: Proposition 63; Brief 2 of 7: Providing Community Services and Supports through Full Service Partnerships.
[28] FY 2006-07 was the earliest fiscal year for which Revenue and Expenditure Reports were submitted by counties. No counties submitted Revenue and Expenditure Reports (according to the Department of Mental Health) prior to FY 06-07.
[29] The expenditures for components authorized under the Mental Health Services Act and reported in the Phase II Deliverable 1 brief include: Mental Health Services Act, State General Fund, Other State Funds, Medi-Cal FFP, Medicare, Other Federal Funds, Realignment, County Funds, Other Funds. Breakout by age group is not possible due to the limitations of the RER, discussed in this report. It is not included in this report due to challenges inherent in merging in the full RER data set (see Appendix E).

Therefore, it was imperative for the team to quickly identify a reliable and valid means of determining FSP costs by age group. [30]

Recall the discussion of the Revenue and Expenditure Report limitations in Chapter II. A link to the worksheet provided by the Department of Mental Health for documenting FSP expenditures by program for FY 08-09 is provided in Appendix E. There was no change to the original FY 09-10 RER form issued to counties. The revised version, however, requires only a summary total for each FSP program and does not ask for breakout costs. [31]

The initial questions posed about the FSP program worksheets (*summarized in Chapter II*) laid the groundwork for similar questions about the FSP programs:

1. Are FSP programs identified by a unique identification number in the Revenue and Expenditure Report?
    a. If yes, can this be tracked to individual client (services received) in the DCR?
2. Are FSP programs identified by name in the Revenue and Expenditure Report?
    a. If yes, can this be tracked to individual client (services received) in the DCR?
    b. If yes, can this be tracked to the CSS Plan and Annual Updates?

The answer to #1 was determined to be ***no***. This posed obvious problems – the most troubling being:

- How can we reliably link a particular FSP worksheet with expenditures to a particular age group in the DCR?

An alternative was considered – perhaps FSP programs as identified in the RER worksheets could be tracked to the CSS Plan and Annual Updates. The team therefore embarked upon an exhaustive review process of attempting to match up every RER worksheet back to a named FSP program in the original CSS Plan, and then to subsequent fiscal year Annual Updates.

The results were problematic for a number of reasons:

- Names of programs change from year to year in some counties but do not always change on the RER (or vice versa);
- Programs may be combined in a given fiscal year when they were broken out by age the previous year. For example, all small counties combined FSP breakout programs by age group into one omnibus FSP program in FY 09-10;
- Programs disappear out of the RER but are not documented as to why they disappear in the Annual Update;
- New programs appear in the RER, but they are not documented in the original CSS Plan or the Annual Update;
- Programs are identified as FSP in the original CSS Plan/Annual Update, but no FSP expenditures appear in the RER;

[30] Revenue and Expenditure Reports reviewed were those submitted by counties and municipalities to DMH as of October 1, 2011. Dr. Harris traveled to Sacramento and personally picked up an encrypted hard drive containing DCR data, Annual Updates and FY 08-09 and FY 09-10 RERs (EMT already had FY 08-09 RERs from the Phase II Deliverable 1 analysis).

[31] Revised instructions were issued to counties on December 27, 2011, with a due date of January 31, 2012, for counties that had not yet submitted FY 08-09 and FY 09-10 RERs. FY 09-10 is provided in the report, but the revised forms are identical to FY 08-09. http://www.dmh.ca.gov/dmhdocs/docs/notices11/11-16.pdf
Although the revised instructions did not impact EMT's time line (FY 09-10 RERs provided by DMH were provided prior to the revised instructions issuance), the Evaluation Advisory Group will need to carefully consider whether this RER data can be used, given how different the instructions are from those of previous years.

- Not all age groups that had been planned to be served by a program may, in actuality, be served (when DCR data is compared with planned budgets); and
- Target age groups may change from year to year.

The answer to the question, "*Are FSP programs identified by name in the Revenue and Expenditure Report, and can they be tracked to individual FSPs in the DCR, and to the CSS Plan and Annual Updates*?" is:

"*It depends entirely on the county, the fiscal year and even the program in question*."

In addition, the answer to the question changes even within a given county, and within a single fiscal year.

However, barriers to extracting FSP cost by age group should not be seen as a poor reflection of county documentation. Indeed, the Revenue and Expenditure Reports were not designed for this purpose. Counties reported during the web survey process (additional data collection used for this deliverable, described later in this chapter) that they complied as best they could with the RER instructions provided, but that the RERs are not a reflection of county mental health accounting practices. Indeed, the prevailing sentiment among county fiscal staff may be summarized in one quote received:

"*We simply don't track our mental health spending this way*."

After spending 60 days of investigation, thoroughly exhausting these possibilities as potential data sources, the Evaluation Advisory Group was convened in order to seek expert guidance and input into resolution of the critical challenge of breaking out FSP costs into age groups in a reliable and valid manner.

The objectives of the first Evaluation Advisory Group meeting (held November 3, 2011 – see Chapter II for an introduction to the EAG) were:

a) To define the product necessary to meet the requirements of the deliverable;
b) To identify *feasible* ways in which the deliverable may be improved (e.g., be made more informative and useful in understanding what drives cost per client and cost differences across counties);
c) To identify issues and solutions to the issues that need to be resolved to:
    1) identify the data elements necessary to the desired products;
    2) identify the data sources most suitable to producing these data elements;
    3) identify issues and solutions concerning the exact configuration of data elements (e.g., the exact definition of what FSP costs should include) appropriate to developing the products;
    4) conduct the analysis; and
    5) display findings; and
d) To suggest an organized set of steps to systematically resolve issues identified under c).

The results of the RER analysis were presented to the Evaluation Advisory Group, along with other potential data sources. Challenges associated with each potential data source are summarized in Exhibit III.1.

The EAG determined, during the deliberation process, that the critical question of FSP expenditures by age group would be difficult for EMT to answer using the available data sources. Although the total cost of Full Service Partnerships each fiscal year can be obtained from the RER (and indeed, was obtained and reported in Phase II Deliverable 1 for FY 08-09), the ***RER falls short on its own in terms of providing a reliable and valid mechanism for breaking out the total cost by age group.***

Exhibit III.1

Available FSP Cost Data Sources & Limitations

COST ELEMENT	DATA SOURCE	USE	CHALLENGES	PROPOSED SOLUTION(S)
Unit of Analysis	Revenue and Expenditure Report, FSP Program Worksheets	FSP program-level expenditures	1) Expenditures at the program level, rather than individual per-person FSP client costs (i.e., that would be tracked in Medi-Cal data). Because of budgetary considerations, establishing a study in which we obtain individual-level Medi-Cal data across all counties and set up a comparison group in each county is not an option. a. Our budget for this deliverable is about 20% of the UCSD budget (*in which Dr. Gilmer's group set up such a study, with a sampling of counties* – EMT is charged with studying all counties). b. Not all FSP clients and/or services are Medi-Cal eligible, so a study limited to Medi-Cal data doesn't provide an exact estimate of FSP costs.	1) Estimate per-person cost
Average Annual County Cost	Revenue and Expenditure Report, FSP Programs Grand Total	Proxy for cost	1) Expenditures are not final, reconciled payments to county and therefore may be higher than true cost; inclusion of "*other sources*" in total may also inflate true cost [32] 2) Cannot link FSP Program expenditures clearly to individual FSP participants 3) Role of Outreach & Engagement and General System Development expenditures for programs with blended funding	1) Adjust FSP total expenditure proportionate to Cost Report Total [33] (difference between MHSA line item on form 1995 and total MHSA expenditures on Revenue and Expenditure Report); Cost Report is not an option because we have no way to link Vendor ID to FSP program, and no way to disentangle FSP costs from the total MHSA costs reported on form 1995. 2) Use DCR data for number of participants. 3) Query on web survey about the proportion of O&E and GSD spent on FSP clients.
Age Groups	CSS Plan & Annual Updates	FSP age group(s) served by program	1) Non-standardized data source (narrative) 2) Programs that serve multiple age groups	1) Survey counties about proportion of FSP costs per age group.
Estimation of Person Year for Per Capita Cost	CSS Plan & Annual Updates	Annual caseload (FY) – program capacity	Aggregate rather than individual-level data	1) Use DCR data. 2) In addition, new challenges are introduced, such as how to count persons who carry over from year to year, and persons who enter the program late in the year (compared with those who enter early). 3) Tracking service exposure is problematic, given the available data sources.

[32] Reporting on the proportion of funding by other sources is a base requirement for this deliverable.

[33] The latest Cost Report received is for FY 08-09. There is no FY 09-10 Cost Report against which to reconcile MHSA expenditures.

Therefore, the absolute necessity of breaking out FSP expenditures by age group formed the basis for launching a county web survey. The Evaluation Advisory Group determined that *only county department of mental health staff* (preferably, fiscal staff) have the information needed to make determinations about how the total FSP cost for their county should be broken out by age group. Although a county survey represented a data collection burden, county-informed breakouts were deemed to be far preferable to any educated guess on the part of the UCLA/EMT team.

Estimating cost for comparable services provides ***the foundation*** for assessing the return on the FSP service investment. The assessment of cost offset is accomplished through identifying how service costs result in substantial savings to the system (e.g., reduced hospitalization costs, reduced incarceration costs). The web survey was necessary to augment data already gathered from RERs; to ensure that all counties are adequately represented in the analysis; and to ensure the most accurate and feasible estimate of appropriate service costs.

1. Program Costs

The total amount expended on Full Service Partnerships in FY 08-09 and FY 09-10 (as reported by each county in its RER) served as the basis for the total Program Cost. [34] Total Program Cost was only a starting point, however, given the need to break out cost by age group.

2. Age Groups

Per the MHSA Community Services and Supports Three-Year Program and Expenditure Plan Requirements, "*Each county must plan for each age group in their populations to be served*." (p. 13) [35] Age groups are defined as follows:

- Children, Youth and Families (CYF): Birth to 18 years, and special-education pupils from birth to age 21
- Transition-Age Youth (TAY): 16 to 25 years
- Adults: 18 to 59 years [36]
- Older Adults: 60 years and older [37]

The county web survey contained questions about the proportion of spending on Full Service Partnership services for each age group, for each fiscal year. [38]

[34] Only one county, Del Norte, did not submit an FY 09-10 RER. Therefore, expenditures as reported in its web survey served as the sole source for FSP FY 09-10 expenditures.

[35] http://www.dmh.ca.gov/dmhdocs/docs/letters05/05-05CSS.pdf
p. 21. Children and adolescents identified as seriously emotionally disturbed (SED) are eligible for FSPs if they meet the criteria set forth in Welfare and Institutions Code Section 5600.3, Subdivision (a).
http://www.leginfo.ca.gov/cgi-bin/displaycode?section=wic&group=05001-06000&file=5600-5623.5
California's Welfare and Institutions Code is posted in its entirety on the website cited above, absent page numbers. Click on the link and the section cited will appear on screen, verbatim, as quoted.

[36] California Code of Regulations, Title 9. Rehabilitative and Development Services, Division 1. Department of Mental Health, Chapter 14. Mental Health Services Act, Article 2: Definitions, Section 3200.010. Adult. (p. 1).

[37] http://www.dmh.ca.gov/dmhdocs/docs/letters05/05-05CSS.pdf
p. 21. Adults and older adults identified to have a serious mental disorder are eligible for FSPs if they meet the criteria set forth in Subdivision (b) of Section 5600.3.
http://www.leginfo.ca.gov/cgi-bin/displaycode?section=wic&group=05001-06000&file=5600-5623.5

[38] Assignment of FSPs into age group categories is done at the county level. This categorization is reflected in the DCR. The UCLA/EMT team does not make any assignment of individual FSPs to age group category.

3. Housing

There was consensus among Evaluation Advisory Group members that housing is a critical aspect of FSP services, and an expensive service.[39] Housing was therefore included as an FSP cost even though it is reported somewhat differently in some counties. There is a specific line item for housing (General System Development Housing line item), but it does not contain complete FSP housing expenditures in some counties. For counties that show no expenditures under the General System Development (GSD) Housing line item:

- One-time-only costs may be under the CSS "*Administration*" line item.
- Ongoing costs may be under the FSP "*Operating*" line item.

Housing is defined in the table below.

Exhibit III.2
Housing Definition (included in the County Web Survey)

Housing Support	DMH Letter 06-07 The cost of providing housing supports, including housing subsidies for permanent, transitional and temporary housing; master leases; motel and other housing vouchers; rental security deposits; first- and last-month rental payments; and other fiscal housing supports. This does not include the capital costs used to purchase, build or rehab housing or the salaries and benefits of staff used to provide client housing supports.
Operating Support	DMH Letter 06-07 The operating costs of providing housing supports to clients, including building repair and maintenance, utilities, housing agency management fees, insurance, property taxes and assessments and credit reporting fees. This does not include the capital costs used to purchase, build or rehab housing or the salaries and benefits of staff used to provide client housing supports.
Housing Placement	DMH Letter 05-05 Age-specific strategies: CYF – Permanent supportive housing for homeless families and families reunifying after a child or parent has been in an institution (e.g., jail, juvenile hall or hospital) or other out-of-home placement. TAY, Adults, Older Adults: Supportive housing – permanent affordable housing with combined supports for independent living, including projects that meet the following criteria: (1) housing is permanent, meaning that each tenant may stay as long as he or she pays his or her share of rent and complies with the terms of a lease or rental agreement, (2) housing is affordable, meaning that each tenant pays no more than 30% to 50% of household income, and (3) tenants have access to an array of support services that are intended to support housing stability, recovery and resiliency, but participation in support services is not a requirement for tenancy. Supportive housing may be site-based (all or a portion of the units in a building are designated for people with special needs, and supportive services are available on site) or scattered site (tenants have or rent houses at various locations in the community). Housing options are available for Transition-Age Youth, Adults and Older Adults who are single and those who choose to share housing, as well as families with children.

Breakout Reporting of Housing Costs

Since housing is a core service for stabilizing clients, and is a major cost item, the EAG recommended that housing costs be broken out, presented and discussed as a key expenditure.

[39] This does not include the MHSA Housing Program (Governor's Housing Initiative). There was consensus among EAG members that this cost would be excluded from the analysis.

Counties were explicitly queried about the line item in which housing was reported on the RER. If it was reported on an FSP line item, the housing amount reported for the relevant age group (i.e., *the age group for which housing is documented on an FSP line item*) was subtracted from the FSP program cost total for that age group. [40] FSP cost by age-group calculations using RER and web survey data were included as a worksheet in each county's FSP Costs and Cost Offsets Excel file, provided to counties for initial review in May 2012.

4. Outreach

The EAG agreed that outreach in order to recruit individuals and families into FSP programs is another critical aspect that should be represented in cost, though it may be reported outside the FSP RER worksheet.

There is a specific line item for Outreach in the CSS Program Worksheet, and counties may show outreach expenditures there (see Appendix E). For counties that show no expenditures under the outreach line item on their FSP program expenditure worksheets, these expenditures may be reported elsewhere. The web survey therefore contained specific questions about the cost of outreach for each fiscal year (specific to bringing potential FSP clients into service) and the proportion spent on each age group.

Counties that participated in the web survey were provided the opportunity to review the initial draft of FSP Costs and Cost Offsets in a county-specific Excel file, distributed in May 2012.

The initial round of survey participants included a majority of the counties (N = 37; 63.8%).[41] The populations of counties represented in the draft report for FY 09-10 comprised most of the State of California (67.3%).[42] The majority was also represented for FY 08-09 (66.9%).

Although the original intent to include outreach costs represented the desire to document ***all*** that Full Service Partnership participants may receive, when counties reviewed the figures, consensus was that inclusion of outreach expenditures overinflated the cost of Full Service Partnership programs. In addition, counties indicated that drilling down on the exact outlay of outreach expenditures for FSP clients was difficult, when outreach is provided to a much broader population.

Given concerns about inexactitude and over-inflation of cost, outreach expenditures were removed from the calculations based on county feedback.

5. Operational Definitions

Through the process described in this chapter, counties were queried directly about the proportion of expenditures provided to each age group for Fiscal Years 08-09 and 09-10. The proportion [43] by age group was

[40] Without this adjustment, we would be counting housing costs twice – they are already included in the RER total, and then we would be counting them again from the county web survey (for those counties that document housing costs on a line item within FSP).
[41] Note that one unique consortium of three municipalities applied to provide MHSA services to their constituents. As public mental health services are not required to be provided by municipalities, this entity was in start-up during the entire study period and was consequently removed from the total N for purpose of calculation. Therefore, the N = 58 (rather than 59).
[42] See Appendix D for a list of county participants. Population data were extracted by county and for the state, for 2008 (corresponding to FY 08-09) and 2009 (corresponding to FY 09-10), from census data:
http://www.census.gov/popest/research/eval-estimates/eval-est2010.html
[43] A small number of counties did not answer all questions, or did not answer for all age groups. For these counties, discrepancies were noted on the county-specific matrix (e.g., no expenditure data for a specific age group, but there are data for that age group in the DCR). For counties that did not answer the question about the age breakout for supportive services, the original budget/Annual Update age breakouts were used to estimate the proportion of expenditures by age group (applied to the Revenue and Expenditure Report data). If the original budget/Annual

then applied to expenditure data [44] in order to arrive at Full Service Partnership cost per age group. [45] This process was followed for all counties in order to maintain uniformity and in order to rely upon county-informed breakouts. [46]

The definition of annual cost average for each age group, in each fiscal year, in each county is:

$$\frac{\textbf{Aggregated Program Cost per Age Group}}{\textbf{Standardized Client Years per Age Group}}$$

"*Program*" refers to the summary of all programs operating within a county for each particular age group. This is the manner in which expenditures are rolled up and reported on the CSS "*Program*" worksheet.

"Cost" for a given fiscal year is defined as the aggregate cost of all programs for an age group, determined using the most recent revision of the Revenue and Expenditure (RER) report for a given fiscal year that has been prepared by the county, in combination with information from that county via web survey that provides a determination as to how program costs should be broken out into age groups.

Program costs may be adjusted by housing that may be reported outside the FSP program expenditure sheets in some counties (e.g., on the CSS General System Development worksheet).

"*Standardized Client Years"* is defined as the number of full FSP client years of service provided across all programs regardless of numbers of clients entering or exiting, or the individual duration of services. This particular aspect of the calculation is discussed in more detail below (see *7. Standardized Client Years* for further discussion).

6. Cost Components

The proposed data sources and procedures to meet the basic requirement of calculating the annualized number of clients and FSP program cost per age group are described in this section.

Numerator

The numerator is the Aggregated Program Cost per Age Group. The data source was the Revenue and Expenditure Report, cumulative across FSP programs. Costs were limited to those reported for FSP clients, using funding sources identified in the RER program summaries combined with information provided by counties via the web survey.

Update numbers were unclear/not specific, the actual numbers served by age group in each fiscal year were used as the basis for developing proportions by age group. The county's FSP costs by age group were then submitted to the county for review and input.

[44] Counties were asked to report on the amount spent per age group on supportive services provided to Full Service Partnership participants by age group. Some counties accounted for all of their FSP expenditures using this method (verified by matching back to their Revenue and Expenditure Report). Other counties accounted for only a proportion. For counties that did not account for all Full Service Partnership line-item expenditures in the web survey, the expenditures used for cost calculations defaulted to the Full Service Partnership line items in the county's Revenue and Expenditure Report.

[45] Not all counties serve all age groups, but the calculation for these counties was simple. For example, County X indicates that nothing was spent on Older Adults during FY 08-09. Zero proportion of cost is multiplied by the total FSP expenditure amount, for a total cost of $0. The value $0 is reflected on County X's FSP Costs and Cost Offsets Excel spreadsheet.

[46] There are a few anomalies – counties that show no expenditures on a certain age group yet show DCR data for this age group. In cases such as these, the anomaly is noted on the county worksheet, and counties were provided another opportunity for review and feedback following distribution of revised FSP Costs and Cost Offsets Excel worksheets on July 27, 2012.

Denominator

The denominator is the Standardized Client Years per Age Group. The data source was FSP clients as identified in the State Department of Mental Health's Data Collection and Reporting System (DCR). The DCR was briefly introduced in Chapter II, *Involvement of Key Stakeholders*. The following description comes from Phase II Deliverable 2.E (draft, p. 8):

> The DCR system houses data for clients who are served through Full Service Partnership programs. Data from assessments – the Partnership Assessment Form (PAF), Key Event Tracking (KET) and Quarterly Assessment (3M) – are collected for clients in specific age categories.
>
> - The PAF reflects client history and baseline information, including client education and/or employment, housing situation, legal issues, health status and substance use.
> - The KET reflects any important changes in the client's life such as housing, education and/or employment and legal issues during Full Service Partnership.
> - The 3M is used to collect information quarterly on key areas such as education, health status, substance use and legal issues.

See *Standardized Client Years* for further discussion.

Fiscal Years Analyzed

The two fiscal years (FY) selected for analysis were FY 08-09 and FY 09-10. These two years were selected as a result of available data in the DCR. Without DCR data for most of the counties, Standardized Client Years per Age Group cannot be calculated (see Exhibit III.1 for a summary of the available data sources and their limitations). Data from earlier fiscal years are incomplete across California counties. [47] The rationale for the focus on later implementation years is that no statewide assumptions can be made in earlier fiscal years.

Start-up costs [48] are not included in the formula. [49]

FY 07-08 is not included in the formula, or in this report, because DCR data are not available for most of the counties.

7. Standardized Client Years

Standardized Client Years represent a numeric value in the denominator of our annual cost-per-FSP-client rate calculation. Calculations are completed separately for each fiscal year and for each age group. The definition of this numeric value, and the rationale for this definition, are provided in this chapter.

Standardized Client Years are calculated through the following process (***again, note that this process is run separately for each fiscal year and for each age group***):

- Identified all clients who were enrolled in FSP during the target fiscal year;

[47] See Phase II Deliverable 2.E –Priority Indicator Report.
[48] In addition, external shocks to system (realignment and the end of AB 2034) occurred in earlier fiscal years, calling into question the ability to replicate the cost calculation into other fiscal years had earlier years been included in the analysis. Counties also provided evidence that RER instructions changed significantly from FY 06-07 to FY 07-08. Documentation may be provided, upon request.
[49] Start-up for each individual county is defined as the first two years of FSP expenditures. Therefore, the actual fiscal years vary, depending upon the county.

- Calculated the number of days that each was enrolled during the target fiscal year (*see the discussion below, as there are nuances to this particular calculation*);
- Summed number of days enrolled across all enrollees;
- Divided by 365 (the number of days in a year).

Enrollment is defined as the period of time that an individual is enrolled in and eligible for services in FSP. This definition is not dependent on being enrolled in any specific service or on receiving any specific support. The main assumption is that enrolled participants are receiving FSP services to meet their varying needs at a level that will help them achieve individualized service plan goals. These targets and the services received by individual participants will appropriately vary. Enrollment appropriate to this definition was initially defined by the partnership start and partnership status change dates entered in the Partnership Assessment Form (PAF).[50]

As has been the case with most MHSA data, however, realities of the data resulted in alternative strategies, described below under *Challenges*.

The primary concept that we measured was the *number of persons served during each fiscal year* (by age group). Of course, not everyone is enrolled continuously over an entire year. There are four different participation patterns that needed to be accounted for in our analysis (*refer back to the second bullet point, above*). We present them in each fiscal year, in order to avoid any confusion that calculations may have somehow been different for different fiscal years:

Fiscal Year 08-09:

- Start date in FY 08-09 and end date in FY 08-09 [51]
- Start date before FY 08-09 and end date in FY 08-09
- Start date in FY 08-09 and no end date (still enrolled)
- Start date before FY 08-09 and no end date (still enrolled)

Fiscal Year 09-10:

- Start date in FY 09-10 and end date in FY 09-10 [52]
- Start date before FY 09-10 and end date in FY 09-10
- Start date in FY 09-10 and no end date (still enrolled)
- Start date before FY 09-10 and no end date (still enrolled)

Examples are provided on the following page to illustrate the number of days calculated in each of the four categories.

[50] The Partnership Status Change date on the PAF is updated automatically when there is a change in status on the KET or 3M.
[51] We account for FSP clients with multiple start and stop dates within the same fiscal year.
[52] For consistency's sake, we account for FSP clients with multiple start and stop dates within the same fiscal year.

Here are some examples to illustrate start and end dates within the same fiscal year (FY 08-09):

Sample Client	Start Date in FY 08-09	End Date in FY 08-09	# of Days
001	7/3/2008	1/30/2009	211
002	7/17/2008	5/1/2009	288
003	8/26/2008	12/15/2008	111

Here are some examples that show start dates before the fiscal year and end dates within the fiscal year (FY 08-09):

Sample Client	Start Date before FY 08-09	End Date in FY 08-09	# of Days
066	7/3/2007	7/15/2008	576
067	7/17/2007	7/15/2008	653
068	8/26/2007	8/22/2008	476

Below is an example of a start date within the fiscal year but no end date. (FY 09-10). When there is no end date, the end date defaults to the end of the most recent fiscal year (June 30, 2012).

Sample Client	Start Date in FY 09-10	No End Date	# of Days
100	7/1/2009	6/30/2012	1,094

Below is one example of a start date before the fiscal year, but no end date (FY 09-10). When there is no end date, the end date defaults to the end of the most recent fiscal year (June 30, 2012).

Sample Client	Start Date before FY 09-10	No End Date	# of Days
045	7/1/2008	6/30/2012	1,459

The examples above (*number of days)* are building blocks used in calculation of Standardized Client Years.[53] However, they do not represent the completion of the calculations, because they have not yet been tallied across all FSP clients in the age group in the fiscal year of interest, nor has the divisor of 365 been applied. The tables merely illustrate how calculations as described under the **bolded bullet point** are completed:

- Identified all clients who were enrolled in FSP during the target fiscal year;
- **Calculated the number of days that each was enrolled during the target fiscal year;**
- Summed number of days enrolled across all enrollees;
- Divided by 365 (the number of days in a year).

For the purpose of discussing FSP cost by age group, we are interested in the number of FSP clients within each age group who received services from the FSP program in each fiscal year. It doesn't matter if some of these people

[53] Keep in mind that the primary concept is to measure the number of persons served by FSP in each fiscal year. This is very different from the number of new enrollees each fiscal year. In Chapter IV, we explain why this difference is so important when we discuss cost offsets.

are the same people in FY 08-09 and FY 09-10. The important consideration is, *Did they receive FSP services in that fiscal year?* If the answer is *yes*, then we counted them. How we counted and arrived at our final calculations is described below.

Challenges

Through discussion with several counties following review of their draft FSP Costs and Cost Offsets Excel worksheets, one issue that came to the fore was the variation across counties in number of FSP clients served in each fiscal year. This feedback prompted further investigation of FSP clients identified as being served in each FY.

In reviewing DCR data for FY 08-09 and 09-10, we found cases with (*the terms in quotation marks represent actual DCR variable names*):

- Identical start ("*PartnershipDate*") and change ("*DatePartnershipStatusChange*") dates
    - Many cases are enrollees prior to FY 09-10 – which suggests that this anomaly is not due to clients recently entered into the system,
- A "*PartnershipStatus*" of "1" (indicating an active partner), and
- KET assessment dates subsequent to their "*DatePartnershipStatusChange*" – meaning that KET data were entered *after* the date of partnership status change, and somehow the DCR did not recognize that KET data were entered and update the DatePartnershipStatusChange variable (see example case below).

Subsequent KET assessments (KETs occurring *after* the original PAF) suggest that a change date equal to the start date ("*DatePartnershipStatusChange*") for such cases is ***not accurate***. The inaccuracy of these end dates prevented them from being included in our initial counts.[54]

The names across the table headers represent DCR variable names. The data shown below were extracted from an actual case out of the DCR to provide an example. The global identification number has been removed to protect confidentiality.

GlobalID	PartnershipStatus	PartnershipDate	DatePartnershipStatusChange	AssessmentDate_KET	AssessmentDate_KET	AssessmentDate_KET
xxxxxx	1	16-Mar-2007	16-Mar-2007	01-Oct-2009	16-Oct-2009	03-Dec-2009

In brief, the example above suggests that an FSP participant was discharged on the same day he or she was enrolled, yet the KET date clearly tells us that this is clearly not the case. This problem with the DCR system prevented cases such as these from being identified initially, given that our initial assumption was to use:

- "*PartnershipDate*" for the date of enrollment; and
- "*DatePartnershipStatusChange*" for the date of FSP conclusion

Other, related, problems were identified in the DCR data:

- Start ("*PartnershipDate*") and change ("*DatePartnershipStatusChange*") dates prior to the FY being considered,
- "*PartnershipStatus*" of "1" (indicating an active partner) or "3" (indicating a re-enrollee), and

[54] A separate issue that should be followed up with DMH is why *DatePartnershipStatusChange* is not automatically updated when KET is entered for these cases. This system glitch is troubling.

- Subsequent KET assessments (in the current fiscal year – yet the CHANGE date is in a fiscal year *prior to the fiscal years we are analyzing*)

Again, these subsequent KET assessments (*dates **in the fiscal years** we are interested in analyzing*) suggest that change dates ("*DatePartnershipStatusChange*") *in prior fiscal years, outside of our analysis range, **are not accurate**.* Thus, the inaccuracy of these change dates prevented them from being included in our initial counts.

The intricacies of the DCR system identified above also impact calculations of days of service. Given the anomalies uncovered, we came to the determination that the "*PartnershipDate,*" "*DatePartnershipStatusChange*" and "*PartnershipStatus*" fields are required for accurate estimation of the number of service days each partner received during a given FY. Decision rules regarding interpretation of the values contained in these data fields are required so that days of service can be consistently calculated for all FSP clients served in a given FY. Decision rules for FSP clients based upon their partnership status are outlined below:

- For **active partners** (i.e., *"PartnershipStatus"* = 1 or 3), days of service were counted from FSP start date (*"PartnershipDate"*) or the beginning of the given FY (July 1 for Partnership Dates prior to the FY) to the end of the FY (June 30).
    - Some active partners show identical "*PartnershipDate*" and "*DatePartnershipStatusChange*" and have KET assessments on the same date, within a given FY. For such cases, days of service were counted from "*PartnershipDate*" to the end of the given FY, as there is no indication of service end.
    - Active partners with "*PartnershipDate*" and "*DatePartnershipStatusChange*" prior to the FY, some with subsequent KET assessments, other without subsequent assessments. Such cases were credited with a full FY of service (365 days), as these partners are active and have no indication of service end.
- For **non-active partners** (i.e., *PartnershipStatus* = 0) with "*DatePartnershipStatusChange*" within the FY or subsequent to the end of the given FY, days of service were counted from start date ("*PartnershipDate*") or the beginning of the given FY (July 1 for partnership dates prior to the FY) to a "*DatePartnershipStatusChange*" within the FY or the end of the FY (June 30).
    - Some non-active partners also show identical "*PartnershipDate*" and "*DatePartnershipStatusChange,*" and have KET assessments on the same date, within a given FY. These cases were defaulted to a single day of service.

Specific decision rules regarding the values (i.e., dates and partnership status) contained in these data files were required to produce accurate counts of service days for all FSP clients served in a given FY. These decision rules were outlined in order to provide the most conservative counts of service days per FSP client.

b. Per-Person Annualized Cost Average by Age Group

Almost all of the counties are included in this Final Report (N = 50; 86.2%). [55] The populations of counties (numbers of persons residing in the counties according to census data) represented in this report comprise almost all of the State of California (95.0%). [56]

[55] Calculations were successfully completed for three additional counties that did not complete the web survey. These three counties aligned their CSS Plans, Annual Updates, and Revenue and Expenditure Reports in a consistent manner and broke out FSP programs into discrete age groups. Alignment of plan, update, RER, plus breakout of discrete FSP programs into distinct age groups was a rarity among the counties, but

The calculations shown in Tables III.1 and III.3 below use *annualized cost per FSP client year* as a standard metric for service costs across counties. The calculation of *annualized cost per FSP client* involved the following steps (recall from earlier in the chapter):

- Identified all clients who were enrolled in FSP during the target fiscal year;
- Calculated the number of days that each was enrolled during the target fiscal year;
- Summed number of days enrolled across all enrollees;
- Divided by 365.

This calculation produces the number of FSP client years of service for the year. Service costs for the year divided by FSP client years of service for the year equals the *Annualized cost per FSP client year* for that fiscal year. Here is the formula for annualized cost per FSP:

$$\frac{\textbf{FSP Costs Total}}{\textbf{Number of Client Years}}$$

This quotient was calculated within client age categories, for each fiscal year (FY 08-09 and FY 09-10).

Table III.1
Full Service Partnership Services: Annualized Cost per-Client by Age Group
(Fiscal Year 08-09)

	Number Served	Sum of Days	Number of Client Years	Annualized Cost per-FSP Client	Daily Cost per-FSP Client	FSP Costs Total	% of Total FSP Costs
CYF	4,296	983,187	2,693.7	$ 21,931.29	$ 60.09	$ 59,076,305.79	19.0%
TAY	4,593	1,064,015	2,915.1	$ 18,553.96	$ 50.83	$ 54,086,655.41	17.4%
Adults	9,640	2,404,022	6,586.4	$ 26,737.23	$ 73.25	$ 176,102,066.30	56.7%
Older Adults	1,388	344,979	945.1	$ 22,303.26	$ 61.10	$ 21,078,807.79	6.8%
Total	**19,917**	**4,796,203**	**13,140.3**			**$ 310,343,835.29**	**100.0%**

Annualized cost is the total cost for an FSP client over a year (12 months).

The average annualized cost (across all age groups) for Fiscal Year 08-09 is **$ 23,617.71**

The average daily cost (across all age groups) for Fiscal Year 08-09 is **$ 60.31**

Table III.2 shows overall Full Service Partnership program costs by age group for FY 08-09, using the methodology we described previously.

this should not be viewed as a "negative" on the part of the counties, because the original intent of the RER had nothing to do with breakouts by age group. Inclusion of the three additional counties brings the total number of participants to 50 (86.2%).

Note that one county was in start-up during the entire study period, and was therefore removed from the total N for purpose of calculation. Therefore, the N = 58 (rather than 59). The link to census data is:
http://www.census.gov/popest/research/eval-estimates/eval-est2010.html

[56] See Appendix D of the full Report for a list of county participants.

Table III.2
Full Service Partnership Services: Percent of Core Cost Components Devoted to FSP Clients, by Age Group
(Fiscal Year 08-09)

	CYF		TAY		Adults		Older Adults	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Housing	$ 2,600,274.29	4.4%	$ 3,421,055.77	6.3%	$ 20,137,423.03	11.4%	$ 1,020,646.55	4.8%
Program Services	$ 56,476,031.50	95.6%	$ 50,665,599.64	93.7%	$ 155,964,643.27	88.6%	$ 20,058,161.24	95.2%
Total	**$ 59,076,305.79**	**100.0%**	**$ 54,086,655.41**	**100.0%**	**$ 176,102,066.30**	**100.0%**	**$21,078,807.79**	**100.0%**

Table III.3 displays the same type of cost information as in Table III.2 but for Fiscal Year 09-10.

Table III.3
Full Service Partnership Services: Annualized Cost per-Client by Age Group
(Fiscal Year 09-10)

	Number Served	Sum of Days	Number of Client Years	Annualized Cost per-FSP Client	Daily Cost per-FSP Client	FSP Costs Total	% of Total FSP Costs
CYF	6,348	1,444,331	3,957.1	$ 17,481.79	$ 47.90	$ 69,177,192.53	18.3%
TAY	6,623	1,619,816	4,437.9	$ 13,741.40	$ 37.65	$ 60,982,974.12	16.1%
Adults	12,733	3,456,407	9,469.6	$ 23,626.13	$ 64.73	$ 223,729,986.45	59.1%
Older Adults	1,764	480,383	1,316.1	$ 18,785.22	$ 51.47	$ 24,723,227.99	6.5%
Total	**27,468**	**7,000,937**	**19,180.7**			**$ 378,613,381.09**	**100.0%**

The average annualized cost (across all age groups) for Fiscal Year 09-10 is **$ 19,739.29**

The average daily cost (across all age groups) for Fiscal Year 09-10 is **$ 50.55**

Table III.4 shows overall Full Service Partnership program costs by age group for FY 09-10, using the methodology described previously.

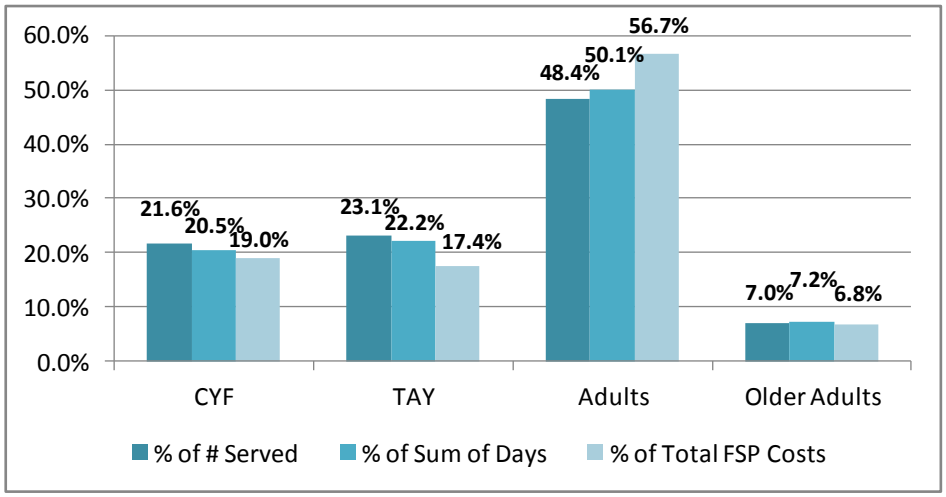
Table III.4
Full Service Partnership Services: Percent of Core Cost Components Devoted to FSP Clients, by Age Group
(Fiscal Year 09-10)

	CYF		TAY		Adults		Older Adults	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Housing	$ 1,686,344.99	2.4%	$ 3,675,433.65	6.0%	$ 22,691,038.11	10.1%	$ 1,385,451.08	10.0%
Program Services	$ 67,490,847.54	97.6%	$ 57,307,540.47	94.0%	$ 201,038,948.34	89.9%	$23,337,776.91	90.0%
Total	**$ 69,177,192.53**	**100.0%**	**$ 60,982,974.12**	**100.0%**	**$ 223,729,986.45**	**100.0%**	**$24,723,227.99**	**100.0%**

The age breakouts reveal that FSP services for Adults comprise most of the expenditures in both fiscal years.

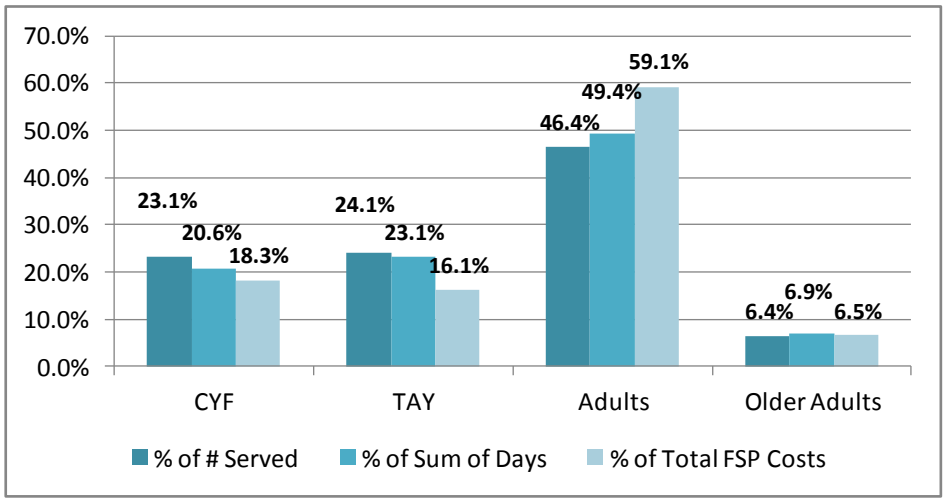
Exhibits III.3 and III.4 display (*for each age group*) a comparison of the percentage of numbers served, sum of days and percent of total FSP costs. FSP data from Table III.1 are used in Exhibit III.3. Numbers served in FY 08-09, days of service and total FSP costs are shown for each age group, as a percentage of the overall total in the fiscal year.

Exhibit III.3
Age Breakout Cost Comparisons: Percentages in FY 08-09



FSP data from Table III.3 are used in Exhibit III.4. Numbers served in FY 09-10, days of service and total FSP costs are shown for each age group, as a percentage of the overall total in the fiscal year.

Exhibit III.4
Age Breakout Cost Comparisons: Percentages in FY 09-10



In both fiscal years, Older Adults are represented nearly equally in terms of:

- percentage of overall FSP participants,
- percentage of overall number of days, and
- proportion (percentage) of overall FSP dollars spent.

They are the only age group that exhibits this characteristic. Adults, as previously noted (Tables III.1 through III.4), represent the group on which the most FSP funds are spent. Among the age groups, most of the expenditures are for Adult FSP clients. Among the age groups, they represent approximately half of all FSP participants, and half of

the overall number of days of service. The argument may be advanced that the serious needs of Adults with mental illness require greater investment of resources. [57]

Children, Youth and Families and Transition-Age Youth display the opposite pattern – the amounts spent on these two groups as a percentage of the overall age group total is less than their proportional numbers and days of service. This expenditure pattern may be indicative of the early-intervention nature of FSP services with these age groups.

c. Contextual Factors – Impact on Cost

Some small counties received additional time to fully implement Full Service Partnership programs. [58] As a result, not all small counties were fully operational by FY 08-09, and FSP costs varied widely in comparison with FY 09-10. Although FSP funds were spent during FY 08-09 by these small counties, FSP was not considered to be fully implemented. Due to major instability in FSP costs from FY 08-09 and FY 09-10, FY 08-09 was set aside for these counties and not included for statewide analyses. See Appendix D, which lists the small counties for which FY 08-09 was not included in the FY 08-09 analysis.

Note that setting aside a number of small counties should not be viewed as a poor reflection of FSP implementation by these counties. As noted above (and in the footnotes), the California Department of Mental Health fully recognized that small counties required additional time to fully ramp up and roll out Full Service Partnership services, and provided an exception in order to allow small counties additional time.

d. FSP Expenditures by Funding Source

The expenditures for components authorized under the Mental Health Services Act include:

- Mental Health Services Act,
- State General Fund,
- Other State Funds,
- Medi-Cal Federal Financial Participation,
- Medicare,
- Other Federal Funds,
- Realignment,
- County Funds, and
- Other Funds.

Breakout by age group is not possible due to the limitations of the RER, discussed in earlier in this chapter (see also Appendix E).

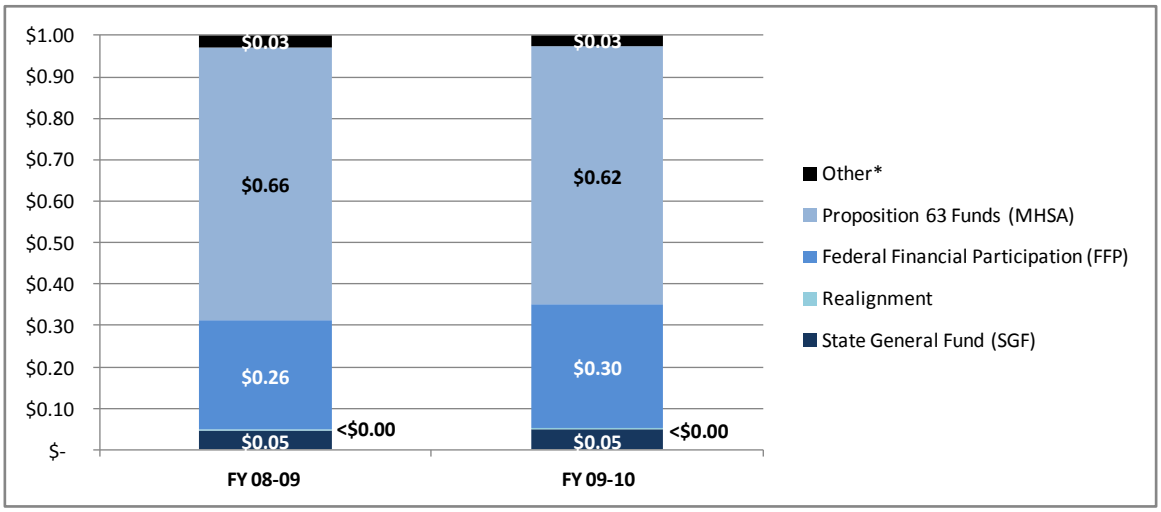
Exhibit III.5 displays FSP expenditures from all counties and municipalities that submitted a Revenue and Expenditure Report in FY 08-09 and/or FY 09-10. Therefore, the pool of counties/municipalities included in the

[57] See Chapter II of the full Report for hypotheses to be tested in future reports related to implementation of evidence-based practices and potential impact on cost.

[58] http://www.dmh.ca.gov/DMHDocs/docs/notices08/08-02.pdf
http://www.dmh.ca.gov/DMHDocs/docs/notices08/08-19.pdf
http://www.dmh.ca.gov/DMHDocs/docs/notices08/08-36.pdf

analysis of proportion of FSP expenditures by funding source is slightly larger than the participant pool for the FSP Costs and Cost Offsets study (see Appendix E).

Exhibit III.5
Proportion of FSP Expenditures by Funding Source
(FY 08-09 & FY 09-10)



*Other Funds: Medicare, Other State, County, Other, Other Federal

MHSA expenditures on Medi-Cal increased in FY 09-10 compared with FY 08-09. The increase in MHSA expenditures on leveraged resources suggests that counties and municipalities are successfully leveraging MHSA in order to bring in additional federal dollars.

e. Summary

This report identifies the average statewide annual and per-day cost of providing FSP services to clients in California. The costs of FSP services are calculated in two categories: program services [59] – which includes activities required under the Mental Health Services Act, as well as any evidence-based models and/or practices offered – and housing costs. [60] While FSP clients may be represented in marginal additional costs (e.g., outreach) there is not a feasible way of parsing these expenditures, and impacts on cost estimates would be minor.

[59] In addition, FSP program services costs may include administrative costs related to operating the FSP program, overhead, and other costs typically considered "other direct costs" that support FSP program operations. For example, it would be unrealistic to expect that contractors do not include ODC and administrative costs when submitting FSP budgets to counties for approval. ODC and administrative costs are standard operating costs necessary to support programs and program staff, and typically included in any program budget (FSP or otherwise).
[60] Housing is defined as housing support, operating support and housing placement. It does not include the Governor's Housing Initiative. Housing support is the cost of housing subsidies for permanent, transitional and temporary housing; master leases; motel and other housing vouchers; rental security deposits; first- and last-month rental payments; and other fiscal housing supports. The operating costs of providing housing supports to clients include building repair and maintenance, utilities, housing agency management fees, insurance, property taxes and assessments, and credit reporting fees. Housing placement is assistance in securing housing, including supportive housing – permanent affordable housing with combined supports for independent living.

IV. Cost Offsets for Full Service Partnership Programs

One focus of this chapter is *"whether costs incurred in providing mental health services … are offset by reduced costs elsewhere in the health care system*." [61] By virtue of the data collected at the time of intake and follow-up, we have been able to expand exploration of cost reduction beyond the health care system, to include incarceration.

Specifically, we explore whether the costs of providing the Full Service Partnership are offset by reduced costs in: [62]

Physical Health Services

- Acute Care Inpatient Hospitalization (number of days) [63]
- Skilled Nursing (Non-Psychiatric) (number of days)
- Emergency Room Visits (number of times)

Psychiatric Care

- Inpatient Psychiatric Hospitalization (number of days)
- Long-Term Care (number of days) [64]
- Skilled Nursing (Psychiatric) (number of days)

Criminal Justice Involvement

- Arrests (number of times)
- Division of Juvenile Justice (number of days)
- Juvenile Hall/Camp (number of days)
- Jail (number of days)
- Prison (number of days)

Results are presented for each age group.

a. Methodology

There are four formulas that are completed when calculating cost offsets (regardless of whether we are calculating offsets for physical health, psychiatric care or criminal justice). In this section (methodology), each calculation is

[61] Fells, T. (1999). Is there a cost offset to psychotherapy? *Journal of Psychotherapy Practice and Research, 8,* 243, 247. Quote taken from p. 243.

[62] Cost Offsets can be developed only for counties that submit data to the State Department of Mental Health's Full Service Partnership (FSP) Data Collection and Reporting System (DCR). All of the variables used in the FSP Cost Offset analysis are contained in the DCR. EMT does not have access to non-DCR data from counties.

The areas analyzed for savings are very similar to those analyzed in the evaluation of AB 2034 efforts, which included inpatient psychiatric hospitalization and incarceration. Emergency room use was also evaluated but was limited to psychiatric rather than physical health.

California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.

We recognize that there are fixed costs associated with each of the offset categories analyzed. The important point is that participants in the Full Service Partnership program are less likely to be the ones occupying the inpatient psychiatric bed, jail cell, etc. as a result of intervention. Obviously, the hospital bed and jail cell are still available for someone else's use, as it were.

[63] As defined in response to physical health needs – we examine psychiatric hospitalization as a separate category of offsets.

[64] Institution for Mental Diseases/Mental Health Rehabilitation Centers. The KET does not distinguish between whether an FSP client's long-term care was reimbursed at the MHRC rate or the IMD rate. Therefore, an average of the IMD and MHRC rates for the facilities contracted by each county was used as the basis for calculating the cost applied to the number of days in long-term care.

introduced and *briefly* described below. [65] This section is followed by a subsection devoted to each calculation, in which an in-depth, step-by-step explanation is provided. Please refer to the numbered section (corresponding to the steps as outlined below) for further explanation of the calculations.

The four calculations are:

1. Out of the larger group of FSP clients **new enrollees** (FY 08-09 and FY 09-10) are selected.
2. For the **pre-intake period** (the 12 months prior to enrolling in the FSP), in each of the offset categories –
    - Per client:
        - Number of days per year/number of events per year (**annual)**
    - Annual per-client number of days/events is different from annualized per-client number of days/events, below, under #3.
3. For the **post-enrollment period** (the 12 months after intake in the FSP), in each of the offset categories –
    - Per client:
        - **Annualized** number of days/number of events
    - Annualized per-client number of days/number of events is different from annual per-client number of days/events, above, under #2.
    - Annualized per-client number of days/number of events involves application of an **annualization multiplier**, in order to arrive at the annualized number of days/number of events per client. The annualization multiplier is very different from a statewide rate (which is a dollar amount and is described under #4).
4. A **statewide rate** (e.g., cost of incarcerating an individual for one day) is applied to arrive at cost offset (and then applied to number of days of acute hospitalization, etc.)
    - After the number of days is multiplied by the rate:
        - For the pre-intake period (the 12 months prior to enrolling in the FSP), the **annual** per-client cost offset is produced.
        - For the post-enrollment period (the 12 months after intake in the FSP), the **annualized** per-client cost offset is produced.

The methodology for each of these new calculations is described in this section.

1. New Enrollees

All cost-offset analyses were limited to new enrollees in each fiscal year. First we explain what a new enrollee is, and then we will justify why limiting the cost analysis to new enrollees was imperative.

This *new* aspect of methodology for calculating cost offsets is actually part of a calculation introduced in Chapter III. Our new enrollees are the bolded groups. Recall the following:

Fiscal Year 08-09

- **Start date in FY 08-09 and end date in FY 08-09** [66]
- Start date before FY 08-09 and end date in FY 08-09

[65] This brief, succinct introduction to the Methodology section is provided for organizational purposes only (in order to provide an orientation for the reader as to the subsections that will follow), and will be insufficient to provide complete understanding of the methodology. Please refer to each subsection, in which step-by-step instructions are provided.
[66] We account for FSP clients with multiple start and stop dates within the same fiscal year.

- **Start date in FY 08-09 and no end date (still enrolled)**
- Start date before FY 08-09 and no end date (still enrolled)

Fiscal Year 09-10

- **Start date in FY 09-10 and end date in FY 09-10** [67]
- Start date before FY 09-10 and end date in FY 09-10
- **Start date in FY 09-10 and no end date (still enrolled)**
- Start date before FY 09-10 and no end date (still enrolled)

A new enrollee is identified thus:

- FY 08-09: Enrollment date between July 1, 2008, and June 30, 2009
- FY 09-10: Enrollment date between July 1, 2009, and June 30, 2010

Any FSP client who did not meet these enrollment-date criteria was excluded from the cost-offset analysis.

- Enrollment date was the sole determining factor as to which fiscal year an FSP client was placed into for purpose of analysis.
- An FSP client appeared in only one data set (no one appeared in both fiscal years, despite the fact that an FSP client who enrolled in FY 08-09 might still be enrolled in FY 09-10). [68]

It was critical to limit the cost-offset analysis to new enrollees in order to compare the proverbial apples to apples. In brief:

- At intake, days of hospitalization and incarceration are queried for the 12 months prior to enrollment.
- In order to provide a valid comparison (apples to apples), the post-comparison period had to be limited to the 12 months following enrollment.

Table IV.1 displays the number of FSP clients (new enrollees only) in FY 08-09. FY 08-09 new enrollees are a subset of the larger group of clients displayed in Table III.1.

Table IV.1
Full Service Partnership Services: New Enrollees by Age Group
(Fiscal Year 08-09)

	Number of New Enrollees FY 08-09
CYF	2,164
TAY	2,327
Adults	4,315
Older Adults	582
Total	**9,388**

Table IV.2 displays the number of FSP clients (new enrollees only) in FY 09-10. FY 09-10 new enrollees are a subset of the larger group of clients displayed in Table III.3.

[67] For consistency's sake, we account for FSP clients with multiple start and stop dates within the same fiscal year.
[68] Length of participation is handled through the annualization calculation. Refer back to the discussion of methods in Chapter III.

Table IV.2
Full Service Partnership Services: New Enrollees by Age Group
(Fiscal Year 09-10)

	Number of New Enrollees FY 09-10
CYF	3,101
TAY	2,977
Adults	4,702
Older Adults	645
Total	**11,425**

2. Pre-Intake Period – 12 Months Prior to Enrolling in FSP: Annual per-Client Offset-Category Cost

This concept is actually straightforward. Because the Partnership Assessment Form (PAF) contains questions for FSP clients about number of days hospitalized, etc., in the 12 months prior to enrollment, there is no need to apply an annualization formula. The period of time in question is already 12 months.

PAF data are collected by individual counties, and then entered into the State of California Department of Mental Health's Data Collection and Reporting System (DCR). EMT received the DCR data (updated through June 30, 2011) through the contract to conduct the Statewide Evaluation of the Mental Health Services Act.

Therefore, *annual per-client offset-category cost* is calculated for the baseline (pre-enrollment) through the following steps:

- Identified all clients who enrolled in FSP during the target fiscal year. [69]
- Through intake interview data (PAF), identified the number of days of hospitalization, incarceration, etc., for each client. [70]
- In the year prior to enrollment, summed across all clients, multiplied by the daily negotiated cost for the county [71] and divided by the number of clients enrolled in FSP during the target year. [72]

This quotient is the *annual per-client (offset-category) cost* for the baseline, the year prior to enrollment.

3. Post-Intake Period – 12 Months Post-Enrollment into FSP: Annualized per-Client Offset-Category Cost

The manner in which annualization is calculated has already been described (Chapter III), and the methodology is no different when applied to cost offsets. [73]

Annualized per-client (offset-category) cost is calculated for the period of time each client is in FSP following enrollment. This post-enrollment offset-category cost is calculated through the following steps:

---

[69] See above for an explanation of how new enrollees were identified.
[70] See each cost-offset category in this section for details.
[71] See each cost-offset category in this section for details.
[72] Total number of new enrollees – see the Summary tables at the end of this chapter.
[73] Annualization of the service period is the same methodology used by the California Department of Mental Health when evaluating and reporting on AB 2034 outcomes.
California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.

- Identified all clients who enrolled in FSP during the target fiscal year (*new enrollees*), and the number of those who had been hospitalized, incarcerated, etc. [74]
- Through Key Event Tracking data, identified: [75]
    - The number of days enrolled.
    - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

    - This quotient is the *annualization multiplier for each new enrollee*.
    - The annualization multiplier is applied to all new enrollees, whether or not they were hospitalized, incarcerated, etc. [76]
- Identified:
    - The number of days of hospitalization, incarceration, etc., for each client post-enrollment, and
    - Multiplied by each client's *annualization multiplier*.
        - An example annualization multiplier from a randomly selected Adult FSP client = .62
        - New enrollees with zero (0) days (*of hospitalization, for example*) drop out of the analysis at this point, and we are left with those new enrollees with a number of days in the offset category of interest.
    - This product is the *annualized number of days of (cost-offset category*) for each new enrollee (e.g., *who was hospitalized or incarcerated during the 12-month follow-up period*).
        - The 12-month follow-up period is completely tailored to the individual FSP client, and entirely based upon the date of intake into the FSP. For example:

Sample Client	Intake (Start Date in FY 08-09)	12-Month Follow-Up Period (Follow-Up goes into FY 09-10)	# of Days
251	12/1/2008	11/31/2009	365

Note that this particular FSP client is a *new enrollee in FY 08-09* based on the intake date of 12/1/2008. This FSP client is not "*double-counted*" as a new enrollee in FY 09-10 because there is no intake date in FY 09-10. The data shown in the table above illustrate the following about the 12-month follow-up period:

- The 12-month follow-up period is tied to the individual FSP client;
- The 12-month clock starts ticking with the individual FSP client's date of intake; and
- The 12-month follow-up period can cross fiscal years for an individual client.

- Summed annualized days of (cost-offset category) across all new enrollees. [77]

[74] See each cost-offset category in this section for the exact DCR variables that were used in the calculations.
[75] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[76] See Chapter III for how days of enrollment were calculated.

- Multiplied by the daily negotiated cost of psychiatric hospitalization, incarceration, etc., for the county, [78] and
- Divided by the number of new enrollees in FSP during the target year. [79]

This quotient is the *annualized per-client hospitalization, incarceration, etc., cost* for the post-enrollment period.

Again, note that we limited the analyses to **new enrollees** in order to have a match with the 12-month pre-enrollment period, in essence, to compare the 12 months following enrollment with the 12-month period prior to enrollment (PAF question asks about the 12 months prior to enrollment when asking about hospitalization, etc.).

This chapter summarizes the program costs for clients who initially enrolled in FSP during the target fiscal year, the amount of offsets, and the percentage of one-year program costs that have been saved in annualized physical health care, psychiatric care and criminal justice through FSP participation by these new enrollees.

b. Physical Health Services

For the purpose of calculating costs and cost offsets, *physical health services* include:

- Acute Care Inpatient Hospitalization (number of days)
- Skilled Nursing (Non-Psychiatric) (number of days)
- Emergency Room Visits (number of times)

Costs and cost savings in each of these categories for FSP clients are presented in the following sections.

1. Acute Care Inpatient Hospitalization (Physical Health)

According to the Agency for Health Care Research and Quality (2002), the United States spends more money per person on health care than any other nation in the world. [80] Stanton and Rutherford (2005) reported that physical health care costs in the U.S. continued to grow from $1,106 per person in 1980 to about $6,280 per person in 2004.[81] Cohen and Herbert (1996) reported in their study that emotional stressors, including negative affect, low social support and clinical depression, also influence immune-system functioning and contribute to a number of physical problems. [82]

The Substance Abuse and Mental Health Services Administration recently released a national study [83] indicating that adults (age 18 or older) with any mental illness (regardless of whether it was classified as severe mental illness) were more likely than adults without mental illness to have:

- High blood pressure

---

[77] Note that FSP clients who do not have any days of hospitalization, incarceration, etc., have dropped out of the analysis at this point.
[78] See each specific offset category in this chapter for where these rates were obtained and the manner in which they were applied.
[79] Total number of new enrollees – see the Summary tables at the end of this chapter.
[80] As cited by Crane, D. D., & Christenson, J. (2008). The medical offset effect: Patterns in outpatient services reduction for high utilizers of health care. *Contemporary Family Therapy: An International Journal, 30*(2), 127-138.
[81] Ibid.
[82] Ibid.
[83] http://www.samhsa.gov/data/2k12/NSDUH103/SR103AdultsAMI2012.pdf
Substance Abuse and Mental Health Services Administration (2012). *Physical Health Conditions among Adults with Mental Illnesses*. Washington, DC: Government Printing Office.
Years analyzed included combined 2008 and 2009 National Survey on Drug Use and Health.

- Asthma
- Diabetes
- Heart disease
- Stroke

In addition, adults with mental illness were more likely to have used an emergency room and to have been hospitalized.[84]

Several studies have shown that providing mental health therapy to individuals suffering from mental illness results in a decrease in the use of other health services. In 1999, Chiles et al. performed a comprehensive meta-analysis of 91 medical cost-offset studies in medical populations published between 1967 and 1997 and concluded that 90 percent of the studies reported some degree of decreased medical (physical health) utilization following psychological intervention. The estimated savings were $1,759 (U.S.) per person over all of these studies. [85] The results showed an average physical health care use decline of 23.6 percent following individual therapy. Furthermore, the study found that those in no-treatment comparison groups **increased** physical health care use by 9.16 percent. [86]

Another study conducted by the Group Health Association found that patients in Kansas City receiving mental health interventions decreased their non-psychiatric usage by 30.7 percent. Lab and X-ray costs (for physical health issues) also decreased by 29.8 percent (Lane, 1998). [87]

A Kaiser Permanente study indicated that patients who participated in psychotherapeutic interventions decreased their average length of hospital stay (for physical health ailments) by 77.9 percent, had a 66.7 percent decrease in physical health hospitalization frequency, a 47.1 percent decrease in physician office visits, a 45.3 percent decrease in emergency room visits, and a four (4) percent decrease in the number of prescriptions received (Sobel, 2000). [88] Law and Crane found similar results in 2000 when they studied medical (physical health) offsets among a sample of participants receiving therapy from marriage and family therapists through a health maintenance organization (HMO) and found a significant, 21.5 percent decrease in physical health care use following behavioral health therapy. [89]

Statewide Acute Care Inpatient Hospitalization Rate (Physical Health)

The Office of Statewide Health Planning and Development (OSHPD) is the source for the rates applied by county for acute inpatient care. [90] Among the counties that participated, a "*statewide*" rate was determined by calculating an average of the rates for counties that participated in this round of the study. [91] The statewide rate for FY 08-09 is:

Inpatient Hospitalization - Physical	
Statewide Average FY 08-09	$2,546.01

[84] For non-psychiatric reasons. SAMHSA analyzed psychiatric ER use and hospitalization separately.
[85] As cited by Carlson, L. D. (2004). Efficacy and medical cost offset of psychosocial interventions in cancer care: Making the case for economic analyses. *Psycho-Oncology, 13*(12), 837-849.
[86] Ibid.
[87] As cited in Crane, D. D., & Christenson, J. (2008). The medical offset effect: Patterns in outpatient services reduction for high utilizers of health care. *Contemporary Family Therapy: An International Journal, 30*(2), 127-138.
[88] As cited by Crane, D. D., & Christenson, J. (2008). The medical offset effect: Patterns in outpatient services reduction for high utilizers of health care. *Contemporary Family Therapy: An International Journal, 30*(2), 127-138.
[89] Ibid.
[90] http://www.oshpd.ca.gov/hid/Products/Hospitals/Utilization/Hospital_Utilization.html
[91] See Appendix D for a list of counties that participated.

The statewide rate for FY 09-10 is:

Inpatient Hospitalization - Physical	
Statewide Average FY 09-10	$2,676.36

The OSHPD data set [92] includes all hospitals in each county. If a county has more than one hospital providing acute hospitalization services, an average within the county was first calculated in order to arrive at a rate for each county. Below is the definition of acute care hospitalization, as provided by OSHPD.

Acute Care Hospitalization

Acute care refers to the daily hospital service cost centers related to the provision of general acute care, such as Medical/Surgical Acute, Obstetrics Acute, Definitive Observation, Medical/Surgical Intensive Care and Coronary Care. The specific rate used in calculations was the Total Net Inpatient Revenue per day from all payer sources**.** [93]

DCR Variables Analyzed at Baseline (Intake) and Follow-Up

The Key Event Tracking Form [94] does not indicate the specific facility in which an individual was hospitalized – only that an inpatient stay occurred for physical health reasons. Below are the exact variables we used out of the PAF and the KET, and their definitions. [95]

- PAF (Intake/Baseline) Variable: **MedicalHospital_PastTwelveDays** [96] – Defined as:
  - RESIDENTIAL INFORMATION: Hospital - Acute Medical Hospital;
  - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
  - Valid Codes: **0-365**
- KET (Follow-Up) Variable: **Current.1** through **Current.155** = **8**, which is a categorical variable assigned to represent Medical Hospital.
  - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
  - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
  - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was hospitalized for medical reasons. [97] What the **Current** variable (code = **8**) tells us is only that an FSP client was hospitalized for medical (physical health) reasons, not how many days.

So the challenge for the analysis was how to determine the number of days of acute (physical) inpatient hospitalization, over 155 possible follow-up points. This is the focus of the *Calculations* section that follows.

---

[92] Available for download from its website, http://www.oshpd.ca.gov/hid/Products/Hospitals/Utilization/Hospital_Utilization.html
[93] The OSHPD worksheets are available online. http://www.oshpd.ca.gov/hid/Products/Hospitals/Utilization/Hospital_Utilization.html
[94] The Key Event Tracking Form is collected by counties and entered into the DCR. EMT receives the data only for analysis.
[95] Courtesy of California State University, Sacramento (Sac State), currently the contractor managing the DCR.
[96] Page 79, DCR Data Dictionary Final_20110915. California State University, Sacramento. There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.
The variable wording is confusing because it seems to suggest occurrence over the past 12 days. The variable name and description, however, have been reproduced verbatim from Sac State's data dictionary. The variable actually refers to the number of **days** over the **past 12** months (prior to FSP intake).
[97] **This particular analysis does NOT include** psychiatric reasons – we examine those separately, later in this chapter.

Calculations – Follow-Up, 12 Months Post-Intake: Acute Care Inpatient Hospitalization (Physical Health)

Accompanying each **Current** variable is a **DateResidentialChange** variable. This variable tells us on what date the FSP client's residential setting changed.

Therefore, we developed programming commands in SPSS that performed the following calculations for each KET follow-up period:

1. Selected only those FSP clients who were hospitalized for acute medical (physical health): **Current = 8.**
2. Calculated the number of days hospitalized by taking the subsequent **DateResidentialChange** and subtracting the current **DateResidentialChange.**

You might point out, "*But wait! What about those who were still hospitalized at the second follow-up?"*

Their **Current.2** status would still = **8**, and their number of days would be calculated for the second time period. There are additional steps to these calculations:

3. After this process was completed 155 times, the number of days hospitalized was summed for each FSP client to arrive at a grand total for each person.
    - The sum is necessary in order to account for subsequent stays that cross KET administrations, as well as intermittent stays by the same person during his or her FSP involvement.
4. Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

    - Days Enrolled, when used in this formula, is not annualized. What we are interested in is the total time period in which an FSP client was enrolled. What we produce is a proportion, which is then applied against the Number of Days Hospitalized to adjust for the period of time that a person *was at risk for hospitalization*. If we do not apply this adjustment, we would unfairly weight the results for or against people who were in the program for shorter or longer periods of time.
    - Days Enrolled is: [98]

DatePartnershipStatusChange_KET – PartnershipDate [99]

5. The proportion calculated for each FSP client out of Step 4 is then multiplied by the sum of days hospitalized in Step 3. This is how we arrive at the number of days hospitalized, without a bias for length of enrollment.

Findings: Acute Care Inpatient Hospitalization (Physical Health)

Tables IV.3 through IV.6 present cost offsets for each of the age groups, in each fiscal year, for inpatient acute medical (physical health) hospitalization.

Table IV.3 represents FY 08-09, and Table IV.5 FY 09-10:

[98] Elements of this formula were explained in Chapter III. The only element missing from what was presented in Chapter III is the annualization factor (dividing by 365). But it does not apply here – we are developing a proportion to be applied against number of days hospitalized.
[99] Applying all of the caveats discussed in Chapter III, section c. *Contextual Factors – Impact on Cost*.

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [100] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) of hospitalization for acute medical (physical health) reasons.
    - This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide Rate for Acute Care Inpatient Hospitalization (Physical Health).
    - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [101]
    - The number of days enrolled.
    - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

    - This quotient is the *annualization multiplier for each new enrollee*.
    - The annualization multiplier is applied to all new enrollees, whether or not they were hospitalized for acute medical (physical health) reasons. [102]

[100] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.
[101] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[102] See Chapter III for how days of enrollment were calculated.

- Identified:
    - The number of days of acute medical (physical health) hospitalization for each FSP client during the 12-month post-enrollment period, and
    - Multiplied by each FSP client's *annualization multiplier*.
        - New enrollees with zero (0) days (*of acute care inpatient hospitalization, for physical health reasons*) drop out of the analysis at this point, and we are left with those new enrollees who spent at least one day in an inpatient acute hospital for physical health reasons.
    - This product is the *annualized number of days of acute medical (physical health) hospitalization* for each new enrollee who was hospitalized (inpatient) for acute medical (physical health reasons) during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide Rate for Acute Care Inpatient Hospitalization (Physical Health).
    - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

Decrease in Number of Days

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

- In other words, the percent of Acute Care Inpatient Hospitalization (Physical Health) offset is equal to the total cost offset for Acute Care Inpatient Hospitalization (Physical Health) divided by the pre-FSP cost for Acute Care Inpatient Hospitalization (Physical Health).

The figures for baseline and follow-up in Table IV.3 are for FSP clients who enrolled in FY 08-09.

Table IV.3
Full Service Partnership Services – Total Annual Cost Offset for Number of Days Hospitalized – Acute Care Physical Health
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	611	282	329	$ 1,555,609.36	$ 717,973.55	$ 837,635.81	53.8%
TAY	1,735	1,625	110	$ 4,417,319.54	$ 4,137,258.93	$ 280,060.61	6.3%
Adults	5,880	5,812	68	$ 14,970,512.32	$ 14,797,383.94	$ 173,128.38	1.2%
Older Adults	1,897	1,696	201	$ 4,829,772.43	$ 4,318,025.32	$ 511,747.11	10.6%
Total	**10,123**	**9,415**	**708**	**$ 25,773,213.65**	**$ 23,970,641.74**	**$ 1,802,571.91**	**7.0%**

Table IV.4 represents FY 08-09, and Table IV.6 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number Hospitalized = the actual number of FSP clients who were hospitalized for acute medical (physical health) reasons.
  - An FSP client is counted only one time at baseline (*regardless of whether he or she was hospitalized multiple times during the 12 months prior to intake*). [103]
  - Number Hospitalized is number of persons hospitalized (*across all counties participating in the study*), not number of times hospitalized, average number per county or some other metric.
- Average Number of Days per Year = the average number of days FSP clients were hospitalized.
  - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year. [104] Here is an illustration of the calculation, using data from CYF:

Pre-FSP Cost
$ 1,555,609.36

(this figure comes from Table IV.3)

	Number of New Enrollees FY 08-09
CYF	2,164

(this figure comes from Table IV.1)

=

[103] This is one example of our conservative approach to estimation of cost offsets.
[104] See the discussion above Table IV.3 for calculation of total FSP cost.

Annual per Client Cost (Pre-Intake)	
$	718.86

(this figure is shown below, in Table IV.4)

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number Hospitalized = the actual number of FSP clients who were hospitalized for acute medical (physical health) reasons.
    - An FSP client is counted only one time at follow-up (*regardless of whether he or she was hospitalized multiple times during follow-up*). [105]
    - Number Hospitalized is number of persons hospitalized (*across all counties participating in the study*), not number of times hospitalized, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were hospitalized. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year. [106] Here is an illustration of the calculation, using data from CYF:

Post-FSP Cost	
$	717,973.55

(this figure comes from Table IV.3)

	Number of New Enrollees FY 08-09
CYF	2,164

(this figure comes from Table IV.1)

=

Annualized per-Client Cost	
$	331.78

(this figure is shown, below, in Table IV.4)

[105] This is one example of our conservative approach to estimation of cost offsets.
[106] See the discussion above Table IV.3 for calculation of total FSP cost.

The figures for baseline and follow-up in Table IV.4 are for FSP clients who enrolled in FY 08-09.

Table IV.4
Full Service Partnership Services – Annualized per-Client Cost for Number of Days Hospitalized – Acute Care Physical Health
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Hospitalized	Average Number of Days per Year	Annual per-Client Cost	Number Hospitalized	Average Number of Days per Year	Annualized per-Client Cost
CYF	38	3.0	$ 718.86	17	3.7	$ 331.78
TAY	89	7.9	$ 1,898.29	96	9.4	$ 1,777.94
Adults	296	14.9	$ 3,469.41	402	7.4	$ 3,429.29
Older Adults	87	8.6	$ 8,298.58	103	6.5	$ 7,419.29
Total	**510**			**618**		

The figures for baseline and follow-up in Table IV.5 are for FSP clients who enrolled in FY 09-10.

Table IV.5
Full Service Partnership Services – Total Annual Cost Offset for Number of Days Hospitalized – Acute Care Physical Health
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	419	695	-276	$ 1,121,393.08	$ 1,860,067.27	$ (738,674.19)	-65.9%
TAY	2,113	831	1,282	$ 5,655,139.78	$ 2,224,051.66	$ 3,431,088.12	60.7%
Adults	7,763	5,675	2,088	$ 20,776,549.99	$ 15,188,319.11	$ 5,588,230.88	26.9%
Older Adults	1,231	1,605	-374	$ 3,294,593.98	$ 4,295,551.04	$ (1,000,957.06)	-30.4%
Total	**11,526**	**8,806**	**2,720**	**$30,847,676.83**	**$ 23,567,989.08**	**$ 7,279,687.75**	**23.6%**

Studies have shown that initial engagement of individuals with serious mental illness in supported care results in increased use of medical health services. Prior to enrollment in FSP, physical health needs have been neglected, and poor health is "*exacerbated by years of untreated severe mental illness, habitual substance use and homelessness*" (Iyog-O'Malley, 2012, p. 9). [107]

The figures for baseline and follow-up in Table IV.6 are for FSP clients who enrolled in FY 09-10.

Table IV.6
Full Service Partnership Services – Annualized per-Client Cost for Number of Days Hospitalized – Acute Care Physical Health
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Hospitalized	Average Number of Days per Year	Annual per-Client Cost	Number Hospitalized	Average Number of Days per Year	Annualized per-Client Cost
CYF	57	3.0	$ 361.62	25	10.8	$ 599.83
TAY	153	8.8	$ 1,899.61	75	4.5	$ 747.08
Adults	340	10.9	$ 4,418.66	294	8.7	$ 3,230.18
Older Adults	87	7.2	$ 5,107.90	98	8.7	$ 6,659.77
Total	**637**			**492**		

[107] Iyog-O'Malley, M. (August 2012). *Review and analysis of FSP cost data*. Report for Community Behavioral Health Services, City and County of San Francisco.

2. *Skilled Nursing (Non-Psychiatric)*

A skilled nursing facility is a state-licensed facility that provides skilled services such as overall management and evaluation of a patient care plan, ongoing assessment of rehabilitation needs and therapeutic exercises or activities. [108]

There is an important distinction between skilled nursing facilities that attend to physical health needs and skilled nursing facilities that focus on psychiatric needs. For the purpose of this analysis, we are focusing on only non-psychiatric skilled nursing.

As you will read below, the DCR instruments also make a distinction between skilled nursing facilities focused on physical health needs and those focused on psychiatric needs, as does the Office of Statewide Health Planning and Development (OSHPD). [109]

Statewide Skilled Nursing Facility Day Rate (Non-Psychiatric)

The Office of Statewide Health Planning and Development (OSHPD) is the source for the rates applied by county for use of skilled nursing facilities (non-psychiatric). A "*statewide*" rate was calculated by averaging the rates for counties that participated in this round of the study (see Appendix D). The OSHPD data set [110] includes all skilled nursing facilities in each county.

The Key Event Tracking Form does not indicate the specific facility in which an individual was hospitalized – only that a stay in a skilled nursing facility occurred. [111]

Therefore, if a county has more than one facility providing skilled nursing (non-psychiatric) services, an average within the county was first calculated to arrive at a rate for each county. [112] An average rate within a county means:

- The rate for each skilled nursing facility identified for that county (per OSHPD) is automatically tabulated and averaged in the OSHPD pivot table.
- OSHPD is able to distinguish between non-psychiatric and psychiatric skilled nursing facility rates, thereby matching the DCR variable we analyzed (non-psychiatric – please see below).
- We therefore downloaded the non-psychiatric skilled nursing facility average rate from OSHPD.

The statewide rate for FY 08-09 is:

Skilled Nursing - Non-Psychiatric	
Statewide Average FY 08-09	$213.96

The statewide rate for FY 09-10 is:

[108] http://www.medicareadvocacy.org/medicare-info/skilled-nursing-facility-snf-services/
Medicare and Medicaid Certification are required in order to receive federal reimbursement.

[109] OSHPD is our "go-to" source for statewide health-related rates (needed to attach a cost to a day spent in a skilled nursing facility, for example).

[110] Available for download from the website.

[111] The categorical code assigned tells us whether it was for psychiatric or non-psychiatric reasons – refer back to the earlier sections on hospitalization for physical health and psychiatric hospitalization for a discussion about the KET and the use of categorical codes at follow-up.

[112] The specific cell within the OSHPD Long-Term Care pivot table is the profile tab, Health Care Expenses by Cost Center, Routine Services, Skilled Nursing, per Patient Day. http://www.oshpd.ca.gov/hid/Products/Hospitals/Utilization/Hospital_Utilization.html

Skilled Nursing - Non-Psychiatric	
Statewide Average FY 09-10	$230.87

DCR Variables Analyzed at Baseline (Intake) and Follow-Up

Below are the exact variables we used out of the PAF and the KET, and their definitions. [113]

- PAF (Intake/Baseline) Variable: **NursingPhysical_PastTwelveDays** [114] – Defined as:
  - RESIDENTIAL INFORMATION: Skilled nursing facility (physical);
  - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
  - Valid Codes: **0-365**
- KET (Follow-Up) Variable: **Current.1** through **Current.155 = 23**, which is a categorical variable assigned to represent Skilled Nursing Facility (Physical).
  - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
  - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
  - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was in a skilled nursing facility (physical health-related). What the **Current** variable (code = **23**) tells us is only that an FSP client was in a skilled nursing facility for physical health reasons, not how many days.

So the challenge for the analysis was how to determine the number of days in a skilled nursing facility for physical health reasons, over 155 possible follow-up points. This is the focus of the *Calculations* section that follows.

Calculations – Follow-Up, 12 Months Post-Intake: Skilled Nursing (Physical Health)

Accompanying each **Current** variable is a **DateResidentialChange** variable. This variable tells us on what date the client's residential setting changed.

Therefore, we developed programming commands in SPSS that performed the following calculations for each KET follow-up period:

1. Selected only those FSP clients who were in a skilled nursing facility for physical health reasons: **Current = 23.**
2. Calculated the number of days in skilled nursing for physical health reasons by taking the subsequent **DateResidentialChange** and subtracting the current **DateResidentialChange.**
3. After this process was completed 155 times, the number of days in a skilled nursing facility (physical health) was summed for each FSP client to arrive at a grand total for each person.
   - The sum is necessary in order to account for subsequent stays that cross KET administrations, as well as intermittent stays by the same person during his or her FSP involvement.

[113] Courtesy of California State University, Sacramento, currently the contractor managing the DCR.

[114] Page 85, DCR Data Dictionary Final_20110915. California State University, Sacramento. There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.

The variable wording is confusing because it seems to suggest occurrence over the past 12 days. The variable name and description, however, have been reproduced verbatim from Sac State's data dictionary. The variable actually refers to the number of **days** over the **past 12** months (prior to FSP intake).

4. We then took Days Enrolled and divided the figure into 365:

$$\frac{365}{\text{Days Enrolled}}$$

   - Days Enrolled, when used in this formula, is not annualized. What we are interested in is the total period in which an FSP client was enrolled. What we produce is a proportion, which is then applied against the Number of Days in Skilled Nursing Facility (physical health) in order to adjust for the period of time that a person *was at risk for stay in a skilled nursing facility for physical health reasons*. If we do not apply this adjustment, we would unfairly weight the results for or against people who were in the program for shorter or longer periods of time.
   - Days Enrolled is therefore: [115]

DatePartnershipStatusChange_KET – PartnershipDate [116]

5. The proportion calculated for each FSP client out of Step 4 is then multiplied by the sum of days in a skilled nursing facility (physical health reasons) in Step 3. This is how we arrive at the number of days in a skilled nursing facility (physical health reasons), without a bias for length of enrollment.

Findings: Skilled Nursing (Physical Health)

Tables IV.7 through IV.10 present cost offsets for each of the age groups, in each fiscal year, for inpatient psychiatric hospitalization.

Table IV.7 represents FY 08-09, and Table IV.9 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [117] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) in a skilled nursing facility for physical health reasons.
   - This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide Skilled Nursing Facility Day Rate (Non-Psychiatric).

[115] Elements of this formula were presented in Chapter III. The only piece missing from what was presented in Chapter III is the annualization factor (dividing by 365). But it does not apply here – we are developing a proportion to be applied against number of days hospitalized.
[116] Applying all of the caveats discussed in Chapter III, section c. *Contextual Factors – Impact on Cost*.
[117] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.

- This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [118]
  - The number of days enrolled.
  - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

  - This quotient is the *annualization multiplier for each new enrollee*.
  - The annualization multiplier is applied to all new enrollees, whether or not they were in a skilled nursing facility (for physical health reasons). [119]
- Identified:
  - The number of days in a skilled nursing facility (for physical health reasons) for each FSP client during the 12-month post-enrollment period, and
  - Multiplied by each FSP client's *annualization multiplier*.
    - New enrollees with zero (0) days (*in a skilled nursing facility*) drop out of the analysis at this point, and we are left with those new enrollees with number of days in a skilled nursing facility.
  - This product is the *annualized number of days in a skilled nursing facility (physical health)* for each new enrollee who was in a skilled nursing facility (for physical health reasons) during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide Skilled Nursing Facility Day Rate (Non-Psychiatric).
  - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

Decrease in Number of Days

[118] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[119] See Chapter III for how days of enrollment were calculated.

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

  - In other words, the percent of Skilled Nursing (Physical Health) offset is equal to the total cost offset for Skilled Nursing (Physical Health) divided by the pre-FSP cost for Skilled Nursing (Physical Health).

The figures for baseline and follow-up in Table IV.7 are for FSP clients who enrolled in FY 08-09.

Table IV.7
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Skilled Nursing Facility
Physical Health
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	14	36	-22	$ 2,995.46	$ 7,702.62	$ (4,707.16)	-157.1%
Adults	2,031	1,521	510	$ 434,556.10	$ 325,392.87	$ 109,163.23	25.1%
Older Adults	3,175	1,048	2,127	$ 679,328.22	$ 224,231.80	$ 455,096.42	67.0%
Total	**5,220**	**2,605**	**2,615**	**$1,116,879.78**	**$ 557,327.29**	**$ 559,552.49**	**50.1%**

Table IV.8 represents FY 08-09, and Table IV.10 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number in Facility = the actual number of FSP clients who were in a skilled nursing facility for physical health reasons.
  - An FSP client is counted only one time at baseline (*regardless of whether he or she was in a skilled nursing facility multiple times during the 12 months prior to intake*).

    - Number in Facility is the total number of persons in a skilled nursing facility (*across all counties participating in the study*), not number of times in a skilled nursing facility, average number per county or some other metric.
- Average Number of Days per Year = the average number of days FSP clients were in a skilled nursing facility.
    - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number in Facility = the actual number of FSP clients who were in a skilled nursing facility for physical health reasons.
    - An FSP client is counted only one time at follow-up (*regardless of whether he or she was in a skilled nursing facility multiple times during follow-up*).
    - Number in Facility is the total number of persons in a skilled nursing facility (*across all counties participating in the study*), not number of times in a skilled nursing facility, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were in a skilled nursing facility. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.8 are for FSP clients who enrolled in FY 08-09.

Table IV.8
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Skilled Nursing Facility
Physical Health
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number in Facility	Average Number of Days per Year	Annual per-Client Cost	Number in Facility	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	1	0.4	$ 1.29	2	1.1	$ 3.31
Adults	19	16.6	$ 100.71	55	7.8	$ 75.41
Older Adults	36	38.4	$ 1,167.23	28	11.4	$ 385.28
Total	**56**			**85**		

The figures for baseline and follow-up in Table IV.9 are for FSP clients who enrolled in FY 09-10.

Table IV.9
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Skilled Nursing Facility
Physical Health
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	10	0	10	$ 2,308.69	$ -	$ 2,308.69	100.0%
Adults	2,493	1,762	731	$ 575,556.29	$ 406,791.09	$ 168,765.20	29.3%
Older Adults	1,701	968	733	$ 392,708.08	$ 223,481.14	$ 169,226.94	43.1%
Total	**4,204**	**2,730**	**1,474**	**$ 970,573.06**	**$ 630,272.23**	**$ 340,300.83**	**35.1%**

The figures for baseline and follow-up in Table IV.10 are for FSP clients who enrolled in FY 09-10.

Table IV.10
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Skilled Nursing Facility
Physical Health
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number in Facility	Average Number of Days per Year	Annual per-Client Cost	Number in Facility	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	1	0.2	$ 0.78	0	0.0	$ -
Adults	25	35.3	$ 122.41	34	17.5	$ 86.51
Older Adults	24	17.7	$ 608.85	29	9.5	$ 346.48
Total	**50**			**63**		

3. Emergency Room Visits

Recall the Substance Abuse and Mental Health Services Administration national study [120] presented under the section discussing inpatient hospitalization for acute care (physical health reasons – non-psychiatric), indicating that adults (age 18 or older) with mental illness were more likely to have used an emergency room and to have been hospitalized. [121]

Crane and Christenson (2008) found a significant, 47 percent decrease in urgent care visits [122] for those who participated in marriage and family therapy. [123] Wayne et al. (2003) found that 34 percent of the complaints

[120] http://www.samhsa.gov/data/2k12/NSDUH103/SR103AdultsAMI2012.pdf
Substance Abuse and Mental Health Services Administration (2012). *Physical Health Conditions among Adults with Mental Illnesses*. Washington, DC: Government Printing Office.
Years analyzed included combined 2008 and 2009 National Survey on Drug Use and Health.
[121] For non-psychiatric reasons. SAMHSA analyzed psychiatric ER use and hospitalization separately.
[122] Crane, D. D., & Christenson, J. (2008). The medical offset effect: Patterns in outpatient services reduction for high utilizers of health care. *Contemporary Family Therapy: An International Journal, 30*(2), 127-138. According to the study, urgent care visits are similar to emergency room visits in that help is sought for symptoms deemed too urgent to wait for an appointment. However, symptoms that lead to urgent care visits are not severe enough to necessitate emergency room admittance.
[123] As cited in Crane & Christenson (2008). Ibid.

reported by patients seeking urgent care occurred within a category of concerns that included headaches, abdominal pain and chest pain as three of the most common problems.[124]

According to Crane and Christenson's findings, individuals receiving mental health services were 30 percent less likely to use emergency services than individuals in a comparison county. The study also found that evidence-based group therapy reduced urgent care visits by 85 to 88 percent. [125]

An emergency room visit was defined, for the purpose of the FSP Costs and Cost Offsets study, as one emergency room visit for **non-psychiatric** reasons. The desire to separate psychiatric from non-psychiatric stems from concerns about potential overlap of psychiatric emergency room visits with inpatient psychiatric hospitalization. This is an important distinction, because there are different variables in the DCR associated with emergency room visits for psychiatric versus non-psychiatric reasons (see the discussion under DCR variables analyzed, below). Only **non-psychiatric visits** were analyzed for this report.

Statewide Emergency Room Visit Rate

The Office of Statewide Health Planning and Development (OSHPD) is the source for the rates applied by county for emergency room visits. A "*statewide*" rate was calculated by averaging the rates for counties that participated in this round of the study (see Appendix D).

The statewide rate for FY 08-09 is:

Emergency Room Use	
Statewide Average FY 08-09	$206.08

The statewide rate for FY 09-10 is:

Emergency Room Use	
Statewide Average FY 09-10	$212.40

The OSHPD data set was calculated especially for this study and is not available for download from its website. The rate was calculated by OSHPD using the following variables: [126]

Total Adjusted Emergency Room Expense

Total adjusted emergency room expense is calculated by taking the total direct emergency service expense and subtracting any adjustment from direct expense for emergency services reported to OSHPD on the Hospital Annual Financial Disclosure Report. Total Adjusted Emergency Room Expense would represent the emergency service expense incurred by hospitals to provide emergency service care to patients. This expense would include labor, supplies, purchased services, depreciation, leases and rentals, and any other expense that is identifiable to providing emergency service care.

Total Emergency Room Visits Reported

This is the total number of emergency service visits reported to OSHPD on the Hospital Annual Financial Disclosure report. An emergency service visit is counted for each appearance of a patient in an emergency services unit (medical or psychiatric) of the hospital. An emergency service visit also includes non-emergency patients who use the emergency room for care.

[124] Ibid.
[125] Depending on the specific evidence-based model implemented.
[126] Courtesy of Kyle Rowert, OSHPD, July 2012.

Total Adjusted Emergency Room Expense/Visit

Total adjusted emergency room expense per visit is calculated by taking the total adjusted emergency room expense and dividing by the total emergency room visits reported. Total adjusted emergency room expense per visit represents the average expense to the hospital for each emergency room visit.

DCR Variables Analyzed at Baseline (Intake) and Follow-Up

The Key Event Tracking Form (part of the MHSA DCR) does not indicate the specific facility in which an individual received emergency room services – only that emergency services occurred. [127] Below are the exact variables we used out of the PAF and the KET, and their definitions. [128]

- PAF (Intake/Baseline) Variable: **PhyRelated** [129] – Defined as:
  - EMERGENCY INTERVENTION: Physical health-related;
  - Indicates the number of physical health-related emergency interventions [130] the partner has had during the past 12 months;
  - Valid Codes: **0-99**
- KET (Follow-Up) Variable: **EmergencyType1** through **EmergencyType155 = 1**, which is a categorical variable assigned to represent Physical Health.
  - The **Emergency Type** variables represent the type of emergency intervention received by the FSP client at the time of each follow-up. [131]
  - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
  - The DCR allows for entry of up to 155 KETs.

This information, on its own, is sufficient to calculate the number of times that an FSP client received emergency room services. The process of arriving at a summary total across all of the KET follow-ups is the focus of the *Calculations* section that follows.

Calculations – Follow-Up, 12 Months Post-Intake: Emergency Room Visits (Non-Psychiatric)

Therefore, we developed programming commands in SPSS that did the following for each KET follow-up period:

1. Selected only those FSP clients who received emergency intervention for physical health reasons (not psychiatric). **EmergencyType = 1.**
2. Calculated the number of times emergency intervention was received for physical health reasons.
3. After this process was completed 155 times, the number of times emergency intervention for physical health reasons occurred was summed for each FSP client to arrive at a grand total for each person.
4. Next, Days Enrolled was divided into 365 (number of days in a year):

[127] The categorical code assigned tells us whether it was for psychiatric or non-psychiatric reasons – we analyzed only the non-psychiatric emergency services due to perceived overlap of psychiatric emergency services with the inpatient psychiatric hospitalization variable.
[128] Courtesy of California State University, Sacramento, currently the contractor managing the DCR.
[129] Page 126, DCR Data Dictionary Final_20110915. California State University, Sacramento. There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.
[130] Although "*physical-health-related emergency intervention*" does not equate to emergency room use per se, it is the closest proxy available in the DCR for emergency room use. Emergency room intervention is a logical, likely outcome of a physical health emergency.
[131] Page 193, DCR Data Dictionary Final_20110915. California State University, Sacramento. There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.

365

Days Enrolled

- Days Enrolled, when used in this formula, is not annualized. What we are interested in is the total period in which an FSP client was enrolled. What we produce is a proportion, which is then applied against the Number of ER Visits [132] in order to adjust for the period of time that a person *was at risk for an ER visit for physical health reasons*. If we do not apply this adjustment, we would unfairly weight the results for or against people who were in the program for shorter or longer periods of time.
- Days Enrolled: [133]

DatePartnershipStatusChange_KET – PartnershipDate [134]

5. The proportion calculated for each FSP client out of Step 4 is then multiplied by the sum of ER visits (physical health reasons) in Step 3. This is how we arrive at the number of ER visits (physical health reasons), without a bias for length of enrollment.

Findings: Emergency Room Visits (Physical Health)

Tables IV.11 through IV.14 present cost offsets for each of the age groups, in each fiscal year, for emergency room visits for physical health reasons.

Table IV.11 represents FY 08-09, and Table IV.13 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [135] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Visits per Year	
12 Months Pre-Intake	

- Number of Visits per Year = the actual number of visits (total, across all FSP clients) to the ER for physical health reasons.
  - This is an **annual** number because it is the actual number of visits in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

Pre-FSP Cost

- Pre-FSP Cost = Number of Visits (Pre) multiplied by the Statewide Emergency Room Visit Rate.

---

[132] We make the assumption that a single ER visit takes place on a single day (1-to-1 comparison).
[133] Elements of this formula were described in Chapter III. The only element missing from what was presented in Chapter III is the annualization factor (dividing by 365). But it does not apply here – we are developing a proportion to be applied against number of days hospitalized.
[134] Applying all of the caveats discussed in Chapter III, section c. *Contextual Factors – Impact on Cost*.
[135] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.

- This is an **annual cost** because the Statewide Rate is multiplied by the actual number of visits per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Visits per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [136]
  - The number of days enrolled.
  - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

  - This quotient is the *annualization multiplier for each new enrollee*.
  - The annualization multiplier is applied to all new enrollees, whether or not they spent any time in the emergency room (for physical health reasons). [137]
- Identified:
  - The number of emergency interventions (for physical health reasons) for each FSP client during the 12-month post-enrollment period, and
  - Multiplied by each FSP client's *annualization multiplier*.
    - New enrollees with zero (0) emergency interventions (*for physical health reasons*) drop out of the analysis at this point, and we are left with those new enrollees who have visited the emergency room for a physical health reason.
  - This product is the *annualized number of visits to the emergency room (physical health)* for each new enrollee who received an emergency intervention (for physical health reasons) during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Visits (Post) multiplied by the Statewide Emergency Room Visit Rate.
  - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of visits (see the bullet point above).

Decrease in Number of Visits

[136] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[137] See Chapter III for how days of enrollment were calculated.

- Decrease in Number of Visits = Number of Visits at Baseline (Pre) minus the Number of Visits at Follow-Up (Post):

Pre – Post = Decrease in Number of Visits

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

  - In other words, the percent of Emergency Room Visits (Physical Health) offset is equal to the total cost offset for Emergency Room Visits (Physical Health) divided by the pre-FSP cost for Emergency Room Visits (Physical Health).

The figures for baseline and follow-up in Table IV.11 are for FSP clients who enrolled in FY 08-09.

Table IV.11
Full Service Partnership Services – Total Annual Cost Offset for Number of Emergency Room Visits
Physical Health
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Visits per Year		Decrease in Number of Visits	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	377	35	342	$ 77,692.04	$ 7,274.61	$ 70,417.43	90.6%
TAY	1,108	103	1,005	$ 228,336.29	$ 21,226.21	$ 207,110.08	90.7%
Adults	3,628	319	3,309	$ 747,657.09	$ 65,739.42	$ 681,917.67	91.2%
Older Adults	767	145	622	$ 158,063.12	$ 29,881.55	$ 128,181.57	81.1%
Total	**5,880**	**602**	**5,278**	**$ 1,211,748.54**	**$ 124,121.79**	**$ 1,087,626.75**	**89.8%**

Table IV.12 represents FY 08-09, and Table IV.14 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number Visiting ER = the actual number of FSP clients who received an emergency intervention for physical health reasons.
  - An FSP client is counted only one time at baseline (*regardless of whether he or she received multiple emergency interventions during the 12 months prior to intake*).

- Number Visiting ER is the number of persons who received an emergency intervention for physical health reasons (*across all counties that participated in the study*), not number of times the ER was visited, average number of ER visits by county or some other metric.

- Average Number of Visits per Year = the average number of ER visits (non-psychiatric).
  - At baseline, it is simply the average number of emergency interventions (physical health-related) as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number Visiting ER = the actual number of FSP clients who received an emergency intervention for physical health reasons.
  - An FSP client is counted only one time at follow-up (*regardless of whether he or she received multiple emergency interventions during follow-up*).
  - Number Visiting ER is the number of persons who received an emergency intervention for physical health reasons (*across all counties that participated in the study*), not number of times the ER was visited, average number of ER visits by county or some other metric.
- Average Number of Visits per Year = an average of the annualized total number of emergency room visits (physical health) across all FSP clients who visited the emergency room for a physical health reason. Because the Average Number of Visits per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.12 are for FSP clients who enrolled in FY 08-09.

Table IV.12
Full Service Partnership Services – Annualized per-Client Cost for Number of Emergency Room Visits
Physical Health
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Visiting ER	Average Number of Visits per Year	Annual per-Client Cost	Number Visiting ER	Average Number of Visits per Year	Annualized per-Client Cost
CYF	210	1.2	$ 35.90	32	0.3	$ 3.36
TAY	444	2.3	$ 98.12	97	1.0	$ 9.12
Adults	1,127	2.7	$ 173.27	295	1.3	$ 15.24
Older Adults	204	2.5	$ 271.59	89	1.0	$ 51.34
Total	**1,985**			**513**		

The figures for baseline and follow-up in Table IV.13 are for FSP clients who enrolled in FY 09-10.

Table IV.13
Full Service Partnership Services – Total Annual Cost Offset for Number of Emergency Room Visits
Physical Health
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Visits per Year		Decrease in Number of Visits	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	645	48	597	$ 136,999.68	$ 10,195.32	$ 126,804.36	92.6%
TAY	1,162	103	1,059	$ 246,811.82	$ 21,877.47	$ 224,934.35	91.1%
Adults	2,906	841	2,065	$ 617,241.96	$ 178,630.59	$ 438,611.37	71.1%
Older Adults	489	160	329	$ 103,864.87	$ 33,920.70	$ 69,944.17	67.3%
Total	**5,202**	**1,152**	**4,050**	**$ 1,104,918.33**	**$ 244,624.08**	**$ 860,294.25**	**77.9%**

The figures for baseline and follow-up in Table IV.14 are for FSP clients who enrolled in FY 09-10.

Table IV.14
Full Service Partnership Services – Annualized per-Client Cost for Number of Emergency Room Visits
Physical Health
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Visiting ER	Average Number of Visits per Year	Annual per-Client Cost	Number Visiting ER	Average Number of Visits per Year	Annualized per-Client Cost
CYF	294	1.1	$ 44.18	37	0.4	$ 3.29
TAY	522	1.9	$ 82.91	76	0.8	$ 7.35
Adults	1,042	2.8	$ 131.27	285	1.1	$ 37.99
Older Adults	203	1.5	$ 161.03	77	1.0	$ 52.59
Total	**2,061**			**475**		

c. Psychiatric Care

For the purpose of calculating costs and cost offsets, *psychiatric care* includes:

- Inpatient Psychiatric Hospitalization (number of days)
- Long-Term Care (Psychiatric) (number of days) [138]
- Skilled Nursing (Psychiatric) (number of days)

Costs and cost savings in each of these areas for FSP clients are presented in the following sections.

1. Inpatient Psychiatric Hospitalization

Mental illnesses such as schizophrenia, schizoaffective disorder and bipolar disorder are often episodic, with exacerbations and remissions superimposed on varying degrees of prolonged disability. Nationally, care for

[138] Institution for Mental Diseases facilities/Mental Health Rehabilitation Centers. Key Event Tracking data do not distinguish between the two. Therefore, an average of the IMD and MHRC rates for the facilities contracted by each county was used as the basis for calculating the cost applied to the number of days in long-term care.

patients with these severe disorders accounts for the use of nearly half (43%) of mental health resources, with the largest proportion of expenditures allocated to hospital inpatient care. [139]

Inpatient Psychiatric Hospitalization is defined as services provided in an acute psychiatric hospital or a distinct acute psychiatric part of a general hospital that is approved by the Department of Health Services to provide psychiatric services. Those services are medically necessary for diagnosis or treatment of a mental disorder in accordance with Section 1820.205. [140] *Psychiatric Care* refers to the daily hospital service cost centers related to the provision of psychiatric care, including *Psychiatric Acute* – Adult and Psychiatric Intensive (Isolation) Care.

Statewide Inpatient Psychiatric Hospitalization Rate

The County Cost Report is the source for the rates applied by county for inpatient psychiatric hospitalization (*please see below for the definition of included facilities*). The Cost Report is a report submitted to the California Department of Mental Health every year, documenting everything that the county has spent on mental health. The Cost Report is used as the basis for the California Department of Mental Health's reconciliation of all county mental health costs within a fiscal year. In essence, billing from disparate sources (e.g., MHSA, Medi-Cal) is all reconciled and comes together in final form in the Cost Report. [141]

The form within the County Cost Report from which we extracted each county's inpatient psychiatric rate is MH1966_HOSPINPT. Specifically, we used the Cost per Unit row. For the Cost Report, inpatient psychiatric services are considered Mode 05 – Service Function 10-18:

- Mode 05: *24-Hour Mode of Service* – Services designed to provide a therapeutic environment of care and treatment within a residential setting. Depending on the severity of mental disorder and the need for related medical care, treatment would be provided in one of a variety of settings.

We included only the following types of facilities from Short-Doyle/Medi-Cal Modes, included in Cost Reports and CSI Mode 05:

- 05 – Psychiatric Health Facility [142]
- 07 – Inpatient Psychiatric Hospital Services of an acute care general hospital

A "*statewide*" rate was determined by calculating an average of the rates for counties that participated in this round of the study. [143]

The Key Event Tracking Form does not indicate the specific facility in which an individual was hospitalized for psychiatric reasons – only that a psychiatric hospitalization occurred. Therefore, if a county has more than one hospital providing psychiatric hospitalization services, an average within the county was first calculated in order to arrive at a rate for each county. An average rate within a county means:

- The rate for each hospital identified for that county (per the Cost Report – see above for the definition of what hospitals were included) is entered into a formula, and then the average is calculated.

---

[139] Fenton, W. S., Mosher, L. R., Herrell, J. M., & Blyler, C. R. (1998). Randomized trial of general hospital and residential alternative care for patients with severe and persistent mental illness. *American Journal of Psychiatry, 155*(4), 516-522.
[140] From County Cost Reports, *Service Functions 10-18: Hospital Inpatient*.
[141] Through negotiation with the California Department of Mental Health, eventually a final, reconciled version of the Cost Report is produced.
[142] Although Code 05 also includes Adult Crisis Residential or Adult Residential facilities, we included Psychiatric Health Facilities and Inpatient Psychiatric Hospital Services of an acute care general hospital **only** when calculating the statewide inpatient psychiatric rate.
[143] See Appendix D for a list of counties that participated. However, if the county rate was higher than the Statewide Maximum Allowance (SMA), the SMA rate was used.

- However, if the average is higher than the Statewide Maximum Allowance, the rate defaulted to the Statewide Maximum Allowance.

Not all counties (notably some small, rural counties) have a facility in which to hospitalize individuals for psychiatric reasons. Absent a written agreement with a neighboring county for said services, the Statewide Maximum Allowance was applied for such counties.

The statewide rate for FY 08-09 is:

Inpatient Hospitalization - Psychiatric	
Statewide Average FY 08-09	$1,007.30

The statewide rate for FY 09-10 is:

Inpatient Hospitalization - Psychiatric	
Statewide Average FY 09-10	$1,032.35

DCR Variables Analyzed at Baseline (Intake) and Follow-Up

The Key Event Tracking Form [144] does not indicate the specific facility in which an individual was hospitalized – only that an inpatient stay occurred for psychiatric reasons. Below are the exact variables we used out of the PAF and the KET, and their definitions. [145]

- PAF (Intake/Baseline) Variable: **PsychiatricHospital_PastTwelveDays** [146] – Defined as:
  - RESIDENTIAL INFORMATION: Hospital – Acute Psychiatric Hospital/Psychiatric Health Facility (PHF);
  - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
  - Valid Codes: **0-365**
- KET (Follow-Up) Variable: **Current.1** through **Current.155 = 9**, which is a categorical variable assigned to represent Psychiatric Hospital.
  - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
  - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
  - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was hospitalized for psychiatric reasons. [147] What the **Current** variable (code = **9**) tells us is only that an FSP client was hospitalized for psychiatric reasons, not how many days.

[144] The Key Event Tracking Form is collected by counties and entered into the DCR. EMT receives the data only for analysis.
[145] Courtesy of California State University, Sacramento, currently the contractor managing the DCR.
[146] Page 79, DCR Data Dictionary Final_20110915. California State University, Sacramento (Sac State). There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.
The variable wording is confusing because it seems to suggest occurrence over the past 12 days. The variable name and description, however, have been reproduced verbatim from Sac State's data dictionary. The variable actually refers to the number of **days** over the **past 12** months (prior to FSP intake).

So the challenge for the analysis was how to determine the number of days of psychiatric inpatient hospitalization, over 155 possible follow-up points. This is the focus of the *Calculations* section that follows.

Calculations – Follow-Up, 12 Months Post-Intake: Inpatient Psychiatric Hospitalization

Accompanying each **Current** variable is a **DateResidentialChange** variable. This variable tells us on what date the FSP client's residential setting changed.

Therefore, we developed programming commands in SPSS that calculated the following for each KET follow-up period:

1. Selected only those FSP clients who were hospitalized for psychiatric reasons: **Current = 9**.
2. Calculated the number of days hospitalized by taking the subsequent **DateResidentialChange** and subtracting the current **DateResidentialChange**.
3. After this process was completed 155 times, the number of days hospitalized (psychiatric) was summed for each FSP client to arrive at a grand total for each person.
    - The sum is necessary in order to account for subsequent stays that cross KET administrations, as well as intermittent stays by the same person during FSP involvement.
4. Days Enrolled is then divided into 365 (number of days in a year):

$$\frac{\textbf{365}}{\textbf{Days Enrolled}}$$

    - Days Enrolled, when used in this formula, is not annualized. What we are interested in is the total period that an FSP client was enrolled. What we produce is a proportion, which is then applied against the Number of Days Hospitalized (psychiatric) in order to adjust for the period of time that a person *was at risk for hospitalization*. If we do not apply this adjustment, we would unfairly weight the results for or against people who were in the program for shorter or longer periods of time.
    - Days Enrolled is: [148]

DatePartnershipStatusChange_KET – PartnershipDate [149]

5. The proportion calculated for each FSP client out of Step 4 is then multiplied by the sum of days hospitalized (psychiatric) in Step 3. This is how we arrive at the number of days hospitalized (psychiatric), without a bias for length of enrollment.

Findings: Inpatient Psychiatric Hospitalization

Tables IV.15 through IV.18 present cost offsets for each of the age groups, in each fiscal year, for inpatient psychiatric hospitalization.

Table IV.15 represents FY 08-09, and Table IV.17 FY 09-10:

[147] **Not** for physical health reasons – we addressed that in a previous section in this chapter.
[148] Elements of this formula were presented in Chapter III. The only piece missing from what was presented in Chapter III is the annualization factor (dividing by 365). But it does not apply here – we are developing a proportion to be applied against number of days hospitalized.
[149] Applying all of the caveats discussed in Chapter III, section c. *Contextual Factors – Impact on Cost*.

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [150] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) of inpatient psychiatric hospitalization.
    - This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide Rate for Inpatient Psychiatric Hospitalization.
    - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [151]
    - The number of days enrolled.
    - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

    - This quotient is the *annualization multiplier for each new enrollee*.
    - The annualization multiplier is applied to all new enrollees, whether or not they were hospitalized (inpatient) for psychiatric reasons. [152]

[150] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.
[151] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[152] See Chapter III for how days of enrollment were calculated.

- Identified:
    - The number of days of inpatient psychiatric hospitalization for each FSP client during the 12-month post-enrollment period, and
    - Multiplied by each FSP client's *annualization multiplier*.
        - New enrollees with zero (0) days (*of inpatient psychiatric hospitalization*) drop out of the analysis at this point, and we are left with those new enrollees who spent at least one day hospitalized (inpatient) for psychiatric reasons.
    - This product is the *annualized number of days of inpatient psychiatric hospitalization* for each new enrollee who was hospitalized (inpatient) for psychiatric reasons during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide Rate for Inpatient Psychiatric Hospitalization.
    - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

Decrease in Number of Days

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

- Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

    - In other words, the percent of Inpatient Psychiatric Hospitalization offset is equal to the total cost offset for Inpatient Psychiatric Hospitalization divided by the pre-FSP cost for Inpatient Psychiatric Hospitalization.

The figures for baseline and follow-up in Table IV.15 are for FSP clients who enrolled in FY 08-09.

Table IV.15
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Inpatient Psychiatric Hospital
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	2,427	2,005	422	$ 2,444,711.45	$ 2,019,631.83	$ 425,079.62	17.4%
TAY	14,002	6,334	7,668	$ 14,104,182.02	$ 6,380,223.46	$ 7,723,958.56	54.8%
Adults	41,242	19,406	21,836	$ 41,542,970.63	$ 19,547,618.64	$ 21,995,351.99	52.9%
Older Adults	4,414	1,639	2,775	$ 4,446,211.93	$ 1,650,960.89	$ 2,795,251.04	62.9%
Total	**62,085**	**29,384**	**32,701**	**$ 62,538,076.03**	**$ 29,598,434.82**	**$ 32,939,641.21**	**52.7%**

Table IV.16 represents FY 08-09, and Table IV.18 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number Hospitalized = the actual number of FSP clients who were hospitalized (inpatient) for psychiatric reasons.
    - An FSP client is counted only one time at baseline (*regardless of whether he or she was hospitalized multiple times during the 12 months prior to intake*).
    - Number Hospitalized is number of persons hospitalized (*across all counties participating in the study*), not number of times hospitalized, average number per county or some other metric.
- Average Number of Days per Year = the average number of days FSP clients were hospitalized.
    - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number Hospitalized = the actual number of FSP clients who were hospitalized (inpatient) for psychiatric reasons.
    - An FSP client is counted only one time at follow-up (*regardless of whether he or she was hospitalized multiple times during follow-up*).
    - Number Hospitalized is number of persons hospitalized (*across all counties participating in the study*), not number of times hospitalized, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were hospitalized. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.16 are for FSP clients who enrolled in FY 08-09.

Table IV.16
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Inpatient Psychiatric Hospital
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Hospitalized	Average Number of Days per Year	Annual per-Client Cost	Number Hospitalized	Average Number of Days per Year	Annualized per-Client Cost
CYF	149	9.0	$ 1,129.72	118	11.6	$ 933.29
TAY	414	24.5	$ 6,061.10	295	16.0	$ 2,741.82
Adults	1,149	27.0	$ 9,627.57	872	23.6	$ 4,530.15
Older Adults	103	19.8	$ 7,639.54	65	11.8	$ 2,836.70
Total	**1,815**			**1,350**		

These results are extremely encouraging and are consistent with an evaluation of the AB 2034 program – that evaluation found cost offsets of approximately $24.7 million from reductions in psychiatric inpatient days and number of days incarcerated. [153]

The figures for baseline and follow-up in Table IV.17 are for FSP clients who enrolled in FY 09-10.

Table IV.17
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Inpatient Psychiatric Hospital
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	3,621	2,551	1,070	$ 3,738,131.70	$ 2,633,519.46	$ 1,104,612.24	29.5%
TAY	14,071	6,313	7,758	$14,526,167.11	$ 6,517,212.21	$ 8,008,954.90	55.1%
Adults	51,321	23,705	27,616	$52,981,125.87	$ 24,471,806.64	$ 28,509,319.23	53.8%
Older Adults	5,406	2,537	2,869	$ 5,580,872.67	$ 2,619,066.59	$ 2,961,806.08	53.1%
Total	**74,419**	**35,106**	**39,313**	**$76,826,297.35**	**$ 36,241,604.90**	**$ 40,584,692.45**	**52.8%**

The figures for baseline and follow-up in Table IV.18 are for FSP clients who enrolled in FY 09-10.

Table IV.18
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Inpatient Psychiatric Hospital
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Hospitalized	Average Number of Days per Year	Annual per-Client Cost	Number Hospitalized	Average Number of Days per Year	Annualized per-Client Cost
CYF	269	5.6	$ 1,205.46	140	4.0	$ 849.25
TAY	587	16.0	$ 4,879.46	264	18.1	$ 2,189.19
Adults	1,306	26.1	$ 11,267.79	836	18.6	$ 5,204.55
Older Adults	146	19.7	$ 8,652.52	91	10.4	$ 4,060.57
Total	**2,308**			**1,331**		

[153] Review of the report and appendices did not yield a per-person cost offset in either area, or a breakout for inpatient psychiatric offsets compared with incarceration offsets. Unfortunately, comparisons broken out into psychiatric and incarceration therefore cannot be provided.
California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.

2. *Long-Term Care (Psychiatric)*

Mental Health Rehabilitation Centers (MHRCs) provide intensive support and rehabilitation services designed to assist people with mental disorders, 18 years or older, who would have been placed in a state hospital or another mental health facility. Services provided in MHRCs help develop a person's skills to become self-sufficient and capable of increasing levels of independent functioning. [154]

Key Event Tracking data do not distinguish between whether care was reimbursed at the Institution for Mental Diseases (IMD) rate or the MHRC rate (both are subsumed under a variable entitled *Long-Term Care*). Therefore, there was no way to analyze reimbursement at each rate as distinct from one another. When arriving at a statewide rate for purpose of comparison, an average of the IMD and MHRC rates for the facilities contracted by each county was used as the basis for calculating the cost applied to the number of days in long-term care.

Statewide Long-Term Care Rate (Psychiatric)

IMD rates for FY 08-09 and FY 09-10 were provided to EMT courtesy of the MHSOAC, and any missing rates from counties were extracted from the Cost Report, Mode 05 (Service Function 36-39). [155] MHRC rates were extracted from the Cost Report, Mode 05 (Service Function 90-94). A "*statewide*" rate was then calculated by averaging the rates for counties that participated in the study (see Appendix D).

The statewide rate for FY 08-09 is:

Long-Term Care	
Statewide Average FY 08-09	$169.00

The statewide rate for FY 09-10 is:

Long-Term Care	
Statewide Average FY 09-10	$182.65

DCR Variables Analyzed at Baseline (Intake) and Follow-Up

Below are the exact variables we used out of the PAF and the KET, and their definitions. [156]

- PAF (Intake/Baseline) Variable: **LongTermCare_PastTwelveDays** [157] – Defined as:
  - RESIDENTIAL INFORMATION: Long-term institutional care [Institution for Mental Diseases (IMD)/Mental Health Rehabilitation Centers (MHRC)]; [158]
  - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
  - Valid Codes: **0-365**

[154] http://www.dmh.ca.gov/services_and_programs/Quality_Oversight/Licensing_and_Certification/default.asp
[155] IMD rates taken from the Cost Report included "Patch," otherwise known as "with Patch."
[156] Courtesy of California State University, Sacramento, currently the contractor managing the DCR.
[157] Page 86, DCR Data Dictionary Final_20110915. California State University, Sacramento (Sac State). There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.
The variable wording is confusing because it seems to suggest occurrence over the past 12 days. The variable name and description, however, have been reproduced verbatim from Sac State's data dictionary. The variable actually refers to the number of **days** over the **past 12** months (prior to FSP intake).
[158] Institution for Mental Diseases (IMD) is a Medicaid reimbursement classification, related to long-term care. It is unclear why it is equated with MHRCs in the DCR. MHRCs may be reimbursed for care under the IMD category, for example.

- KET (Follow-Up) Variable: **Current.1** through **Current.155 = 25**, which is a categorical variable assigned to represent Long-Term Care. [159]
    - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
    - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
    - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was in a long-term-care facility. What the **Current** variable (code = **25**) tells us is only that an FSP client was in a long-term-care facility, not how many days.

So the challenge for the analysis was how to determine the number of days in a long-term-care facility, over 155 possible follow-up points. This is the focus of the *Calculations* section that follows.

Calculations – Follow-Up, 12 Months Post-Intake: Long-Term Care (Psychiatric)

Accompanying each **Current** variable is a **DateResidentialChange** variable. This variable tells us on what date the client's residential setting changed.

Therefore, we developed programming commands in SPSS that systematically generated the following for each KET follow-up period:

1. Selected only those FSP clients who were in a long-term-care facility: **Current = 25.**
2. Calculated the number of days in long-term care by taking the subsequent **DateResidentialChange** and subtracting the current **DateResidentialChange.**
3. After this process was completed 155 times, the number of days in a long-term-care facility was summed for each FSP client to arrive at a grand total for each person.
    - The sum is necessary in order to account for subsequent stays that cross KET administrations, as well as intermittent stays by the same person during his or her FSP involvement.
4. Days Enrolled was divided into 365 (number of days in a year):

$$\frac{\textbf{365}}{\textbf{Days Enrolled}}$$

    - Days Enrolled, when used in this formula, is not annualized. What we are interested in is the total period in which an FSP client was enrolled. What we produce is a proportion, which is then applied against the Number of Days in Long-Term Care in order to adjust for the period of time that a person *was at risk for stay in a long-term-care facility*. If we do not apply this adjustment, we would unfairly weight the results for or against people who were in the program for shorter or longer periods of time.
    - Days Enrolled is: [160]

[159] Institution for Mental Diseases (IMD) is a Medicaid reimbursement classification, related to long-term care. It is unclear why it is equated with MHRCs in the DCR. MHRCs may be reimbursed for care under the IMD category, for example.

DatePartnershipStatusChange_KET – PartnershipDate [161]

5. The proportion calculated for each FSP client out of Step 4 is then multiplied by the sum of days in a long-term care facility in Step 3. This is how we arrive at the number of days in a long-term care facility, without a bias for length of enrollment.

Findings: – Long-Term Care (Psychiatric)

Tables IV.19 through IV.22 present cost offsets for each of the age groups, in each fiscal year, for long-term care.

Table IV.19 represents FY 08-09, and Table IV.21 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [162] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) spent in long-term care.
    - This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide Long-Term Care Rate (Psychiatric).
    - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [163]
    - The number of days enrolled.

---

[160] Elements of this formula were presented in Chapter III. The only element missing from what was presented in Chapter III is the annualization factor (dividing by 365). But it does not apply here – we are developing a proportion to be applied against number of days hospitalized.
[161] Applying all of the caveats discussed in Chapter III, section c. *Contextual Factors – Impact on Cost*.
[162] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.
[163] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.

- Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

- This quotient is the *annualization multiplier for each new enrollee*.
- The annualization multiplier is applied to all new enrollees, whether or not they were in long-term care for psychiatric reasons. [164]

- Identified:
  - The number of days spent in long-term care (psychiatric) for each FSP client during the 12-month post-enrollment period, and
  - Multiplied by each FSP client's *annualization multiplier*.
    - New enrollees with zero (0) days (*spent in long-term care*) drop out of the analysis at this point, and we are left with those new enrollees who spent at least one day in long-term care for psychiatric reasons.
  - This product is the *annualized number of days of long-term care* for each new enrollee who was in long-term care for psychiatric reasons during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide Long-Term Care Rate (Psychiatric).
  - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

Decrease in Number of Days

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

[164] See Chapter III for how days of enrollment were calculated.

Percent of Offset

- Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

  - In other words, the percent of Long-Term Care (Psychiatric) offset is equal to the total cost offset for Long-Term Care (Psychiatric) divided by the pre-FSP cost for Long-Term Care (Psychiatric).

The figures for baseline and follow-up in Table IV.19 are for FSP clients who enrolled in FY 08-09.

Table IV.19
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Long-Term-Care Facility
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	4,711	532	4,179	$ 796,165.08	$ 89,939.11	$ 706,225.97	88.7%
Adults	46,781	3,197	43,584	$ 7,906,049.39	$ 540,341.07	$ 7,365,708.32	93.2%
Older Adults	5,158	148	5,010	$ 871,708.66	$ 25,067.96	$ 846,640.70	97.1%
Total	**56,650**	**3,878**	**52,772**	**$ 9,573,923.13**	**$ 655,348.14**	**$ 8,918,574.99**	**93.2%**

Table IV.20 represents FY 08-09, and Table IV.22 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number in Long-Term Care = the actual number of FSP clients who were in long-term care for psychiatric reasons.
  - An FSP client is counted only one time at baseline (*regardless of whether he or she was in long-term care multiple times during the 12 months prior to intake*).
  - Number in Long-Term Care is number of persons in long-term care (*across all counties participating in the study*), not number of times in long-term care, average number per county or some other metric.
- Average Number of Days per Year = the average number of days FSP clients were in long-term care.
  - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number in Long-Term Care = the actual number of FSP clients who were in long-term care for psychiatric reasons.
    - An FSP client is counted only one time at follow-up (*regardless of whether he or she was in long-term care multiple times during follow-up*).
    - Number in Long-Term Care is number of persons in long-term care (*across all counties participating in the study*), not number of times in long-term care, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were in long-term care. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.20 are for FSP clients who enrolled in FY 08-09.

Table IV.20
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Long-Term-Care Facility
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number in Long-Term Care	Average Number of Days per Year	Annual per-Client Cost	Number in Long-Term Care	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	31	44.3	$ 342.14	11	6.8	$ 38.65
Adults	226	112.9	$ 1,832.22	36	34.6	$ 125.22
Older Adults	19	78.4	$ 1,497.78	3	4.5	$ 43.07
Total	**276**			**50**		

The figures for baseline and follow-up in Table IV.21 are for FSP clients who enrolled in FY 09-10.

Table IV.21
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Long-Term-Care Facility
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	9,022	614	8,408	$ 1,647,825.18	$ 112,144.17	$ 1,535,681.01	93.2%
Adults	60,683	2,937	57,746	$ 11,083,459.95	$ 536,341.34	$ 10,547,118.61	95.2%
Older Adults	6,027	304	5,723	$ 1,100,802.75	$ 55,524.15	$ 1,045,278.60	95.0%
Total	**75,732**	**3,855**	**71,877**	**$ 13,832,087.88**	**$ 704,009.66**	**$ 13,128,078.22**	**94.9%**

The figures for baseline and follow-up in Table IV.22 are for FSP clients who enrolled in FY 09-10.

Table IV.22
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Long-Term-Care Facility
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number in Long-Term Care	Average Number of Days per Year	Annual per-Client Cost	Number in Long-Term Care	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	51	35.7	$ 553.52	6	7.0	$ 37.67
Adults	287	85.3	$ 2,357.18	32	32.6	$ 114.07
Older Adults	27	61.9	$ 1,706.67	6	2.4	$ 86.08
Total	**365**			**44**		

3. Skilled Nursing (Psychiatric)

A psychiatric skilled nursing facility is a Medicare-certified facility that provides intervention for individuals requiring mental health treatment in a secured setting. The focus of these facilities is to stabilize psychiatric symptoms and treat medical conditions. [165]

In state-of-the-art skilled nursing facilities, care managers enhance activation using motivational interviewing techniques and action plans, which set and track short-term achievable goals for medical care or lifestyle change. Coaching is provided to patients to help them interact more effectively with their providers. With the participant's permission, providers are notified about changes in the patient's medication regimen and medical status. The care manager works to help clients overcome barriers to attending medical appointments. [166]

There is a distinction between the above and skilled nursing facilities that focus on physical health needs. For the purpose of this analysis, we are focusing on only the above. Skilled nursing costs and cost offsets related to physical health were addressed earlier in this chapter.

As you will read below, the DCR instruments also distinguish skilled nursing facilities focused on psychiatric needs from those focused on physical health needs, as does the Office of Statewide Health Planning and Development (OSHPD) and the Cost Report.

Statewide Skilled Nursing Facility Day Rate (Psychiatric)

The Cost Report (Mode 05, SF 30-34) is the source for the rates applied by county for skilled nursing facilities (psychiatric).[167] A "statewide" rate was calculated by averaging the rates for counties that participated in the study (see Appendix D). Therefore, if a county has more than one facility providing skilled nursing (psychiatric) services, an average within the county was first calculated to arrive at a rate for each county.

The statewide rate for FY 08-09 is:

[165] http://www.dhhs.saccounty.net/BHS/Pages/Adult-Mental-Health/SP-Psychiatric-Skilled-Nursing-Facilities.aspx
[166] Druss, B. G., Von Esenwein, S. A., Compton, M. T., Zhao, L., & Leslie, D. L. (2011). Budget impact and sustainability of medical care management for persons with serious mental illness. *AJP in Advance*, 1-8.
[167] The Cost Report does **NOT** provide the Patch distinction for skilled nursing facilities. Therefore, there is no way to select "with Patch" or "without Patch" because this option is not offered as a selection criterion.

Skilled Nursing - Psychiatric	
Statewide Average FY 08-09	$222.49

The statewide rate for FY 09-10 is:

Skilled Nursing - Psychiatric	
Statewide Average FY 09-10	$233.87

DCR Variables Analyzed at Baseline (Intake) and Follow-Up

Below are the exact variables we used out of the PAF and the KET, and their definitions. [168]

- PAF (Intake/Baseline) Variable: **NursingPsychiatric_PastTwelveDays** [169] – Defined as:
  - RESIDENTIAL INFORMATION: Skilled nursing facility (psychiatric);
  - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
  - Valid Codes: **0-365**
- KET (Follow-Up) Variable: **Current.1** through **Current.155 = 24**, which is a categorical variable assigned to represent Skilled Nursing Facility (Psychiatric).
  - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
  - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
  - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was in a skilled nursing facility (psychiatric). What the **Current** variable (code = **24**) tells us is only that an FSP client was in a skilled nursing facility for psychiatric reasons, not how many days.

So the challenge for the analysis was how to determine the number of days in a skilled nursing facility for psychiatric reasons, over 155 possible follow-up points. This is the focus of the *Calculations* section that follows.

Calculations – Follow-Up, 12 Months Post-Intake: Skilled Nursing (Psychiatric)

Accompanying each **Current** variable is a **DateResidentialChange** variable. This variable tells us on what date the client's residential setting changed.

Therefore, we developed programming commands in SPSS that performed the following operations for each KET follow-up period:

1. Selected only those FSP clients who were in a skilled nursing facility for psychiatric reasons: **Current = 24.**
2. Calculated the number of days in skilled nursing for psychiatric reasons by taking the subsequent **DateResidentialChange** and subtracting the current **DateResidentialChange.**

[168] Courtesy of California State University, Sacramento, currently the contractor managing the DCR.

[169] Page 84, DCR Data Dictionary Final_20110915. California State University, Sacramento (Sac State). There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.

The variable wording is confusing because it seems to suggest occurrence over the past 12 days. The variable name and description, however, have been reproduced verbatim from Sac State's data dictionary. The variable actually refers to the number of **days** over the **past 12** months (prior to FSP intake).

3. After this process was completed 155 times, the number of days in a skilled nursing facility (psychiatric) was summed for each FSP client to arrive at a grand total for each person.
    - The sum is necessary in order to account for subsequent stays that cross KET administrations, as well as intermittent stays by the same person during his or her FSP involvement.
4. Days Enrolled was divided into 365 (number of days in a year):

$$\frac{365}{\text{Days Enrolled}}$$

    - Days Enrolled, when used in this formula, is not annualized. What we are interested in is the total period in which an FSP client was enrolled. What we produce is a proportion, which is then applied against the Number of Days in Skilled Nursing Facility (psychiatric) in order to adjust for the period of time that a person *was at risk for stay in a skilled nursing facility for psychiatric reasons*. If we do not apply this adjustment, we would unfairly weight the results for or against people who were in the program for shorter or longer periods of time.
    - Days Enrolled is: [170]

DatePartnershipStatusChange_KET – PartnershipDate [171]

5. The proportion calculated for each FSP client out of Step 4 is then multiplied by the sum of days in a skilled nursing facility (psychiatric) in Step 3. This is how we arrive at the number of days in a skilled nursing facility (psychiatric), without a bias for length of enrollment.

Findings: Skilled Nursing Facility (Psychiatric)

Tables IV.23 through IV.26 present cost offsets for each of the age groups, in each fiscal year, for number of days in a skilled nursing facility (psychiatric).

Table IV.23 represents FY 08-09, and Table IV.25 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [172] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) in a skilled nursing facility for psychiatric reasons.
    - This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

[170] Elements of this formula were presented in Chapter III. The only element missing from what was presented in Chapter III is the annualization factor (dividing by 365). But it does not apply here – we are developing a proportion to be applied against number of days hospitalized.
[171] Applying all of the caveats discussed in Chapter III, section c. *Contextual Factors – Impact on Cost*.
[172] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide Skilled Nursing Facility Day Rate (Psychiatric).
    - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [173]
    - The number of days enrolled.
    - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

    - This quotient is the *annualization multiplier for each new enrollee*.
    - The annualization multiplier is applied to all new enrollees, whether or not they were in a skilled nursing facility (for psychiatric reasons). [174]
- Identified:
    - The number of days in a skilled nursing facility (for psychiatric reasons) for each FSP client during the 12-month post-enrollment period, and
    - Multiplied by each FSP client's *annualization multiplier*.
        - New enrollees with zero (0) days (*in a skilled nursing facility*) drop out of the analysis at this point, and we are left with those new enrollees with number of days in a skilled nursing facility.
    - This product is the *annualized number of days in a skilled nursing facility (psychiatric)* for each new enrollee who was in a skilled nursing facility (for psychiatric reasons) during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide Skilled Nursing Facility Day Rate (Psychiatric).

[173] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[174] See Chapter III for how days of enrollment were calculated.

- This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

Decrease in Number of Days

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

- Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

- In other words, the percent of Skilled Nursing (Psychiatric) offset is equal to the total cost offset for Skilled Nursing (Psychiatric) divided by the pre-FSP cost for Skilled Nursing (Psychiatric).

The figures for baseline and follow-up in Table IV.23 are for FSP clients who enrolled in FY 08-09.

Table IV.23
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Skilled Nursing Facility Psychiatric
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	105	122	-17	$ 23,361.03	$ 27,143.29	$ (3,782.26)	-16.2%
Adults	2,282	674	1,608	$ 507,712.96	$ 149,911.04	$ 357,801.92	70.5%
Older Adults	1,226	309	917	$ 272,767.78	$ 68,748.16	$ 204,019.62	74.8%
Total	**3,613**	**1,105**	**2,508**	**$ 803,841.77**	**$ 245,802.49**	**$ 558,039.28**	**69.4%**

Table IV.24 represents FY 08-09, and Table IV.26 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number in Facility = the actual number of FSP clients who were in a skilled nursing facility for psychiatric reasons.
    - An FSP client is counted only one time at baseline (*regardless of whether he or she was in a skilled nursing facility multiple times during the 12 months prior to intake*).
    - Number in Facility is the total number of persons in a skilled nursing facility (*across all counties participating in the study*), not number of times in a skilled nursing facility, average number per county or some other metric.
- Average Number of Days per Year = the average number of days FSP clients were in a skilled nursing facility.
    - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number in Facility = the actual number of FSP clients who were in a skilled nursing facility for psychiatric reasons.
    - An FSP client is counted only one time at follow-up (*regardless of whether he or she was in a skilled nursing facility multiple times during follow-up*).
    - Number in Facility is the total number of persons in a skilled nursing facility (*across all counties participating in the study*), not number of times in a skilled nursing facility, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were in a skilled nursing facility. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.24 are for FSP clients who enrolled in FY 08-09.

Table IV.24
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Skilled Nursing Facility
Psychiatric
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number in Facility	Average Number of Days per Year	Annual per-Client Cost	Number in Facility	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	4	3.2	$ 10.04	5	2.4	$ 11.66
Adults	19	33.2	$ 117.66	31	4.4	$ 34.74
Older Adults	6	27.3	$ 468.67	5	7.2	$ 118.12
Total	**29**			**41**		

The figures for baseline and follow-up in Table IV.25 are for FSP clients who enrolled in FY 09-10.

Table IV.25
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Skilled Nursing Facility Psychiatric
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	69	259	-190	$ 16,137.29	$ 60,573.29	$ (44,436.00)	-275.4%
Adults	5,365	2,663	2,702	$ 1,254,732.52	$ 622,805.72	$ 631,926.80	50.4%
Older Adults	1,807	595	1,212	$ 422,609.82	$ 139,154.87	$ 283,454.95	67.1%
Total	**7,241**	**3,517**	**3,724**	**$ 1,693,479.63**	**$ 822,533.88**	**$ 870,945.75**	**51.4%**

The figures for baseline and follow-up in Table IV.26 are for FSP clients who enrolled in FY 09-10.

Table IV.26
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Skilled Nursing Facility Psychiatric
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number in Facility	Average Number of Days per Year	Annual per-Client Cost	Number in Facility	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	2	1.6	$ 5.42	4	6.2	$ 20.35
Adults	47	50.2	$ 266.85	36	14.8	$ 132.46
Older Adults	10	36.3	$ 655.21	10	4.8	$ 215.74
Total	**59**			**50**		

d. Criminal Justice Involvement

Criminal justice involvement, for the purpose of this report, is defined as:

- Arrests (number of times)
- Division of Juvenile Justice (number of days)
- Juvenile Hall/Camp (number of days)
- Jail (number of days)
- Prison (number of days)

In a 2005 study, Wolff, Bjerklie and Maschi calculated cost for nurse care managers over a two-year period. Cost was calculated using the mean salaries for registered nurses, based on data from the Bureau of Labor Statistics, a mean fringe rate of 29 percent and training costs. From a health system perspective, the results show that a mean annual cost of implementing the intervention, including staff salaries, fringe benefits, supplies and equipment, and overhead, was estimated at $973 per patient for the first year and $915 per patient for the second year, which did

not include one-time equipment and training costs. [175] For the second year, the mean costs for patients in the intervention group were $932 less than for those in a comparison group, reflecting a 92.3 percent probability of a cost offset. [176] The cost profile was highly favorable and led to a trend toward a cost offset by the second year, suggesting a good value. [177]

Results are presented in each of these offset categories, for each age group.

1. Arrests

Cost offsets for arrests are presented separately from those for incarceration due to the inherent difference in the data (an incidence of arrest versus number of days incarcerated).

Bierie (2009) "drew a cost-benefit method to compare recidivism between two groups of inmates," those in boot camp and those in prison. [178] His study estimated a "loss of $78,864 in 2005 for the 186 arrests generated from the traditional prison." This translated into an average cost of $424 per arrest and an average of $652 in police expenses drained by the average traditional prison inmate (p. 386). [179] In comparison, the study found "the boot camp's 114 unique arrests drained a total of $39,342 in police spending." The total cost translated into an "average of $345 per arrest and an average loss of $375 per inmate served" (p. 386). [180]

Statewide Arrest Rates [181]

A booking fee is incurred when an arrestee is taken into custody into county jail or another local detention facility. The purpose of the booking fee is to enable counties to recover costs associated with booking individuals into county detention facilities from the arresting agencies. Costs can include searching, wrist-banding, fingerprinting and medical and mental screening of arrestees. [182]

Costs were calculated by dividing the booking fee by the total number of reported number of arrests for each county. [183]

The statewide rate for FY 08-09 is:

Arrests	
Statewide Average FY 08-09	$21.38

The statewide rate for FY 09-10 is:

[175] Wolff, N., Bjerklie, J. R., & Maschi, T. (2005). Reentry planning for mentally disordered inmates: A social investment perspective. *Journal of Offender Rehabilitation, 41*(2), 21-42.
[176] Ibid.
[177] Ibid.
[178] Bierie, D. (2009). Cost matters: A randomized experiment comparing recidivism between two styles of prisons. *Journal of Experimental Criminology, 5*, 371-397.
[179] Ibid.
[180] Ibid.
[181] FY 2008-2009 and 2009-2010: State of California Department of Justice: Office of the Attorney General: http://ag.ca.gov/cjsc/publications/profiles/pub.php
Arrests were calculated by using data from Table 3A – *Total Felony Arrests by Gender, Offense and Arrest Rate* and Table 4A – *Total Misdemeanor Arrests by Gender, Offense and Arrest Rate*.
[182] http://www.californiacityfinance.com/BkgFeeFacts100215.pdf
[183] FY 2008-2009 – California State Controller's Office: Division of Accounting and Reporting: http://www.sco.ca.gov/Files-ARD-Payments/booking_bookingfees08.pdf
FY 2009-2010 – California State Controller's Office: Division of Accounting and Reporting: http://www.sco.ca.gov/Files-ARD-Payments/bookingfees_fy0910.pdf

Arrests	
Statewide Average FY 09-10	$17.84

DCR Variables Analyzed at Baseline (Intake) and Follow-Up

The Key Event Tracking Form (part of the MHSA DCR) does not indicate the specific facility in which an individual was arrested – only that an arrest occurred. [184]Below are the exact variables we used out of the PAF and the KET, and their definitions. [185]

- PAF (Intake/Baseline) Variable: **ArrestPast12** [186] – Defined as:
  - LEGAL ISSUES/DESIGNATIONS: Arrest information;
  - Indicates the number of times the partner was arrested during the past 12 months;
  - Valid Codes: **0-99**
- KET (Follow-Up) Variable: **Date Arrested1** through **DateArrested155** [187]
  - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
  - The DCR allows for entry of up to 155 KETs.

This information, on its own, is sufficient to calculate the number of times that an FSP client was arrested. The process of arriving at a summary total across all of the KET follow-ups is the focus of the *Calculations* section that follows.

Calculations – Follow-Up, 12 Months Post Intake: Arrests

Therefore, we developed programming commands in SPSS that did the following for each KET follow-up period:

1. Converted the date of arrest (for FSP clients with a date of arrest) to a categorical variable indicating that an arrest had occurred (e.g., **Arrest1 = 1).**
2. Calculated the number of arrests.
3. After this process was completed 155 times, the number of arrests was summed for each FSP client to arrive at a grand total for each person.
4. Next, Days Enrolled was divided into 365 (number of days in a year):

$$\frac{\textbf{365}}{\textbf{Days Enrolled}}$$

   - Days Enrolled, when used in this formula, is not annualized. What we are interested in is the total period in which an FSP client was enrolled. What we produce is a proportion, which is then applied against the Number of Arrests in order to adjust for the period of time that a person *was*

[184] We do not have access to actual arrest records for a number of reasons. However, the primary reason is that counties do not release arrest data by named individual (in certain counties in some states, this information is actually available online). Furthermore, even if there were some means of determining whether a named individual had been arrested, this would be a clear violation of UCLA's IRB, which, in order to protect confidentiality, has solely authorized receipt of the DCR and CSI data for the purpose of this study.
[185] Courtesy of California State University, Sacramento, currently the contractor managing the DCR.
[186] Page 120, DCR Data Dictionary Final_20110915. California State University, Sacramento. There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.
[187] Page 190, DCR Data Dictionary Final_20110915. California State University, Sacramento. There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.

at risk for an arrest. If we do not apply this adjustment, we would unfairly weight the results for or against people who were in the program for shorter or longer periods of time.

- Days Enrolled: [188]

DatePartnershipStatusChange_KET – PartnershipDate [189]

5. The proportion calculated for each FSP client out of Step 4 is then multiplied by the sum of arrests in Step 3. This is how we arrive at the number of arrests, without a bias for length of enrollment.

Findings: Arrests

Tables IV.27 through IV.30 present arrest cost offsets for each of the age groups, in each fiscal year.

Table IV.27 represents FY 08-09, and Table IV.29 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [190] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Arrests per Year	
12 Months Pre-Intake	

- Number of Arrests per Year = the actual number of arrests (total, across all FSP clients).
  - This is an **annual** number because it is the actual number of arrests in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

Pre-FSP Cost

- Pre-FSP Cost = Number of Arrests (Pre) multiplied by the Statewide Arrest Rate.
  - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of arrests per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Arrests per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [191]
  - The number of days enrolled.

[188] Elements of this formula were described in Chapter III. The only element missing from what was presented in Chapter III is the annualization factor (dividing by 365). But it does not apply here – we are developing a proportion to be applied against number of days hospitalized.
[189] Applying all of the caveats discussed in Chapter III, section c. *Contextual Factors – Impact on Cost*.
[190] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.
[191] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.

- Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

- This quotient is the *annualization multiplier for each new enrollee*.
- The annualization multiplier is applied to all new enrollees, whether or not they were arrested. [192]

- Identified:
  - The number of arrests for each FSP client during the 12-month post-enrollment period, and
  - Multiplied by each FSP client's *annualization multiplier*.
    - New enrollees with zero (0) arrests drop out of the analysis at this point, and we are left with those new enrollees who have been arrested.
  - This product is the *annualized number of arrests* for each new enrollee who was arrested during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Arrests (Post) multiplied by the Statewide Arrest Rate.
  - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of arrests (see the bullet point above).

Decrease in Number of Arrests

- Decrease in Number of Arrests = Number of Arrests at Baseline (Pre) minus the Number of Arrests at Follow-Up (Post):

Pre – Post = Decrease in Number of Arrests

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

[192] See Chapter III for how days of enrollment were calculated.

Percent of Offset

- Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

  - In other words, the percent of Arrests offset is equal to the total cost offset for Arrests divided by the pre-FSP cost for Arrests.

The figures for baseline and follow-up in Table IV.27 are for FSP clients who enrolled in FY 08-09.

Table IV.27
Full Service Partnership Services – Total Annual Cost Offset for Number of Arrests
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Arrests per Year		Decrease in Number of Arrests	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	467	135	332	$ 9,984.93	$ 2,892.85	$ 7,092.08	71.0%
TAY	1,432	252	1,180	$ 30,617.59	$ 5,396.56	$ 25,221.03	82.4%
Adults	1,981	340	1,641	$ 42,355.76	$ 7,265.26	$ 35,090.50	82.8%
Older Adults	46	3	44	$ 983.53	$ 53.45	$ 930.08	94.6%
Total	**3,926**	**730**	**3,196**	**$ 83,941.81**	**$ 15,608.12**	**$ 68,333.69**	**81.4%**

Table IV.28 represents FY 08-09, and Table IV.30 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number Arrested = the actual number of FSP clients who were arrested.
  - An FSP client is counted only one time at baseline (*regardless of whether he or she was arrested multiple times during the 12 months prior to intake*).
  - Number Arrested is the number of persons who were arrested (*across all counties that participated in the study*), not number of times arrested, average number of arrests by county or some other metric.
- Average Number of Arrests per Year = the average number of arrests.
  - At baseline, it is simply the average number of arrests as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number Arrested = the actual number of FSP clients who were arrested.
  - An FSP client is counted only one time at follow-up (*regardless of whether he or she was arrested multiple times during follow-up*).
  - Number Arrested is the number of persons who were arrested (*across all counties that participated in the study*), not number of times arrested, average number of arrests by county or some other metric.
- Average Number of Arrests per Year = an average of the annualized total number of arrests across all FSP clients who were arrested during the follow-up period. Because the Average Number of Arrests per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.28 are for FSP clients who enrolled in FY 08-09.

Table IV.28
Full Service Partnership Services – Annualized per-Client Cost for Number of Arrests
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Arrested	Average Number of Arrests per Year	Annual per-Client Cost	Number Arrested	Average Number of Arrests per Year	Annualized per-Client Cost
CYF	266	1.4	$ 4.61	71	1.3	$ 1.34
TAY	800	1.9	$ 13.16	207	0.9	$ 2.32
Adults	1,140	1.7	$ 9.82	270	1.1	$ 1.68
Older Adults	38	0.6	$ 1.69	6	0.1	$ 0.09
Total	**2,244**			**554**		

The figures for baseline and follow-up in Table IV.29 are for FSP clients who enrolled in FY 09-10.

Table IV.29
Full Service Partnership Services – Total Annual Cost Offset for Number of Arrests
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Arrests per Year		Decrease in Number of Arrests	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	578	153	425	$ 10,313.81	$ 2,733.70	$ 7,580.11	73.5%
TAY	1,817	292	1,525	$ 32,422.49	$ 5,215.79	$ 27,206.70	83.9%
Adults	1,814	316	1,498	$ 32,368.96	$ 5,636.91	$ 26,732.05	82.6%
Older Adults	78	13	66	$ 1,391.83	$ 223.05	$ 1,168.78	84.0%
Total	**4,287**	**774**	**3,513**	**$ 76,497.09**	**$ 13,809.45**	**$ 62,687.64**	**81.9%**

The figures for baseline and follow-up in Table IV.30 are for FSP clients who enrolled in FY 09-10.

Table IV.30
Full Service Partnership Services – Annualized per-Client Cost for Number of Arrests
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Arrested	Average Number of Arrests per Year	Annual per-Client Cost	Number Arrested	Average Number of Arrests per Year	Annualized per-Client Cost
CYF	356	0.9	$ 3.33	79	0.7	$ 0.88
TAY	975	1.9	$ 10.89	157	1.0	$ 1.75
Adults	1,014	1.4	$ 6.88	199	0.9	$ 1.20
Older Adults	44	0.7	$ 2.16	9	0.2	$ 0.35
Total	**2,389**			**444**		

2. Incarceration

Incarceration in four different types of facilities is presented in this section. Because the methodologies are nearly identical, we present the discussion of rates, variables and calculations at the beginning of the section, followed by the findings.

Although we recognize that the methodologies are complex, it is our assumption that, with the calculations having been explained in the seven previous sections, familiarity allows us to group the incarceration variables together and thereby avoid needless repetition.

Incarceration comprises these four types of facilities:

- Division of Juvenile Justice
- Juvenile Hall/Camp
- Jail
- Prison

Wolff, Bjerklie and Maschi (2005) assert that correctional facilities are under increasing pressure to respond to the treatment needs of mentally disordered offenders during their incarceration and to arrange for treatment after release through reentry planning. [193] According to their study, reentry planning, from a social investment perspective, is a mechanism that protects the health outcomes produced by investments in correctional health care and, by extension, produces justice outcomes to the extent that the public is protected from future criminal behavior associated with untreated mental illness. [194]

Statewide Incarceration Rates

In this section, we present each of the sources for obtaining incarceration rates for the four facilities:

- Division of Juvenile Justice
- Juvenile Hall/Camp
- County Jail
- Prison

[193] Wolff, N., Bjerklie, J. R., & Maschi, T. (2005). Reentry planning for mentally disordered inmates: A social investment perspective. *Journal of Offender Rehabilitation, 41*(2), 21-42.
[194] Ibid.

Depending upon the source, additional calculations were conducted in order to arrive at a statewide average.

The statewide rates for FY 08-09 are below:

	DJJ*	JHC	Jail	Prison*
Statewide Average FY 08-09	$641.18	$296.40	$142.47	$129.05

*Note that this rate was not available by county, so the statewide rate was used for all counties.

The statewide rates for FY 09-10 are below:

	DJJ*	JHC	Jail	Prison*
Statewide Average FY 09-10	$641.18	$292.80	$151.43	$129.05

*Note that this rate was not available by county, so the statewide rate was used for all counties.

Division of Juvenile Justice

The Division of Juvenile Justice (DJJ) provides education and treatment to California youth 12 to 25 years of age who have serious criminal backgrounds and exhibit the need for intensive treatment. Treatment programs can address such needs as violent and criminal behavior, sex offender behavior, and substance abuse and mental health issues. [195]

The Division of Juvenile Justice (DJJ) costs were divided by 365 to get the cost per day, as costs listed were the average annual cost per ward. [196] This calculation results in an annualized rate.

Juvenile Halls and Camps

Juvenile Halls and Camps (JHC) [197] provide secure detention and confinement to delinquent youth from 8 to 25 years of age who are awaiting adjudication and disposition. [198] Camps also provide rehabilitative treatment, care and custody of minors who are wards of Juvenile Court. [199]

The average daily cost survey contains the average daily population and average daily cost for Juvenile Halls and Camps as reported by the Probation Department for each county. Juvenile Hall rates are reported independently from the Camp rates in the Average Daily Cost Survey. [200] DCR data do not distinguish between Juvenile Halls or Camps, and so the rates from the Average Daily Cost Survey (completed by the California Department of Corrections) were averaged to get a combined rate. [201]

---

[195] http://www.cdcr.ca.gov/juvenile_justice/index.html

[196] FY 2008-2009 – Department of Finance. (2009) *Corrections and Rehabilitation. 5225 Department of Corrections and Rehabilitation, California Budget 2009-10.* Sacramento, CA: State of California, Department of Finance

FY 2009-10 – California Correctional Peace Officers Association http://www.ccpoa.org/issues/ccpoa_on_prison_reform#juvenile-justice

[197] California Department of Corrections and Rehabilitation – Corrections Standards Authority (CSA): *Average Cost per Day – Juvenile Halls and Camps*
http://www.cdcr.ca.gov/csa/FSO/Average_Daily_Cost_Survey.html

[198] The upper age limit of "youth" is dependent upon the county (i.e., varies on a county-by-county basis).

[199] http://www.laalmanac.com/crime/cr39.htm

[200] California Department of Corrections and Rehabilitation – Corrections Standards Authority (CSA**):** *Average Cost per Day – Juvenile Halls and Camps*
http://www.cdcr.ca.gov/csa/FSO/Average_Daily_Cost_Survey.html

[201] Not every county has both types of facilities. CSA is exact in its cost calculations, and provides a daily cost for only the exact type of facility in each county (i.e., daily cost is matched to a specific facility, and the exact number of individuals incarcerated during the year is accounted for). When creating an average cost per county, we included only the actual facilities operating in each county. For some counties, this will include

Jail

A Type II facility is a local detention facility that detains persons awaiting arraignment, post-arraignment and during the trial and sentencing period. A Type III facility is a local facility that detains convicted and sentenced persons. [202]

The California Department of Corrections and Rehabilitation – Corrections Standards Authority (CSA) was the source for county jail costs. Specifically, the average cost per day was used as the rate. [203]

Two counties (Los Angeles and Lake) provided a daily jail rate inclusive of mental health services. They were the only two counties to provide this rate. The rate for Los Angeles County (see Appendix C) is higher than the daily jail rates provided for counties from CSA. Therefore, Los Angeles County's higher rate impacted the average statewide jail rate. [204]

Prison

For FY 08-09, the prison rate was obtained directly from the LAO (Legislative Analyst's Office) Annual Costs to Incarcerate an Inmate in Prison for California on the Criminal Justice and Judiciary FAQ page. [205] The total line item was then divided by 365 to obtain the average cost per day. This calculation results in an annualized rate.

The prison rate for FY 09-10 was taken from the Key Facts section of page 17 in the DOF's (Department of Finance) 2010-11 Supplementary Budget Summary. [206] Although the document summarizes projected budget solutions for 2010-11, the average cost presented is consistent with other reports/articles from various news outlets.

DCR Variables Analyzed at Baseline (Intake) and Follow-Up

Below are the exact variables we used out of the PAF and the KET, and their definitions. [207]

Division of Juvenile Justice

- PAF (Intake/Baseline) Variable: **DJJ_PastTwelveDays** [208] – Defined as:
  - RESIDENTIAL INFORMATION: Justice Placement – Division of Juvenile Justice;
  - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
  - Valid Codes: **0-365**

---

juvenile halls and camps. For other counties, this will include just juvenile hall or just camp. For details on what type of facility each county operates, please follow the link below and look up the specific county you are interested in.

California Department of Corrections and Rehabilitation – Corrections Standards Authority (CSA): *Average Cost per Day – Juvenile Halls and Camps*
http://www.cdcr.ca.gov/csa/FSO/Average_Daily_Cost_Survey.html

[202] http://www.cdcr.ca.gov/CSA/FSO/Docs/6_2008%20Adult_T_24_FINAL_REGULATION_TEXT.pdf

[203] *Average Cost per Day Type II and III Jails* –
http://www.cdcr.ca.gov/csa/FSO/Average_Daily_Cost_Survey.html

[204] The rate inclusive of mental health services for Los Angeles County comes from Economic Roundtable (2009). *Where we sleep: Costs when homeless and housed in Los Angeles*. "Sheriff's Department costs for incarceration in medical or mental health jail facilities were … $1,093 per day in fiscal years 2006-2007 and 2007-2008."

[205] http://www.lao.ca.gov/laoapp/laomenus/sections/crim_justice/6_cj_inmatecost.aspx?catid=3

[206] http://www.dof.ca.gov/budget/historical/2010-11/governors/documents/Supplementary_Budget_Summary.pdf

[207] Courtesy of California State University, Sacramento (Sac State), currently the contractor managing the DCR.

[208] Page 88, DCR Data Dictionary Final_20110915. California State University, Sacramento. There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.

The variable wording is confusing because it seems to suggest occurrence over the past 12 days. The variable name and description, however, have been reproduced verbatim from Sac State's data dictionary. The variable actually refers to the number of **days** over the **past 12** months (prior to FSP intake).

- KET (Follow-Up) Variable: **Current.1** through **Current.155** = **16**, which is a categorical variable assigned to represent Division of Juvenile Justice.
    - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
    - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
    - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was in a Division of Juvenile Justice facility. What the **Current** variable (code = **16**) tells us is only that an FSP client was in a Division of Juvenile Justice facility, not how many days.

Juvenile Halls and Camps

- PAF (Intake/Baseline) Variable: **JuvenileHall/Camp_PastTwelveDays** [209] – Defined as:
    - RESIDENTIAL INFORMATION: Justice Placement – Juvenile Hall / Camp / Ranch;
    - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
    - Valid Codes: **0-365**
- KET (Follow-Up) Variable: **Current.1** through **Current.155 = 15**, which is a categorical variable assigned to represent Juvenile Hall/Camp. [210]
    - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
    - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
    - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was in a Juvenile Hall or a Juvenile Camp. What the **Current** variable (code = **15**) tells us is only that an FSP client was in Juvenile Hall/Camp, not how many days.

Jail

- PAF (Intake/Baseline) Variable: **Jail_PastTwelveDays** [211] – Defined as:
    - RESIDENTIAL INFORMATION: Justice Placement – Jail;
    - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
    - Valid Codes: **0-365**

---

[209] Ibid.

[210] California Department of Corrections and Rehabilitation – Corrections Standards Authority (CSA)**:** *Average Cost per Day – Juvenile Halls and Camps*
http://www.cdcr.ca.gov/csa/FSO/Average_Daily_Cost_Survey.html

[211] Page 89, DCR Data Dictionary Final_20110915. California State University, Sacramento (Sac State). There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.

The variable wording is confusing because it seems to suggest occurrence over the past 12 days. The variable name and description, however, have been reproduced verbatim from Sac State's data dictionary. The variable actually refers to the number of **days** over the **past 12** months (prior to FSP intake).

- KET (Follow-Up) Variable: **Current.1** through **Current.155 = 27**, which is a categorical variable assigned to represent Jail. [212]
    - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
    - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
    - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was in jail. What the **Current** variable (code = **27**) tells us is only that an FSP client was in jail, not how many days.

Prison

- PAF (Intake/Baseline) Variable: **Prison_PastTwelveDays** [213] – Defined as:
    - RESIDENTIAL INFORMATION: Justice Placement – Prison;
    - Indicates the number of DAYS the partner has been living in this setting during the past 12 months;
    - Valid Codes: **0-365**
- KET (Follow-Up) Variable: **Current.1** through **Current.155 = 26**, which is a categorical variable assigned to represent Prison.[214]
    - The **Current** variables represent the residential status of the FSP client at the time of each follow-up.
    - Follow-ups (as documented on the KET) are not conducted according to any predetermined time frame, but rather are driven by Key Events occurring in the FSP client's life (e.g., hospitalization, incarceration).
    - The DCR allows for entry of up to 155 KETs.

This information, on its own, is insufficient to calculate the number of days that an FSP client was in prison. What the **Current** variable (code = **26**) tells us is only that an FSP client was in prison, not how many days.

Calculations – Follow-Up, 12 Months Post-Intake: Incarceration

Accompanying each **Current** variable is a **DateResidentialChange** variable. This variable tells us on what date the FSP client's residential setting changed.

Therefore, we developed programming commands in SPSS that performed the following calculations for each KET follow-up period:

1. Selected only those FSP clients who were incarcerated. As noted previously, these calculations were conducted separately for each of the incarceration categories.
2. Calculated the number of days in each incarceration category by taking the subsequent **DateResidentialChange** and subtracting the current **DateResidentialChange.**

[212] http://www.cdcr.ca.gov/CSA/FSO/Docs/6_2008%20Adult_T_24_FINAL_REGULATION_TEXT.pdf

[213] Page 90, DCR Data Dictionary Final_20110915. California State University. Sacramento (Sac State). There have been multiple releases of the DCR, and at least two in 2011 marked "Final." This version will be provided upon request.

The variable wording is confusing because it seems to suggest occurrence over the past 12 days. The variable name and description, however, have been reproduced verbatim from Sac State's data dictionary. The variable actually refers to the number of **days** over the **past 12** months (prior to FSP intake).

[214] http://www.lao.ca.gov/laoapp/laomenus/sections/crim_justice/6_cj_inmatecost.aspx?catid=3

3. After this process was completed 155 times (again, separately for each incarceration category), the number of days in each incarceration category was summed for each FSP client to arrive at a grand total for each person in each of the four categories.
    - The sum is necessary in order to account for subsequent stays that cross KET administrations, as well as intermittent stays by the same person during his or her FSP involvement.
4. Days Enrolled was divided into 365:

$$\frac{365}{\text{Days Enrolled}}$$

    - Days Enrolled, when used in this formula, is not annualized. What we are interested in is the total period in which an FSP client was enrolled. What we produce is a proportion, which is then applied against the Number of Days in each incarceration category [215] in order to adjust for the period of time that a person *was at risk for incarceration*. If we do not apply this adjustment, we would unfairly weight the results for or against people who were in the program for shorter or longer periods of time.
    - Days Enrolled is: [216]

DatePartnershipStatusChange_KET – PartnershipDate [217]

5. The proportion calculated for each FSP client out of Step 4 is then multiplied by the sum of days incarcerated (separate for each facility) in Step 3. This is how we arrive at the number of days in incarceration for each facility, without a bias for length of enrollment.

Findings: Incarceration

Division of Juvenile Justice

Tables IV.31 through IV.34 present Cost Offsets for each of the age groups, in each fiscal year, for the Division of Juvenile Justice.

Table IV.31 represents FY 08-09, and Table IV.33 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [218] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) incarcerated.

[215] Each of the steps we are laying out is run separately for each category, as you will see from the separate tables we display later in this section.
[216] Elements of this formula were presented in Chapter III. The only element missing from what was presented in Chapter III is the annualization factor (dividing by 365). But it does not apply here – we are developing a proportion to be applied against number of days hospitalized.
[217] Applying all of the caveats discussed in Chapter III, section c. *Contextual Factors – Impact on Cost*.
[218] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.

- This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide DJJ Rate.
  - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [219]
  - The number of days enrolled.
  - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

  - This quotient is the *annualization multiplier for each new enrollee*.
  - The annualization multiplier is applied to all new enrollees, whether or not they were in a DJJ facility. [220]
- Identified:
  - The number of days in a DJJ facility for each FSP client during the 12-month post-enrollment period, and
  - Multiplied by each FSP client's *annualization multiplier*.
    - New enrollees with zero (0) days (*incarcerated in a DJJ facility*) drop out of the analysis at this point, and we are left with those new enrollees who were incarcerated in a DJJ facility.
  - This product is the *annualized number of days incarcerated in a DJJ facility* for each new enrollee who was incarcerated in a DJJ facility during the 12-month follow-up period.

Post-FSP Cost

[219] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[220] See Chapter III for how days of enrollment were calculated.

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide DJJ Rate.
    - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

Decrease in Number of Days

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

- Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

    - In other words, the percent of DJJ cost offset is equal to the total cost offset for DJJ divided by the pre-FSP cost for incarceration in DJJ facilities.

The figures for baseline and follow-up in Table IV.31 are for FSP clients who enrolled in FY 08-09.

Table IV.31
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Division of Juvenile Justice Facility
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	757	126	631	$ 485,373.26	$ 80,788.68	$ 404,584.58	83.4%
TAY	2,615	106	2,509	$ 1,676,685.70	$ 67,965.08	$ 1,608,720.62	95.9%
Adults	0	0	0	$ -	$ -	$ -	-
Older Adults	0	0	0	$ -	$ -	$ -	-
Total	**3,372**	**232**	**3,140**	**$2,162,058.96**	**$148,753.76**	**$ 2,013,305.20**	**93.1%**

Table IV.32 represents FY 08-09, and Table IV.34 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number Incarcerated = the actual number of FSP clients who were incarcerated in a DJJ facility.

- An FSP client is counted only one time at baseline (*regardless of whether he or she was incarcerated in a DJJ facility multiple times during the 12 months prior to intake*).
- Number Incarcerated is the total number of persons incarcerated in a DJJ facility (*across all counties participating in the study*), not number of times in a DJJ facility, average number per county or some other metric.

- Average Number of Days per Year = the average number of days FSP clients were incarcerated in a DJJ facility.
  - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number Incarcerated = the actual number of FSP clients who were incarcerated in a DJJ facility.
  - An FSP client is counted only one time at follow-up (*regardless of whether he or she was incarcerated in a DJJ facility multiple times during follow-up*).
  - Number Incarcerated is the total number of persons incarcerated in a DJJ facility (*across all counties participating in the study*), not number of times incarcerated in a DJJ facility, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were incarcerated in a DJJ facility. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.32 are for FSP clients who enrolled in FY 08-09.

Table IV.32
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Division of Juvenile Justice Facility
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Incarcerated	Average Number of Days per Year	Annual per-Client Cost	Number Incarcerated	Average Number of Days per Year	Annualized per-Client Cost
CYF	6	14.6	$ 224.29	5	3.8	$ 37.33
TAY	22	27.9	$ 720.54	3	3.2	$ 29.21
Adults	0	0.0	$ -	0	0.0	$ -
Older Adults	0	0.0	$ -	0	0.0	$ -
Total	**28**			**8**		

The figures for baseline and follow-up in Table IV.33 are for FSP clients who enrolled in FY 09-10.

Table IV.33
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Division of Juvenile Justice Facility
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	553	20	533	$ 354,572.54	$ 12,823.60	$ 341,748.94	96.4%
TAY	2,662	45	2,617	$ 1,706,821.16	$ 28,853.10	$ 1,677,968.06	98.3%
Adults	0	0	0	$ -	$ -	$ -	-
Older Adults	0	0	0	$ -	$ -	$ -	-
Total	**3,215**	**65**	**3,150**	**$ 2,061,393.70**	**$ 41,676.70**	**$ 2,019,717.00**	**98.0%**

The figures for baseline and follow-up in Table IV.34 are for FSP clients who enrolled in FY 09-10.

Table IV.34
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Division of Juvenile Justice Facility
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Incarcerated	Average Number of Days per Year	Annual per-Client Cost	Number Incarcerated	Average Number of Days per Year	Annualized per-Client Cost
CYF	15	9.4	$ 114.34	1	0.5	$ 4.14
TAY	28	19.6	$ 573.34	6	0.8	$ 9.69
Adults	0	0.0	$ -	0	0.0	$ -
Older Adults	0	0.0	$ -	0	0.0	$ -
Total	**43**			**7**		

Juvenile Halls and Camps

Tables IV.35 through IV.38 present cost offsets for each of the age groups, in each fiscal year, for Juvenile Halls and Camps.

Table IV.35 represents FY 08-09, and Table IV.37 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [221] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) incarcerated.
  - This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

[221] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide Juvenile Hall/Camp Rate.
    - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [222]
    - The number of days enrolled.
    - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

    - This quotient is the *annualization multiplier for each new enrollee*.
    - The annualization multiplier is applied to all new enrollees, whether or not they were in juvenile hall and/or camp. [223]
- Identified:
    - The number of days in juvenile hall and/or camp for each FSP client during the 12-month post-enrollment period, and
    - Multiplied by each FSP client's *annualization multiplier*.
        - New enrollees with zero (0) days (*incarcerated in juvenile hall and/or camp*) drop out of the analysis at this point, and we are left with those new enrollees who were incarcerated in juvenile hall/camp.
    - This product is the *annualized number of days incarcerated in juvenile hall and/or camp* for each new enrollee who was incarcerated in juvenile hall/camp during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide Juvenile Hall/Camp Rate.
    - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

[222] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[223] See Chapter III for how days of enrollment were calculated.

Decrease in Number of Days

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

- Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

  - In other words, the percent of Juvenile Hall and/or Camp cost offset is equal to the total cost offset for Juvenile Hall and/or Camp divided by the pre-FSP cost for incarceration in Juvenile Hall and/or Camp.

The figures for baseline and follow-up in Table IV.35 are for FSP clients who enrolled in FY 08-09.

Table IV.35
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Juvenile Hall/Camp
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	6,714	4,408	2,306	$ 1,990,044.86	$ 1,306,541.22	$ 683,503.64	34.3%
TAY	33,378	2,905	30,473	$ 9,893,315.06	$ 861,048.60	$ 9,032,266.46	91.3%
Adults	0	0	0	$ -	$ -	$ -	-
Older Adults	0	0	0	$ -	$ -	$ -	-
Total	**40,092**	**7,313**	**32,779**	**$ 11,883,359.92**	**$ 2,167,589.82**	**$ 9,715,770.10**	**81.8%**

Table IV.36 represents FY 08-09, and Table IV.38 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number Incarcerated = the actual number of FSP clients who were incarcerated in juvenile hall and/or camp.

    - An FSP client is counted only one time at baseline (*regardless of whether he or she was incarcerated in juvenile hall and/or camp multiple times during the 12 months prior to intake*).
    - Number Incarcerated is the total number of persons incarcerated in juvenile hall or camp (*across all counties participating in the study*), not number of times in juvenile hall and/or camp, average number per county or some other metric.
- Average Number of Days per Year = the average number of days FSP clients were incarcerated in juvenile hall and/or camp.
    - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number Incarcerated = the actual number of FSP clients who were incarcerated in juvenile hall and/or camp.
    - An FSP client is counted only one time at follow-up (*regardless of whether he or she was incarcerated in juvenile hall and/or camp multiple times during follow-up*).
    - Number Incarcerated is the total number of persons incarcerated in juvenile hall and/or camp (*across all counties participating in the study*), not number of times incarcerated, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were incarcerated in juvenile hall and/or camp. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.36 are for FSP clients who enrolled in FY 08-09.

Table IV.36
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Juvenile Hall/Camp
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Incarcerated	Average Number of Days per Year	Annual per-Client Cost	Number Incarcerated	Average Number of Days per Year	Annualized per-Client Cost
CYF	122	33.9	$ 919.61	94	28.5	$ 603.76
TAY	273	55.9	$ 4,251.53	71	15.9	$ 370.03
Adults	0	0.0	$ -	0	0.0	$ -
Older Adults	0	0.0	$ -	0	0.0	$ -
Total	**395**			**165**		

The figures for baseline and follow-up in Table IV.37 are for FSP clients who enrolled in FY 09-10.

Table IV.37
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Juvenile Hall/Camp
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	10,491	5,636	4,855	$ 3,071,729.83	$ 1,650,202.01	$ 1,421,527.82	46.3%
TAY	38,072	3,972	34,100	$ 11,147,354.69	$ 1,162,988.36	$ 9,984,366.33	89.6%
Adults	0	0	0	$ -	$ -	$ -	-
Older Adults	0	0	0	$ -	$ -	$ -	-
Total	**48,563**	**9,608**	**38,955**	**$ 14,219,084.52**	**$ 2,813,190.37**	**$ 11,405,894.15**	**80.2%**

The figures for baseline and follow-up in Table IV.38 are for FSP clients who enrolled in FY 09-10.

Table IV.38
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Juvenile Hall/Camp
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Incarcerated	Average Number of Days per Year	Annual per-Client Cost	Number Incarcerated	Average Number of Days per Year	Annualized per-Client Cost
CYF	229	20.6	$ 990.56	119	21.3	$ 532.15
TAY	393	57.0	$ 3,744.49	87	19.0	$ 390.66
Adults	0	0.0	$ -	0	0.0	$ -
Older Adults	0	0.0	$ -	0	0.0	$ -
Total	**622**			**206**		

Jail

Tables IV.39 through IV.42 present cost offsets for each of the age groups, in each fiscal year, for County Jail.

Table IV.39 represents FY 08-09, and Table IV.41 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [224] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) incarcerated.
  - This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

[224] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide Jail Rate.
    - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [225]
    - The number of days enrolled.
    - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

    - This quotient is the *annualization multiplier for each new enrollee*.
    - The annualization multiplier is applied to all new enrollees, whether or not they were in jail. [226]
- Identified:
    - The number of days in jail for each FSP client during the 12-month post-enrollment period, and
    - Multiplied by each FSP client's *annualization multiplier*.
        - New enrollees with zero (0) days (*incarcerated*) drop out of the analysis at this point, and we are left with those new enrollees who were incarcerated.
    - This product is the *annualized number of days incarcerated in jail* for each new enrollee who was incarcerated in jail during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide Jail Rate.
    - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

Decrease in Number of Days

[225] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[226] See Chapter III for how days of enrollment were calculated.

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

- Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

  - In other words, the percent of Jail cost offset is equal to the total cost offset for Jail divided by the pre-FSP cost for incarceration in Jail.

The figures for baseline and follow-up in Table IV.39 are for FSP clients who enrolled in FY 08-09.

Table IV.39
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Jail
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	24,816	5,829	18,987	$ 3,535,606.42	$ 830,445.79	$ 2,705,160.63	76.5%
Adults	84,754	12,599	72,155	$ 12,075,144.53	$ 1,795,015.53	$ 10,280,129.00	85.1%
Older Adults	2,954	95	2,859	$ 420,864.82	$ 13,591.91	$ 407,272.91	96.8%
Total	**112,524**	**18,523**	**94,001**	**$16,031,615.77**	**$ 2,639,053.23**	**$13,392,562.54**	**83.5%**

Table IV.40 represents FY 08-09, and Table IV.42 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number Incarcerated = the actual number of FSP clients who were incarcerated in jail.
  - An FSP client is counted only one time at baseline (*regardless of whether he or she was incarcerated in jail multiple times during the 12 months prior to intake*).
  - Number Incarcerated is the total number of persons incarcerated in jail (*across all counties participating in the study*), not number of times in jail, average number per county or some other metric.

- Average Number of Days per Year = the average number of days FSP clients were incarcerated in jail.
    - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number Incarcerated = the actual number of FSP clients who were incarcerated in jail.
    - An FSP client is counted only one time at follow-up (*regardless of whether he or she was incarcerated in jail multiple times during follow-up*).
    - Number Incarcerated is the total number of persons incarcerated in jail (*across all counties participating in the study*), not number of times incarcerated, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were incarcerated in jail. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.40 are for FSP clients who enrolled in FY 08-09.

Table IV.40
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Jail
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Incarcerated	Average Number of Days per Year	Annual per-Client Cost	Number Incarcerated	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	303	50.3	$ 1,519.38	193	20.3	$ 356.87
Adults	878	68.6	$ 2,798.41	402	27.4	$ 415.99
Older Adults	20	32.8	$ 723.14	8	2.2	$ 23.35
Total	**1,201**			**603**		

The figures for baseline and follow-up in Table IV.41 are for FSP clients who enrolled in FY 09-10.

Table IV.41
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Jail
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	5	-5	$ -	$ 757.17	$ (757.17)	-
TAY	23,584	6,885	16,699	$ 3,571,410.02	$ 1,042,620.34	$ 2,528,789.68	70.8%
Adults	72,626	11,052	61,574	$ 10,998,016.63	$ 1,673,644.15	$ 9,324,372.48	84.8%
Older Adults	2,334	225	2,109	$ 353,446.02	$ 34,072.56	$ 319,373.46	90.4%
Total	**98,544**	**18,167**	**80,377**	**$ 14,922,872.67**	**$ 2,751,094.22**	**$ 12,171,778.45**	**81.6%**

The figures for baseline and follow-up in Table IV.42 are for FSP clients who enrolled in FY 09-10.

Table IV.42
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Jail
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Incarcerated	Average Number of Days per Year	Annual per-Client Cost	Number Incarcerated	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	1	0.1	$ 0.24
TAY	291	42.7	$ 1,199.67	161	27.6	$ 350.23
Adults	793	53.5	$ 2,339.01	323	20.8	$ 355.94
Older Adults	28	25.3	$ 547.98	8	3.4	$ 52.83
Total	**1,112**			**493**		

The results of the Full Service Partnership Cost Offset analysis – over $25 million in savings from reductions in days spent in jail alone for FY 08-09 and FY 09-10 – are extremely encouraging and are consistent with an evaluation of the AB 2034 program; that evaluation found cost offsets of approximately $24.7 million from reductions in psychiatric inpatient days and number of days incarcerated. [227]

Prison

Tables IV.43 through IV.46 present cost offsets for each of the age groups, in each fiscal year, for Prison.

Table IV.43 represents FY 08-09, and Table IV.45 FY 09-10:

12 Months Pre-Intake – The data displayed under any column marked "*Pre*" correspond to those collected at baseline. [228] "*Pre-Intake*" means before the client enrolled in FSP.

For **baseline** (intake, 12 months prior to enrolling in FSP):

Number of Days per Year	
12 Months Pre-Intake	

- Number of Days per Year = the actual number of days (total, across all FSP clients) incarcerated.
    - This is an **annual** number because it is the actual number of days in the 12 months prior to enrolling in FSP. Nothing is done to this number – no changes or adjustments are made to it – it is exactly as the FSP client reported on the PAF.

Pre-FSP Cost

- Pre-FSP Cost = Number of Days (Pre) multiplied by the Statewide Prison Rate.
    - This is an **annual cost** because the Statewide Rate is multiplied by the actual number of days per year (see the bullet point above).

[227] Review of the report and appendices did not yield a per-person cost offset in either area or a breakout for inpatient psychiatric offsets compared with incarceration offsets. Unfortunately, comparisons broken out into psychiatric and incarceration therefore cannot be provided.
California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.
[228] Refer back to the discussion earlier in the chapter for the explanation about which variables we analyzed, and why.

12 Months Post-Intake – The data displayed under any column marked "*Post*" correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

Number of Days per Year	
	12 Months Post-Intake

- Through Key Event Tracking data, identified: [229]
  - The number of days enrolled.
  - Days Enrolled is then divided into 365 (the number of days in a year), illustrated in the formula below:

$$\frac{365}{\text{Days Enrolled}}$$

  - This quotient is the *annualization multiplier for each new enrollee*.
  - The annualization multiplier is applied to all new enrollees, whether or not they were in prison. [230]

- Identified:
  - The number of days in prison for each FSP client during the 12-month post-enrollment period, and
  - Multiplied by each FSP client's *annualization multiplier*.
    - New enrollees with zero (0) days (*incarcerated*) drop out of the analysis at this point, and we are left with those new enrollees who were incarcerated.
  - This product is the *annualized number of days incarcerated in prison* for each new enrollee who was incarcerated in prison during the 12-month follow-up period.

Post-FSP Cost

- Post-FSP Cost = Number of Days (Post) multiplied by the Statewide Prison Rate.
  - This is an **annualized cost** because the Statewide Rate is multiplied by the annualized number of days (see the bullet point above).

Decrease in Number of Days

- Decrease in Number of Days = Number of Days at Baseline (Pre) minus the Number of Days at Follow-Up (Post):

Pre – Post = Decrease in Number of Days

[229] See Chapter III for an introduction to the KET, variables used when calculating number of days of FSP participation, and each cost-offset category in this chapter for the specific cost-offset variables used in analysis.
[230] See Chapter III for how days of enrollment were calculated.

Total Cost Offset

- Total Cost Offset = **Pre-FSP Cost – Post-FSP Cost**

Percent of Offset

- Percent of Offset =

$$\frac{\text{Total Cost Offset}}{\text{Pre-FSP Cost}}$$

  - In other words, the percent of Prison cost offset is equal to the total cost offset for Prison divided by the pre-FSP cost for Prison.

The figures for baseline and follow-up in Table IV.43 are for FSP clients who enrolled in FY 08-09.

Table IV.43
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Prison
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	1,243	25	1,218	$ 160,409.15	$ 3,226.25	$ 157,182.90	98.0%
Adults	3,960	0	3,960	$ 511,038.00	$ -	$ 511,038.00	100.0%
Older Adults	562	0	562	$ 72,526.10	$ -	$ 72,526.10	100.0%
Total	**5,765**	**25**	**5,740**	**$ 743,973.25**	**$ 3,226.25**	**$ 740,747.00**	**99.6%**

Table IV.44 represents FY 08-09, and Table IV.46 FY 09-10. Each table is divided in half, with the left half labeled:

- *12 Months Pre-Intake* – the data displayed in this half correspond to those collected at baseline. "*Pre-Intake*" means before the client enrolled in FSP.

For baseline (intake, 12 months prior to enrolling in FSP):

- Number Incarcerated = the actual number of FSP clients who were incarcerated in prison.
  - An FSP client is counted only one time at baseline (*regardless of whether he or she was incarcerated in prison multiple times during the 12 months prior to intake*).
  - Number Incarcerated is the total number of persons incarcerated in prison (*across all counties participating in the study*), not number of times in prison, average number per county or some other metric.
- Average Number of Days per Year = the average number of days FSP clients were incarcerated in prison.
  - At baseline, it is simply the average number of days as reported on the PAF.
- Annual per-Client Cost = Pre-FSP Cost divided by the total number of new enrollees for the fiscal year.

The right half is labeled:

- *12 Months Post-Intake* – the data displayed in this half correspond to those collected in the follow-up period. "*Post-Intake*" means after the client enrolled in FSP.

For **follow-up** (post-enrollment, 12 months after enrolling in FSP):

- Number Incarcerated = the actual number of FSP clients who were incarcerated in prison.
  - An FSP client is counted only one time at follow-up (*regardless of whether he or she was incarcerated in prison multiple times during follow-up*).
  - Number Incarcerated is the total number of persons incarcerated in prison (*across all counties participating in the study*), not number of times incarcerated, average number per county or some other metric.
- Average Number of Days per Year = an average of the annualized total number of days FSP clients were incarcerated in prison. Because the Average Number of Days per Year is an average of an annualized number, it is also an annualized number.
- Annualized per-Client Cost = Post-FSP Total Cost divided by the total number of new enrollees for the fiscal year.

The figures for baseline and follow-up in Table IV.44 are for FSP clients who enrolled in FY 08-09.

Table IV.44
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Prison
(Fiscal Year 08-09 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Incarcerated	Average Number of Days per Year	Annual per-Client Cost	Number Incarcerated	Average Number of Days per Year	Annualized per-Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	6	24.4	$ 68.93	1	0.7	$ 1.39
Adults	30	52.5	$ 118.43	0	0.0	$ -
Older Adults	3	5.7	$ 124.62	0	0.0	$ -
Total	**39**			**1**		

The figures for baseline and follow-up in Table IV.45 are for FSP clients who enrolled in FY 09-10.

Table IV.45
Full Service Partnership Services – Total Annual Cost Offset for Number of Days in Prison
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of Days per Year		Decrease in Number of Days	Pre-FSP Cost	Post-FSP Cost	Total Cost Offset	Percent of Offset
	12 Months Pre-Intake	12 Months Post-Intake					
CYF	0	0	0	$ -	$ -	$ -	-
TAY	1,142	180	962	$ 147,375.10	$ 23,229.00	$ 124,146.10	84.2%
Adults	6,864	0	6,864	$ 885,799.20	$ -	$ 885,799.20	100.0%
Older Adults	65	0	65	$ 8,388.25	$ -	$ 8,388.25	100.0%
Total	**8,071**	**180**	**7,891**	**$ 1,041,562.55**	**$ 23,229.00**	**$ 1,018,333.55**	**97.8%**

The figures for baseline and follow-up in Table IV.46 are for FSP clients who enrolled in FY 09-10.

Table IV.46
Full Service Partnership Services – Annualized per-Client Cost for Number of Days in Prison
(Fiscal Year 09-10 New Enrollees ONLY)

	12 Months Pre-Intake			12 Months Post-Intake		
	Number Incarcerated	Average Number of Days Per Year	Annual Per Client Cost	Number Incarcerated	Average Number of Days Per Year	Annualized Per Client Cost
CYF	0	0.0	$ -	0	0.0	$ -
TAY	9	16.7	$ 49.50	1	4.3	$ 7.80
Adults	44	40.8	$ 188.39	0	0.0	$ -
Older Adults	1	1.5	$ 13.01	0	0.0	$ -
Total	**54**			**1**		

Stephan (1999) reported that each year prisons across the country are estimated, on average, to spend 12 percent of their total operating expenditures on health care, with roughly 17 percent of the correctional health care dollar allocated to mental health services.[231] In 2001, Beck and Maruschak reported on federal statistics showing that while in prison, 61 to 79 percent of inmates with mental health problems receive some type of mental health treatment, and 50 to 60 percent of these inmates also receive psychotropic medications. [232]

Treating individuals with mental illness out in the community instead of in a criminal justice setting of course offers many more advantages in addition to the obvious cost savings reported above. Cost savings should not be the sole reason for advocating that treatment take place in a community-based setting. Cost savings do provide a compelling reason, however, particularly during a period of criminal justice realignment. [233] The Full Service Partnership should be at the forefront as a meritorious alternative.

e. Racial/Ethnic Background of FSP Clients with Offset Data

Decision rules for data analysis established by the UCLA/EMT team require that no more than 10 percent of the data for any given variable be missing. The percentage of missing/unknown racial/ethnic background for FSP clients demonstrating outcomes in the physical health categories ranged from 15 to 70 percent, depending upon the age group and offset category. As a result, only TAY [234] and Older Adults [235] exhibiting outcomes in the area of skilled nursing met the requirement necessary to display racial/ethnic findings.

The percentage of missing/unknown racial/ethnic background for FSP clients demonstrating outcomes in the psychiatric categories ranged from 14 to 63 percent, depending upon the age group and offset category. As a result, only TAY [236] and Older Adults [237] exhibiting outcomes in the area of long-term care met the requirement necessary to display racial/ethnic findings.

[231] As cited in Wolff, N., Bjerklie, J. R., & Maschi, T. (2005). Reentry planning for mentally disordered inmates: A social investment perspective. *Journal of Offender Rehabilitation, 41*(2), 21-42.
[232] Ibid.
[233] AB 109, most recently.
[234] FY 08-09 and FY 09-10.
[235] FY 09-10 only.
[236] FY 08-09 only.
[237] FY 09-10 only.

The percentage of missing/unknown racial/ethnic background for FSP clients demonstrating outcomes in the incarceration categories ranged from 14 to 100 percent, depending upon the age group and offset category. As a result, only CYF [238] and TAY [239] exhibiting outcomes in the area of DJJ incarceration, and Older Adults [240] exhibiting outcomes in the area of prison incarceration met the requirement necessary to display racial/ethnic findings.

Due to the high percentage of cases with missing/unknown racial/ethnic data, analyses were not conducted for this study. The study of FSP Costs and Cost Offsets examined only those FSP clients with outcome data in the offset categories of interest. Therefore, the FSP client population of interest for the study is a much smaller group from the larger population of FSP clients. The sample was first narrowed down by:

1. Selecting only new enrollees in FY 08-09, and in FY 09-10.

The sample was secondly narrowed down by:

2. Examining offsets in each of the following categories:
    a. Physical Health
    b. Psychiatric Care
    c. Criminal Justice

Racial/ethnic analyses were further hampered for the FSP Costs and Cost Offsets Study by small sample size for FSP clients showing outcomes in many of the offset categories. Small sample size impacts the percentage of missing/unknown disproportionately. Again, note that in order to be considered for the racial/ethnic analysis, an FSP client had to show an outcome in the cost offset area, **and** have a valid ethnic/racial value in at least one of the fields for racial/ethnic background. [241]

For racial/ethnic analyses on the entire population of FSP clients, please refer to the Initial Statewide Priority Indicator Report Phase II. [242] The Priority Indicator Report presents an analysis in which race/ethnicity is the **only** variable of interest for the entire population of FSP clients. Because there are no qualifying criteria (e.g., did not need to also show an arrest at baseline), the criteria for missing/unknown are met. Race/ethnicity is presented for the entire FSP client population in the Priority Indicator Report.

f. Summary

This report identifies the cost savings that society realizes because these services have been provided. Of course, these savings are not the sole justification of expenditures; the primary purpose of the law is to improve services to mentally ill citizens most in need of assistance. However, it is a primary purpose of accountable and transparent public service to demonstrate the impacts of this needed and individually compassionate service on public concerns. Therefore, this analysis summarizes the savings that are incurred in a limited number of public services for the recipients of FSP services. To state this differently, this analysis assesses the costs to society with respect to health services that are incurred by persons facing severe mental health challenges, and public costs incurred because of criminal justice system involvement attributable to these challenges.

[238] FY 09-10 only.
[239] FY 08-09 only.
[240] FY 09-10 only.
[241] Otherwise, our analysis would have simply duplicated the work being done for the Statewide Priority Indicator Report.
[242] http://www.mhsoac.ca.gov/Evaluations/docs/InitialStatewidePriorityIndicators_Report2EPhase2.pdf

It is important to note that this is a conservative analysis. Costs that are not clearly attributable to FSP clients have not been included, and cost savings estimates have been indexed to conservative estimates of cost. As is widely recognized, estimating the costs of savings attributable to service is complex – from both a cost estimate and a benefit estimate point of view. At each step in these estimation processes, we have consciously adopted a conservative approach.

Per the MHSA Community Services and Supports Three-Year Program and Expenditure Plan Requirements, "*Each county must plan for each age group in their populations to be served*." (p. 13) [243] Age groups are defined as follows:

- Children, Youth and Families (CYF): Birth to 18 years, and special-education pupils from birth to age 21 (p. 21)
- Transition-Age Youth (TAY): 16 to 25 years (p. 21)
- Adults: 18 to 59 years [244]
- Older Adults: 60 years and older (p. 21) [245]

Almost all of the counties are included in this report (**N = 50; 86.2%**). [246] The populations of counties (numbers of persons residing in the counties according to census data) represented in this report comprise almost all of the State of California (95.0%). [247]

FSP services are intensive to meet the needs of FSP-targeted clients. This is driven primarily by the policy objective to meet the serious needs of the hardest-to-serve clients – those with severe mental illness. This policy objective includes meeting both the service and the quality-of-life needs of FSP clients and the social outcomes and services needs of California. To address this complex balance between policy objective and client needs, this study has assessed a broad range of costs to citizens of California that are a consequence of service delivery to mental health clients most in need. Table IV.47 below represents costs of service and costs saved as a result of service for Fiscal Year (FY) 08-09 new enrollees in FSP.

- Costs of service are program and housing costs for new clients in a given fiscal year as discussed above; and
- Cost offsets are the total differential between the cost of mental and physical health services, and criminal justice involvement costs, in the year prior to entry into FSP services and the average 12-month cost after entry into services. [248] This is the amount of public money in these areas that was saved after these clients had access to service. [249]

---

[243] http://www.dmh.ca.gov/dmhdocs/docs/letters05/05-05CSS.pdf
Children and adolescents identified as seriously emotionally disturbed (SED) are eligible for FSPs if they meet the criteria set forth in Welfare and Institutions Code Section 5600.3, Subdivision (a). Adults and older adults identified to have a serious mental disorder are eligible for FSPs if they meet the criteria set forth in Subdivision (b) of Section 5600.3.
http://www.leginfo.ca.gov/cgi-bin/displaycode?section=wic&group=05001-06000&file=5600-5623.5
California's Welfare and Institutions Code is posted in its entirety on the website cited above, absent page numbers. Click on the link and the section cited will appear on screen, verbatim, as quoted.
[244] Although the age range for Adults was not included in DMH Letter 05-05, it is defined in the California Code of Regulations, Title 9. Rehabilitative and Development Services, Division 1. Department of Mental Health, Chapter 14. Mental Health Services Act, Article 2: Definitions, Section 3200.010. Adult.
[245] http://www.dmh.ca.gov/dmhdocs/docs/letters05/05-05CSS.pdf
[246] See the footnote above. The link to census data is:
http://www.census.gov/popest/research/eval-estimates/eval-est2010.html
[247] See Appendix D of the full Report for a list of county participants.
[248] Annualization of the service period is the same methodology used by the California Department of Mental Health when evaluating and reporting on AB 2034 outcomes.

Full Service Partnership Cost Offsets by Age Group include: [250]

Physical Health

- Acute Care Inpatient Hospitalization (number of days)
- Skilled Nursing (Non-Psychiatric) (number of days)
- Emergency Room Visits (number of times)

Psychiatric Care

- Inpatient Psychiatric Hospitalization (number of days)
- Long-Term Care (number of days) [251]
- Skilled Nursing (Psychiatric) (number of days)

Criminal Justice Involvement

- Arrests (number of times)
- Division of Juvenile Justice (number of days)
- Juvenile Hall/Camp (number of days)
- Jail (number of days)
- Prison (number of days)

Table IV.47
Total Full Service Partnership Services – Costs & Cost Offsets
(Fiscal Year 08-09 New Enrollees ONLY)

	Number of New Enrollees FY 08-09	Sum of Days	Total Cost for FY 08-09 New Enrollees	Total Cost Offset FY 08-09	Percent Offset FY 08-09
CYF	2,164	340,323	$ 20,450,009.07	$ 2,428,313.16	11.9%
TAY	2,327	371,250	$ 18,870,637.50	$ 22,437,417.44	118.9%
Adults	4,315	690,298	$ 50,564,328.50	$ 41,509,329.01	82.1%
Older Adults	582	91,220	$ 5,573,542.00	$ 5,421,665.55	97.3%
Total	**9,388**	**1,493,091**	**$ 95,458,517.07**	**$71,796,725.16**	**75.2%**

Table IV.48 presents the same analysis for new enrollees in FY 09-10.

California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.

[249] Of course, cost savings in individual counties could be attributable to many plausible alternative influences other than FSP enrollment, particularly additional services from other programs in that county. However, these influences would not adequately explain aggregate state level savings. This issue of diversity in county savings, and in county environments, will be addressed in greater detail in an upcoming analysis.

[250] Cost Offsets can be developed only for counties that submit data to the State Department of Mental Health's Full Service Partnership (FSP) Data Collection and Reporting System (DCR). All of the variables used in the FSP Cost Offset analysis are contained in the DCR. EMT does not have access to non-DCR data from counties.

The areas analyzed for savings are very similar to those analyzed in the evaluation of AB 2034 efforts, which included inpatient psychiatric hospitalization and incarceration. Emergency room use was also evaluated but was limited to psychiatric rather than physical health.

California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.

[251] Institution for Mental Diseases facilities/Mental Health Rehabilitation Centers. Key Event Tracking data do not distinguish between the two. Therefore, an average of the IMD and MHRC rates for the facilities contracted by each county was used as the basis for calculating the cost applied to the number of days in long-term care.

Table IV.48
Total Full Service Partnership Services – Costs & Cost Offsets
(Fiscal Year 09-10 New Enrollees ONLY)

	Number of New Enrollees FY 09-10	Sum of Days	Total Cost for FY 09-10 New Enrollees	Total Cost Offset FY 09-10	Percent Offset FY 09-10
CYF	3,101	454,605	$ 21,775,579.50	$ 2,262,842.11	10.4%
TAY	2,977	496,190	$ 18,681,553.50	$ 27,501,007.94	147.2%
Adults	4,702	868,415	$ 56,212,502.95	$ 56,120,875.82	99.8%
Older Adults	645	103,459	$ 5,325,034.73	$ 3,857,684.17	72.4%
Total	**11,425**	**1,922,669**	**$ 101,994,670.68**	**$ 89,742,410.04**	**88.0%**

The findings displayed in Tables IV.47 and IV.48 support a number of conclusions:

- Cost savings over the two-year period are consistent in relative magnitude across age groups. In particular, TAY consumers experienced the greatest cost-related benefits of service. Transition-Age Youth are at high risk for criminal justice and crisis management services, and FSP participation apparently has a significant impact on consequences for this age group.
- Cost offsets are dramatically lower for the CYF age group. This may reflect the more preventive orientation of services for children, which is not as clearly reflected in the short time line of the measured offsets. Savings for children may appear over a much longer period of time, outside the currently funded study period. In addition, the "*consequence*" nature of the offset categories examined (e.g., criminal justice involvement) is more relevant to older age cohorts. [252] Effects of service are sensitive to life maturation, indicators of service success and the time horizon of measured effects.
- Overall, across all age groups, 75 and 88 percent of FSP program costs for new enrollees in FY 08-09 and FY 09-10 (respectively) are offset by savings to the public mental health, health and justice systems. Although the argument of cost savings should never be advanced as the primary reason for providing public mental health services, results of this magnitude make a strong case for the wisdom of investing public resources in programs such as the Full Service Partnership.

In summary, this analysis of cost offsets in larger social costs attributable to participation in the FSP program documents positive results. Results for the TAY and Adult age groups, which account for the great majority of clients, are particularly positive. These results are quite favorable when compared with AB 2034, a program charged with serving homeless (or at risk of being homeless) TAY and adults with severe mental illness – the final analysis reported a percentage of costs offset of 49.8 percent. [253]

This reflects the greater risk for hospitalization and incarceration that exists in these age groups. Overall, these results suggest a very positive treatment outcome, and return on investment, for FSP clients.

Table IV.49 illustrates cost offsets by age and offset category for new Full Service Partnership enrollees in Fiscal Year 08-09.

[252] Although indicators such as education are logical choices for Children and Youth, challenges inherent in the statewide data collection system related to floor effects and missing data made this variable unsuitable for analysis. See Phase II Deliverable 2.E – Priority Indicator Report.
[253] California Department of Mental Health (2007). (unpublished) *Report to the Legislature on the effectiveness of integrated services for homeless adults with serious mental illness*. Sacramento, CA: Author.
Data collected from November 1, 1999 to January 31, 2007. $55 million in costs, $27.4 million in offsets (psychiatric hospitalization, incarceration and emergency room use for psychiatric episodes).

Table IV.49
Full Service Partnership Cost Offsets by Age & Offset Category
(Fiscal Year 08-09 New Enrollees ONLY)

	Psychiatric		Physical Health		Criminal Justice	
	Amount of Offset	Percent of Total Offset for Age Group	Amount of Offset	Percent of Total Offset for Age Group	Amount of Offset	Percent of Total Offset for Age Group
CYF	$ 425,079.62	17.5%	$ 908,053.24	37.4%	$ 1,095,180.30	45.1%
TAY	$ 8,426,402.27	37.6%	$ 482,463.53	2.2%	$ 13,528,551.64	60.3%
Adults	$ 29,718,862.23	71.6%	$ 964,209.28	2.3%	$ 10,826,257.50	26.1%
Older Adults	$ 3,845,911.36	70.9%	$ 1,095,025.10	20.2%	$ 480,729.09	8.9%
Total	**$ 42,416,255.48**	**59.1%**	**$ 3,449,751.15**	**4.8%**	**$ 25,930,718.53**	**36.1%**

Table IV.50 illustrates cost offsets by age and offset category for new Full Service Partnership enrollees in Fiscal Year 09-10. [254]

Table IV.50
Full Service Partnership Cost Offsets by Age & Offset Category
(Fiscal Year 09-10 New Enrollees ONLY)

	Psychiatric		Physical Health		Criminal Justice	
	Amount of Offset	Percent of Total Offset for Age Group	Amount of Offset	Percent of Total Offset for Age Group	Amount of Offset	Percent of Total Offset for Age Group
CYF	$ 1,104,612.24	38.4%	$ (611,869.83)	-	$ 1,770,099.70	61.6%
TAY	$ 9,500,199.91	34.5%	$ 3,658,331.16	13.3%	$ 14,342,476.87	52.2%
Adults	$ 39,688,364.64	70.7%	$ 6,195,607.45	11.0%	$ 10,236,903.73	18.2%
Older Adults	$ 4,290,539.63	92.9%	$ (761,785.95)	-	$ 328,930.49	7.1%
Total	**$ 54,583,716.42**	**59.9%**	**$ 8,480,282.83**	**9.3%**	**$ 26,678,410.79**	**29.3%**

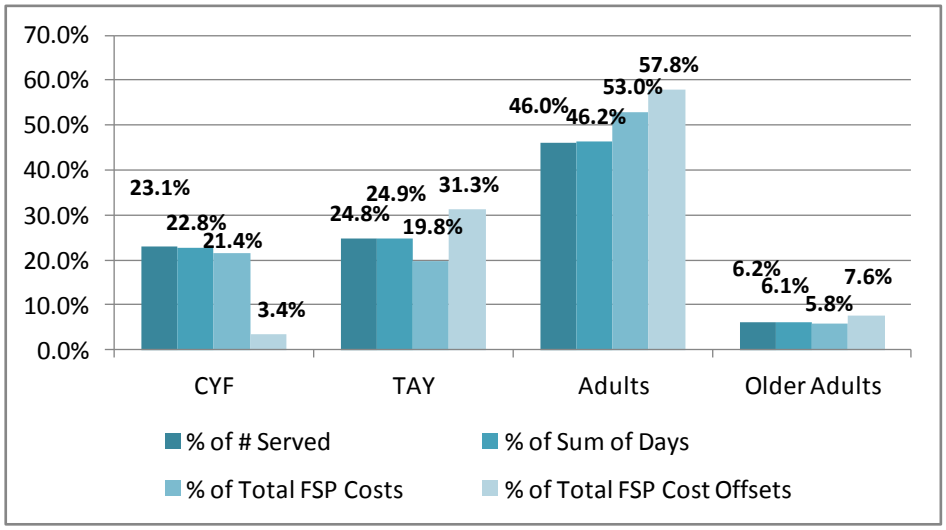
The findings displayed in Tables IV.49 and IV.50 support the following conclusions:

- For Adults and Older Adults, the greatest proportion of offsets each fiscal year is accounted for by savings in psychiatric care (largely due to reductions in inpatient psychiatric hospitalization).
- Among TAY and CYF, the greatest proportion of offsets in each fiscal year is accounted for by criminal justice (incarceration and arrests, although largely due to reduction in the number of days incarcerated).
- Physical health (acute care inpatient hospitalization, skilled nursing – non-psychiatric, and emergency room visits) offsets increased substantially as a percentage of overall offsets between FY 08-09 and FY 09-10. Current primary care-mental health integration efforts underway will examine the medical needs of FSP clients in more depth and shed further light on how MHSA meets their myriad needs.

[254] Physical Health amounts in FY 09-10 for CYF and Older Adults actually show a loss, or no cost offset. This means that there were more days of acute care hospitalization, etc., for physical health reasons among Children, Youth and Older Adults during their tenure as Full Service Partners than in the 12 months prior to intake into the program.

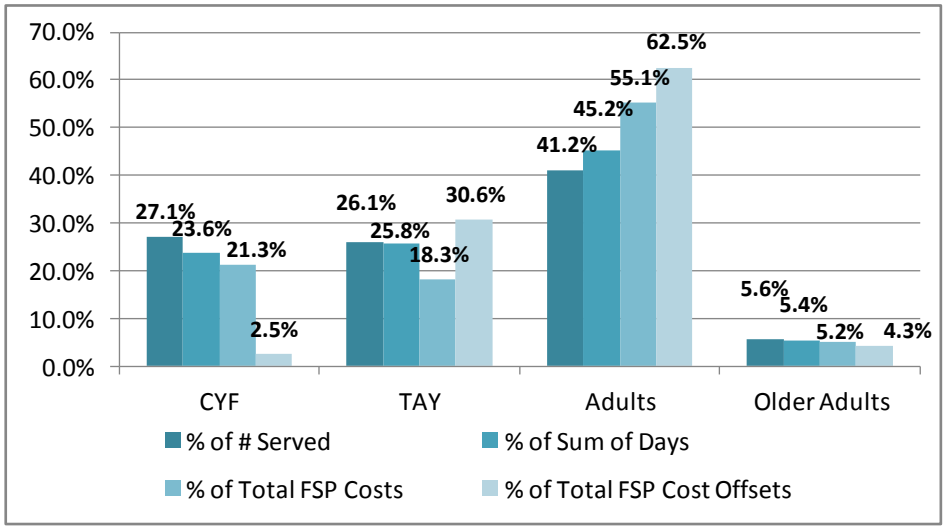
Percentage of overall offset represented by each age group (new enrollees only) is compared with their proportion in terms of overall numbers served, days of service and costs in Exhibits IV.1 and IV.2. FSP data from Tables IV.47 and IV.49 are displayed in Exhibit IV.1.

Exhibit IV.1
Full Service Partnership % of Costs & Cost Offsets by Age & Offset Category
(Fiscal Year 08-09 New Enrollees ONLY)



FSP data from Tables IV.48 and IV.50 are used in Exhibit IV.2.

Exhibit IV.2
Full Service Partnership % of Costs & Cost Offsets by Age & Offset Category
(Fiscal Year 09-10 New Enrollees ONLY)



Findings as illustrated in Exhibits IV.1 and IV.2 support the following conclusions:

- TAY as an age group show offsets in greater proportion to their costs when compared with other age groups.

- Older Adults are represented nearly equally in terms of percentage of overall FSP participants, number of service days, FSP cost, and cost offsets.
- Adults represent the age group with the largest proportion of FSP cost offsets compared with other age groups. The investment in the serious mental health needs of Adults yields a return on investment.
- Children and Youth display the opposite pattern – the amount of offsets as a percentage of the overall age group total is less than their proportional numbers and days of service. [255]

Exhibits IV.3 through IV.10 illustrate the proportion of offset in each category for the age groups.

Exhibit IV.3
. Full Service Partnership % of Cost Offsets for CYF Age Group
(FY 08-09 New Enrollees ONLY)

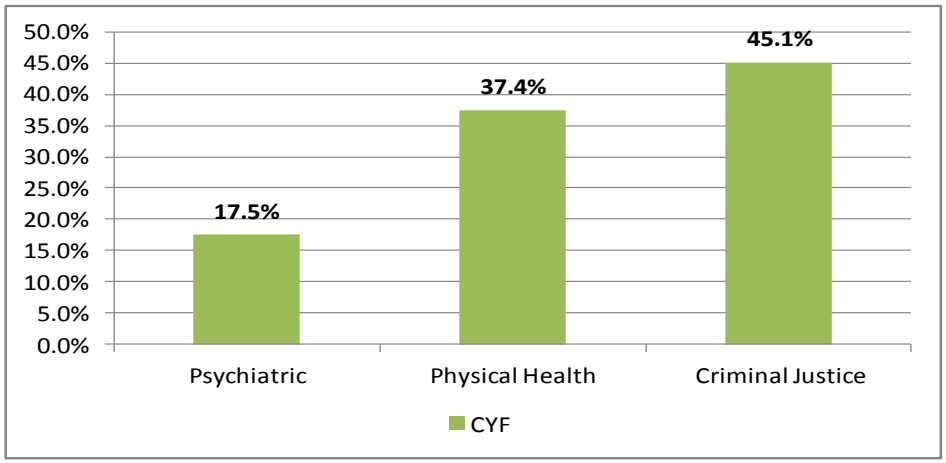
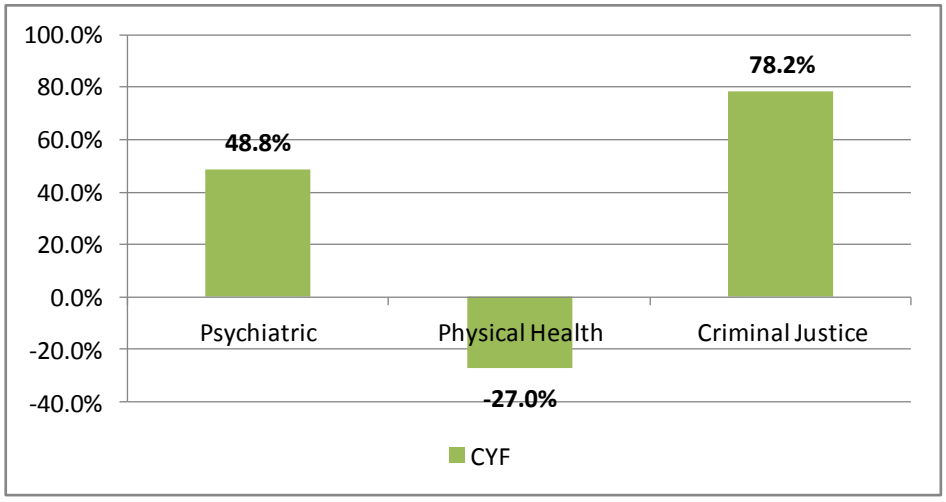


Exhibit IV.4
. Full Service Partnership % of Cost Offsets for CYF Age Group
(FY 09-10 New Enrollees ONLY)



[255] CYF savings are more likely in the long term; consequence data may not be the most appropriate for this age group. See Chapter II of the full Report for limitations re: analysis of the Education variable in the DCR.

Exhibit IV.5
Full Service Partnership % of Cost Offsets for TAY Age Group
(FY 08-09 New Enrollees ONLY)

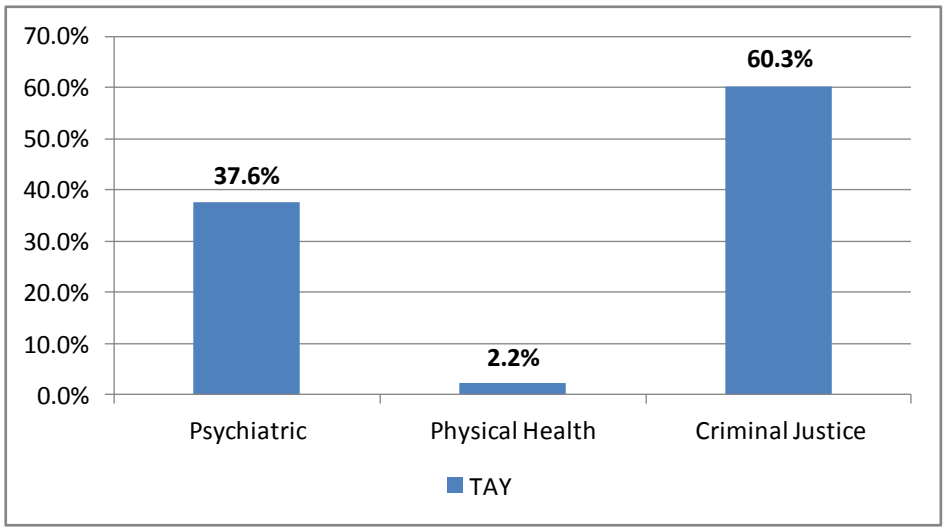
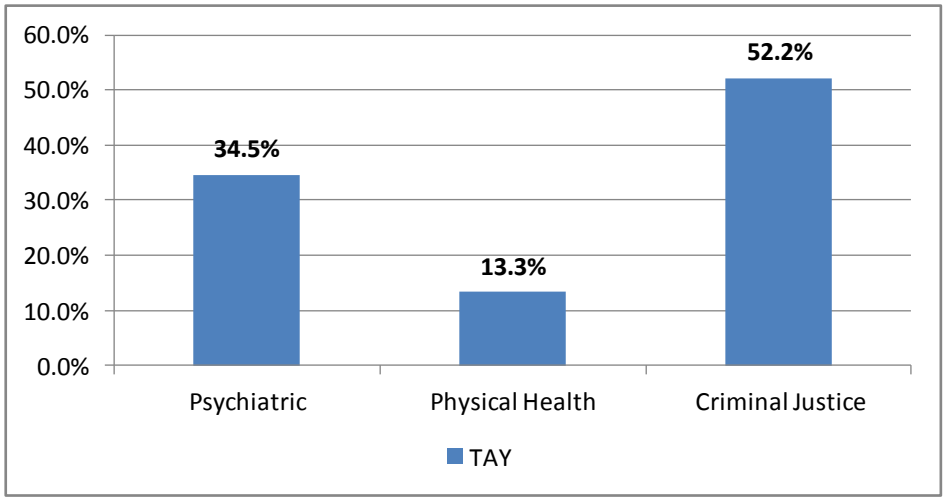


Exhibit IV.6
Full Service Partnership % of Cost Offsets for TAY Age Group
(FY 09-10 New Enrollees ONLY)



Criminal Justice (arrests and incarceration) showed the greatest cost offsets compared with costs for CYF and TAY. Depending on the age group and fiscal year, from 45.1 to 78.2 percent of criminal justice costs to the public in the 12 months prior to intake were offset in the 12 months following intake due to reductions in numbers of days incarcerated and number of arrests. [256]

The results diverge for health-related offsets (Psychiatric and Physical Health), depending upon age group and fiscal year. Among TAY, between 34.5 and 37.6 percent (FY 09-10 and FY 08-09, respectively) of Psychiatric costs to the public in the 12 months prior to intake were offset in the 12 months following intake due to reductions in

[256] Mostly related to reductions in incarceration – see the sections on Arrests and Incarceration in this chapter.

numbers of days hospitalized and in long-term care. [257] For CYF, the percentage of offsets ranges from 17.5 to 48.8 (FY 08-09 and FY 09-10, respectively).

In the area of Physical Health, the percentages of costs offset are not as high – a finding consistent across the older age groups as well (Adults and Older Adults). However, the argument may be advanced that FSP clients of all ages are particularly vulnerable to medical problems and are therefore provided with access to necessary physical health care as a result of program participation. [258]

Exhibit IV.7
Full Service Partnership % of Cost Offsets for Adult Age Group
(FY 08-09 New Enrollees ONLY)

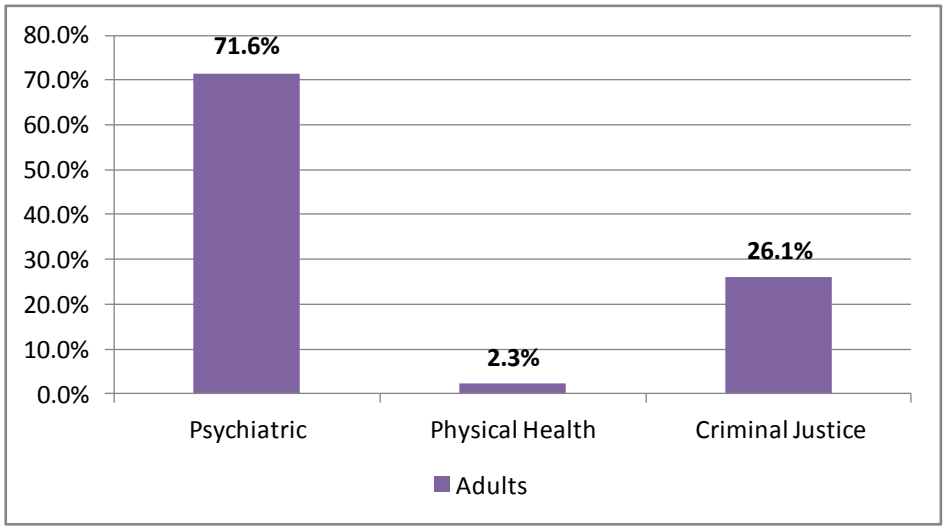
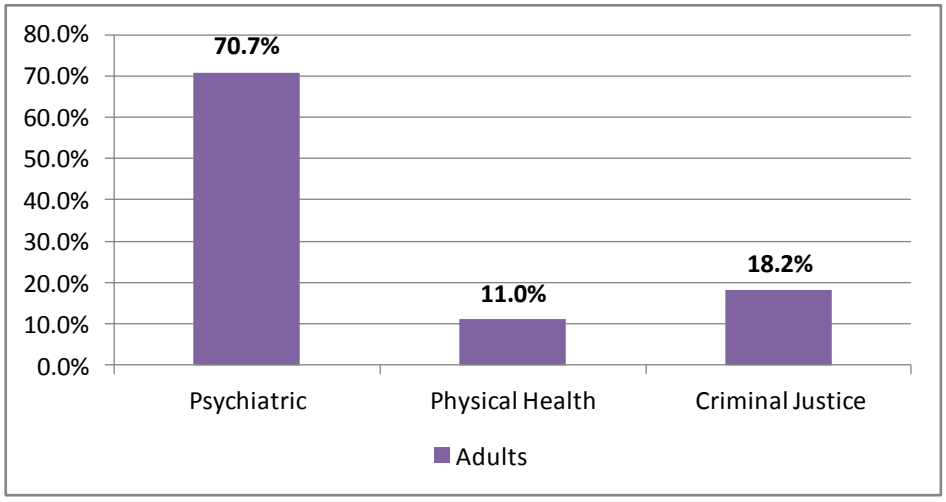


Exhibit IV.8
Full Service Partnership % of Cost Offsets for Adult Age Group
(FY 09-10 New Enrollees ONLY)



[257] Mostly related to reductions in inpatient psychiatric hospitalization, as discussed earlier in this chapter.
[258] Indeed, research literature supports this hypothesis, as discussed early in this chapter.

For Adults and Older Adults (illustrated in exhibits above and below), Psychiatric care (inpatient hospitalization, skilled nursing – psychiatric, and long-term care) showed the greatest cost offsets. Depending on the age group and fiscal year, from 70.7 to 111.2 percent of publicly funded psychiatric care costs in the 12 months prior to intake were offset in the 12 months following intake due to reductions in numbers of days of inpatient psychiatric hospitalization, skilled nursing (psychiatric) care, and long-term care. [259]

Exhibit IV.9
Full Service Partnership % of Cost Offsets for Older Adult Age Group
(FY 08-09 New Enrollees ONLY)

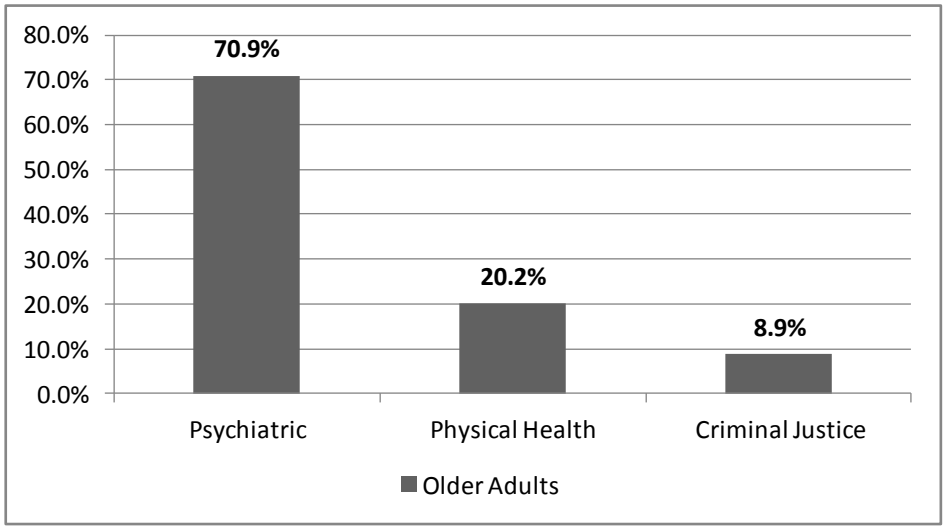
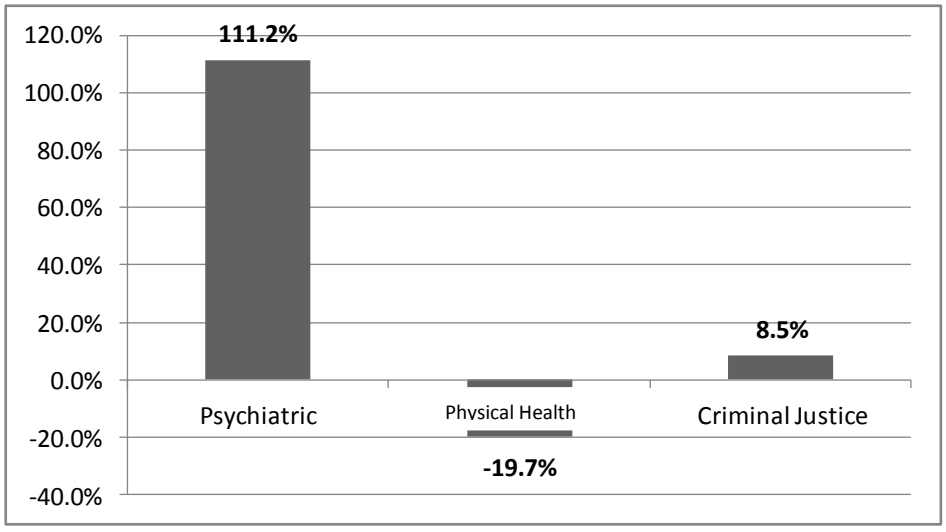


Exhibit IV.10
Full Service Partnership % of Cost Offsets for Older Adult Age Group
(FY 09-10 New Enrollees ONLY)

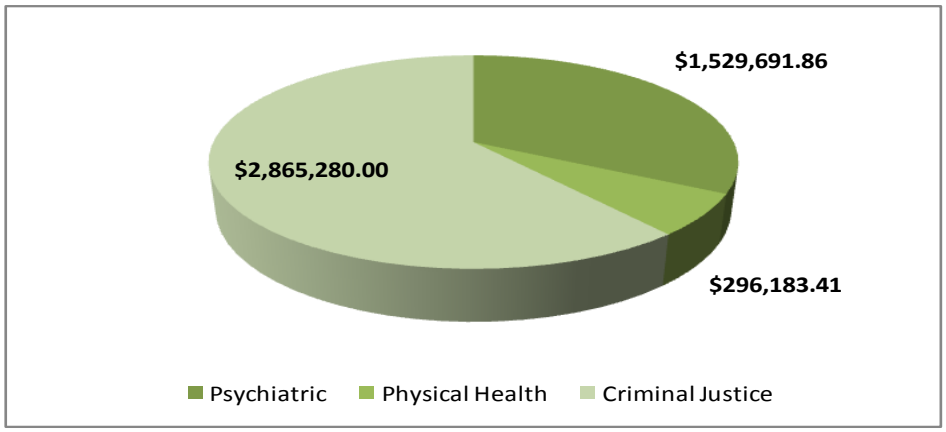


Exhibits IV.11 through IV.14 summarize the offset amounts for each age group and the categories examined (physical health, psychiatric care and criminal justice). Exhibit IV.11 displays how CYF combined offsets from FY 08-

[259] Mostly related to reductions in inpatient psychiatric hospitalization, as discussed earlier in this chapter.

09 and FY 09-10 are broken out proportionally among psychiatric care, physical health and criminal justice. Results for CYF FSP clients whose data are displayed in Tables IV.47 through IV.50 (in the rows labeled CYF) are now summarized in Exhibit IV.11.

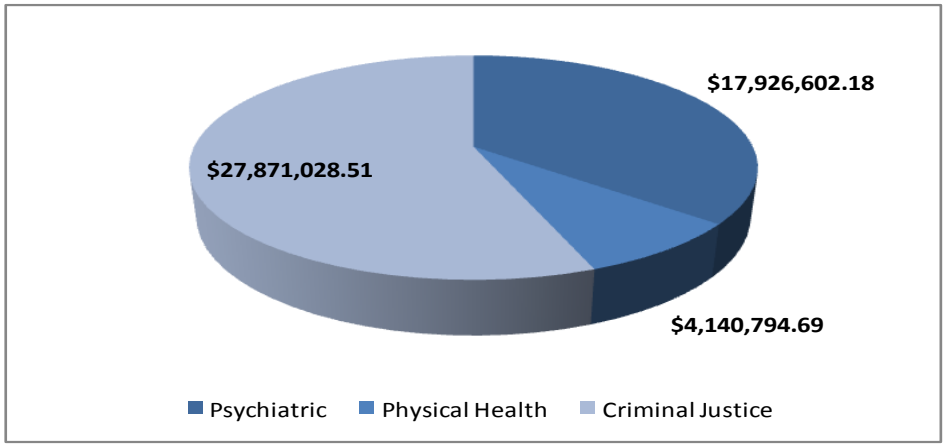
Exhibit IV.11
Full Service Partnership Amount of Cost Offsets for CYF
(FY 08-09 & FY 09-10 New Enrollees ONLY)



In FY 08-09 and FY 09-10, the total amount of costs to the public system offset for CYF in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $4,691,155.27 – $4.7 million. Most of the savings were due to reductions in days incarcerated.

Exhibit IV.12 displays how TAY combined offsets from FY 08-09 and FY 09-10 are broken out proportionally among psychiatric care, physical health and criminal justice. Results for TAY FSP clients whose data are displayed in Tables IV.47 through IV.50 (in the rows labeled TAY) are now summarized in Exhibit IV.12.

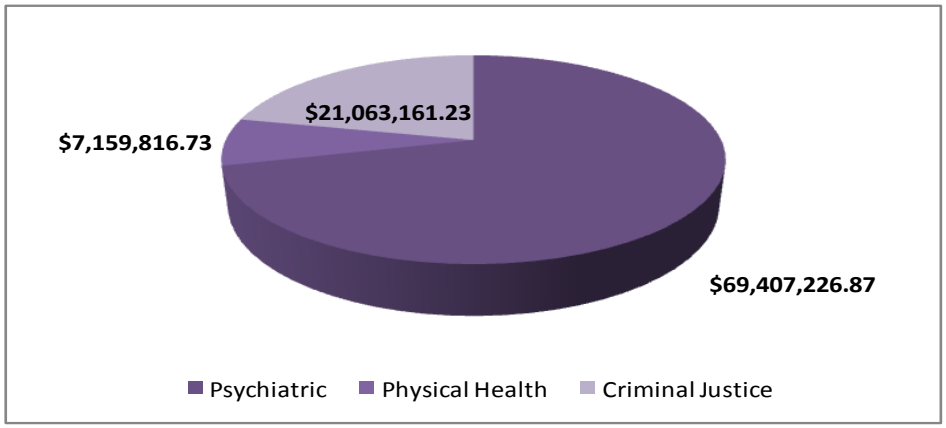
Exhibit IV.12
Full Service Partnership Amount of Cost Offsets for TAY
(FY 08-09 & FY 09-10 New Enrollees ONLY)



In FY 08-09 and FY 09-10, the total amount of costs to the public system that were offset for TAY in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $49,938,425.38 – $49.9 million. As with their CYF counterparts, most of the savings were due to reductions in days incarcerated.

Exhibit IV.13 displays how Adult combined offsets from FY 08-09 and FY 09-10 are broken out proportionally among psychiatric care, physical health and criminal justice. Results for Adult FSP clients whose data are displayed in Tables IV.47 through IV.50 (in the rows labeled Adult) are now summarized in Exhibit IV.13.

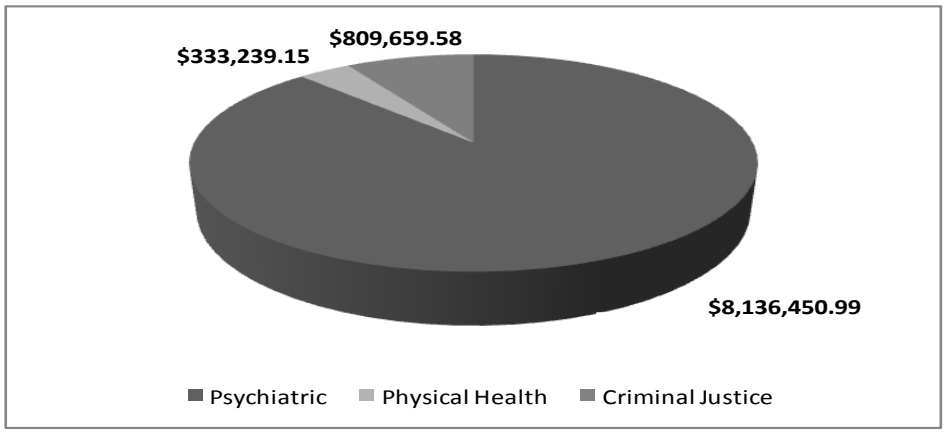
Exhibit IV.13
Full Service Partnership Amount of Cost Offsets for Adults
(FY 08-09 & FY 09-10 New Enrollees ONLY)



In FY 08-09 and FY 09-10, the total amount of costs to the public system offset for Adults in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $97,630,204.83 – $97.6 million. Most of the savings were due to reductions in days spent in inpatient psychiatric hospitalization.

Exhibit IV.14 displays how Older Adult combined offsets from FY 08-09 and FY 09-10 are broken out proportionally among psychiatric care, physical health and criminal justice. Results for Older Adult FSP clients whose data are displayed in Tables IV.47 through IV.50 (in the rows labeled Older Adult) are now summarized in Exhibit IV.14.

Exhibit IV.14
Full Service Partnership Amount of Cost Offsets for Older Adults
(FY 08-09 & FY 09-10 New Enrollees ONLY)

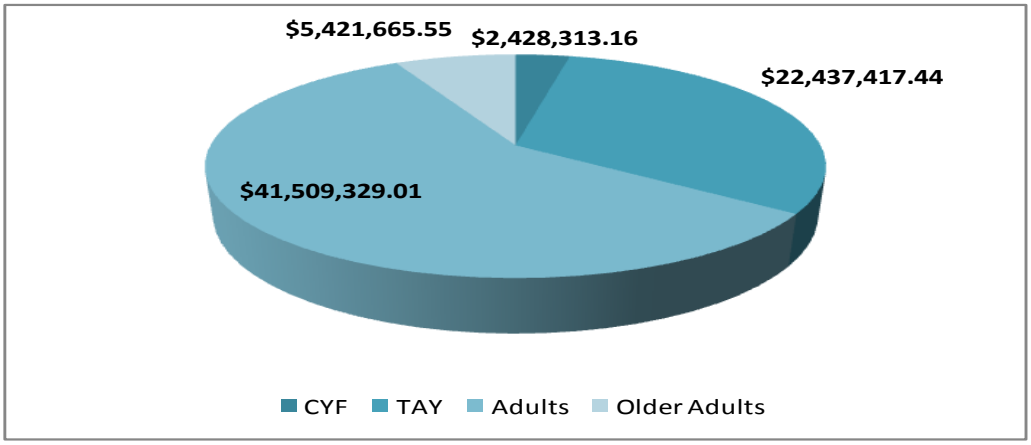


In FY 08-09 and FY 09-10, the total amount of costs to the public system offset for Older Adults in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $9,279,349.72 – $9.3 million. Most of the savings were due to reductions in days spent in inpatient psychiatric hospitalization.

Exhibits IV.15 through IV.17 summarize the offset amounts across the age groups and the areas examined (psychiatric care, physical health and criminal justice).

Exhibit IV.15 displays how all offsets from FY 08-09 are broken out proportionally by age group to show the total amount of offset. Results for all FSP clients whose data are displayed in Tables IV.47 and IV.49 are now summarized in Exhibit IV.15.

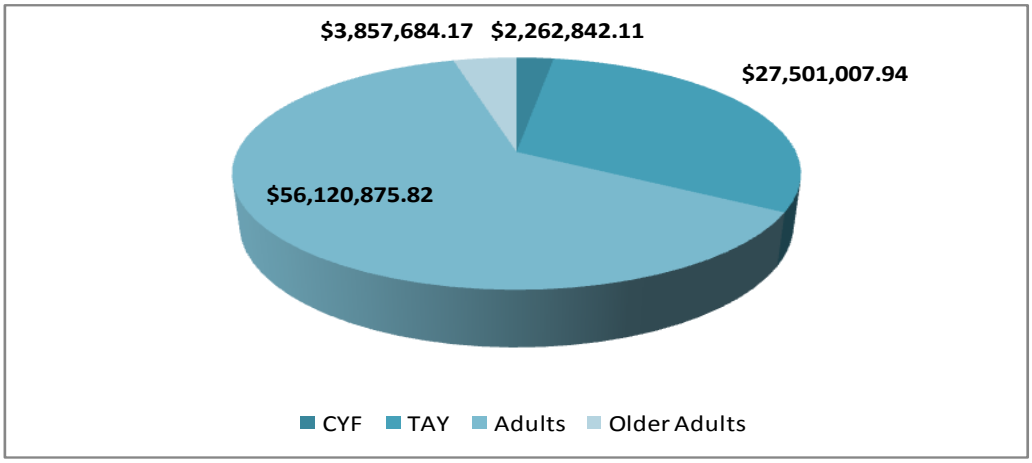
Exhibit IV.15
Full Service Partnership Amount of Cost Offsets by Age Group
(FY 08-09 New Enrollees ONLY)



In FY 08-09, the total amount of costs to the public system offset across all age groups in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $71,796,725.16 – $71.8 million. Most of the savings were due to reductions in inpatient psychiatric hospitalization and incarceration among adult FSP clients, followed by fewer days of incarceration among TAY FSP clients.

Exhibit IV.16 displays how all offsets from FY 09-10 are broken out proportionally by age group to show the total amount of offset. Results for all FSP clients whose data are displayed in Tables IV.48 and IV.50 are now summarized in Exhibit IV.16.

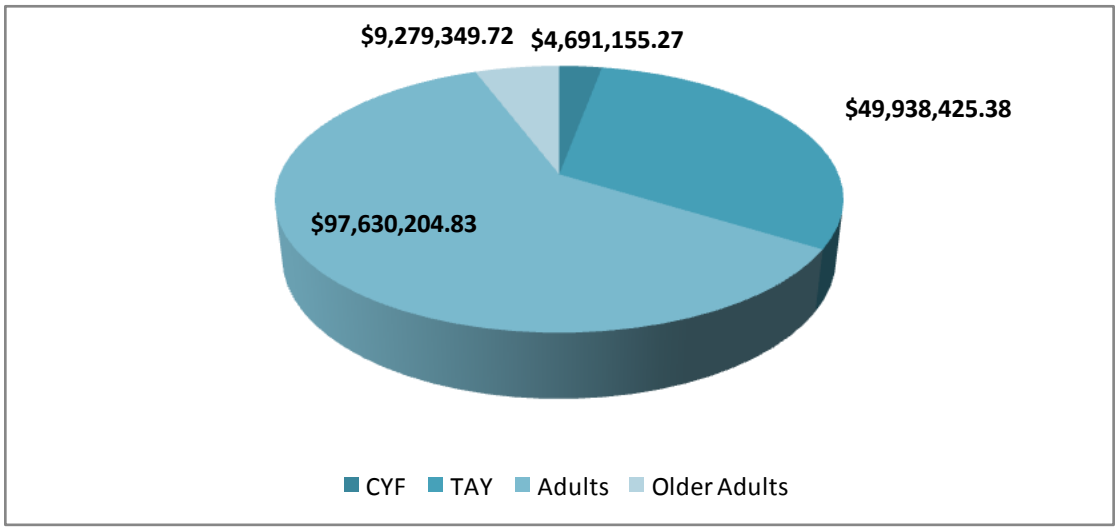
Exhibit IV.16
Full Service Partnership Amount of Cost Offsets by Age Group
(FY 09-10 New Enrollees ONLY)



In FY 09-10, the total amount of costs to the public system that were offset across all age groups in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $89,742,410.04 – $89.7 million. As was observed with the previous fiscal year, most of the savings were due to reductions in inpatient psychiatric hospitalization and incarceration among Adult FSP clients, followed by fewer days of incarceration among TAY FSP clients.

Exhibit IV.17 displays all offsets from FY 08-09 and FY 09-10 broken out proportionally by age group to show the total amount of offset. Results for all FSP clients whose data are displayed in Tables IV.47 through IV.50 are now summarized in Exhibit IV.17.

Exhibit IV.17
Full Service Partnership Amount of Cost Offsets by Age Group
(FY 08-09 & FY 09-10 New Enrollees ONLY)



When the fiscal year totals are combined (above exhibit), the total amount of costs to the public system that were offset across all age groups in the three major categories analyzed (psychiatric care, physical health and criminal justice) was $161,539,135.20 – $161.5 million. In summary, most of the savings were due to reductions in inpatient psychiatric hospitalization and incarceration among Adult FSP clients, followed by fewer days of incarceration among TAY FSP clients.

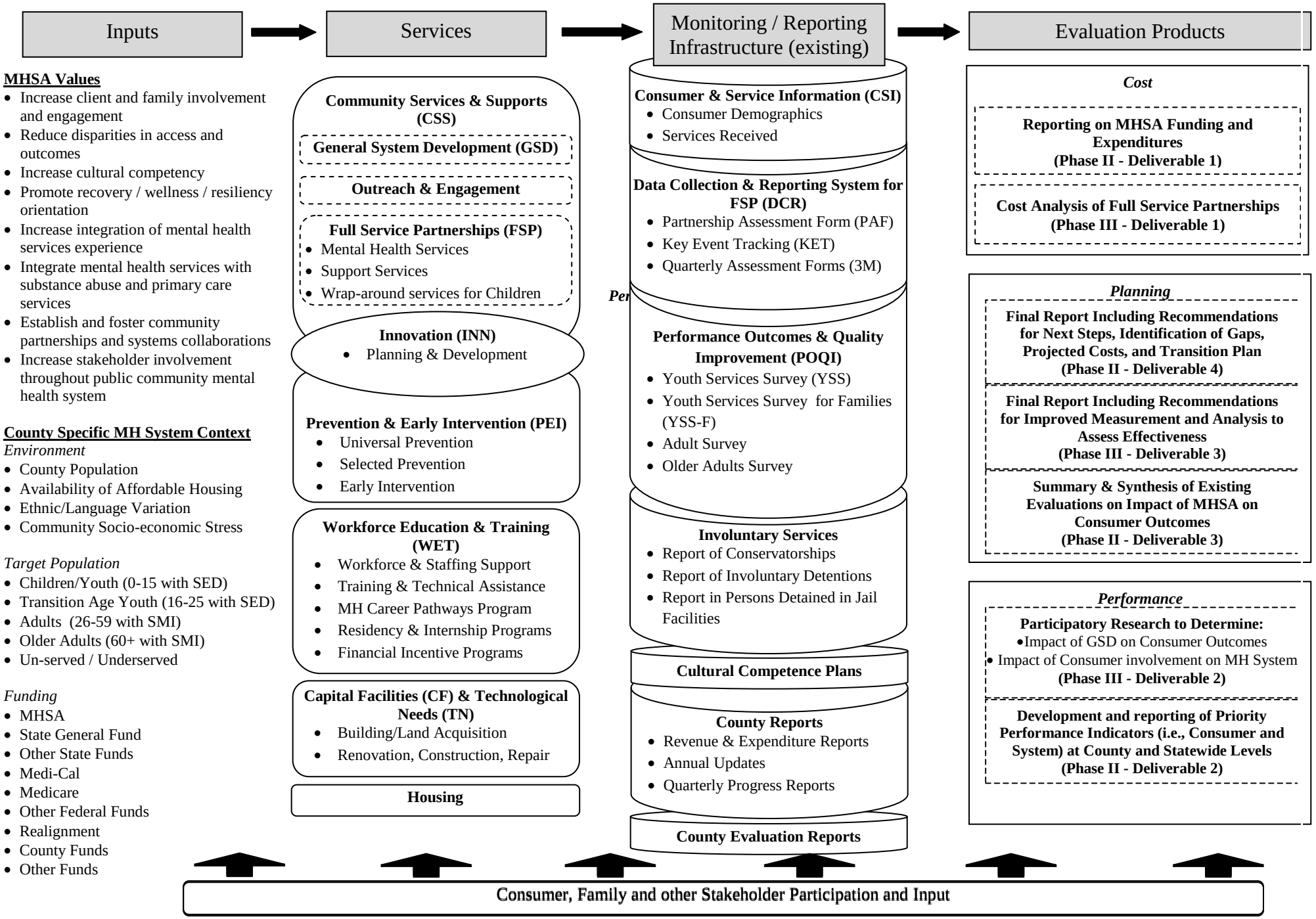
When the total cost for new enrollees across both fiscal years ($197,453,187.75) is compared with the total amount offset, the percentage of costs offset is 81.8 percent.

Appendix A
Key Stakeholder Contacts

LIST OF PRESENTATIONS, MEETINGS, INTERVIEWS, CALLS PERSONALLY CONDUCTED BY DR. HARRIS WITH KEY STAKEHOLDERS IN RE: STATEWIDE MHSA EVALUATION		
March 22, 2011	In-person with Southern Regional MHSA Coordinators	Service Providers
March 23, 2011	In-person with Bay Area Regional MHSA Coordinators	Service Providers
March 29, 2011	In-person with Superior Regional MHSA Coordinators	Service Providers
March 30, 2011	In-person with Central Regional MHSA Coordinators	Service Providers
April 1, 2011	In-person with LA County DMH	Service Providers
April 15, 2011	In-person with FSP Practices Workgroup (Todd Gilmer, UCSD, Jen Clancy, CiMH, and others)	Service Providers
May 9, 2011	In-person with MHSA Partners	Service Providers
May 11, 2011	In-person with NAMI CA (Kathleen Derby)	Client & Family Agency
June 13, 2011	In-person with California Network of Mental Health Clients (Delphine Brody and client representatives)	Client & Family Agency
June 13, 2011	In-person with California Department of Aging (Lin Benjamin)	Agency representing under-served
June 13, 2011	In-person with California Community Colleges - Student Services and Special Programs (Betsy Sheldon)	Service Providers
June 14, 2011	In-person with United Advocates for Children and Families (Oscar Wright)	Client & Family Agency
June 14, 2011	In-person with Client and Family Leadership Committee (Dee Lemonds), Cultural and Linguistic Competence Committee (Pete Best)	Client & Family Agency
June 14, 2011	Webinar with NAMI CA clients and family representatives, onsite at NAMI CA offices	Client & Family Agency
June 23, 2011	In-person with the California Mental Health Directors Association (Heather Anders, contact) and Mental Health and Aging Coalition (Vivana Criado)	Service Providers & Agency representing under-served
July 15, 2011	In-person at Nevada County (Michele Violett)	Presentation to Clients & Families
July 22, 2011	In-person at Shasta County (Jaime Hannigan)	Presentation to Clients & Families
July 22, 2011	Telephone call with Alameda County (Rick Crispino)	Service Providers
July 22, 2011	In-person with California Mental Health Planning Council (Ann Arneill-Py)	Association
July 22, 2011	In-person with California Council of Community Mental Health Agencies (Harriett Markell)	Association
July 22, 2011	In-person with Sacramento Association of Mental Health Contractors (John Buck)	Association
July 22, 2011	In-person with CASRA (Joseph Robinson)	Association

Appendix B
Statewide Evaluation Conceptual Framework

Exhibit 1: MHSA Phase II & III Statewide Evaluation Framework



This page left intentionally blank

Appendix C
Technical Appendix

Evaluation Advisory Group Members

1. Maria Iyog-O'Malley, Former FSP Services Manager, San Francisco Department of Mental Health/EMT Expert Consultant
2. Debbie Innes-Gomberg, Los Angeles County Department of Mental Health
3. Christina Cordova, Orange County Health Authority
4. Keith Erselius, San Bernardino Behavioral Health
5. Ruben Gasco, San Bernardino Behavioral Health
6. Keith Haigh, San Bernardino Behavioral Health
7. Brian Yates, American University, EMT Expert Consultant
8. Todd Gilmer, University of San Diego, EMT Expert Consultant
9. Steve Hahn-Smith, Contra Costa Health Services Department
10. Diane Prentiss, San Francisco Department of Public Health

County FSP Cost by Age Group Web Survey

RespondentID	
Please enter county name:	Open-Ended Response
Please enter county code:	Open-Ended Response
Where did your county/municipality document FSP Housing Expenditures on the FY 08-09 Revenue & Expenditure Reports:	GSD Housing
	GSD Operating
	FSP Operating
	Outreach & Engagement Operating
	Administrative: Operating
	Outside of the MHSA Housing Program
	None of these – Another line item
	If you indicated "None of these – Another line item", please specify.
What amount of expenditures in this line item for FY 08-09 is devoted to FSP Housing?	GSD Housing
	GSD Operating
	FSP Operating
	Outreach & Engagement Operating
	Administrative: Operating
	None of these – Another line item
What percentage of expenditures in this line item for FY 08-09 is devoted to FSP Housing? (Please have total equal 100%)	GSD Housing
	GSD Operating
	FSP Operating
	Outreach & Engagement Operating
	Administrative: Operating
	None of these – Another line item
What % of monies from the "GSD Housing" source of FSP Housing in FY 08-09 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
What % of monies from the "GSD Operating" source of FSP Housing in FY 08-09 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults

What % of monies from the "FSP Operating" source of FSP Housing in FY 09-10 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
What % of monies from the "Outreach & Engagement Operating" source of FSP Housing in FY 08-09 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
What % of monies from the "Administrative - Operating" source of FSP Housing in FY 08-09 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
What % of monies from the "Other" source of FSP Housing in FY 08-09 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
Where did your county/municipality document FSP Housing Expenditures on the FY 09-10 Revenue & Expenditure Reports?	GSD Housing
	GSD Operating
	FSP Operating
	Outreach & Engagement Operating
	Administrative: Operating
	Outside of the MHSA Housing Program
	None of these – Another line item
	If you indicated "None of these – Another line item", please specify.

What amount of expenditures in this line item in FY 09-10 is devoted to FSP Housing?	GSD Housing
	GSD Operating
	FSP Operating
	Outreach & Engagement Operating
	Administrative: Operating
	None of these – Another line item
What percentage of expenditures in this line item in FY 09-10 is devoted to FSP Housing? (Please have total equal 100%)	GSD Housing
	GSD Operating
	FSP Operating
	Outreach & Engagement Operating
	Administrative: Operating
	None of these – Another line item
What % of monies from the "GSD Housing" source of FSP Housing in FY 09-10 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
What % of monies from the "GSD Operating" source of FSP Housing in FY 09-10 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
What % of monies from the "FSP Operating" source of FSP Housing in FY 09-10 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
What % of monies from the "Outreach & Engagement Operating" source of FSP Housing in FY 08-09 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults

What % of monies from the "Administrative - Operating" source of FSP Housing in FY 08-09 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
What % of monies from the "Other" source of FSP Housing in FY 08-09 was expended on each age group: (Please have total equal 100%)	Children
	TAY
	Adults
	Older Adults
How many programs FY 08-09 are devoted to outreach to FSPs?	0 Programs
	1-10 Programs
What amount of expenditures in this program for FY 08-09 is devoted to outreach to FSPs?	Program 1
	Program 2
	Program 3
	Program 4
	Program 5
	Program 6
	Program 7
	Program 8
	Program 9
	Program 10
What % of monies for outreach in "Program 1" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 2" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 3" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY

	Adults
	Older Adults
What % of monies for outreach in "Program 4" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 5" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 6" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 7" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 8" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 9" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 10" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults

	Older Adults
How many programs FY 09-10 are devoted to outreach to FSPs?	0 Programs
	1-10 Programs
What amount of expenditures in this program for FY 09-10 is devoted to outreach to FSPs?	Program 1
	Program 2
	Program 3
	Program 4
	Program 5
	Program 6
	Program 7
	Program 8
	Program 9
	Program 10
What % of monies for outreach in "Program 1" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 2" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 3" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 4" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 5" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults

	Older Adults
What % of monies for outreach in "Program 6" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 7" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 8" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 9" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for outreach in "Program 10" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
How many programs for FY 08-09 are devoted to supportive services for FSPs?	0 Programs
	1-10 Programs
What amount of expenditures in this program for FY 08-09 is devoted to supportive services for FSPs?	Program 1
	Program 2
	Program 3
	Program 4
	Program 5
	Program 6
	Program 7
	Program 8
	Program 9
	Program 10

What % of monies for supportive services in "Program 1" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 2" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 3" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 4" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 5" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 6" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 7" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults

What % of monies for supportive services in "Program 8" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 9" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 10" in FY 08-09 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
How many programs for FY 09-10 are devoted to supportive services for FSPs?	0 Programs
	1-10 Programs
What amount of expenditures in this program for FY 09-10 is devoted to supportive services for FSPs?	Program 1
	Program 2
	Program 3
	Program 4
	Program 5
	Program 6
	Program 7
	Program 8
	Program 9
	Program 10
What % of monies for supportive services in "Program 1" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults

What % of monies for supportive services in "Program 2" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 3" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 4" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 5" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 6" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 7" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults

What % of monies for supportive services in "Program 8" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 9" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
What % of monies for supportive services in "Program 10" in FY 09-10 was expended on FSPs in each age group: (Please have total equal 100%)	Children, Youth & Families
	TAY
	Adults
	Older Adults
Please provide any comments or notes you may have for EMT.	Open-Ended Response

FSP Services Assessment Tool

		YES/NO			
		CYF	TAY	AD	OA
1	Outreach to Underserved and Unserved Communities				
2	Priority to Unserved Populations				
3	FSP Eligibility (criteria)				
3	Needs Assessment				
3	Individual Services & Supports Plan				
3	Service Delivery based on Needs Assessment & ISSP				
4	Low Caseload				
4	Consumer/Family Staff				
4	24/7 Coverage				
4	Services in Community v. in the Clinic				
5	Client Centered Care				
5	Family Centered Care				
5	Culturally Appropriate				
5	Collaboration with Community Services				
5	Integrated Service Delivery				
6	Individual Therapy				
6	Group Therapy				
6	Medication Support				
6	Crisis Intervention				
6	Employment Case Management				
6	Medical Case Management				
6	Social Case Management				
6	Rehabilitative Case Management				
6	Educational Case Management				
6	Community Client Services				
7	Case Management Support				
7	Housing Case Management				
7	Psychoeducation				
7	Family Education				
8	Instrumental Needs				
8	Cost of Health Care Treatment				
8	Respite Care				

HOUSING		YES/NO			
		CYF	TAY	AD	OA
9	Housing Supports				
9	Operating Support				
9	Housing Placement				

		YES/NO			
		CYF	TAY	AD	OA
10	Psychiatrist/NP staff				
10	Social Worker staff				
10	Team Approach				
11	Educational/Employment Supplies				
11	Recreational Activities				
11	Transportation				
12	Education/Employment Case Management				
12	Recreational Case Management				
12	Parenting Education				
12	Intimate Partner Violence Services				
13	Substance Abuse Treatment				
14	Wellness Recovery Action Plan				
14	Cognitive Behavioral Therapy				
14	Dialectical Behavior Therapy				
14	Social Skills Training				
14	Behavior Therapy				
14	Modeling				
14	Family Psychoeducation				
14	Partners in Care				
14	IMPACT (Improving Mood--Promoting Access to Collaborative Treatment)				
14	Multisystemic Therapy				
14	Therapeutic Foster Care				
14	Psychoeducational Multi-Family Groups				
14	Parent-Child Interaction Therapy				
14	Wraparound				
15	Alternative Treatment				
15	Culturally Specific				
16	Coordination w/Hospital				
16	Coordination w/Criminal Justice				
17	Discharge Planning / Criteria				

Average Daily Cost – Juvenile Halls & Camps

Average Daily Cost - Juvenile Halls and Camps				
County	**County Code**	**Juvenile Halls**	**Camps**	**Total**
Alameda	1	$374.61	$181.95	$278.28
Alpine	2	N/A		
Amador	3	NJHC		
Berkeley City	65	N/A		
Butte	4	$265.49	NC	$265.49
Calaveras	5	NJHC		$0.00
Colusa	6	NJH	DNR	$0.00
Contra Costa	7	$241.09	$241.09	$241.09
Del Norte	8	$226.39	$226.39	$226.39
El Dorado	9	$240.00	$240.00	$240.00
Fresno	10	$321.09	$321.09	$321.09
Glenn	11	$152.37	NC	$152.37
Humboldt	12	$163.54	NC	$163.54
Imperial	13	$222.11	NC	$222.11
Inyo	14	$282.00	NC	$282.00
Kern	15	$174.79	$197.08	$185.94
Kings	16		NC	$0.00
Lake	17	$281.69	NC	$281.69
Lassen	18	$478.43	NC	$478.43
Los Angeles	19	$384.00	$250.12	$317.06
Madera	20	$125.00	$125.00	$125.00
Marin	21	$383.64	NC	$383.64
Mariposa	22	NJHC		$0.00
Mendocino	23	$221.46		$221.46
Merced	24	$234.69	$234.69	$234.69
Modoc	25	NJHC		$0.00
Mono	26	NJHC		$0.00
Monterey	27	$208.00	$208.00	$208.00
Napa	28	$332.08	NC	$332.08
Nevada	29	$230.76	NC	$230.76
Orange	30	$317.47	$317.47	$317.47
Placer	31	$438.36	NC	$438.36
Plumas	32	NJHC		$0.00
Riverside	33	$220.76	$220.76	$220.76
Sacramento	34	$220.00	$247.00	$233.50
San Benito	35	$282.00	NC	$282.00
San Bernardino	36	$439.38	$439.38	$439.38
San Diego	37	$236.17	$172.02	$204.10
San Francisco	38	$315.00	$569.00	$442.00
San Joaquin	39	$225.09	$225.09	$225.09
San Luis Obispo	40	$336.21	NC	$336.21

Average Daily Cost - Juvenile Halls and Camps				
San Mateo	41	$429.00	$558.76	$493.88
Santa Barbara	42	$255.95	$220.04	$238.00
Santa Clara	43	$382.00	$382.00	$382.00
Santa Cruz	44	$441.78	NC	$441.78
Shasta	45	$285.67	$285.67	$285.67
Sierra	46	NJHC		$0.00
Siskiyou	47	DNR	NC	$0.00
Solano	48	$239.00	$154.00	$196.50
Sonoma	49	$492.00	$492.00	$492.00
Stanislaus	50	$188.75	NC	$188.75
Sutter-Yuba	58/63	$186.16	$196.16	$191.16
Tehama	52	$379.00	NC	$379.00
Tri-City	66	N/A		$0.00
Trinity	53	$182.00	$182.00	$182.00
Tulare	54	$231.16	$231.16	$231.16
Tuolumne	55	NJHC		$0.00
Ventura	56	$274.95	$274.95	$274.95

Source
California Department of Corrections and Rehabilitation - Corrections Standards Authority (CSA)
Average Cost per Day - Juvenile Halls and Camps
http://www.cdcr.ca.gov/csa/FSO/Average_Daily_Cost_Survey.html

DNR = Agency did not report costs
NJH = No Juvenile Hall
NC = No Camp
NJHC = No Juvenile Hall or Camp

Average Daily Cost – Type II and III Jails

Average Daily Cost - Type II & III Facilities		
County	**County Code**	**ADC**
Alameda	1	$103.06
Alpine	2	--
Amador	3	$151.67
Berkeley City	65	--
Butte	4	$93.89
Calaveras	5	$82.38
Colusa	6	--
Contra Costa	7	$148.31
Del Norte	8	$77.17
El Dorado	9	$172.98
Fresno	10	$58.44
Glenn	11	DNR
Humboldt	12	$103.37
Imperial	13	$77.17
Inyo	14	DNR
Kern	15	$99.13
Kings	16	$79.60
Lake	17	$77.17
Lassen	18	DNR
Los Angeles	19	$1,093.00
Madera	20	$82.00
Marin	21	$149.01
Mariposa	22	$105.00
Mendocino	23	$91.15
Merced	24	$157.86
Modoc	25	$138.71
Mono	26	DNR
Monterey	27	$94.56
Napa	28	$120.23
Nevada	29	$118.80
Orange	30	$131.00
Placer	31	$158.00
Plumas	32	$133.95
Riverside	33	$122.10
Sacramento	34	$92.87
San Benito	35	$116.75
San Bernardino	36	$76.91
San Diego	37	$147.90
San Francisco	38	$107.54
San Joaquin	39	$118.04
San Luis Obispo	40	$103.16

Average Daily Cost - Type II & III Facilities		
San Mateo	41	$139.44
Santa Barbara	42	$80.87
Santa Clara	43	$133.62
Santa Cruz	44	$77.17
Shasta	45	$102.87
Sierra	46	DNR
Siskiyou	47	$143.89
Solano	48	$12.00
Sonoma	49	$153.74
Stanislaus	50	$114.10
Sutter-Yuba	58/63	$73.81
Tehama	52	$58.24
Tri-City	66	--
Trinity	53	$101.02
Tulare	54	$64.50
Tuolumne	55	$119.60
Ventura	56	$126.55
Yolo	57	$122.46

Rates from Lake and Los Angeles were obtained directly from the counties themselves.

The rate inclusive of mental health services for Los Angeles County comes from Economic Roundtable (2009). *Where we sleep: Costs when homeless and housed in Los Angeles*. "Sheriff's Department costs for incarceration in medical or mental health jail facilities were…. $1,093 per day in fiscal years 2006-2007 and 2007-2008."

Source
California Department of Corrections and Rehabilitation - Corrections Standards Authority (CSA)
Average Cost per Day Type II and III Jails
http://www.cdcr.ca.gov/csa/FSO/Average_Daily_Cost_Survey.html

DNR = Did Not Report
-- = County was missing from source document

Appendix D
County Participants

County	Study Participants [260]			
	FSP Costs by Age Group	# of FSPs/Days of Service by Age Group	FSP Cost Offsets by Age Group	Notes
Alpine	✓			FY 08-09 excluded from analysis; Not in Statewide Data Collection System
Alameda	✓			Not in Statewide Data Collection System
Amador	✓	✓	✓	FY 08-09 excluded from analysis
Berkeley	✓			Not in Statewide Data Collection System
Butte	✓	✓	✓	
Calaveras	✓	✓	✓	FY 08-09 excluded from analysis;
Colusa	✓	✓	✓	FY 08-09 excluded from analysis;
Contra Costa	✓	✓	✓	
Del Norte	✓	✓	✓	FY 08-09 excluded from analysis;
El Dorado	✓	✓	✓	
Fresno	✓	✓	✓	
Glenn	✓	✓	✓	
Humboldt	✓	✓	✓	FY 08-09 excluded from analysis;
Imperial	✓	✓	✓	
Inyo	✓	✓	✓	FY 08-09 excluded from analysis;
Kern	✓	✓	✓	
Kings				
Lake	✓	✓	✓	
Lassen	✓	✓	✓	FY 08-09 excluded from analysis;
Los Angeles	✓	✓	✓	
Madera	✓	✓	✓	
Marin	✓			Not in Statewide Data Collection System
Mariposa				
Mendocino	✓			
Merced	✓	✓	✓	
Modoc				
Mono	✓	✓	✓	FY 08-09 excluded from analysis;
Monterey				Not in Statewide Data Collection System
Napa	✓	✓	✓	
Nevada				
Orange	✓	✓	✓	
Placer	✓	✓	✓	
Plumas				

[260] Tri City indicated that they were in start-up during the entire study period (FY 08-09 and FY 09-10). Start-up years are not included in the calculations.

County	Study Participants [260]			
	FSP Costs by Age Group	# of FSPs/Days of Service by Age Group	FSP Cost Offsets by Age Group	Notes
Riverside	✓	✓		Not in Statewide Data Collection System
Sacramento				
San Benito	✓	✓	✓	
San Bernardino	✓	✓	✓	
San Diego	✓	✓	✓	
San Francisco	✓	✓	✓	
San Joaquin	✓	✓	✓	
San Luis Obispo	✓	✓	✓	
San Mateo*	✓			
Santa Barbara	✓			Not in Statewide Data Collection System
Santa Clara	✓	✓	✓	
Santa Cruz	✓	✓	✓	
Shasta	✓	✓	✓	
Sierra	✓	✓	✓	
Siskiyou	✓	✓	✓	
Solano	✓	✓	✓	
Sonoma	✓	✓	✓	
Stanislaus	✓	✓	✓	
Sutter-Yuba				
Tehama	✓	✓	✓	FY 08-09 excluded from analysis
Trinity	✓	✓	✓	
Tulare	✓	✓	✓	
Tuolumne	✓	✓	✓	
Ventura	✓	✓	✓	
Yolo	✓	✓	✓	
TOTAL	**50**	**43**	**42**	

*San Mateo County made best efforts to participate in the study, but their data is not in the DCR, and we were unable to conform it to the DCR format in time for inclusion in this report.

Appendix E
Revenue & Expenditure Reports

Exhibit E.1
Full Service Partnership Program Worksheet: Revenue and Expenditure Report
(Fiscal Year 08-09)

http://www.dmh.ca.gov/DMHDocs/docs/notices09/09-22_Enclosure2.xls

Revenue and Expenditure Reports

Process of Transferring Individual County Excel Files from FY 09-10 into Master Cross-Site File

The MHSA (FY: 06/07, 07/08, 08/09) Database was created in the Spring of 2011 in order to conduct analyses for Phase II Deliverable 1. It is an aggregated database containing fiscal data from a total of 59 California counties/municipalities spanning three fiscal year periods, covering 25 program data sets, sourced from 589 distinct file locations, containing a total of 4,498 unique variables, encompassing a grand total of 287,265 distinct data points.

Fiscal Year 2006-2007 contained 1,325 distinct variables provided by 57 counties/municipalities across 6 programs located within 57 separate files containing a total of 72,525 distinct data points.

Fiscal Year 2007-2008 contained 1,265 distinct variables provided by 59 counties/municipalities across 7 programs located within 60 separate files containing a total of 75,900 distinct data points.

Fiscal Year 2008-2009 contained 2,264 distinct variables provided by 59 counties/municipalities across 11 programs located within 472 separate files containing a total of 135,840 distinct data points.

The MHSA Database was constructed through a process of template creation, formula crafting, running transfer protocols and performing validity checks.

Templates were formed via construction of a list of all variables across each program over all three fiscal years. Formula were generated to transfer the values of individual cells to the database template and were compiled to transfer all the relevant data points within a given workbook and, subsequently, entire source-file.

Formulas were crafted for each of the unique variables contained within each program or workbook. Master formulae were crafted for each workbook within a file or fiscal year. The master formulae performed the relocation of each relevant data point, across all programs, within a given file or fiscal year.

Transfer protocols were generated to perform manual and semi-automated opening and closing of files, updating formula and transferring the relevant data values of each fiscal year to the database. Validity checks were performed throughout each stage of the process with full checks on each new formula, random spot checks, specific value checks and redundant report checks.

Challenges/Limitations

Complications in the construction of the database template arose from the systemic variance within a specific program across multiple fiscal years. Each program contains differing sets of reported variables across each fiscal year. Such complexity required the database construction and formulae formats to account for the disparate data formats. This was accomplished through the merger of otherwise identical variables names that were renamed and through the adjustment of cell-specific spacing references in all formulae.

Further complicating the construction of the database was the systemic variance among the three fiscal years in file sets and data locations. While fiscal years 2006-2007 and 2007-2008 are rather similar the 2008-2009 fiscal year is provided in an entirely different file set format. Additionally, each fiscal year contains noteworthy variance in data locations from the other fiscal years. This complexity required the substantial retooling of the formula sets and numerous additional, unique formula sets to be constructed.

However, the most severe complications came as a result of modifications performed by reporting counties to the file names, workbook names and, most significantly, workbook formats. Variances which caused transfer protocols to report incorrect and invalid data points, if not miss the source-data entirely. These issues necessitated the manual reformatting of all files and workbooks locations found to be employing deviant standards and the subsequent manual operation of all associated transfer protocols.

EMT hired a contractor to complete the initial extraction and merge. The contractor's services have been retained to complete the extraction and merge for the FY 09-10 data.

However, in the interest of expediency, FSP totals were taken from RERs through transcription and input into county Costs and Cost Offsets worksheets (provided to counties for review). Totals were cross-checked for accuracy. This initial process was much less costly and time-consuming, and met the immediate deliverable deadline need.

Exhibit E.5
Counties/Municipalities that submitted Revenue and Expenditure Reports
(Fiscal Year 08-09 & Fiscal Year 09-10)

Counties	Revenue & Expenditure Report	
	FY 08/09	FY 09/10
Alameda	1	1
Alpine	1	1
Amador	1	1
Berkeley City	1	1
Butte	1	1
Calaveras	1	1
Colusa	1	1
Contra Costa	1	1
Del Norte	1	0
El Dorado	1	1
Fresno	1	1
Glenn	1	1
Humboldt	1	1
Imperial	1	1
Inyo	1	1
Kern	1	1
Kings	1	1
Lake	1	1
Lassen	1	1
Los Angeles	1	1
Madera	1	1
Marin	1	1
Mariposa	1	1
Mendocino	1	1
Merced	1	1
Modoc	1	1
Mono	1	1
Monterey	1	1
Napa	1	1
Nevada	1	1
Orange	1	1
Placer	1	1
Plumas	1	1
Riverside	1	1
Sacramento	1	1

Counties	Revenue & Expenditure Report	
	FY 08/09	FY 09/10
San Benito	1	1
San Bernardino	1	1
San Diego	1	1
San Francisco	1	1
San Joaquin	1	1
San Luis Obispo	1	1
San Mateo	1	1
Santa Barbara	1	1
Santa Clara	1	1
Santa Cruz	1	1
Shasta	1	1
Sierra	1	1
Siskiyou	1	0
Solano	1	1
Sonoma	1	0
Stanislaus	1	1
Sutter-Yuba	1	1
Tehama	1	1
Tri City	1	1
Trinity	1	1
Tulare	1	1
Tuolumne	1	1*
Ventura	1	1
Yolo	1	1
*New summary format		

Appendix F
Key Stakeholder Feedback

This appendix describes our process for receiving stakeholder input on this report draft, and the manner in which stakeholder feedback was handled.

a. Process for Stakeholder Input

Stakeholder input was sought for two key deliverables:

- The draft of this report
- County-specific tables depicting FSP costs and cost offsets [261]

1. Full Service Partnership Cost-Offset Report

The draft report [262] was released publicly at the Mental Health Services Oversight and Accountability Commission meeting on July 26, 2012. Stakeholders were asked to submit comments in writing via e-mail to:

eharris@emt.org

Feedback was required to be submitted no later than August 26, in order to allow EMT sufficient time for revision to the Final Report due September 30, 2012. Feedback received (in order of receipt) and disposition, is summarized in the following table.

Stakeholder		Feedback		
Constituent Organization	**Representative**	**Feedback**	**Implemented in Report**	**Notes**
MHSOAC	Eduardo Vega	Include amounts of offsets overall and by age group in pie charts	✓	Seven new pie charts have been added to both the Executive Summary and the full Report
MHSOAC	Eduardo Vega	Tie the relevant table data is being drawn from to the chart using narrative	✓	Narrative has been added to the Executive Summary and the full Report
MHSOAC, San Mateo County Behavioral Health Services	Richard Van Horn, Patrick Miles	Examine costs & cost offsets for those with longer periods of service – the current report annualizes in order to present results for 12 months of service. Mr. Van Horn is interested in a comparison of 12 and 24 months. Patrick Miles is interested in pre-post testing (regardless of length of service)		Receipt of new data from additional participating counties up until two weeks before submission of the draft report prevented any new analyses from being completed. However, we propose re-purposing one of the Phase II Deliverable 1.B briefs (due 11/30/12) in order to answer Richard Van Horn's question. Because a number of stakeholders requested additional analyses that could not be completed, and the upcoming Cost briefs due on 11/30/12 represent the logical vehicle in which to answer these questions, a summary of proposed re-purposing of the Phase II Deliverable 1.B Cost Briefs is included at the end of this appendix.

[261] The data contained in the county-specific tables form the basis for creation of the statewide data set, summarized and reported here.
[262] Phase III Deliverable 1.C Initial written report that specifies the financial impact of outcomes achieved in comparison with expenditures for FSP clients for each of the four age groups.

Stakeholder		Feedback		
Constituent Organization	**Representative**	**Feedback**	**Implemented in Report**	**Notes**
MHSOAC	Ralph Nelson	Examine costs & cost offsets for completers compared with non-completers – the current report makes no distinction between results for FSP graduates compared with FSP dropouts.		See above.
MHSOAC, Los Angeles County Department of Mental Health	Larry Poaster, Deborah Innes-Gomburg	CYF savings are not likely until longer-term; consequence data may not be the most appropriate for this age group	✓	Notation made to Chapter II as to why Education was not a suitable variable for analysis in a Cost Offset study
MHSOAC	Commissioner Brown	There are fixed costs associated with hospitalization & incarceration that do not change	✓	Footnote added under Methods, Chapter IV. However, FSPs are less likely to be occupying the beds, etc.
MHSOAC	Commissioner Brown	AB 109 (criminal justice realignment) will make it difficult to compare costs & cost offsets to later years		Noted in report that the change in FY 10-11 to a streamlined summary RER will make it very difficult to conduct this level of cost offset analysis without direct data collection from counties
San Joaquin County Family Member	Raul Sanchez	Include web survey in Appendix	✓	
" "	" "	The goal of any publicly funded program must be 100% participation by all the involved government agencies. Whether the goal is reached and the reasons why the goal is not reached are separate issues. The goal must be 100% participation.		The study period has concluded, but we agree with this feedback and will state as goal for future reports.
" "	" "	Pie charts should be self-explanatory – the combination pie chart because some area offsets were in arrears was confusing – suggest bar charts for each fiscal year instead.	✓	
San Joaquin County Family Member, American University Professor/Expert Consultant	Raul Sanchez, Brian Yates	Substance abuse in adults may be a factor to consider		We suggest an additional report in order to examine substance abuse costs and cost offsets among adult FSPs
CASRA	Joseph Robinson	Clearly explain whether psychiatric, non-psychiatric, or both types of emergency room visits were analyzed and reported.	✓	Only non-psychiatric ER visits were analyzed due to concerns about the psychiatric ER variable and potential overlap with inpatient psychiatric hospitalization in the DCR
CASRA	Joseph Robinson	Request that other physical outcome measures be analyzed, such as non-psychiatric hospitalizations, attendance at routine physical health appointments, filling non-psychiatric meds, etc.	✓	We were limited to variables in the DCR, and of the list requested, only non-psychiatric hospitalizations and skilled nursing stays for physical health reasons were available in the DCR.

Stakeholder		Feedback		
Constituent Organization	**Representative**	**Feedback**	**Implemented in Report**	**Notes**
CASRA	Joseph Robinson	In order to best prepare for increased attention on clinical outcomes, effectiveness, and cost of services, we respectfully request that two additional reports be completed comparing costs & cost offsets between the county and contracted providers		See Chapter II for the data limitations, our feasibility assessment, and the necessity of collecting billing data directly from counties in order to comply with this request. MHSOAC will need to issue a separate RFP, should this become a funding priority.
CASRA	Joseph Robinson	Recommend that the data collecting & reporting system that supported AB 2034 be revisited	✓	After reviewing the last report provided to the legislature, we agree. The recommendation is in the Executive Summary
CMHDA	Patricia Ryan	Recommend that CSI & DCR be reviewed jointly by CMHDA & DHCS	✓	The recommendation is in the Executive Summary, but limited to the DCR because that was the dataset we worked with for this report
Contra Costa County Health Services Department	Steve Hahn-Smith	In order to provide the most accurate count of clients, costs and cost offsets, EMT should analyze county billing data		See above. In addition, EMT is limited to use of the UCLA-agreed upon common data set (DCR), and does not have sufficient funding to process any data set outside of the DCR. The intricacies of accommodating differing data systems from different counties, and then attempting to reconcile the varying systems, are well outside the scope of EMT's subcontract.
UC San Diego	Todd Gilmer	See above		See above. In addition, Dr. Gilmer received federal monies from ACYF to conduct an ongoing study of costs and cost offsets in a sample of counties, with a focus on articulating a model of reducing homelessness. The multi-year award and amount of funding is sufficient to the task of accommodating Medi-Cal billing data, as well as site visits in order to collect the necessary fidelity data. CSI & DCR data are linked to OSHPD and Medi-Cal Short Doyle via Social Security number and date of birth (this only took place following thorough IRB review and approval of human subjects protection protocols). Our sub-task within a larger study was much more limited in scope *(in terms of both time and subcontracted amount)* – largely confined to existing data, with a narrow window for counties to provide additional fiscal information via web survey. These constraints influenced our recommendation (along with CASRA's strong call for a comparison study) that MHSOAC consider funding a study solely focused on the use of county billing data, in order that core questions be answered across all counties.

Stakeholder		Feedback		
Constituent Organization	**Representative**	**Feedback**	**Implemented in Report**	**Notes**
Contra Costa County Health Services Department , University of California at San Diego	Steve Hahn-Smith, Todd Gilmer	The key event approach to data collection produces an under-reporting of hospitalizations. after enrollment. If clinicians don't think to fill out a key event, it appears in the DCR as if the event never occurred. This suspicion was validated through a comparison of KET and claims data.		See above. Dr. Gilmer has reported, however, through analysis of data from participants in the ACYF study that the change in offsets is overstated when DCR data is the sole source of outcome analysis. However, cost offsets are still realized in the areas explored.
Napa County Health and Human Services	Felix Bedolla	The DMH system is flawed, in that CSI excludes some FSP clients from the DCR. Therefore, FSPs are accurately represented in the county MIS, but not in the statewide DCR.		See previous page.
Los Angeles County Department of Mental Health	Debbie Innes-Gomberg	Housing costs for all age groups are likely under-stated due to how they are reported and tracked by each county.		See previous page.
Lake County Mental Health	Sarah Deng	CSI data should be used (i.e., crisis /hospitalization services/dates) for purposes of maximizing the use of existing data and minimizing duplicate entry into the DCR, thereby reducing the potential for inconsistencies due to data entry errors/omissions		Due to the amount of data manipulation and cleaning necessary (CSI and DCR data provided by DMH were not analysis-ready), EMT was only able to access the DCR in time for report analysis.
Mental Health Association of Los Angeles	Dave Pilon	Recommend that the successful data collection systems established under AB 2034 be revisited	✓	After reviewing the AB 2034 evaluation reports sent, we agree that much can be learned from AB 2034.
Contra Costa County Health Services Department	Steve Hahn-Smith	Recommend that outcome data be collected on a required quarterly assessment schedule in order to address the under-reporting problem	✓	Recommendation is included in the executive summary.
San Benito County Behavioral Health	Lynda Yoshikawa	Actual housing and program services costs are more accurate and useful than the annualized cost per client (unfair bias toward small counties with small client N). It appears as if entire budget was spent on one person in an age group, which is not accurate.	✓	Small counties with N of 1 in an age group, and/or less than one year of service – a modified formula was applied involving fractional application of cost, in order to more accurately represent cost per person.
Community Behavioral Health Services, City & County of San Francisco	Maria Iyog-O'Malley	Procedure for calculating housing cost "assumes that all clients in housing have the same lengths of housing stays as their treatment services."		This is not true in our calculation of housing cost because we take the housing cost as an expenditure sum for the fiscal year. Just as for other FSP costs in our calculation, it is a fiscal year total expenditure. It is true that we factor it into an annual (or daily) cost per client based on the number of client years. Housing is part of that average cost regardless of the number of days it was actually used by different clients, but that is no different than any other client cost paid for out of FSP.

Stakeholder		Feedback		
Constituent Organization	**Representative**	**Feedback**	**Implemented in Report**	**Notes**
San Joaquin County Family Member	Raul Sanchez	**Executive Summary, Page vi** "This is the amount of public money in these areas that was saved because these clients had access to service." **Comment:** This raises the cause and effect issue.	✓	"because" replaced with "after" and a caveat footnote added to the Executive Summary
San Joaquin County Family Member	Raul Sanchez	**Full Report, Page 9, Footnote 45** "Previous research by an Evaluation Advisory Group member on a subset of counties (representing the majority of the state's population) using DCR data revealed that there is little change in employment and education outcomes"… Mr. Sanchez concluded that a program does not produce significant outcomes on the Education indicator, and that this finding should be verified and, if appropriate, resources reallocated to programs that work.		However, we believe the fault lies with the DCR itself, primarily in the way in which the Education questions are structured (inconsistencies between intake and follow-up), as well as issues with KET data collection discussed earlier. Fundamental reform must occur at the measurement level in order to ensure that the data collection and reporting system is measuring what it is supposed to measure with respect to educational outcomes.
San Joaquin County Family Member	Raul Sanchez	• Add costs to the flow chart • Consider direct costs and benefits and indirect costs and benefits • The cost offset of "Greater Independence" leads me to think of emotional well being and the various techniques developed to measure this (Global Assessment of Functioning, the Kennedy Scale, research results by Rand Corp. for the evaluation of Prevention and Early Intervention Programs under the Mental Health Services Act) • Peer support (and family support) could result in cost offsets for psychiatric health care, physical health care, and incarceration • Reduced reliance on staff and reduced program costs is a result of greater independence and improved emotional well-being. As a family member, I keep questioning the conventional objectives of greater penetration rates and retention rates. • Improved medication compliance could be a result of positive modeling by peers • "Parent partners" are included – perform a literature search on family member supports and their outcomes.	✓	We support the call for full funding of a participatory evaluation to investigate costs and cost offsets of this important aspect of the MHSA.

This page left intentionally blank