Young Adult Outcomes Of Youth Exiting Dependent Or Delinquent Care In Los Angeles County

Supported by the Conrad N. Hilton Foundation

Dennis P. Culhane, PhD, Professor
Thomas Byrne, Research Assistant
School of Social Policy & Practice
University of Pennsylvania
Philadelphia, PA

Stephen Metraux, PhD
Associate Professor
Department of Health Policy & Public Health
University of the Sciences in Philadelphia
Philadelphia, PA

Manuel Moreno, PhD
Halil Toros, PhD
Max Stevens, PhD
Research & Evaluation Services
Chief Executive Office
Los Angeles County

November 2011

Table of Contents

EXECUTIVE SUMMARY ..... **i**
Introduction ..... **i**
Description of Study Groups ii
Section 1: Young Adult Outcomes By Domain ..... **iv**
1.1 Public Welfare iv
1.2 Criminal Justice iv
1.3 Health, Mental Health, and Substance Abuse Treatment v
1.4. Vocational Training, Employment and Earnings vii
1.5 Educational Attainment viii
Section 2: Young Adult Outcomes Across Multiple Domains ..... **xi**
2.1 Outcomes Across Multiple Domains xi
2.2 Costs of Service Use Across Multiple Domains xii
Section 3: Relationship Between Selective Factors and Young Adult Outcomes ..... **xvi**
Section 4: Implications for Policy and Research ..... **xix**

FULL REPORT **1**
Introduction **1**
Description of Data Sources 4
Youth Data 4
Adult Outcome Data 6
Sample Selection 6
Sample Description 8
Summary 9
Section 1: Young Adult Outcomes By Domain **14**
Introduction 14
1.1 Public Welfare 14
1.2 Criminal Justice 17
1.3 Health, Mental Health, and Substance Abuse Treatment 18
1.4. Employment and Earnings 24
1.5 Educational Attainment 26
1.6 Summary 31
SECTION 1 TABLES AND FIGURES 34
Section 2 : Young Adult Outcomes Across Multiple Domains **57**
2.1 Outcomes Across Multiple Domains 57
2.2 Cost of Service Use Across Multiple Domains 61
2.3 Summary 63
SECTION 2 FIGURES 64
Section 3: Relationship Between Select Factors and Young Adult Outcomes **73**
3.1 Descriptive Measures and Descriptions of Outcomes 75
3.2 Descriptive Measures and Descriptions of Select Factors/Covariates 76
3.3 Results of Models 80
SECTION 3 TABLES 90
Section 4: Implications For Policy and Research **95**

EXECUTIVE SUMMARY

Introduction

Increasing attention is being given to how youth who "age-out" of the child welfare system fare in their early adult years. These youth, who upon reaching a given age must statutorily leave the child welfare system from out-of-home placements either in foster care or congregate residential facilities, face a particularly challenging transition to adulthood. The difficulties associated with aging-out of the child welfare system manifest themselves for some in undesired adult outcomes, which prior studies have shown to include increased risks for criminal justice involvement, unemployment, teen pregnancy, behavioral health disorders, homelessness and lower educational attainment.

This report investigates the young adult outcomes of youth who age-out of or otherwise exit Los Angeles County's child welfare supervised foster care system and/or juvenile probation system. Two cohorts of young adults from both systems were selected for analysis. Within the two cohorts, this study focuses on three groups of youth exiters: (i) *The child welfare (CW) group* is comprised of youth who exited from a child welfare out-of-home placement between the ages of 16 and 21; (ii) *the juvenile probation (JP) group* is made up of youth who exited from any type of juvenile probation supervision between the ages of 16 and 21; and (iii) *the crossover group* is comprised of all youth who exited an out-of-home child welfare placement between the ages of 16 and 21 and who also had a record of involvement with the juvenile probation system.[1] The adult outcomes of youth in each of these three groups are analyzed by linking their administrative records from Los Angeles County's Department of Children and Family Services (DCFS) and/or Probation Department with administrative databases from seven County departments providing an array of public services to residents of Los Angeles County, as well as from two California statewide agencies.

In performing this investigation, this study features several novel approaches toward examining the adult outcomes of youth aging-out of the child welfare system. While several studies have examined the adult outcomes of this population, there has been no such study looking specifically at adult outcomes among the sub-group of "crossover" youth who are involved in both child welfare and juvenile justice systems, and who may be at a particularly high risk for poor outcomes in adulthood. Despite the concern that has been raised about adult outcomes in this population, no prior studies have looked at adult outcomes of crossover youth, nor among the more general group of children who

[1] Only youth who entered or who had active cases in both the child welfare and juvenile probation systems at or after age 16 were designated crossover youth for this study. This misses persons whose involvement in either system concluded before age 16. As such, the number of youth identified as crossover youth in this study is a lower-bound estimate of the true prevalence of crossover youth. Crossover youth were 10% of all child welfare exiters (including crossover youth) in the 2002 chort and 12.5% of all child welfare exiters in the 2004 cohort (including crossover youth). While these estimates are conservative, they align with existing literature on youth exiters, which, as reported by Herz, Ryan and Bilchik (2010), suggests that between 9% and 29% of child welfare involved youth engage in delinquency.

exit the juvenile justice system as adults. Along with providing findings on the adult outcomes of these latter two groups, this study also provides a basis for outcome comparisons across the three groups among these outcomes. Here, we can assess the assertion that crossover youth represent a group that stands out among their peers who are only involved with either the child welfare or juvenile justice systems, as a particularly at-risk population for undesirable outcomes in adulthood. Additionally, this study looks at outcomes across a variety of public programs and thus offers an opportunity to better understand the relationship and dynamics between a number of adult domains including the educational, occupational, health, mental health, criminal justice and public welfare systems.

This Executive Summary summarizes a more extensive and detailed full report produced on the young adult outcomes of youth exiting the child welfare and/or juvenile probation system in Los Angeles County. More information on the results reported here, as well as other results not included in this Executive Summary, may be viewed in the full report.

Description of Study Groups

This study focuses on two cohorts of youth who exited from an out-of-home child welfare placement and/or juvenile probation supervision: those who exited at any point during 2002 (JP group n=8,368; CW group n=2,388 crossover group n=268) and those who exited at any point during 2004 (JP group n=8,855; CW group n=2,300; crossover group n=330). Each cohort is divided into the three study groups identified above.[2] Looking at the demographic characteristics of the three study groups, important findings include the following:

- Roughly 80% of JP exiters and two thirds of crossover youth were male, while the majority of CW exiters (about 60%) were female.

- JP exiters were predominantly Latino (57%), while just under one-quarter of these exiters were African-American. On the other hand, the majority of youth (56%) in the crossover group were African-American, and the crossover group had a lower proportion of Latino youth (30%) than either the JP or CW group. The racial/ethnic distribution was more balanced among CW exiters, where about 40% of youth were African-American, slightly more than one-third were Latino, and about 15% were white.

[2] It was not possible to determine from the available data whether the youth in the crossover group did or did not have a 241.1 hearing to determine which agency would maintain jurisdiction over the case. As such, those included in the crossover group likely include a broader range of youth than those who had a 241.1 hearing. However, all crossover youth were under the supervision of both DCFS and the Probation Department, although at different times.

- All three groups averaged about 18 years of age when they exited their respective system of care, although the crossover youth, whose age at exit from the child welfare system was used, were marginally younger.

- JP youth were, on average, 16 years old at the time of their first arrest. CW exiters and crossover youth, on the other hand, were about 12 years old at the time when their last out-of-home placement began.[3]

- In comparing the child welfare system experiences of those in the CW and crossover groups, a few key differences merit attention. First, crossover youth had more DCFS out-of-home placements (i.e. distinct instances of out-of-home placement during which an individual might experience one or more placement changes) and more placement locations (i.e. changed placements more frequently) during their last out of home placement than CW exiters. Second, the majority of CW exiters aged-out from the child welfare system, while only about one-third of crossover youth aged- out, and a far greater share of crossover youth exited the child welfare system due to incarceration in either the juvenile or adult correctional system. Third, more CW exiters than crossover youth were residing in a foster home placement or in a relative's home at the time of their exit from DCFS care, while more crossover youth were residing in group homes at their time of exit from DCFS care.[4]

This study takes the approach of comparing the outcomes of the three study groups comprised of JP, CW and crossover youth. Given that much of the outcome data were only available for the period stretching from 2005-2009, and because members of the study groups exited in either 2002 or 2004, Sections 1 and 2 of this report largely take the approach of assessing young adult outcomes in two distinct time periods relative to a youth's exit from care. These two periods, respectively, encompass the initial four years following a youth's exit from the child welfare and/or juvenile probation system (for the 2004 exit cohort) and years five through eight following exit from care (for the 2002 exit cohort). For the 2004 exit cohort, this means that adult outcomes were, with few exceptions and where data was available, assessed using data from the four-year period stretching from 2005 to 2008 (i.e. the initial four-years following their exit from care). For the 2002 exit cohort, adult outcomes were assessed using data from the period stretching from 2006 to 2009 (i.e. the fifth through the eighth years following their exit from care).

---

[3] Please note that only the last start date for an out-of-home placement was available for each youth observed in this study. For example, if a child had initial contact with the DCFS system at age 5, an out-of-home placement that lasted from ages 7 to 10, and then a second out-of-home placement that lasted from ages 12 to 16, the only start date available for analysis would be the one that started at age 12.

[4] For the sake of consistency for all youth in the crossover category, this study counts their exit from the child welfare system as their exit date, regardless of whether the exit came prior to or subsequent to their exit from the juvenile probation system. It should be noted that 66% of the crossover youth in the 2002 cohort had a date of exit from the probation system that came after their date of exit from the child welfare system. However, only slightly more than half (53%) of crossover youth in the 2004 cohort had a date of exit from the probation system that came after their date of exit from the child welfare system.

Section 1: Young Adult Outcomes By Domain

The primary objectives of this section are threefold:

- To assess the extent to which youth in each of the three study groups used adult services administered by Los Angeles County in the domains of public welfare, criminal justice, health, mental health and substance abuse treatment, and how they fared in the areas of employment and education.

- To estimate the costs associated with the use of adult services provided by County agencies in each of the five above described domains for all three study groups.

- To assess the level of secondary and post-secondary educational attainment, as well as the employment and earnings trajectories of youth in the study groups.

Figures ES-1 and ES-2 illustrate the proportions of youth in each of the three study groups who received services in each of the domains described above in years 1-4 and 5-8 following exit from care. The remainder of this section details provides additional details about service use within each of these domains.

1.1 Public Welfare

Public welfare outcomes of youth in each of the three study groups come from data provided by the Los Angeles County Department of Public Social Services (DPSS). DPSS is responsible for administering benefits and services to low-income residents of Los Angeles County. In addition, DPSS data provide information on eligibility for Medi-Cal.

Noteworthy findings from the analysis of the DPSS data and public welfare outcomes of youth exiters from the child welfare and or/juvenile probation systems include the following:

- In the initial four years following exit from care, more than 1 in 10 youth in the CW group cash assistance through the County's General Relief (GR) program; 1 in 5 received cash assistance through the California Work Opportunities and Responsibilities to Kids (CalWORKs) program; roughly 1 in 3 received food stamps through the CalFresh program; and more than half were covered by Medi-Cal at some point.

- Roughly one-quarter of the JP group, one-third of the CW group, and one-half of crossover youth experienced a period of extreme poverty during their young adult years, as measured by receipt of the two forms of cash assistance, CalWORKs and GR, that were tracked in this study during this period.

1.2 Criminal Justice

Data on criminal justice system involvement include records both of jail stays in the Los Angeles County Sheriff Department jails and adult probation supervision from the Probation Department.

The criminal justice data indicated that:

- Incarceration was particularly prevalent among crossover youth, with almost two-thirds having a jail stay. This was notably higher than the roughly one-half of JP youth who had a jail stay and more than double the one-quarter of the CW youth who experienced a Sheriff Department jail stay.

- Having an episode of adult probation was a less common experience for members of all three groups. Around 7% of the CW group had a probation episode, while roughly 18% of both the JP and crossover group were under adult probation supervision at some point in years 1 to 4 following exit from care.

- Cost estimates indicate that substantial County resources were expended on jail stays for members of all three groups in years 1 to 4 following exit from care. The average per person cost over this entire initial four year period among those who experienced at least one jail stay, was estimated at $18,430 for the CW group, $25,486 for the JP group and $33,946 for the crossover group. The costs associated with probation supervision were minimal.

1.3 Health, Mental Health, and Substance Abuse Treatment

Information on health, mental health and substance abuse treatment come from records maintained by the Department of Health Services (DHS), the Department of Mental Health (DMH), and the Department of Public Health, Substance Abuse Prevention and Control division (SAPC) who, respectively, provide health, mental health and substance abuse treatment services to eligible individuals.

Health Services Utilization

DHS data provide information about the extent and cost of inpatient, outpatient and emergency room utilization by persons in each of the three study groups. The following findings from analysis of the DHS health services data merit special attention:

- There were relatively low rates of inpatient stays among all three groups in the initial four years following exit from care. At 9%, crossover youth had the highest rate of experiencing an inpatient stay, which was about triple the rate of the JP and CW groups.

- The average total cost per user of inpatient services in years 1 to 4 following exit from the child welfare and/or criminal justice systems was slightly higher for the CW group ($49,761) than for the crossover group ($47,677), and users of inpatient

services in the JP group had markedly lower average costs ($34,690). Despite lower rates of inpatient service use, the CW group had higher average costs because the majority of inpatient stays among members of this group occurred in the latter part of this initial four year period, when inpatient services were slightly more costly.

- Crossover youth had the highest rates of inpatient and outpatient service use (9% and 26% respectively), and their rate of emergency department utilization (27%) was about double the rate of emergency department use of the JP group and CW group.

- The general patterns of DHS health services use and associated costs were largely the same in years 5 to 8 as in years 1 to 4, albeit with lower rates of receipt of all treatment modalities for all exiter groups. Specifically, rates of inpatient service utilization declined to 4% for the crossover group, which was still higher than either the CW or JP group. Likewise, rates of outpatient and emergency department use dropped to 18% and 20%, respectively, for the crossover group, although the rate of emergency department use for the crossover group was still twice as high as either the JP or CW group. Average inpatient costs were lower for all three groups. While CW youth continued to have the highest average costs ($37,813), youth in the JP group had higher inpatient costs ($32,629) in years 5 to 8 than did youth in the crossover group ($26,743).

Mental Health Services Utilization

DMH records offer information about the extent and associated cost of inpatient, outpatient and day mental health treatment modalities.[5] A number of results from the DMH data are worth highlighting:

- Receipt of outpatient treatment was by far the most commonly accessed form of DMH treatment. Receipt of inpatient and day mental health treatment was fairly uncommon among members of all three study groups.

---

[5] Inpatient treatments are those in which the patient spends at least one night in a clinic or hospital. Outpatient treatments are those in which the patient leaves the hospital or clinic on the same day that the treatment is provided. Day treatment refers to ongoing daily treatment. It should also be noted that a portion of DHS data may be mental health related since DHS operates several psychiatric emergency rooms in Los Angeles County. These facilities also operate inpatient psychiatric beds and some provide outpatient psychiatric visits. Since these services are included in the DHS data, there is the potential for mental health utilization to be understated if only services provided by DMH are counted. Moreover, some DHS-provided mental health services are entered into the DMH information system, so it's possible that services can be double counted. To address these issues in part, inpatient stays in the DHS data that had an accompanying diagnosis code for a serious mental illness were isolated for closer analysis, although the number of these stays was not significant. Additionally, to assess how many youth had received treatment for a serious mental illness in DHS or DMH, the percentage of youth that had an episode of service receipt in either system with an accompanying diagnosis for serious mental illness was analyzed. While this does not account fully for all the contingencies presented by potentially overlapping types of service provision and data sets, the latter analysis at a minimum likely provides a reliable estimate of the proportion of youth who received treatment for a serious illness in either DHS or DMH.

- In years 1 to 4 following exit from care, the crossover group had the highest rate of receipt of outpatient mental health treatment, with more than 45% of its members accessing outpatient DMH mental health services. This was more than four times higher than the 10% of the JP group who received outpatient mental health treatment and more than two and a half times the 17% of CW youth who received outpatient treatment.

- The proportion of persons in all three groups who received outpatient mental health treatment dropped dramatically in years 5 to 8. The share of persons in the JP and CW groups who accessed outpatient services in years 5 to 8 was about half as high as in years 1 to 4. The rate of outpatient mental health treatment receipt in the crossover group was only one third as high in years 5 to 8 as in years 1 to 4.

Drug and Alcohol Treatment

The analysis of SAPC data focuses on detox treatment, outpatient counseling and residential treatment services, which represented the three most commonly accessed forms of SAPC services. Based on the number of persons who received substance abuse treatment from either DHS, DMH or SAPC (detailed below in Section 2.1), there are indications that substance abuse is a more common problem than would be indicated by analysis of the SAPC data alone. Indeed, fairly small proportions (roughly 5% of the CW and JP groups in years 1 to 4, as well as years 5 to 8, and 10% of the crossover youth in both periods) had records of treatment through SAPC. These findings are described in detail in the final report.

Summary of Health, Mental Health and Substance Abuse Treatment

Outpatient treatment for health, mental health and drug/alcohol issues were among the most common types of treatment accessed by all three study groups. Rates of DHS emergency department utilization were comparable to DHS outpatient service use rates. By comparison, the use of inpatient/residential forms of health, mental health and substance abuse treatment by youth exiting the child welfare and/or probation systems was fairly uncommon during their young adult years. On the one hand, the low rates of inpatient service use relative to outpatient treatment suggests that some youth exiters are able to access preventative and ongoing forms of care that may be better suited to meet their needs and may help many to avoid making use of inpatient or residential care. On the other hand, the fact that rates of DHS emergency department utilization were comparable to rates of DHS outpatient health services indicates that many others may face barriers in obtaining non-acute health care, and certainly merits closer attention.

1.4. Vocational Training, Employment and Earnings

Data on the vocational training, employment, and earnings of youth come from two sources. Data from the California Employment Development Department (EDD)

reported quarterly earnings of youth in the CW and crossover groups. This information was not available for youth in the JP group. Data from the Department of Community and Senior Services (CSS) showed that very low proportions of the study groups (less than 2% of all three groups in both years 1 to 4 and years 5 to 8) participated in their employment and career services programs, and these results may be accessed in the full report.

Employment and Earnings

- Slightly less than one half of the members of the CW and crossover groups had earnings of any amount in years 1 to 4 following their exit from care. These proportions remained largely unchanged in years 5 to 8.

- The average cumulative earnings in years 1 to 4 following exit from care among members in the CW exiter group were more than $15,000 higher than those of the crossover youth ($29,350 vs. $13,443). Average cumulative earnings were higher in years 5 to 8, by about $10,000 for the CW group and about $5,000 for the crossover group.

- About one quarter of CW exiters were considered to be consistently employed in years 1 to 4, which was more than double the 10% of crossover youth who were consistently employed. Fewer members of both the CW and crossover groups were consistently employed in years 5 to 8, although the proportion of CW exiters that were consistently employed (10%) was about double the proportion of the crossover group that was consistently employed (5%).

- Average cumulative earnings for both groups and, in particular, for those who were consistently employed, increased noticeably from the initial four-year period following exit from care to the four-year period encompassing the fifth through eighth years following exit from care. In the initial four-year period average cumulative earnings for those who were cumulatively employed were $52,179 for the CW group and $36,367 for those in the crossover group. In years 5 to 8 the average cumulative earnings for persons who were consistently employed increased for both groups, to $78,462 for the CW group and $72,282 for the crossover group.

1.5 Educational Attainment

This section uses data provided by the California Partnership for Achieving Student Success (Cal-PASS) to examine the secondary and post-secondary educational attainment of youth in the three study groups. Cal-PASS records on high school, community college and four-year university attainment were all provided separately. Robust high school data covered the time period from 2003-2004 academic year until the 2009-2010 academic year, although the high school experiences of most youth in the 2002 and 2004 exit cohorts likely preceded this timeframe. Due to this data

coverage problem, findings on high school achievement were largely inconclusive, but findings for post-secondary levels of educational attainment are summarized here.

Higher Education Outcomes

The available community college data allow for the identification of all youth who enrolled in a community college, a four-year university in the University of California (UC) or California State University (CSU) systems, or a select group of private four-year universities at any point between 2000 and 2010. Community college and four-year university data were only available for institutions located in Los Angeles County. Given this data limitation, it was not possible to identify any youth who obtained higher education outside of Los Angeles County. As such, the rates of attainment of higher education presented here represent lower-bound estimates. Important findings from analysis of the Cal-PASS higher education data include the following:

- Slightly less than half (46%) of the CW group enrolled in community college. Comparatively, approximately 40% of crossover youth and roughly 32% of JP youth enrolled in community college.

- A very small minority of the youth observed for this report, approximately two percent of both the JP and CW exiter groups, received Associate's degrees.

- Three percent of the JP group and two percent of the CW group met the credit requirements to transfer from community college to a four-year university in the University of California (UC) or California State University (CSU) systems.

- Among those who earned enough credits to transfer to a four-year university, about 28% of the JP group and 39% of the CW group matriculated at a four-year university.

- Slightly less than 1% of the youth in the JP group enrolled in a four-year university in Los Angeles County, compared to the two percent of CW exiters who did so.

- Among youth who matriculated at a four-year university, 83% of the CW group and 88% of the JP group did so after taking classes at a community college.

- Looking specifically at youth who attended a four-year university, about 13% of the JP group and 14% of the CW group received Bachelor's degrees. An additional 6% of youth in both groups received a graduate or professional degree. From a different perspective, approximately 0.2% of the JP group and 0.4% of the CW group received a Bachelor's degree or higher from a four-year university located in Los Angeles County.

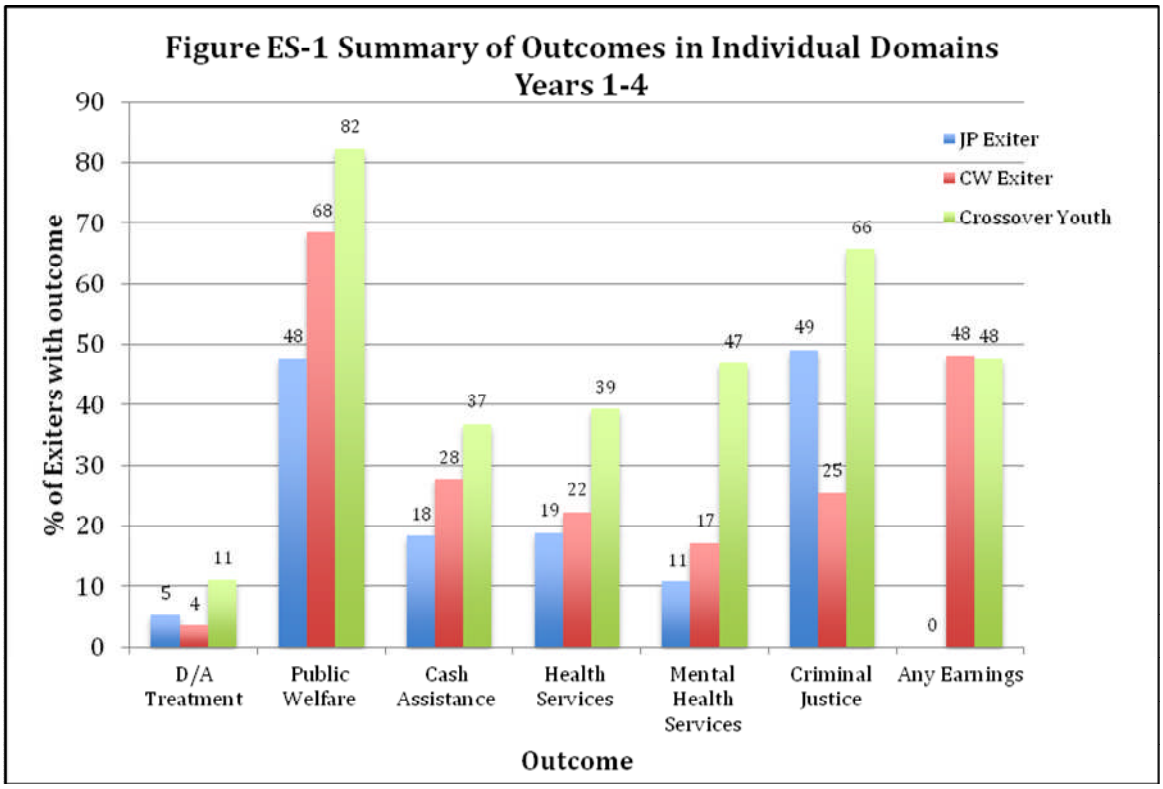


Figure ES-1 Summary of Outcomes in Individual Domains
Years 1-4
% of Exiters with outcome
90
80
70
60
50
40
30
20
10
0
JP Exiter
CW Exiter
Crossover Youth
5
4
11
48
68
82
18
28
37
19
22
39
11
17
47
49
25
66
0
48
48
D/A Treatment
Public Welfare
Cash Assistance
Health Services
Mental Health Services
Criminal Justice
Any Earnings
Outcome

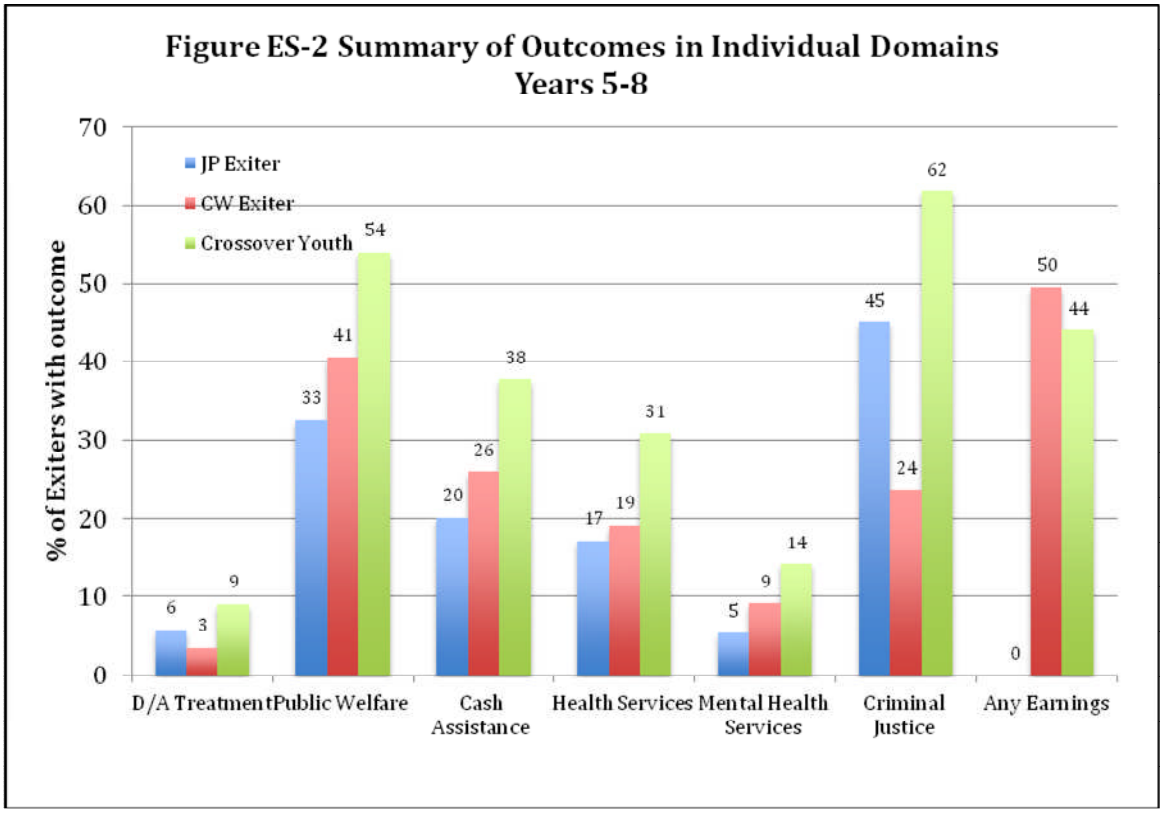


Figure ES-2 Summary of Outcomes in Individual Domains
Years 5-8
% of Exiters with outcome
70
60
50
40
30
20
10
0
JP Exiter
CW Exiter
Crossover Youth
6
3
9
33
41
54
20
26
38
17
19
31
5
9
14
45
24
62
0
50
44
D/A Treatment
Public Welfare
Cash Assistance
Health Services
Mental Health Services
Criminal Justice
Any Earnings

Section 2: Young Adult Outcomes Across Multiple Domains

This section is focused on addressing the following questions:

- What are the patterns of multi-system use by youth in the CW, JP and crossover groups during their young adult years?

- Among youth who make use of publicly funded services, what is the net impact of such service use and what are the most common patterns of service utilization?

2.1 Outcomes Across Multiple Domains

This section provides an overview of service use by youth in all three study groups across the following domains: 1) public welfare (i.e. any receipt of GR, CalWORKs, Medi-Cal or CalFresh); 2) criminal justice (i.e. any probation episode or any Sheriff Department jail stay), 3) health services (i.e. any utilization of DHS services), 4) mental health services (i.e. any utilization of DMH services), 5) drug/alcohol treatment (i.e. any SAPC treatment).

Figures ES-3 and ES-4 show the extent to which members of each of the three study groups accessed services in one or more of the five domains mentioned above, in years 1 to 4 and in years 5 to 8 following exit from the child welfare and/or juvenile probation systems. Findings worth highlighting from these figures include:

- In years 1 through 4, a majority of members of all three groups made use of a public service in at least one of the five domains. Nearly 90% of the crossover youth received at least one type of public service, which was higher than the roughly 80% of the CW group and the roughly 75% of the JP group who did so.

- In years 1 to 4, as the number of domains increased, the utilization rates declined for all exiter groups. However, the proportions of each group that used services in at least three domains were still substantial (22% of the JP group, 17% of the CW group and 49% of crossover group). Crossover youth consistently had higher rates of service receipt across multiple domains.

- Although the rates of multiple domain service utilization were lower for all three groups in years 5 to 8, the trends that were observed in years 1 to 4 continued in years 5 to 8. A majority of all three groups (80% of the crossover group, and 60% of both the CW and JP groups) received a public service provided in at least one of the five domains, yet there was a consistently higher rate of service utilization in these multiple domains among members of the crossover group.

In looking more closely at the extent of service use across multiple domains, a number of additional findings merit attention:

- Varying combinations of jail stays, health services utilization, and cash assistance receipt represented the most frequently occurring combinations of dual domain service use in both years 1 to 4 and 5 through 8 for members of all three study groups.

- About one quarter of youth in the crossover group experienced a jail stay and received cash assistance (either GR or CalWORKs) in years 1 to 4. This was more than double the proportion of youth in both the JP and CW groups (11% and 10% respectively) who had a jail stay and received cash assistance. These proportions were largely unchanged in years 5 to 8 following exit from the child welfare or juvenile justice systems.

- In years 1 to 4, inpatient service utilization in any system (i.e. a DHS or DMH inpatient hospitalization, or an SAPC detox or residential treatment episode) was limited to a small fraction of members of all three exiter groups. Roughly 13% of crossover youth had some type of inpatient stay, a proportion that was more than double the 5% of the CW and JP groups who experienced an inpatient stay. In years 5 to 8, about 9% of crossover youth had an inpatient stay compared to 5% of JP exiters and 4% of CW exiters.

- Nearly one-quarter of crossover youth received DHS or DMH treatment that was associated with a serious mental illness in years 1 to 4. The comparable figures for the CW and JP groups were 11% and 5% respectively. In years 5 to 8, only 11% of crossover youth received treatment for a serious mental illness, compared to 8% of CW exiters and 4% of the JP group.

- In years 1 to 4 following exit from their respective systems of care, 17% of persons in the crossover group received treatment associated with a drug/alcohol disorder, which was more than double the rate of treatment observed in both the CW group (6%) and the JP group (8%). These figures were largely unchanged in years 5 to 8 following exit.

- Few members of all three study groups received treatment for both a serious mental illness and a substance abuse disorder. However, at 8%, the proportion of crossover youth who received both types of treatment in years 1 to 4 was four times greater than the 2% of both CW and JP youth who did so. In years 5 to 8, only 4% of crossover youth were treated for a serious mental illness and a substance abuse disorder, but this was still more than double the share of the CW (2%) and JP (1%) groups who received both types of treatment.

2.2 Costs of Service Use Across Multiple Domains

Analyzing the cost of service utilization across domains allows for a more comprehensive portrait of the overall impact of youth exiters on public services across multiple systems of care. Tables ES-5 and ES-6 present the average cumulative costs

of service utilization per user across the health, behavioral health, public welfare and criminal justice systems in years 1 to 4 and 5 to 8 subsequent to exit from the child welfare and/or juvenile probation systems. The following information provided by the figures is particularly worth highlighting:

- In the initial four years following exit from their respective County systems, the average per-person public service utilization costs across all domains for the crossover group ($35,171) was more than double that of youth in the JP ($15,985) and CW ($12,532) groups.

- In years 1 to 4, costs associated with involvement in the criminal justice system accounted for the largest single share of the average cumulative cost for all three groups. For the crossover and JP groups, criminal justice costs accounted for, respectively, 55% and 68% of total costs on average, but only 33% for the CW group.

- For the JP and CW groups, public welfare costs (i.e. GR, CalWORKs and CalFresh costs) accounted for the second largest share of overall public service utilization costs. Mental health services costs represented the second largest share for the crossover group.

- In years 5 to 8, average per person public service utilization costs were lower for all three groups, but the average cost among youth in the crossover group ($27,272) was still more than double that of the CW group ($10,895) and almost double that of the JP group ($14,324).

- Criminal justice system costs accounted for an even larger share of the average per person costs in years 5 to 8. Among those in the JP group, criminal justice involvement accounted for about 70% of public service costs on average, compared to about 40% for persons in the CW group and 60% for the crossover group. In all three groups, public welfare costs accounted for the next highest share of the average cost per person.

This section also examined the distribution of public service costs and found that relatively small groups of youth in all three study groups made highly disproportionate use of public services. To be more specific, in each study group, the 25% of those who made the most extensive and expensive use of public services accounted for roughly 75% of the overall cost of services used in all three groups. On the other end of the spectrum, the 25% of youth who made the least extensive and least costly use of public services accounted for only about 1% of the overall cost of public services used by members of each of the three study groups. These findings were effectively identical both in years 1 to 4 and in years 5 through 8 following exit from the child welfare and/or juvenile probation systems. Collectively, these findings are important, as they suggest that “heavy” (i.e. extensive and highly costly) service utilization in multiple public systems was limited to a fairly small number of youth exiting the child welfare and/or juvenile probation systems.

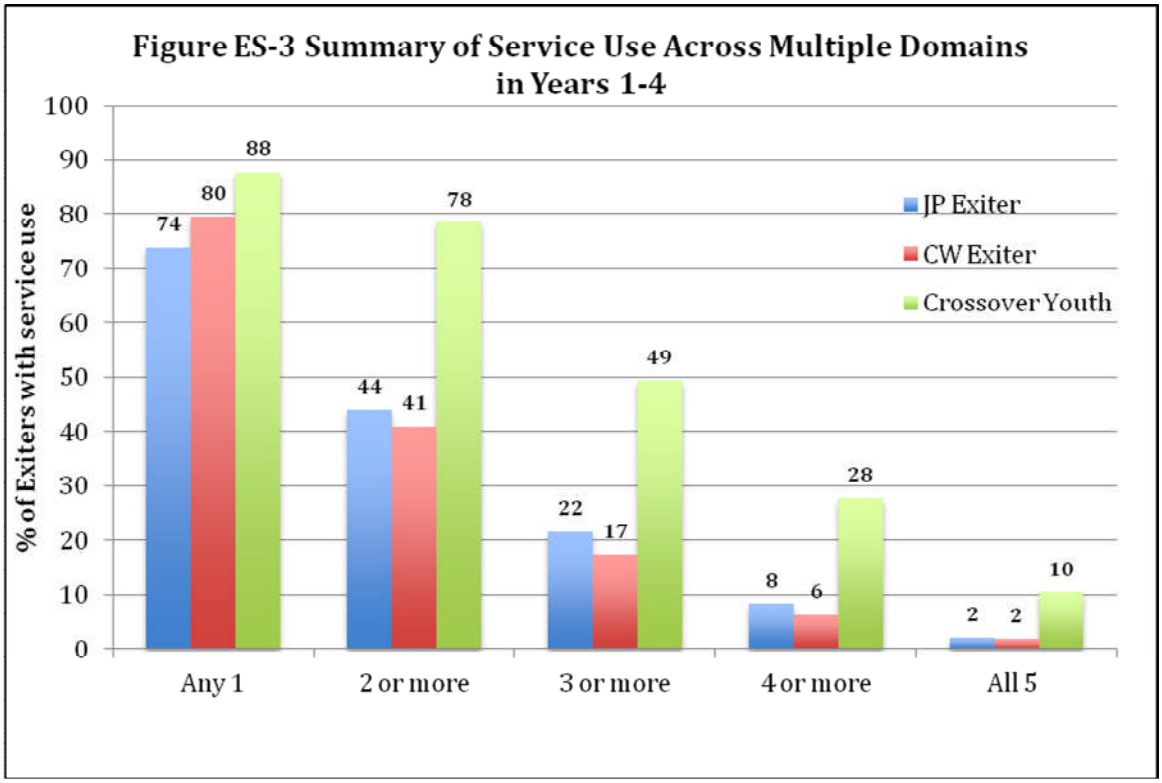


Figure ES-3 Summary of Service Use Across Multiple Domains in Years 1-4
% of Exiters with service use
100
90
80
70
60
50
40
30
20
10
0
74
80
88
44
41
78
22
17
49
8
6
28
2
2
10
Any 1
2 or more
3 or more
4 or more
All 5
JP Exiter
CW Exiter
Crossover Youth

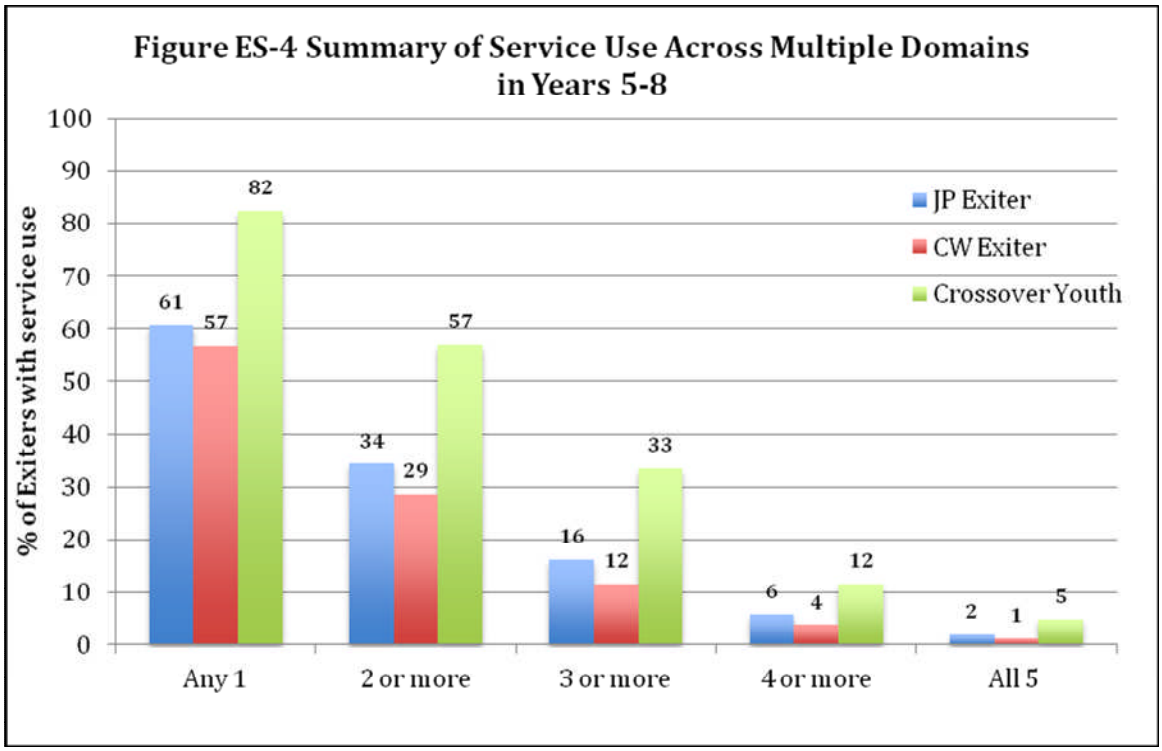


Figure ES-4 Summary of Service Use Across Multiple Domains in Years 5-8
% of Exiters with service use
100
90
80
70
60
50
40
30
20
10
0
61
57
82
34
29
57
16
12
33
6
4
12
2
1
5
Any 1
2 or more
3 or more
4 or more
All 5
JP Exiter
CW Exiter
Crossover Youth

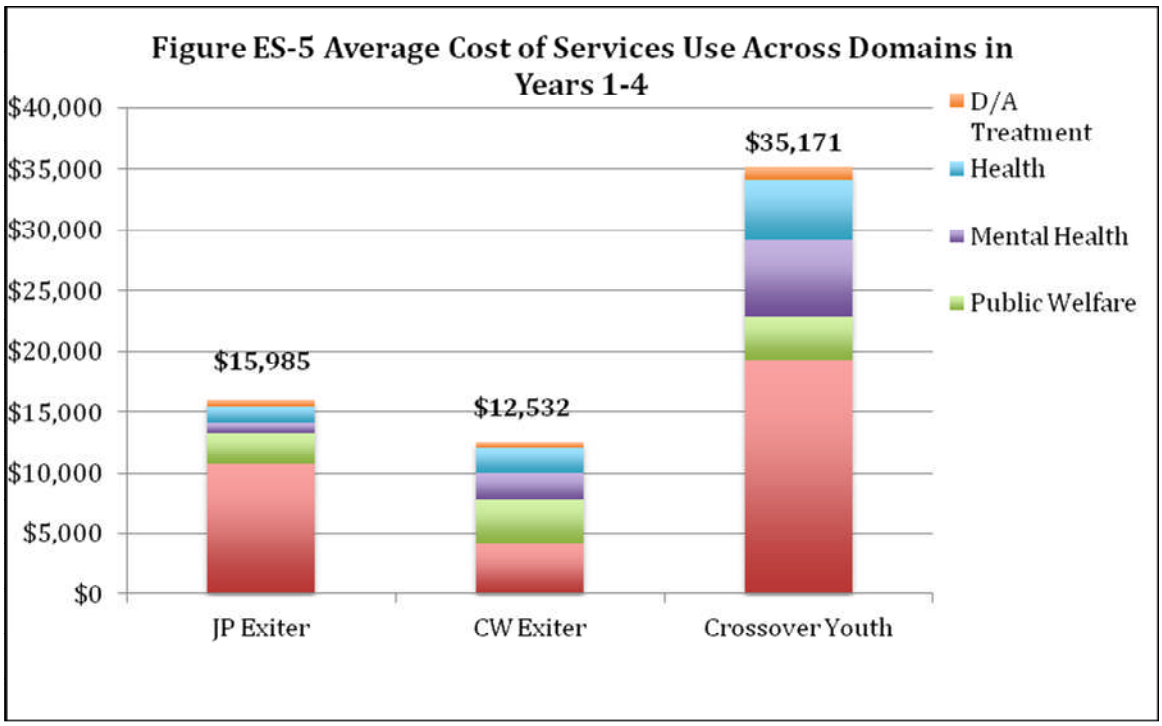


Figure ES-5 Average Cost of Services Use Across Domains in Years 1-4
$40,000
$35,000
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
$15,985
$12,532
$35,171
JP Exiter
CW Exiter
Crossover Youth
D/A Treatment
Health
Mental Health
Public Welfare

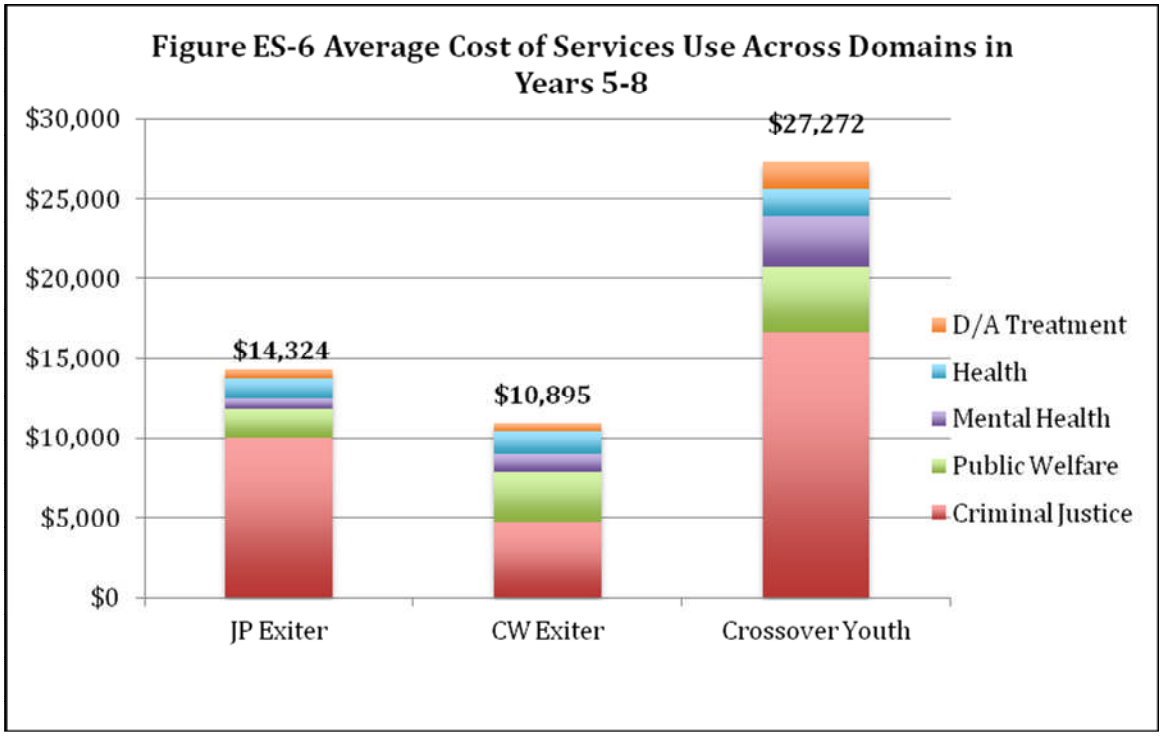


Figure ES-6 Average Cost of Services Use Across Domains in Years 5-8
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
$14,324
$10,895
$27,272
JP Exiter
CW Exiter
Crossover Youth
D/A Treatment
Health
Mental Health
Public Welfare
Criminal Justice

Section 3: Relationship Between Selective Factors and Young Adult Outcomes

This section aims to answer the following questions:

- Do outcomes vary differentially by involvement in the child welfare and juvenile justice systems, or involvement in both systems? Furthermore, are factors such as demographic characteristics, age at entry into care, level of educational attainment, consistent employment, and, where applicable, type of exit and type of placement at exit associated with young adult outcomes, including public service utilization, earnings and employment?

- How does participation in both housing related and other types of the Independent Living Program (ILP) affect outcomes of youth exiting the child welfare system?

This section uses multiple regression techniques to examine the relationship between a set of select factors and the following outcomes:

- Total earnings
- Consistent employment
- Total cost of public service use
- Heavy use of public services
- Jail stays
- Timing and use of cash assistance (i.e. GR or CalWORKs)
- High educational attainment

The multiple regression models provide a sense of the strength of the associations between these factors. Given that some variables were only available for youth who had involvement in the child welfare system (e.g. reason for removal from home), two sets of models were estimated, with one grouping together members of all three study groups, and the second using just youth in the CW and crossover groups.

3.1 Summary of Findings From Regression Models

Key findings from the regression results include:

- ***Membership in the crossover group is a strong and consistent predictor of less desirable outcomes:*** Compared to persons in the JP group, crossover youth had costs associated with public services use costs that were 110% higher, were far more likely to be heavy users of public services and to experience a jail stay, and were 91% less likely to have high educational attainment, which is defined as having either completed an Associate's degree at a community college of having enrolled at a four-year university. Moreover, crossover youth were more likely than JP youth to receive both GR and CalWORKs, suggesting that poverty poses a more substantial problem for members of this group. Similarly, in comparison to the CW group, crossover youth were more than twice as likely to be heavy users of public services, three times more likely to experience a jail stay,

and 1.5 times more likely to receive GR. Crossover youth were also 50% less likely to be consistently employed than their CW counterparts.

- ***Higher educational attainment is associated with positive young adult outcomes:*** There was strong evidence that higher levels of educational attainment were associated with positive outcomes. Earning more credits at a community college was associated with higher earnings, lower public service use costs, a higher likelihood of being consistently employed, and a decreased likelihood of being a heavy user of public services, of experiencing a jail stay, and of receiving either GR or CalWORKs. Moreover, youth who had high educational attainment had drastically lower public services use costs, and were far less likely to be heavy users of public services or to have experienced jail stays.

- ***Consistent employment is associated with positive outcomes:*** While complete employment and earnings data were only available for youth in the CW and crossover groups, consistent employment was an important factor for predicting positive outcomes among these groups. Youth who had a pattern of consistent earnings had public service costs that were 70% lower than their non-consistently employed counterparts. Moreover, those who were consistently employed were far less likely to be heavy users of public services or to have experienced jail stays.

- ***Among child welfare involved youth, older age at entry into care is consistently associated with less desirable outcomes:*** In the models that focused solely on youth in the CW and crossover groups, older age at the time of an individual's last out-of-home placement, which was not necessarily the same as their age at the time of initial contact with DCFS, was associated with lower earnings, a decreased likelihood of consistent employment, higher total costs of public service use, and increased likelihood of experiencing a jail stay.

- ***A history of treatment for a serious mental illness is associated with an increased likelihood of a jail stay, receipt of GR and/or CalWORKs, and lower earnings***: In both sets of models, persons with a history of treatment for a serious mental illness were found to have an increased likelihood of experiencing a jail stay and receiving GR and CalWORKs. In addition, treatment for a serious mental illness was associated with lower earnings and a less consistent pattern of employment.

- ***There is tentative evidence that ILP programs providing housing assistance promote positive outcomes, but the relationship between ILP programs and outcomes needs to be studied more carefully:*** This study examined the relationship between both housing related and non-housing related types of ILP programs and young adult outcomes. Here, the findings relative to the relationship between both of these types of ILP services and outcomes should be interpreted cautiously. Findings were strongest and most consistent for housing related ILP services, and as such, those findings are described in greatest detail here.

Housing assistance in the form of the payment of move-in expenses and/or security deposits for market rate rental units and receipt of Homeless Prevention Initiative (HPI) assistance were fairly consistent predictors of positive young adult outcomes. Receipt of such services was generally associated with favorable outcomes (i.e. higher earnings, more consistent employment, higher educational attainment, lower public service costs, decreased likelihood of jail stays and receipt of cash assistance). However, such findings may be due more so to eligibility criteria for receipt of such services, or to underlying characteristics of recipients that were not controlled for in the model and that also make them predisposed to more favorable outcomes. For example, receipt of assistance through the Transitional Housing Placement Program (THPP) requires youth to be attending high school or a vocational training program on a full-time basis. Similarly, a number of ILP mental health-based housing programs (e.g. the Athena or B.R.I.D.G.E.S program) require youth to meet certain mental health diagnostic criteria. These criteria mean that participation in certain ILP programs is limited to a selected group of youth who have certain characteristics. In turn, these characteristics, rather than participation in the ILP programs themselves, may explain the observed relationship between receipt of ILP services on young adult outcomes.

Section 4: Implications for Policy and Research

Based on this study's findings, the following nine implications/recommendations represent steps policymakers might consider taking in forming policies intended to improve both immediate and long-term outcomes for youth exiting Dependent or Delinquent Care in Los Angeles County.

1) Crossover youth – i.e. those involved in both child welfare and juvenile justice systems – comprise a particularly vulnerable group of exiters. Policymakers might consider specifically targeting this group for ongoing outreach and intervention in an effort to increase the likelihood that, as adults, they will successfully adapt to and assimilate mainstream norms and expectations.

Almost every measure considered in this report indicates that crossover youth are at-risk of comparatively negative outcomes after they exit the child welfare and juvenile justice systems. A considerably larger proportion of the observed crossover youth fell into extreme poverty in their young adult years by comparison with those in the JP and CW groups. Additionally, larger proportions of those in the crossover group became incarcerated as young adults, used inpatient, outpatient, and emergency health services, and received treatment for mental health conditions.

The statistical models deployed for this report reinforce this picture, showing that membership in the crossover group substantially increases the likelihood of less desirable outcomes. Not surprisingly, then, crossover youth are an especially costly presence within the County when they become adults. In the initial four years following exit from their respective County systems, service utilization costs for crossover youth were more than double those of the JP group and almost triple those of the CW group. Moreover, in years five through eight after exit, service utilization costs for the crossover group were more than double those of the CW group and almost double those of the JP group.

Given the relative vulnerability of crossover youth as they enter into adulthood, as well as the comparative costs of providing them with needed services, policymakers might consider taking steps to identify this youth as early as possible so as to provide them with targeted services and supports that would improve their chances of making a successful transition to adulthood and life beyond the child welfare and juvenile justice systems. Insofar as improved outcomes for crossover youth would render them less costly for the County as adults, providing them with proactive, targeted attention and services would represent a strategic investment in long-term cost avoidance.

2) Sizeable proportions of youth in all three study groups continue to make substantial demands upon public services systems upon reaching adulthood.

This basic finding is consistent with other studies of youth aging-out of the foster care system and underscores the need to adopt policies and programs for youth in the child welfare and juvenile justice systems that facilitate and support successful transitions

into adulthood. Improved adult outcomes for youths exiting dependent and delinquent care can be reasonably expected to decrease dependency on public services. Preventive policy guided by a long-term perspective can therefore be framed as an investment in both cost avoidance and the promotion of self-sufficiency.

3) Policies must accommodate the varied outcomes and heterogeneous subgroups that exist among the youths in the study groups. The findings presented in this report show that youth exiting dependent and delinquent care in Los Angeles County are by no means monolithic with regards to their eventual adult outcomes. At a minimum, one set of policies should address how to ameliorate the heavy services use and related outcomes among the more troubled persons in this group, while another set needs to focus on how to facilitate more of the youth who are capable of completing college and/or sustaining employment.

4) More focus needs to be placed on the at-risk youth who secure stable employment. Substantial attention has been focused, here and elsewhere, on the negative outcomes associated with aging-out of the child welfare system. Less is known about those youth who appear to make positive transitions from the child welfare and juvenile justice systems to adulthood. What are the keys to their success? To what extent do they evince shared characteristics and patterns of programmatic participation? These are questions that should be addressed by future research. Their answers could inform a process of crafting policy and implementing programs that seek to replicate the experiences of successful exiters.

5) Youth enrolled in college present another potential intervention point for services to facilitate successful transitions into adulthood among at-risk youth. Close to half (45%) of the CW group, 40 percent of the crossover group, and roughly one-third (32 percent) of the JP group, enrolled in a community college. However, much smaller proportions of each group earned degrees or earned the credit requirements to transfer to a four-year university in the University of California or California State University systems. Policymakers might consider implementing campus based support services that provide system involved youth with targeted intervention and support that would increase the number who graduate.

6) Identify heavy services users and provide them with intensive services that facilitate better outcomes and generate net cost savings. The top 25% of heaviest service users among the youth observed in this study consumed about three-quarters of the services used by the all three study groups. Youth in this quartile had an average cost of over $70,000 per person, depending on the group and study period. Identifying youth in this quartile, ideally while they are still in the child welfare and/or juvenile justice systems, in order to provide them with housing, coordinated health and mental health care services, and case management, would be a proactive means of supporting successful transitions to adulthood and would provide services in an increasingly cost-effective manner by reducing the wasteful utilization of scarce resources that results when services are offered on a more haphazard, *ad hoc* basis.

This approach, investing in the coordinated, multi-disciplinary care of heavy services users, has been adopted successfully in targeting chronic adult homeless persons in other localities and a similar approach could be adapted and applied to the at-risk in Los Angeles County.

7) There were few clear differences in outcomes between the child welfare and juvenile probation study groups. Another unique opportunity provided by the data used in this study was to assess whether or not the outcomes for youth exiting the child welfare system differed substantially from probation youth who presumably had stronger ties with their families of origin. For most outcomes, the CW group has similar outcomes when compared to the JP group.

8) Conduct further research on how (a) time of exit from the child welfare system and (b) the circumstances under which exits are made, affect adult outcomes. Table 3.3.2 presents regression results that show the impact of various CW-only factors on eight adult outcomes. The CW group included all youth who were still in the CW system at age 16 or older (late exiters), and many who ultimately exited the CW system for reasons other than aging out upon or after reaching adult status. Surprisingly, late exits were not associated with a decrease in negative outcomes. The impact that the time of exit from the child welfare system has on adult outcomes, as well as the impact of the circumstances under which exits are made, therefore need to be better understood. An understanding of these impacts is especially important given the imminent implementation of California legislation AB 12, which, effective in 2012, extends the period in which a youth may stay in foster care beyond their 18th birthday to age 21.

9) Further research. The results presented here give a broad overview of the interactions between youth in the child welfare and juvenile probation systems and their risk for subsequent negative adult outcomes. As such, many of the topics examined in this study could be explored in considerable additional detail, with more specific insights and implications for particular aspects of this transition period to adulthood. Additional datasets, from other systems and other geographic areas, can further expand the scope of this project to provide a more comprehensive profile of outcomes among young adults who leave the child welfare and juvenile probation systems.

Acknowledgments

The authors wish to thank the following people for the invaluable assistance that they provided in various stages of the process of completing this report: Bill Pitkin and Jeannine Balfour from the Conrad N. Hilton Foundation; Jordan Horowitz, Victor Manchik and Lauren Sosenko at Cal-PASS; Webb Hester and Greg Rose at the California Department of Social Services; John Wagner at the California Department of Aging and formerly of the California Department of Social Services; and Max Stevens at Los Angeles County's Chief Executive Office.

FULL REPORT

Introduction

Increasing attention is being given to how youth who "age out" of the child welfare system fare in their early adult years. These youth, who upon reaching a given age must statutorily leave the child welfare system from out of home placements either in foster care or congregate residential facilities, face a particularly challenging transition to adulthood. This difficult transition is brought on by a confluence of two dynamics. First, looking backward and as shown in studies such as the Casey Foundation's Northwest Foster Care Alumni Study (Pecora et al., 2005), difficulties in young adulthood have a direct link to the hardships they have experienced in adolescence. These often include family-related trauma, (often multiple) out-of-home placements, poor achievement in school, insufficient resources, and substantial psycho-social issues. Second, youth emerging as adults from the child welfare system often lack the family-based supports that typically facilitate a smooth transition to adulthood. Instead, the support services that are available to youth through the child welfare system end at the onset of adulthood, and little typically exists to supplant these supports. As shown in such studies as Chapin Hall's Midwest Evaluation of the Adult Functioning of Former Foster Youth (Courtney, Dworsky & Pollack 2007), this leaves these youth alone in navigating the challenges of adapting to independent living and attaining a stable adulthood.

The difficulties associated with aging out of child welfare services manifest themselves for some in undesired adult outcomes. Both the Chapin Hall and the Casey studies, as well as several other recent studies (e.g., Fowler, Toro and Miles 2009; Pergamit & Johnson 2009; Needell et al., 2002) have consistently shown how youth aging out of the child welfare system are at increased risk for criminal justice involvement, unemployment, teen pregnancy, behavioral health disorders, homelessness and lower educational attainment.

Among youth in the child welfare system, a subgroup who are at particularly high risk for poor outcomes in adulthood are "crossover youth," or those youth who are involved in the juvenile justice system as well. As with the child welfare system, youth can only be in the juvenile justice system, be it detention or probation, until they reach adult age. Upon reaching adulthood, the youth will find him or herself (should he or she continue to offend) in an adult criminal justice system that is much more punitive and deterrence-oriented than the juvenile system (Altshuler et al., 2009). Herz, Ryan & Bilchik (2010) point out that the needs of crossover youth often go unattended due to dividing lines between the different systems, and here adulthood functions as another dividing line between them and needed services. Despite the concern that has been raised about adult outcomes in this population (Altshuler et al., 2009), existing studies on this population are scarce (e.g., Herz, Ryan & Bilchik 2010; Herz & Ryan 2008; Halemba et al., 2004; Kelley, Thornberry, & Smith, 1997), and none of the studies that were located have looked at adult outcomes of crossover youth.

This report investigates the young adult outcomes of youth who are aging-out of or otherwise exiting child welfare supervised foster care system and/or the juvenile probation system, in Los Angeles County. As described in further detail below, a cohort of young adults from both systems are identified by selecting administrative records from their respective juvenile systems of care and their adult outcomes are identified based on linking these administrative records with administrative databases from County departments providing an array of public services to residents of Los Angeles County, as well as from selected California statewide agencies. In addition to tracking the outcomes of youth exiters from the child welfare system and juvenile probation across multiple domains, this report also explores the relationship between, on one hand, individual characteristics and program factors from juvenile records, and, on the other hand, various adult outcomes. This includes the impact of transitional support services on subsequent adult outcomes to the extent the available data permits.

In performing this investigation, this study features several novel approaches toward examining adult outcomes. As previously mentioned, several studies have examined adult outcomes for youth aging out of the child welfare system, but there has been no such study looking specifically at adult outcomes among crossover youth, nor among the more general group of children who exit the juvenile justice system as adults. Along with providing findings on the adult outcomes of these latter two groups, this study also provides a basis for comparisons across the three groups among these outcomes. Here we can assess the assertion that crossover youth represent a group that stands out among their peers who are only involved with the child welfare or juvenile justice systems as a particularly at-risk population for undesirable outcomes in adulthood. Furthermore, this comparison between all three groups permits an assessment, albeit indirect, of the role of family supports among youth who have all experienced some degree of troubles in their adolescence.

Additionally, this study looks at outcomes across a variety of systems and thus offers an opportunity to better understand the relationship and dynamics between a number of adult domains including the educational, occupational, health, mental health and criminal justice systems. Likewise, while there is general agreement that transitional independent living programs and other forms of transitional services are important for helping youth transition to self-sufficiency and adulthood, there is little understanding as to which programs and types of assistance are successful for promoting positive outcomes among youth exiting foster care or probation.

The study, is built around the following questions:

1) *After youth exit child welfare services and/or juvenile probation supervision and become adults, to what extent do they participate within several unique domains including publicly funded health, mental health, substance abuse treatment and public welfare services; the criminal justice system; and in the workforce?*

2) *How do youth fare with various aspects of employment and educational attainment both before and after exiting child welfare or juvenile probation services and transitioning to adulthood?*

3) *What are the patterns of multi-system (i.e. health, mental health, substance abuse, public welfare and criminal justice) use by youth who exit child welfare services and juvenile probation supervision? Among youth who make use of publicly funded services, what is the net impact of such service use and what are the most common patterns of service utilization?*

4) *Do outcomes vary differentially by involvement in the child welfare and juvenile justice systems, and involvement in both systems? Furthermore, are factors such as demographic characteristics, age at entry into care, level of educational attainment, consistent employment, and (where applicable) type of exit and type of placement at exit associated with adult outcomes including public service utilization, earnings and employment?*

5) *Is participation in Independent Living Programs (ILPs) associated with the outcomes of youth exiting the child welfare system?*

In answering the questions outlined above, this report is divided into four sections. The first section, "Young Adult Outcomes By Domain" addresses Questions 1 and 2 by looking at each of the domains listed in these questions separately. In other words, the findings provide a look at the extent to which the youth followed here become involved, as young adults, in public welfare; criminal justice; health; mental health, and substance abuse treatment; employment and earnings; and educational domains. This section's analysis of each domain in isolation becomes the foundation for subsequent chapters in which outcomes are examined across multiple domains.

The second section, "Young Adult Outcomes across Multiple Domains" addresses Question 3 (and builds upon Section 1) by analyzing the nature, extent and cost of services use across multiple domains as well as identifying the most frequently occurring combinations of services use (e.g. public welfare, criminal justice, substance abuse treatment).

The third section, "The Relationship Between Select Factors and Young Adult Outcomes" addresses Questions 4, and 5 and uses multivariate modeling techniques to assess the relationship of a number of factors on young adult outcomes subsequent to their exit from the child welfare system and/or probation supervision.

The findings from these three sections then become the basis for the final section, on the "Implications For Policy and Research." The focus of this section is a set of recommendations regarding policy avenues and programs that would improve the outcomes of young adults exiting foster care and probation and help them to make more successful transitions to adulthood. This section also notes areas where future research might build on the findings presented in this report.

Description of Data Sources

Data for this study comes from an array of administrative datasets. Records of persons who were in the child welfare and/or juvenile justice systems as youth were identified and then matched with records from an array of adult systems. The analyses in this report are based solely on these administrative records, and no individuals were contacted by investigators for this project for any kind of data collection. Administrative records offer a means to efficiently collect information on services use from a large number of persons that would be unavailable to projects relying on more traditional survey methods. The study received approval from the IRB at the University of Pennsylvania and from the Committee for the Protection of Human Subjects at the California Health and Human Services Agency.

Youth Data

The study populations of youth exiting from child welfare and probation supervision were selected from records maintained by the California Department of Public welfare (DSS), the Los Angeles County Department of Children and Family Services (DCFS), and the Los Angeles County Department of Probation.

Child Welfare Youth

For the youth exiting the child welfare system, records were selected in the DSS administrative database for all those who were discharged (statewide) between the ages of 16 and 21 at any point between January 1, 2002 and December 31, 2004. These records were pared down, using DCFS data, to identify those youth who exited a child welfare supervised, out of home placement in Los Angeles County. Data were combined from these two sources to provide demographic and service use characteristics for each record. Demographic characteristics included race, ethnicity, gender, and age. Service use information included age at commencement of last out of home placement prior to discharge; age at discharge from care; types and frequency of services received; and circumstances at exit from the child welfare system.

Juvenile Probation Youth

Records from the LA County Department of Probation were used to identify all youth who exited probation supervision at age 16 or older in Los Angeles County between January 1, 2000 and December 31, 2006. As with the child welfare data, DoP data provided demographic information on race, ethnicity, gender and age. Additionally, DoP data provided information about the number of juvenile arrests for each youth and age at discharge from the system.

Dual System or "Crossover" Youth

Identifiers from these two databases (name, gender, date of birth, social security number) were matched to identify the third group, those who experienced both a child welfare supervised out of home placement and involvement in the juvenile probation system. Persons with records in this group will be referred to as crossover youth. This set of crossover youth are, in this study, in a group separate from the other two groups while retaining the demographic and services information from both systems.

This study was unable to identify the entire group of youth who meet the definition of crossover youth that has been established in the literature. Herz, Ryan and Bilchik (2010) conceptualized crossover youth as those having experienced maltreatment and engaging in delinquency. They further specify four means by which to identify crossover youth:

> 1) Youth who in the child welfare system who also become involved in the delinquency/probation system after committing a delinquent act;
>
> 2) Youth who had a prior child welfare case and come under the jurisdiction of the probation/delinquency system after committing a delinquent act;
>
> 3) Youth who commit a delinquent act and, once their case is investigated, are referred to the child welfare system due to evidence of maltreatment; and
>
> 4) Youth who exit the juvenile justice system and subsequently enter the child welfare system.

With the available DCFS and Probation exiter data, only youth who entered or who had active cases in both the child welfare and juvenile probation systems at or after age 16 were designated crossover youth for this study. This misses persons whose involvement in either system concluded before age 16.

An additional pathway to exclusion from the crossover youth group comes from jurisdictional rules in place in California during study period (i.e., 2000-2006). During this time, the juvenile delinquency and juvenile dependency courts could not have joint jurisdiction over a youth's case. In the event that a child was involved in both systems, a joint assessment hearing, known as a 241.1 hearing, occurred to determine which system would have jurisdiction over the youth's case. For this study, any youth who may have had a 241.1 hearing and then subsequently remained under the jurisdiction of the system with which he or she was initially involved would not be identified as a crossover youth.

In light of these limitations, any youth identified as a crossover youth would have been in both systems, but some youth who were involved with both systems will not be identified as belonging to this group because they will only have a record in one or the other system. This means that the number of youth identified as crossover youth in this study is a lower-bound estimate of the true prevalence of crossover youth. This will also serve to reduce any differences between the crossover youth and the other two groups.

Throughout this report, the three groups described above (i.e. JP group, CW group and crossover youth), will be referred to collectively as the study groups.

Adult Outcome Data

Records from the three study groups were matched with records of service utilization across seven Los Angeles County Departments and two California state agencies. The time periods for which the data from these County and State entities were available varies, although at a minimum, all encompass the five-year period ranging from January 1, 2005 until December 31, 2009. Collectively these data sources provided detailed information about the outcomes of youth in the domains of health, mental health and substance abuse treatment, public welfare services, criminal justice, and employment, and educational attainment. Table 1 presents a summary of these data sources, with descriptions of the information obtained from each of these data sources and the time periods for which records from each source were available. This matching process produced an integrated record for each person in the study groups of adult services consumed in these systems.

Sample Selection

Exits from the youth systems precede the timeframe for which records on most of the adult outcomes are available. As previously mentioned, the youth whose records comprised the three study groups all had exits from the youth systems in the three-year time period between January 1, 2002 and December 31, 2004. Records from the adult systems (described in Table 1) encompassed non-uniform periods of time, a dynamic which limited the timeframe for which it was possible to track outcomes concurrently across all domains to the five-year period between January 1, 2005 and December 31, 2009. The result of this imperfect concatenation is a gap where there are no records available for adult services use. The time length for this gap ranges from negligible for youth exiting the juvenile systems at the end of 2004 but which can range to three years for those youth who exited the youth systems in early 2002.

Figure 1 illustrates this limitation in tracking. Considering, as an example, the services outcomes for a youth who exited the CW system on July 1, 2004, and juxtaposing this against adult services records that were only available beginning in 2005, means that it would not be possible to track services use that might have occurred during the six-month period directly following the youth's exit from CW services. On the other hand, any service use that occurred in 2005 (i.e., after the initial six-month period) would be observed. Outcomes would be observable up to the first half of the sixth year subsequent to a youth's exit from care (as adult services records are available only until December 31, 2009).

Each of the three study groups is further split into two cohorts: those who exited at any point during 2002 and those who exited at any point during 2004. Splitting the study groups into these two cohorts enables a comparison of outcomes across the study

groups for an eight-year period. As was explained earlier, for those who exited care in 2004 it is possible to observe outcomes across all domains for at least some of the first year directly following exit from care, all of years two to five subsequent to exit from care and at least part of the sixth year following exit from care. In the same manner, for those who exited care in 2002, it is possible to observe outcomes across all domains for at least some portion of the third year subsequent to exit, all of the fourth, fifth, sixth, seventh years and at least some portion of the eighth year subsequent to exit from care. In creating the synthetic, eight-year risk period for adult outcomes, the outcomes for the first four years following exit come from the 2004 cohort, and the outcomes for the latter four years come from the 2002 cohort. This structure is illustrated in Figure 2.

The structure of this synthetic eight-year risk period means that some outcome data were not used. While it is possible to observe outcomes in all domains for those who exited care in 2004 during at least part of the fifth and sixth year following their exit from care, only outcomes that occurred within four years subsequent to their exit from care were examined in the analyses for Sections 1 and 2 (Section 3 takes a different analytic approach). Similarly, for those who exited care in 2002, while it is possible to observe outcomes in the third and fourth year subsequent to exit, the first two sections of this report only analyze outcomes that occurred in the fifth, sixth, seventh and eighth years following their exit from care. In using such an approach (Figure 2), this study is able to compare the outcome of young adult exiters in two four-year periods: the initial four years subsequent to their exit from care and in years five through eight following exit from care. As such, this study can provide information about outcomes of three study groups over the course of the eight-year time horizon following their exit from each respective system of care.

Raw prevalence rates are adjusted and weighted for the gaps that usually occurred between the exit dates from juvenile services (ranging from 2002 through 2004) and the coverage dates for adult services (ranging from 2005 through 2009). In the initial and in the eighth years after leaving the youth systems, where there are gaps in the coverage records, adjustments consist of casting the denominator for the prevalence rate. Instead of the denominator simply being the number of persons in the study group, it is recast as the number of person years (sum of the years each person is in the risk set, which would be attenuated) divided by four (length of the study period) and divided again by the total number of persons in the study group. This reduces the denominator and thereby increases the prevalence rate to compensate for the likelihood that this study missed persons who used services due to this gap.

A mathematical equation for this adjustment would read:

$$\text{Prevalence rate} = \sum E_i / (\sum T_i / (\sum N_i * C))$$

where E is the measureable outcome (event, number of service units, or expenses incurred), i is each individual in the study group, T is the total time each individual spent in the study group, N represents each individual in the study group, and C is a constant representing the maximum duration of the risk period (4 years). If everyone in the study

group were to be in the risk period for the full four years, then the part of the equation in parentheses would reduce to 1, and the equation would be a simple rate of total persons experiencing the outcome divided by total persons.

As previously noted, Section 3 of this report takes a different analytic approach. Section 3 uses multiple regression models to examine the relationship between individual and program level factors and the adult outcomes of exiters. In doing so, Section 3 does not truncate its tracking of the outcomes that occur after four years for the 2004 exit cohort or before the beginning of the fifth year subsequent to exit for the 2002 exit cohort. Nonetheless, the approach used in this section, which is explained more fully at the beginning of Section 3, still allows for comparisons about whether and how young adult outcomes may vary as a function of time elapsed since exit from care.

Throughout this report, instances when the above noted limitations pose challenges to the analyses are noted and the way in which these limitations were addressed is also described.

Sample Description

Table 1 summarizes demographic and services use characteristics for the three study groups. Crossover youth comprised 10% of all child welfare exiters (including crossover youth) in the 2002 exit cohort and about 13% in the 2004 exit cohort. These prevalence levels are consistent with existing literature, which, as reported by Herz, Ryan and Bilchik (2010), suggests that between 9% and 29% of child welfare involved youth engage in delinquency. Nonetheless, as detailed above, these prevalence levels should be treated as a lower bound measure of the true prevalence of crossover youth among youth who are involved in either the CW or JP systems.

For the purposes of the following description of the characteristics of the study groups, there were no substantial differences between the 2002 and 2004 cohorts, so when specific results are cited they will be from the 2002 cohort. For both cohorts, the JP exiter group was predominantly male, the CW exiter group was majority female, and the crossover youth group was almost two-thirds male. In terms of race and ethnicity, the CW exiter group was just over 40% black (non-Hispanic) in both cohorts, with a slightly lower proportion being Hispanic (either white or black race). The proportion of white race (non-Hispanic) was substantially lower. This racial/ethnic distribution differed in the JP exiter group, where Hispanic ethnicity constituted the majority group, with black race constituting just under one quarter of this group and white race at about the same levels as in the CW exiter group. A majority of youths in the crossover group were black and the crossover group had a lower proportion of Hispanics than either the JP or CW group. All three groups averaged about 18 years of age when they exited the system, although the crossover youth, whose age at exit from the child welfare system was used, were slightly younger.[6]

[6] For the sake of consistency for all youth in the crossover category, this study counts their exit from the child welfare system as their exit date, regardless of whether the exit came prior to or subsequent to their exit from the juvenile probation system. It should be noted that 66% of the crossover youth in the 2002

In terms of services, for the JP group, mean number of arrests were calculated and ranged from 1.2 to 1.4 across the two study groups (JP exiters and crossover youth) and cohorts (2002 and 2004). More information was available from the CW system. Among the CW exiters, the largest single group exited CW care from an out of home placement with relatives but about 50% of this group exited from an out of home placement, which encompasses foster home and group home placements. There was a striking contrast in the distribution of this measure when comparing the CW exiters with the crossover youth. Among the latter group, the proportion of youth in group homes at their time of exit was more than double that of the CW group, with much lower proportions exiting from a relative home or a foster home. These differences between the two cohorts continued when looking at the reason that children exited the CW system. Most of the CW exiters were emancipated (i.e., aged out) upon leaving, while roughly a third of the crossover group was in this category. In turn, higher rates of crossover youth were in the reunified with family, incarcerated, and absconded categories. This suggests that these two groups collectively had very different experiences in the child welfare system.

Summary

This report adds to a small but growing literature on adult outcomes of youth aging out of the child welfare and/or the juvenile probation systems. Youth aging out of the child welfare system have been noted to have more trouble transitioning to stable adulthood, as marked by a variety of undesirable outcomes. A correlate of this that has been raised in the research and policy literature is that youth who leave both the child welfare and the juvenile justice systems will have even more difficulty with transition to adulthood. This report appears to be the first major study to empirically assess this assertion. Tracking the use of an array of County and State-funded services by youth aging out of these two systems in Los Angeles not only permits the comparison of youth aging out of child welfare services, out of juvenile probation services, and simultaneously out of both services, it also promises to offer some insight into the patterns by which youth use the mosaic of services systems covered here. The result should be findings that empirically inform an area of concern to policymakers and advocates for youth, as it offers the basis for planning more effective, efficient and coordinated services to facilitate improved outcomes.

---

cohort had a date of exit from the probation system that came after their date of exit from the child welfare system. However, only slightly more than half (53%) of crossover youth in the 2004 cohort had a date of exit from the probation system that came after their date of exit from the child welfare system.

INTRODUCTION TABLES AND FIGURES

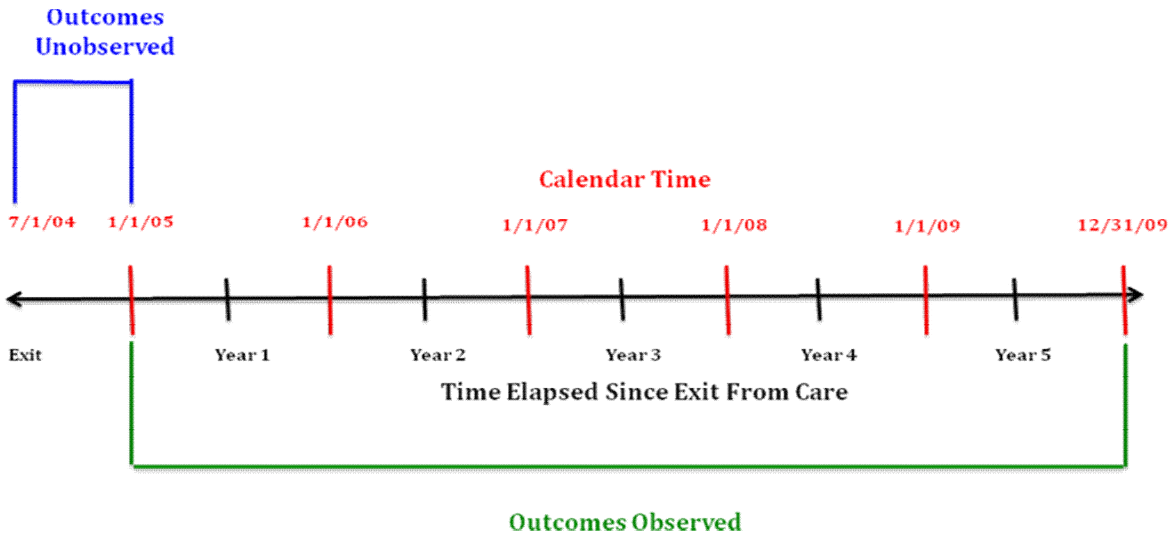
Table 1-Description of Data Sources

Data Source	Description	Dates
LA County Department of Mental Health (DMH)	Inpatient, outpatient and daily mental health treatment services use	1/2005-11/2010
LA County Department of Health Services (DHS)	Inpatient, outpatient, and emergency department health services use	1/2005-12/2009
LA County Department of Public Health (DPH)/SAPC	Detox, outpatient, daily treatment and residential drug/alcohol treatment services use	1/2005-11/2010
LA County Sheriff Department	Jail Stays	1/2005-12/2010
LA County Department of Probation	Monthly probation supervision status	1/2005-12/2009
LA Department of Community & Senior Services (CSS)	Workforce Investment Act (WIA) funded services and other employment/vocational services	1/2005-12/2010
LA County Department of Public Public welfare (DPSS)	Monthly receipt of General Relief (GR), CalWORKs, CalFresh and Medi-Cal	1/2002-12/2009
CA Employment Development Department (EDD)	Quarterly Earnings	4th Quarter 2003-4th Quarter 2010
California Partnership for Achieving Student Success (Cal-PASS)	High school, community college and four-year university outcomes	2003-2010 (High school records) 2000-2010(Community college and four year university records)

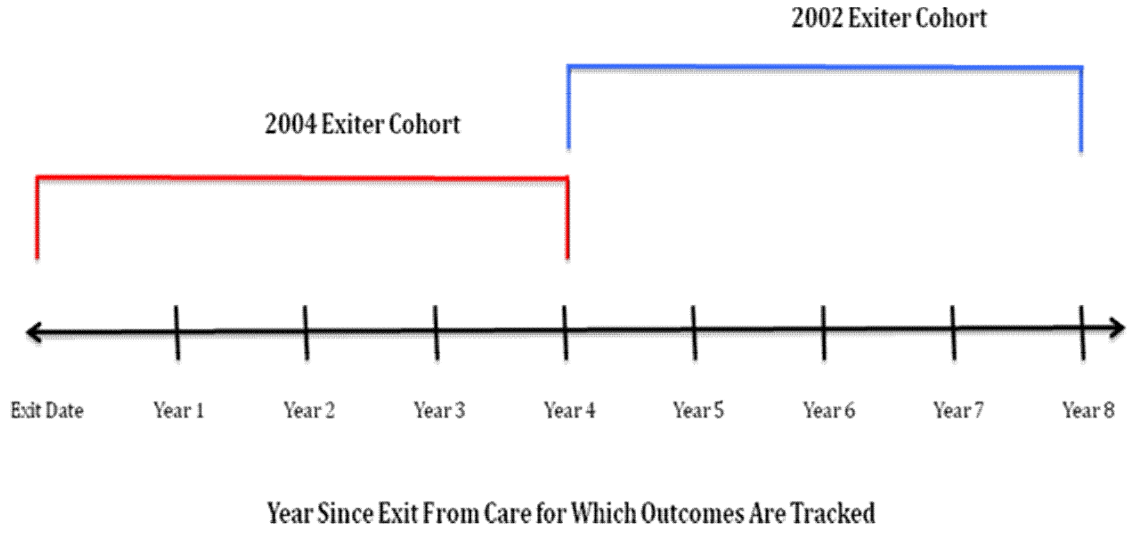
Table 2 – Demographic Characteristics of Youth Exiters, by exit cohort

	2002 Exit Cohort			2004 Exit Cohort		
	JP Exiter	CW Exiters	Crossover Youth	JP Exiter	CW Exiters	Crossover Youth
N	8368	2388	268	8855	2300	330
Gender (%)						
Female	20.2	59.5	35.4	20.7	57.9	36.7
Male	79.8	37.9	64.6	79.3	39.0	63.3
Missing	--	2.6	--	--	3.1	--
Age at Entry (mean)	16.2	12.2	12.3	16.1	11.6	11.2
Age at Exit (mean)	18.2	18.2	17.7	18.1	18.2	17.8
Race/Ethnicity (%)						
White	13.0	15.5	13.1	13.3	13.6	12.1
Black	23.9	42.5	55.6	24.1	43.4	52.1
Hispanic	56.9	35.8	28.0	57.0	36.7	32.7
Other	6.2	6.2	3.4	--	6.3	3.0
Number of DCFS out of home placements (mean)	--	1.8	2.0	--	1.8	2.2
Number of out of home placement locations during last DCFS out of home placement (mean)	--	4.2	5.3	--	4.4	6.6
Number of Arrests (mean)	1.3	--	1.3	1.2	--	1.4
Reason for removal from home (%)						
Care Take Absence/Incapacity	--	24.9	32.1	--	29.1	28.8
Neglect	--	29.3	29.4	--	32.5	33.4
Physical Abuse	--	12.2	12.7	--	12.5	12.1
Sexual Abuse	--	7.8	4.5	--	6.2	3.0
Conversion	--	19.8	16.8	--	13.5	17.3
Other	--	6.0	4.5	--	6.2	5.4
Child Welfare Exit Reason (%)						
Age of Majority or Emancipation	--	59.4	34.0	--	54.6	38.5
Absconded/Ran Away From Placement	--	5.7	7.8	--	5.7	7.0
Guardianship	--	5.7	4.1	--	5.0	2.1
Incarcerated	--	1.0	12.3	--	1.3	14.5
Reunified With Parent/Guardian	--	19.2	23.5	--	22.0	17.0
Other	--	6.4	15.7	--	8.2	19.4
Missing	--	2.6	2.6	--	3.1	1.5
Placement Type at Exit (%)						
Foster Home	--	33.6	21.6	--	35.2	24.2
Group Home	--	13.4	28.4	--	16.4	36.1
Relative/NREFM Home	--	39.2	29.9	--	36.7	27.6
Other	--	11.2	17.5	--	8.6	10.6
Missing	--	2.6	2.6	--	3.1	1.5

<u>Figure 1</u>-Example of Outcome Observation Period As Function of Time Elapsed Since Exit From Care



<u>Figure 2</u>-Outcome Observation Periods for Study Cohorts



Section 1: Young Adult Outcomes By Domain

Introduction

In this section we present basic findings on the use of various services and on participation in employment and education for the three study groups after they turn 18. The three study groups, as described in the first section, are cohorts of youth who were terminated from child welfare (CW exit group), juvenile probation (JP exit group) and both services (crossover youth group) after age 16. The results presented in this section address the following questions:

> *After youth exit child welfare services and/or juvenile probation supervision and become adults, to what extent do they participate within several unique domains including publicly funded health, mental health, substance abuse treatment and public welfare services; the criminal justice system?*
>
> *How do youth fare with various aspects employment and educational attainment both before and after exiting child welfare or juvenile probation services and transitioning to adulthood?*

As described in the introductory section of this report, the prevalence rates of various services will usually be weighted to adjust for a gap between the exit dates from juvenile services, which range from 2002 through 2004, and the coverage dates for adult services, which cover 2005 through 2009.

1.1 Public Welfare

Data on public welfare services encompasses distribution of four types of assistance to eligible households. This assistance is administered through the Los Angeles (LA) County Department of Public welfare (DPSS). Brief descriptions (more detailed descriptions are readily available at the DPSS website – *www.ladpss.org* – and from many other sources) are as follows:

- General Relief (GR). GR is a cash assistance program that provides a monthly grant of $221 for indigent adults who are ineligible for other federal or state assistance programs.
- CalWORKs. CalWORKs is California's version Temporary Assistance to Needy Families (TANF), the income assistance widely known as "welfare" that is available to households with children that receive very little or no other income. In most (but not all) cases TANF-eligible households will be single-parent families.
- CalFresh. CalFresh is California's version of the federal Special Needs Assistance Program (SNAP). SNAP, formerly known as food stamps; provides assistance that eligible recipients can redeem for food at grocery

stores. The income limits for CalFresh assistance require that household income is below 130% of the poverty income guidelines.

- Medi-Cal. Medi-Cal is California's version of health care coverage for low-income, elderly and disabled households known federally as Medicaid. There are a range of eligibility categories and income ceilings, but generally the program covers people in certain categories (e.g., disabled, elderly, children) who have income at or under the poverty income guidelines.

Costs associated with receipt of public welfare benefits were not available in the DPSS data, and were therefore imputed. GR costs were calculated on the assumption of an average monthly grant of $205, which was the average monthly GR grant found in a previous study[7] conducted by the investigators that used DPSS administrative data to track the outcomes of GR participants. CalWORKs costs were calculated using a monthly grant amount of $723, which is the maximum grant for a non-exempt (i.e. not disabled) three-person household in a Region 1 area of California. CalFresh costs were calculated assuming a monthly CalFresh benefit of $200, which is the maximum benefit for a single person household with no income. Given that Medi-Cal costs are likely to vary quite substantially between individuals based on the type and extent of health care services used, no attempt was made to impute Medi-Cal costs for the study groups.

Receipt of DPSS assistance can be interpreted in several ways. On one hand, it is a general indicator that persons are living in or near poverty, as income guidelines require this for benefits eligibility and none of these benefits come close to lifting persons above the poverty guidelines. In that sense it can be seen as a negative outcome. On the other hand, it also indicates that persons are availing themselves of resources that helps stabilize living situations. This is especially true of Medi-Cal (where the alternative among poor households is often no health care coverage) and CalFresh.

Table 1.1 and Figures 1.1.1 through 1.1.4 show the extent to which persons in the three study groups received DPSS benefits. Over the first four years, there were higher rates of GR, CalWORKs, CalFresh, and Medi-Cal receipt among the CW exiter group than among the JP exiter group. In turn, the crossover youth had the highest rates of GR, CalWORKs and CalFresh participation, but a rate of Medi-Cal receipt that was about the same as the CW exiter group.

These rates indicate that there is a considerable amount of poverty among all three groups. At the most extreme are the rates of GR receipt, which is a good indicator of indigency among its recipients as they are allowed virtually no assets or income, and are provided very low levels of assistance. More than one-fifth of the crossover youth received GR during some point in their first four years of adulthood, and this rate is essentially unchanged in years 5 through 8. These rates were somewhat lower for the other two study groups, but the levels remain substantial and relatively steady across

---

[7] See Culhane, D.P. & Metraux, S. (2009). *Using Adult Linkages Project Data For Determining Patterns And Costs Of Services Use By General Relief Recipients In Los Angeles County*.

the two time frames in the table. The levels of CalWORKs receipt here were higher than the levels of GR, especially for the CW group, and were also relatively unchanged over the two study periods. These rates are also good indicators of young adults in the study groups who lived in extreme poverty, as CalWORKs provides a household income (CalWORKs assistance goes exclusively to households with children) that is less than half of poverty income guidelines.

Given this, the combined rates of GR and CalWORKs give good indicators of the proportions of each study group that has experienced a period of extreme poverty at some point in their early years of adulthood. The mean time they receive GR and CalWORKs indicate that most individuals use these income assistance programs either temporarily or sporadically, but nonetheless these results indicate substantial levels of financial hardship.

In making comparisons among groups, it is necessary to be aware of the gender biases that are not accounted for here. As shown in the introductory section, the JP exiters and crossover youth groups were predominantly male and the CW exiter group was majority female. Likewise, households receiving CalWORKs are predominantly headed by single females, and GR recipients are predominantly male. This and other differences between groups will be controlled for in Section 3 when multivariate analyses on receipt of these assistance types will be performed.

Rates, durations and associated costs of CalFresh are also presented. Recipients of CalWORKs and GR both are generally eligible for CalFresh assistance, and the rates of CalFresh assistance are in most cases nearly identical to the combined rates for GR and CalWORKs receipt for each of the study groups in both study period. Here again it is the crossover youth that show the highest rates of CalFresh receipt.

Medi-Cal coverage rates are similar for the CW and crossover exiter groups and are notably higher than coverage rates among the JP group. This finding is likely attributable to the fact that youth in foster care on their 18th birthday are entitled to Medi-Cal coverage until their 21st birthday, a provision known as Extended Medi-Cal Eligibility for Former Foster Care Children (FFCC). This extended eligibility provision is also likely responsible for the fact that Medi-Cal is the only type of assistance in Table 1 that changed substantially from years one through four to years five to eight. Medi-Cal enrollment rates that are nearly half as high in years five to eight as in years one to four are likely due to the fact that as more time passes since a youth's exit from care, they age out of the Medi-Cal eligibility extension.

In summary, rates of DPSS assistance, in all four types examined, are high and indicate substantial rates of poverty among all three study groups. These findings suggest that, in most instances, rates of receipt of DPSS assistance are higher among the two groups who have histories of CW involvement, indicating that this may have a significant association with the need for subsequent income assistance. This association cannot, however, be verified with the descriptive statistics presented here and will be assessed in future sections.

1.2 Criminal Justice

Data on criminal justice system involvement include records both of jail stays in LA County Sheriff Department jails and adult probation supervision from the Probation Department. Data on durations of stays in jail and probation terms are reported here, but information about the offense that led to incarceration or probation supervision was unavailable. Likewise, for those who experienced a jail stay, it was not possible to tell whether they were subsequently transferred to a state prison, which might be an indicator of a more serious offense. As a result, while this study can report on incarceration and probation rates, as well as time spent with each of these criminal justice entities, it was not possible to compare the three study groups with respect to the severity of offenses for which jail stays or probation supervision occurred.

Table and figure 1.2.1 show the rates with which persons in all three study groups experienced a jail stay in the young adult years subsequent to their exit from care. In the initial four years following exit from care, relatively large proportions of all three groups experienced a jail stay. However, incarceration was most prevalent among crossover youth, with almost two thirds having a jail stay, which was notably higher than the roughly half of JP youth who had a jail stay and more than double the rate of jail use among CW youth. Moreover, while more than half of JP and CW exiters, and slightly less than half of crossover youths had two or fewer jail stays, a sizeable minority of members of all three groups who had at least one jail stay had four or more jail stays in the initial four years following their exit from care. JP youth with a record of a jail stay logged the most amount of jail time, spending on average nearly 150 days in jail during the initial four-year period subsequent to their exit from the JP system.

While the rates of jail utilization and total number of days spent in jail were slightly lower among all three groups in years 5 through 8, the trends observed in years 1 through 4 were largely the same. Experiencing a jail stay remained a fairly common occurrence among all three groups, while crossover youth continued to have the highest rates of incarceration and had more frequent jail stays. In years 5 through 8, those in the JP and crossover groups spent similar cumulative amounts of time in jail, while those in the CW group spent far less time incarcerated.

The average cost figures presented in the table indicate that substantial County resources were expended on jail stays for members of all three groups who experienced a jail stay. Here again, crossover youth were the most costly group of jail users in both time periods, largely because a larger share of their jail days involved Medi-Cal treatment. JP youth were the next most expensive in both time periods, with the CW exit group making the least costly use of jail in years 1 to 4 and 5 through 8.

Table and figure 1.2.3 provide information about the rates, duration and associated cost of adult probation involvement among all three groups of youth exiters. On the whole, the trends were quite similar to those seen when examining jail stays. More specifically, in years 1 to 4 following exit from care, roughly one quarter of crossover youth were on

probation for at least one month, a figure that was higher than the rate of probation supervision experienced by the JP group and more than triple the rate among the CW group. There was very little difference between the three groups in terms of the length and cost of probation supervision during the initial four years following exit from care.

Rates of probation supervision in years 5 to 8 were largely similar to those in years 1 to 4 for all three groups. The crossover group again had the highest rate of probation supervision and the CW group the lowest, with a slightly lower proportion of the JP group experiencing probation in years 5 to 8. Once again, there was no substantial difference between the groups in terms of the length of time spent on probation and the costs associated with probation supervision.

In summary, the extent of involvement with the criminal justice system was quite substantial among all three groups, as were the costs associated with such involvement, particularly for jail stays. Perhaps most notably, youth in the crossover group were found to have substantially higher rates of criminal justice system involvement in their adult years than either the JP or CW group. The disparity between the crossover group and the JP group is particularly noteworthy as this suggests that it might be appropriate to view crossover youth as a qualitatively different group from JP youth with respect to their risk of recidivating after exiting the juvenile justice system. While these descriptive measures indicate that this may be the case, Section 3 of this report will address this issue more directly, by examining differences in the criminal justice outcomes between the three study groups while also taking into account characteristic differences between the groups.

1.3 Health, Mental Health, and Substance Abuse Treatment

Information on health, mental health and substance abuse treatment comes from records maintained by three different LA County departments, who administer each type of service to eligible individuals. Brief descriptions of the departments and the nature of the data available from each are provided below:

- ***LA County Department of Health Services (DHS)***- Serving 700,000 persons on a yearly basis, DHS manages the second largest public health care system in the United States. DHS operates four hospitals and also provides a wide range of health services at a number of health centers and clinics throughout LA County. DHS data included information about the frequency and duration of inpatient, outpatient and emergency department health services provided to persons in the three study groups. Each service contact in the DHS data also included an indicator of the primary diagnosis (i.e. ICD9 code) associated with the treatment episode, and the corresponding cost of treatment was calculated using reimbursement rates for each type of health service (i.e. inpatient, outpatient, emergency department) provided by the LA County Chief Executive Office (CEO).
- ***LA County Department of Mental Health (DMH)-*** DMH provides an array of mental health services in both a direct provider capacity and through a network of

sub-contracting agencies and individuals. Serving approximately 250,000 persons on an annual basis, DMH is the largest mental health service system in the United States. The service episode level DMH data used in this study provided information about the frequency and duration of DMH's inpatient, outpatient and daily treatment modalities.[8] DMH records also included a primary diagnosis for each service contact, and costs associated with each treatment episode were calculated using reimbursement rates from the LA CEO.

- ***LA County Department of Public Health, Substance Abuse Prevention and Control division (SAPC)***- SAPC administers a network of different drug treatment modalities that provide services to low-income and indigent persons through various referral sources. There are five SAPC treatment modalities that were tracked in the available data for the study groups. These modalities included two types of residential programs – long-term residential services and short-term detoxification, and three types of other services – outpatient counseling, day care habilitative services, and narcotic treatment program services. SAPC data included frequency and duration of service episodes, and an indicator of the primary drug/alcohol problem of recipients of SAPC services. Costs associated with SAPC treatment were calculated using rates provided for each service type by the LA CEO.

To the extent that youth make use of such services, they may be viewed as accessing needed forms of health and behavioral health care as they transition into adulthood. In this context, the utilization of health, mental health, and substance abuse treatment services may be viewed as a positive outcome. However, high rates of utilization of these services, and especially mental health and substance abuse treatment services, may indicate that youth emerge from their time in dependent or delinquent care at an increased risk of experiencing health and behavioral health problems.

The treatment modalities that members of the study group access as young adults provide some indication as to how these youth use services. On the one hand, receipt of outpatient services suggests that youth are accessing more appropriate, less

---

[8] Inpatient treatments are those in which the patient spends at least one night in a clinic or hospital. Outpatient treatments are those in which the patient leaves the hospital or clinic on the same day that the treatment is provided. Day treatment refers to ongoing daily treatment. It should also be noted that a significant portion of DHS data may be mental health related since DHS operates several psychiatric emergency rooms in Los Angeles County. These facilities also operate inpatient psychiatric beds and some provide outpatient psychiatric visits. Since these services are included in the DHS data, there is the potential for mental health utilization to be understated if only services provided by DMH are counted. Moreover, some DHS-provided mental health services are entered into the DMH information system, so it's possible that services can be double counted. To address these issues in part, inpatient stays in the DHS data that had an accompanying diagnosis code for serious mental illness were isolated for closer analysis. In the end, the number of these stays was not significant. Additionally, to assess how many youth had received treatment for a serious mental illness in DHS or DMH, the percentage of youth that had an episode of service receipt in either system with an accompanying diagnosis for serious mental illness was analyzed. While this does not account fully for all the contingencies presented by potentially overlapping types of service provision and data sets, the latter analysis at a minimum likely provides a good estimate of the proportion of youth who received treatment for a serious illness in either DHS or DMH.

expensive, preventative forms of care that are less taxing of County resources and are likely to promote more positive outcomes for youth. On the other hand, receipt of expensive acute care services such as inpatient/residential care, detox or emergency departments may indicate that youth used types of treatment that may be impact their achievement in outcomes like employment or education.

Health Services Utilization

Table 1.3.1 and figures 1.3.1, 1.3.2, and 1.3.3 summarize DHS health services use among all three groups of exiters. In years 1-4 following exit from care, youth in the crossover group had the highest rates of outpatient service utilization followed by CW youth and then JP youth. More than one quarter of the crossover group accessed DHS outpatient services within the first four years, which was more than double the proportion of the JP group who did so and also substantially higher than the 15% of the CW group who accessed outpatient health services. On the other hand, among youth who used outpatient health care, there was little difference between the groups in terms of the frequency and cost of outpatient services use, although CW youth averaged about one additional outpatient visit in comparison to the JP and crossover youth and thus had a slightly higher average cost associated with outpatient health care.

Turning to the more acute forms of health care, there were relatively low rates of inpatient stays among all three groups in the initial four years following exit from care, and very few youth in each group experienced an inpatient stay with a corresponding diagnosis for a serious mental illness (i.e. an ICD9 code beginning with either 295 or 296). Crossover youth had the highest rate of experiencing an inpatient stay, which was about triple that of the JP and CW groups. However, the average total inpatient cost per user of inpatient services was slightly higher for the CW group ($49,761) than for the crossover group ($47,677), while users of inpatient services in the JP group had markedly lower average costs ($34,690).

Notably, the rates of emergency department utilization among all three groups were largely similar to their rates of outpatient health services use. As with the other modalities of DHS health services, emergency department use was most common among crossover youth, with more than one quarter of this group experiencing an emergency department visit in years 1 to 4. This meant that the proportion of crossover youth who had an emergency department visit was double that of both the JP and CW groups. Crossover youths also had more ED visits and higher costs on average in the initial four years following exit from care than their JP and CW counterparts.

Table 1.3.2 presents the ten most common, unduplicated diagnoses for persons in each study group. Looking at members of the JP group, in years 1 to 4, three of the ten most common diagnoses (injury, after care for fracture, and head wound) appear to be associated with physical trauma. This finding suggests a high rate of accident and injury from other sources, among those in the JP group. To the extent to which males are more likely to experience an accidental or traumatic injury, these findings may in part be explained by the fact that the JP group is primarily male. Also of note in looking at the

JP group is that two mental health diagnoses were among the top ten diagnostic categories, including the most commonly occurring diagnosis. Looking at the CW group, here again mental health related diagnoses were fairly common, comprising the first and sixth most prevalent diagnoses. On the other hand, there is less evidence that traumatic injuries were a major reason for which members of this group sought Medi-Cal attention. Instead, the presence of both supervision of pregnancy and gynecological exams among the top ten diagnoses for the CW group was reflective of the higher proportion of females in this group. Turning to the crossover youth, the two most frequently occurring diagnoses were mental health related, suggesting youth in the crossover group who availed themselves of DHS services did so more frequently for mental health issues than did their CW or JP counterparts. However, much like the JP group, diagnoses suggesting the presence of physical trauma (head wound and injury) were also common in the crossover group.

The general pattern of DHS health services use and common diagnoses was largely the same in years 5 to 8 as in years 1 to 4, albeit with lower rates of receipt of all treatment modalities for all exiter groups. For example, half as many crossover youth experienced an inpatient stay in years 5 to 8 as in years 1 to 4. While crossover group continued to have the highest rate of inpatient health services use, CW and JP youth had markedly higher average costs associated with such inpatient service use. The difference in total inpatient days and costs was particularly pronounced when comparing the CW and crossover youth. Gender differences between the three groups may at least in part explain this trend. The CW exit group had a larger proportion of females, and to the extent that members of this group had more children in years 5 to 8 (relative to years 1 through 4) following exit, the number of inpatient hospital days among this group may have risen as well.

Mental Health Services Utilization

Table 1.3.3 and figures 1.3.4, 1.3.5 and 1.3.6 show the involvement of all three groups of exiters with mental health treatment services provided by DMH. Outpatient treatment represents the mental health treatment modality that was by far the most commonly accessed form of treatment by members of all three groups in years 1 to 4 following exit from care. In drawing comparisons across groups, the crossover exiter group had the highest rate of receipt of outpatient mental health treatment, with more than 45% of members of this group accessing outpatient mental health services. This was more than four times the rate of outpatient treatment observed among members of the JP group, and more than two and a half times the proportion of CW youth who received outpatient treatment. The average number of outpatient visits among users of outpatient mental health services was highest for the CW group in years 1 to 4, with the crossover group having the next highest number of visits and the JP group the fewest. The cost trend was the same, with the CW group having the highest cost of outpatient treatment on average.

Members of the crossover group also accessed both inpatient mental health treatment and day treatment at higher rates than their CW and JP counterparts in years 1 to 4.

On the whole, very small proportions of each group received DMH inpatient services, which might in part be explained by mental health care also being available through the DHS system. While crossover youth had the highest rate of inpatient treatment, among users of inpatient services, CW youth had more inpatient stays and substantially higher costs on average than either the JP or crossover groups.

While higher proportions of youth in all three groups accessed DMH day treatment services than did DMH inpatient services, the use of day treatment was still limited to small minorities of each group. However, with nearly 1 in 10 crossover youth making use of day services, this group again had rates of day treatment receipt that were greatly in excess of either the CW or JP group. Likewise, the average cost associated with this treatment modality was highest for the crossover group and lowest for the JP group.

A number of differences in the extent and pattern of service use between years 1 to 4 and 5 to 8 following exit are worth noting. Most noteworthy were the dramatic declines in outpatient and day treatment services for members of all three groups between years 1 to 4 and 5 to 8 following exit. Members of the JP and CW group accessed outpatient treatment at about half the rate in years 5 to 8 as they did in years 1 to 4 following exit from care. The disparity was particularly large for the crossover group, where a three fold decline in the proportion of persons who accessed outpatient mental health treatment was observed between years 1 to 4 and 5 to 8 following exit from care. Moreover, in years 5 to 8, a higher proportion of crossover youth than CW youth accessed outpatient treatment, which is the reverse of what was observed in years 1 to 4. In addition, while crossover youth continued to use inpatient services at a higher rate relative to the CW and JP groups, this rate is slightly higher for the crossover youth in years 5 to 8, but slightly lower for the other two groups. Also of note, is that in years 5 to 8 the average inpatient cost observed for the CW group is very high, and substantially greater than that of the other two groups. Given the very small proportion of CW youth who used DMH services during the latter time period, this figure should be interpreted with great caution as it likely reflects the influence of a handful of youth who accumulated very high costs associated with inpatient treatment.

Drug and Alcohol Treatment

Table 1.3.4 and figures 1.3.7, 1.3.8, and 1.3.9 provide an overview of the rate, dynamics and cost of SAPC substance abuse treatment provided to all three groups of exiters. As previously described, the SAPC data provided information about five different substance abuse treatment modalities. However, given the fact that very few persons received day care habilative treatment or participated in the narcotic treatment program modality, the focus in this section is limited to detox treatment, outpatient counseling and residential treatment services.

In years 1 to 4 following exit from care, SAPC outpatient counseling was the most commonly used drug/alcohol treatment service. Here, the proportion of crossover youth who accessed outpatient treatment was substantially higher than the JP and CW

groups, who had similar rates of outpatient service utilization. However, users of outpatient services in all three groups had roughly the same average number of outpatient counseling episodes, the CW exiter group received more days of outpatient counseling on average, and consequently had higher average costs than either of the JP group or the crossover group, who made the least costly use of outpatient SAPC counseling.

Shifting focus to the residential forms of treatment (i.e. detox and residential services), rates of treatment were lower for all exiter groups in comparison to outpatient counseling. Very few persons in the JP group experienced a detox episode in years 1 to 4 following exit, and no members of the CW or crossover groups had a detox stay. Receipt of residential services was the more commonly accessed form of residential drug/alcohol treatment. Rates of receipt of residential treatment were highest among crossover youth, with CW exiters having the lowest rate of use of residential substance abuse treatment in years 1 to 4 following exit from care. However, users of residential services in the CW group had more service episodes on average than users of such services in either of the other two groups, and consequently had higher costs associated with residential substance abuse treatment.

SAPC data also provided information about the primary drug/alcohol problem for which youth exiters received treatment. Figure 1.3.10 shows the prevalence of primary drug/alcohol problems among members of each group who received SAPC treatment in years 1 to 4 following their exit from care. Methamphetamine and marijuana/hashish were the two most commonly reported substance use problems across all exiter groups, and when combined, they served as the primary drug problem for more than two thirds of the youth in each group. In terms of other substances, the CW and crossover exiter groups reported alcohol problems at nearly double the rate of the JP youth, while heroin use appears to have been more prevalent among the JP and youth than among members of the CW and crossover groups.

Trends in the utilization of SAPC treatment in years 5 to 8 were generally similar to those seen in years 1 to 4 among all exiter groups. The major difference worth noting is that rates of treatment for the crossover group were lower for outpatient counseling, but higher for residential treatment services. The other difference that bears mentioning relates to that of average costs of SAPC treatment, which were higher for outpatient counseling for all three exiter groups, and higher for residential services for the CW and crossover groups.

Looking at the primary reported drug/alcohol problems in years 5-8 following exit from care, methamphetamine and marijuana/hashish were again the most commonly reported problems for which youth sought SAPC treatment, with the majority of youth reporting problems with either one or the other of these substances.

Summary

The use of LA County-administered inpatient and residential forms of health, mental health and substance abuse treatment by youth exiting the child welfare and/or probation systems was fairly uncommon during their young adult years. Outpatient treatment modalities were far more common in all three treatment systems (i.e. health, mental health and drug/alcohol) among members of all three study groups. This desirable mix, where outpatient services are the predominant mode of health care, is tempered by the finding that rates of DHS emergency department utilization were comparable, and in some cases higher, than utilization rates for DHS outpatient health services. This indicates that many persons faced barriers in obtaining non-acute health care, or used emergency services when other services use would have been more appropriate.

Relative to their JP and CW counterparts, higher proportions of crossover youth made use of virtually all health, mental health, and substance abuse treatment modalities that were examined in both years 1 to 4 and 5 to 8 subsequent to exit from care. Moreover, in many cases, crossover youth had higher average costs associated with their health and behavioral health treatment. While this may be a desirable outcome to the extent that crossover youth are understood to be receiving needed health and/or behavioral health care, it nonetheless also suggests that youth in this group emerge from the child welfare and probation system with more intensive health and/or behavioral health needs than persons in either the CW or JP group, another factor that contributes to the barriers they face transitioning to adulthood.

1.4. Employment and Earnings

This section explores the employment and earnings of young adults with histories in the JP and/or CW systems. Tracking the employment and earnings trajectories of youth following their exit from the child welfare and/or juvenile probation systems provides a window to understanding the extent to which youth exiters are able to gain a foothold in the labor market as they transition to adulthood. Data on the employment, earnings and vocational training of youth come from two sources, each of which will be reviewed in this subsection.

LA County Department of Community and Senior Services (CSS)

CSS provides employment services funded through the Workforce Investment Act (WIA). These services include employment programs targeted specifically to youth ages 14-24, as well as additional job search and career counseling services for adults ages 18 and older. The CSS data used in this study provided information about the date and type of CSS services received. Table 1.4.1 shows the proportion of all groups of exiters who received WIA funded employment/vocational services of any type from CSS in years 1 to 4 and in years 5 to 8 following exit from care. Only a very small minority of youth received CSS services, and will not be considered further.

California Employment Development Department (EDD)

EDD is the California state agency charged with collecting payroll taxes, administering the state's unemployment/disability insurance programs and providing an array of additional related services. EDD also maintains employment and earnings records for more than 17 million California workers. EDD data used in this study reported quarterly earnings of youth in the CW and crossover groups. This information was not available for youth with involvement in the probation system.

In order to assess employment rates, the results reported here detail the proportion of youth in all three groups who had earnings of any amount following their exit from care, as well as youth who were considered to be "consistently" employed. Consistently employed was the term given to those who had earnings of any amount in at least 10 (or about two thirds) of the quarters in one of the four-year periods following exit from care. These metrics are imperfect measures of employment rate as they do not capture any wages earned in "off the books" employment or other unofficial types of work in which persons may be engaged. Nonetheless, they do offer conservative measures of the rate and consistency of labor force participation of youth exiters during their young adult years, although these rates should be interpreted cautiously.

This subsection also examines the corresponding earnings levels over time for the youth who had employment, and compares the earnings of those who were deemed to be consistently employed against all other youth who had earnings. In doing so, it is able to provide some indication of whether there is an upward trend over time in the earnings trajectory of those youth who are participating in the labor market.

Before discussing the findings gleaned from the earning data, two additional points about the EDD data need mentioning. First, EDD records were available from the first quarter of 2004 until the last quarter of 2010, meaning that the data fully covered both the 1st year following exit from care for the 2004 exiter cohort and the 8th year subsequent to exit for the 2002 cohort. Consequently, it was not necessary to apply the weighting procedures discussed in the Introduction of Section 1 to these data. Second, EDD earnings data were available only for youth who had involvement with the child welfare system, meaning that the EDD analyses were limited to comparisons between the CW exiter group and the crossover youth.

Table 1.4.2 and figures 1.4.1 and 1.4.2 summarize the employment and earnings outcomes of youth in the CW and crossover groups. The proportion of youth who had any earnings in years 1 to 4 was fairly similar for both groups, with slightly less than half of the persons in both groups having earnings during that time period. However, the CW exiter group appears to have been more steadily employed. About 23% of CW exiters (or roughly half of all those with earnings) were consistently employed. By comparison, about 10% of youth in the crossover group (or about half of youth in the crossover group with earnings) were consistently employed. Similarly, a typical CW exiter had earnings in roughly half of the quarters in the initial four year period following exit from care, while a typical crossover youth had earnings in only about 40% of the 16 quarters covered in that time frame. This gap in employment is also reflected in earnings in years 1 to 4, where the average earnings of members in the CW exiter

group were more than $15,000 higher than those of the crossover youth ($29,350 vs. $13,443).

For both study groups, overall proportion with any earnings in years 5 to 8 remained at just under half, and the overall number of consistent employment dropped off sharply in the latter period for both study groups. The disparity in consistent employment remained about the same, however, with about twice as many in the CW group consistently employed as compared to the crossover group (10% to 5%). This disparity in work is also reflected in the disparity in mean earnings received per worker over this four-year period.

Overall, these earnings findings reflect mixed results. Table 1.4.2 shows that in both 4-year periods, just under half of the members in each group had any earnings. When looked at annually, however, Figure 1.4.1 indicates that in any given year, only between about 20% and 35% of had any earnings, with the crossover group lagging compared to the CW group.

Despite a persistent disparity in earnings between the two groups, Figure 1.4.2 shows a generally increasing trend in average yearly earnings (for all those who had earnings) from years 1 to 8 at a rate that exceeded inflation (which was not adjusted for here). These gains did turn around in year 6, however, in a trend reversal that likely reflects the effects of the recession in 2008 and 2009. If the average cumulative earnings that were reported for years 1 to 4 and 5 to 8 in Table 1.4.2 were spread over their respective 4 year periods, annual earnings for the CW group in years 1 to 4 would be slightly below the poverty threshold for a single person household (using the 2004 Federal poverty guidelines), and slightly above the same threshold in years 5 to 8. For the crossover group, estimated annualized earnings would be well below the poverty threshold for single person households in both time periods.

For those who were consistently employed, the situation is markedly more positive, particularly in years 5 to 8 following exit from care. Figures 1.4.3 and 1.4.4 illustrate the cumulative earnings for both 4-year periods for the consistently employed as compared to others. If annualized, the cumulative earnings for persons in the CW and crossover group who were consistently employed would have earnings that were roughly 200% higher than the Federal poverty guideline (again using the 2004 Federal poverty guidelines). This is one measure of how many in each study group manage to successfully navigate the transition to adulthood experienced in this 8-year study period. Given this, the decline in proportions of consistently employed in both groups between the first and the second four-year periods examined here are reasons for concern, as it indicates that less persons over time were successfully assimilated into the mainstream labor market.

1.5 Educational Attainment

This section examines the secondary and post-secondary educational attainment of youth exiting the child welfare and/or juvenile probation systems. More specifically, this

subsection (along with the previous one) addresses the second overall study question posed in the introductory section:

How do youth fare with various aspects of employment and educational attainment both before and after exiting child welfare or juvenile probation services and transitioning to adulthood?

More specifically, this section looks at the following:

- What proportion of youth earn high school diplomas or GEDs?
- What is the highest high school grade level completed by youth?
- What proportion of youth attend at least some community college?
- What proportion of youth receive an associates degree from a community college or earn enough credits to transfer to a university in the California State or University of California systems?
- What proportion of youth enroll in and complete a degree at a four-year university in the California State or University of California systems?
- What is the highest level of educational attainment among youth?

The data used to investigate these questions were provided by the California Partnership for Achieving Student Success (Cal-PASS). Cal-PASS is an initiative that collects and shares student data from the public K-12, community college and university systems in California. Cal-PASS collects individual level records for students, and each student is assigned a unique alpha-numeric Cal-PASS identifier. Cal-PASS analysts used identifying information from the LA County DCFS and Department of Probation to match youth who exited from the child welfare and/or probation systems with their unique Cal-PASS identifier, and in turn, with their individual level high school, community college and four-year university records. In some cases, the matching process was inconclusive, meaning that a certain proportion of youth exiters were matched with more than one unique Cal-PASS identifier. As a result, about 10.7% (n=1,854) of JP exiters, 1% (n=47) of CW exiters and 0.3% (n=2) of crossover youth were dropped from the analysis of Cal-PASS data, as they were matched with more than one Cal-PASS identifier.

Cal-PASS high school, community college and four-year university records were all provided separately. As each set of records was slightly different, additional details about each dataset and the methodology used to assess the high school, community college and four-year university data are provided in the respective sub-sections below that analyze the outcomes of youth in each of these areas.

High School Outcomes

Robust Cal-PASS data on the high school outcomes of youth exiters were available for the period ranging from the 2003-2004 academic year to the 2009-2010 academic year. The initial intent was to analyze high school outcomes among a sample comprised of consecutive 9th grade entry cohorts, however the data from the three study groups

preceded the time period for which Cal-PASS had reliable data. As all of the youth in this study were 16 or older at their time of exit from care in either 2002 or 2004, in most cases they were enrolled in 9th grade prior to the 2003-2004 academic year, which represents the first year for which robust Cal-PASS high school data were available.

Given this limitation, high school outcomes were tracked here among 10th grade entry cohorts. As such, different inclusion criteria were used to select a sample to be used for assessing high school outcomes among the three study groups. The criteria were: 1) A record of enrollment in the 10th grade; 2) Available high school records in the data for a period of at least 3 years subsequent to the academic year of 10th grade enrollment. Put differently, any youth with a record of enrollment in 10th grade in the 2003-2004, 2004-2005, 2005-2006, 2006-2007, or 2007-2008 academic years were eligible for inclusion. For members of the 2002 exit cohort, these inclusion criteria yielded a sample (n=3 for JP group, n=3 for CW group, n=0 for crossover youth) that was too small for analysis. Instead, the analysis of high school outcomes presented here is limited to youth from the 2004 exit cohort who met the above described 10th grade entry cohort criteria. While still smaller than desirable, the resulting sample (n=328 for JP group, n=95 for CW group, n=15 for crossover youth) is reported here.

Table 1.5.1 details the high school educational outcomes among the 10th grade entry cohorts. Among youth who were enrolled in high school in 10th grade, 25% of youth in the JP group and 20% of youth in the CW group ultimately received a high school diploma. An additional 1.6% of the JP group completed an adult education or a Regional Occupational Program (ROP). While it is not possible to directly assess the highest grade level completed by youth exiters, it is possible to track attrition between 10th and 12th grade. Among those who were enrolled 10th grade, 57% of the JP group and 51% of the CW group had a record of enrollment in the 11th grade, proportions which dropped to 43% and 47%, respectively, for 12th grade. Given that 25% of youth in the JP group and 20% of youth in the CW ultimately received a high school diploma, Table 1.5.1 would further indicate that a substantial proportion of youth in each group who began 12th grade did not continue on to graduation. However, at least some students who appear not to have completed high school may have transferred to and graduated from a high school that did not contribute data to Cal-PASS. This is likely a small group, but the proportion of students who ultimately graduated high school may be slightly higher than what was observed, given that Cal-PASS data do not cover every high school.

Higher Education Outcomes

The available higher education data allow for the identification of all youth who enrolled in a community college, a four-year university in the University of California (UC) or California State University (CSU) systems, or a select group of private four-year universities at any point between 2000 and 2010. Although Cal-PASS receives data from institutions of higher education located across the state, for this study, community college and four-year university data were only available for institutions located in Los Angeles County. Consequently, in the context of this study, it was only possible to

identify youth who enrolled in a community college or four-year university located in Los Angeles County at any point between 2000 and 2010. As such, the rates of community college and four-year university enrollment presented in this section are likely lower-bound estimates of the number of youth who ultimately enrolled in higher education, as a certain number of youth are likely to have attended a community college or university located outside of Los Angeles County.

This subsection analyzes the higher education outcomes of all youth who had a record of enrollment at a community college or four-year university in Los Angeles County at any point between 2000 and 2010, regardless of whether initial enrollment preceded or followed a youth's discharge from the child welfare and/or juvenile probation system. There is less focus in this section on the timing of higher education outcomes relative to discharge from the child welfare and/or juvenile justice system, so the 2002 and 2004 exiter cohorts are grouped together in the analysis presented here.

Table 1.5.2 shows the proportion of each study group who had any record of community college enrollment at any point between 2000 and 2010. The rate of enrollment in community college was highest for the CW group, with about 46% having enrolled in community college. This was higher than the 40% of crossover youth who enrolled in community college and the 31% of JP youth who had enrollment records. Only a very small minority received either an Associate of Arts (A.A.) or Associate of Sciences (A.S.) degree during that same time period. Approximately 2% of youth in both the JP and CW exiter groups received an Associates degree.

A second community college outcome of interest is the extent to which individuals in each of the three study groups met the necessary criteria to be eligible to transfer to a university in the University of California (UC) or California State University (CSU) systems. According to a standard definition used by the Research and Planning Group for California Community Colleges, a student who completes at least 60 transferable units with at least a 2.0 GPA and who successfully completes any transfer level English and any transfer level math course is considered transfer ready to the UC or CSU system. There are some differences in the criteria used to determine transfer-ready status in the CSU and UC systems. Either way, only a small minority of youth exiters who had a record of community college enrollment actually achieved transfer ready status.

Finally, the Cal-PASS community college data were combined with the Cal-PASS records of all youth who enrolled in an institution in the UC or CSU system located in Los Angeles County between 2000 and 2010 to assess what proportion of youth who enroll in community college continue on to a four-year university. Figure 1.5.1 shows the proportion of all youth who enrolled in community college and all youth who achieved transfer ready status who had a record of enrollment in a four-year university in the UC or CSU system. As the figure shows, about 2% of the JP group and 4% of the CW group who attended community college had a record of enrollment in a four-year university. However, when looking just at the sub-group of youth who achieved transfer ready status, about 28% of the JP group and 39% of the CW group enrolled at

a UC or CSU campus. Findings for the crossover group were suppressed as virtually none in this group had records of these outcomes.

Table 1.5.3 presents findings from analysis of the Cal-PASS four-year university data. Certain small cell values have been suppressed. A very small minority of youth had a record of enrollment at a UC or CSU institution located in Los Angeles County between 2000 and 2010. Among youth in the JP group, 0.9% enrolled in at a UC or CSU campus, a proportion that was lower than the 2% of CW exiters who did so. Among youth who attended a four-year university, relatively few received a degree at any point between 2000 and 2010 with 13.3% of the JP group and 13.5% of the CW group receiving Bachelor's degrees and an additional 5.9% of the JP group and 5.6% of the CW group receiving a graduate or professional degree.

Finally, as a complement to Figure 1.5.1, which displayed the proportion of community college enrolled youth who also enrolled in a four-year university, Table 1.5.3 takes the inverse approach and shows the proportion of youth who enrolled in a four-year university in the UC or CSU system located in Los Angeles County who also had a record of community college enrollment. As the table shows, a fairly large proportion of all youth (88% of the JP group and 83% of the CW group) who enrolled in a UC or CSU also had attended a community college. This finding suggests that for youth exiting dependent or delinquent care who reach college, community college is an important intermediary step in doing so.

To summarize higher education outcomes, youth in each of the three study groups were placed into one of six mutually exclusive categories on the basis of their highest level of educational attainment as indicated in the community college and/or four-year university records. The six categories are as follows:

- *No community college/No university*-includes all youth for whom there was no record of community college or university enrollment in Cal-PASS data
- *Some community college*- includes all youth for whom there was a record of community college enrollment, but who did not achieve transfer ready status, did not receive any type of degree/award from a community college and did not have a record of enrollment in a UC or CSU.
- *Transfer ready status*- includes all youth who achieved transfer ready status at a community college, but did not receive an Associates degree and did not have a record of enrollment in a UC or CSU.
- *Associates degree*-includes all youth who received either an A.A. or A.S. degree at a community college but did not have a record of enrollment in a UC or CSU.
- *Some university*-includes all youth who had a record of enrollment at a UC or CSU but who did not receive a degree.
- *Bachelor's degree or higher*-Includes all youth who earned a bachelor's or a graduate degree from a UC or CSU.

Table 1.5.4 shows the proportion of members in each of the three study groups who fell into each of the six above described categories. Once again, certain small cell values

were suppressed. The majority of persons in all three study groups had neither a record of community college enrollment, nor a record of enrollment in a UC or CSU institution. Depending on the group, between about 30% and 46% of youth had a record of community college enrollment. However, very small proportions of youth in all three groups had levels of educational attainment that went beyond enrollment in a community college, and very few youth in the JP and CW group--0.2% and 0.4% respectively—received a bachelor's degree or higher.

Summary

The main findings of this subsection were that less than one quarter of those tracked from tenth grade (both in the CW and JP study groups) were found to have graduated from high school. In post-secondary educational outcomes, where more complete data were available, a significant minority of youth in all three study groups (between 32% and 46%) were found to have enrolled in community college, although very few youth were found to have achieved higher levels of post-secondary educational attainment, and very few either enrolled in a four-year university in the UC or CSU system or received a degree from a UC or CSU. Finally, virtually none of those in the crossover study group were found to have attained the high school or higher education outcomes measured here except for community college enrollment.

In summarizing these findings one must also be aware of substantial limitations. This is particularly so for the high school outcomes, where the high school experiences of many youth in the study sample likely preceded the period of time for which high school data were available. Among the higher education data, the reported proportions of persons achieving transfer ready status, earning an Associates degree or earning a bachelor's degree or higher, are likely underestimates. A certain proportion of those who were still enrolled in community college or university at the end of 2010 likely continued on to earn degrees, and the findings on post-secondary educational attainment should be interpreted accordingly. An unknown proportion of youth who exited the child welfare and/or juvenile probation system also are likely to have attended community colleges and four-year universities located outside of Los Angeles County, and would consequently, not be identified as obtaining higher education in the findings presented here. While these limitations underreport the higher education findings to some extent, it would be unlikely to substantially alter the main conclusion found here, that young adults who attain higher education mileposts are very much the exception among all three of these subgroups.

1.6 Summary

In order to summarize the principal findings of this section, Figures 1.6.1 and 1.6.2 present the overall rates of service use in each system in years 1 to 4 and 5 to 8 following exit from care. These figures also show the proportion of youth in each group who had any earnings as indicated in the EDD data. Education related outcomes are not included in these tables as they were examined a different manner than the rest of these outcomes. In considering these figures it is important to clarify that the cash

assistance column encompasses receipt of either GR or CalWORKs, and that persons identified as having received cash assistance represent a subset of those who received of any type of public welfare assistance, which also includes Medi-Cal and CalFresh. Likewise, the criminal justice columns include all persons identified as having had either a jail stay or an episode of probation.

In comparing the involvement of each of the study groups each domain, a number of trends are worth noting. First, while patterns of service utilization in years 1 to 4 following exit from care were similar to those observed in years 5-8, service utilization rates were slightly lower within most individual domains for all three groups in the latter time period. Moreover, when comparing the study groups, the crossover youth had the highest rates of service utilization of all types both in years 1 to 4 and 5 to 8. Looking at specific types of service utilization, service rates were highest in the public welfare and criminal justice system in both time periods for all three groups. However, the proportion of JP exiters who received some type of public welfare benefit (i.e. GR, CalWORKs, Medi-Cal, or CalFresh) in years 1 to 4, was much lower than the more than two thirds of CW and eight in ten members of the crossover youth who did so. A similar pattern was seen in years 5 to 8, but the disparity between groups was slightly less. Finally, the biggest disparity between groups was seen in the criminal justice domain. In both time periods, almost two-thirds of crossover youth who had criminal justice system involvement far exceeded the comparable proportions of the other two study groups.

In summary, the results presented in this section provide several key points of information about the young adult outcomes of youth who age out of the CW and/or JP systems.

1) The fairly high rates of receipt of public welfare benefits demonstrate that poverty is common experience during the young adult years for youth who age out of these systems. Coupled with findings that only about half of the individuals in all three groups had earnings in years 1 to 4 and 5 to 8 following exit from juvenile systems, this suggests that the many youth who age out of the CW and/or JP systems have young adult years that are characterized by economic insecurity.

2) The rates of criminal justice system involvement among members of all three groups were quite high. Having such numbers of youth experiencing a jail stay or an episode of probation supervision during their young adult years in concerning.

3) There were some positive trends seen in the education and earnings outcomes. A significant minority of youth in all three exiter groups enrolled in community college or had a higher level of educational attainment. Nearly half of youth in the CW group enrolled in community college or attained a higher level of post-secondary education. The comparable figures for the JP and crossover groups were about 31% and 40%, respectively.

4) In terms of earnings, the youth who displayed a consistent pattern of employment/earnings subsequent to their exit from care, had dramatically higher earnings over time than did their counterparts who showed more sporadic employment patterns. The proportion of consistently employed young adults dropped off in the latter part of risk period, however, underscoring the tenuous hold on the labor market possessed by even those in the group with the best employment outcomes.

Section 3 of this report looks more closely at factors that are associated with higher earnings, as well as the likelihood of whether a youth will be consistently employed or achieves positive higher education outcomes. A final important finding to emerge from this section is that crossover youth, who had involvement in both the JP and CW systems, had markedly different, and on the whole less desirable, outcomes than their counterparts in the other two groups. This suggests that crossover youth have more difficulty transitioning to adulthood than youth exiting either the JP system or youth leaving the CW system, who have been previously shown to experience a variety of unfavorable outcomes in their young adult years. While this section did not account for differences in the characteristics of group members that might explain some of the differences between groups, Section 3 of this report will do so and more definitively assess the degree to which the three study groups experience differential outcomes in their young adult years.

SECTION 1 TABLES AND FIGURES

Table 1.1 – Public Welfare (cash assistance and healthcare coverage) Utilization
Years 1-4 after exit from Juvenile Systems (2004 Cohort)

	Type of Exiter		
	JP Exiter	**CW Exiter**	**Crossover Youth**
N	8855	2300	330
	GR		
Received GR (%)	9.8	12.2	22.2
Mean Months of GR	10.3	11.6	11.1
Cost of GR (per user)	$2,111	$2,373	$2,279
	CalWORKs		
Received CalWORKs (%)	12.9	21.1	25.7
Mean Months of CalWORKs receipt	18.3	16.9	11.8
Cost of CalWORKs (per user)	$13,255	$12,251	$8,527
	CalFresh		
Received CalFresh (%)	24.2	32.4	45.1
Mean Months of CalFresh	20.1	20.2	15.5
Cost of CalFresh per user	$4,014	$4,042	$3,104
	Medi-Cal		
Received Medi-Cal (%)	32.0	51.3	51.4
Mean Months of Medi-Cal receipt	35.9	24.5	22.5
Years 5-8 after exit from Juvenile Systems (2002 Cohort)			
N	8368	2388	268
	GR		
Received GR (%)	13.1	11.8	24.0
Mean Months of GR	9.7	10.9	13.3
Cost of GR (per user)	$1,991	$2,227	$2,735
	CalWORKs		
Received CalWORKs (%)	12.0	19.4	26.6
Mean Months of CalWORKs receipt	11.0	15.5	11.7
Cost of CalWORKs (per user)	$7,931	$11,184	$8,485
	CalFresh		
Received CalFresh (%)	25.1	31.7	42.0
Mean Months of CalFresh	14.9	19.1	21.1
Cost of CalFresh per user	$2,974	$3,828	$4,229
	Medi-Cal		
Received Medi-Cal (%)	14.2	23.4	22.3
Mean Months of Medi-Cal receipt	20.8	23.8	24.7

Table 1.2.1 Jail Utilization

Years 1-4 after Exit exit from Juvenile Systems (2004 Cohort)			
	Type of Exiter		
	JP Exiter	**CW Exiter**	**Crossover Youth**
N	8855	2300	330
Had Jail Stay (%)	47.6	25.0	64.2
Mean Length of Jail Stay (days)	42.7	25.6	32.5
Mean Number of Jail Stays	3.5	3.2	4.1
Number of Jail Stays (%)			
1 Stay	33.4	41.6	29.7
2 Stays	20.8	19.9	14.6
3 Stays	15.6	12.9	17.8
4 or more Stays	30.2	25.6	37.8
Mean Total Number of Jail Days	147.9	81.9	135.1
Jail Days deemed "Medical" (%)	8.9	13.0	14.6
Mean Total Cost of Jail	$25,486	$18,430	$33,946
Years 5-8 after Exit exit from Juvenile Systems (2002 Cohort)			
N	8368	2388	268
Had Jail Stay (%)	42.7	22.7	60.4
Mean Length of Jail Stay (days)	39.6	28.1	37.1
Mean Number of Jail Stays	3.1	3.0	3.4
Number of Jail Stays (%)			
1 Stay	38.1	42.8	36.2
2 Stays	22.9	22.4	24.1
3 Stays	14.1	12.4	9.9
4 or more Stays	25.0	22.4	29.8
Mean Total Number of Jail Days	122.4	83.3	124.3
Jail Days deemed "Medical" (%)	9.4	15.1	12.0
Mean Total Cost of Jail	$26,386	$23,274	$31,055

Table 1.2.2 Probation Utilization

Years 1-4 after exit from Juvenile Systems (2004 Cohort)			
	Type of Exiter		
	Juvenile Probation Exiter	Child Welfare Exiter	Crossover Youth
N	8855	2300	330
Received probation (%)	19.3	7.3	23.3
Mean Months of probation	17.7	17.1	18.0
Mean Total Cost of Probation	$1,416	$1,368	$1,443
Years 5-8 after exit from Juvenile Systems (2002 Cohort)			
N	8368	2388	268
Received probation (%)	15.4	6.7	22.3
Mean Months of probation	18.7	17.6	16.8
Mean Total Cost of Probation	$1,498	$1,409	$1,345

Table 1.3.1 – Health Services Use (inpatient, outpatient & emergency)

Years 1-4 after exit from Juvenile Systems (2004 Cohort)			
	JP Exiter	**CW Exiter**	**Crossover Youth**
N	8855	2300	330
Inpatient			
Received Inpatient Services (%)	3.1	3.3	9.0
Mental Health Inpatient Stay (%)	0.3	0.4	1.0
Mean Number of Inpatient Stays	1.5	1.7	1.8
Mean Total Number of Inpatient Days	10.8	14.2	15.8
Mean Length of Inpatient Stay	8.5	7.5	8.0
Mean Total Inpatient Cost	$34,690	$49,761	$47,677
Outpatient			
Received Outpatient Services (%)	12.0	15.0	26.4
Mean Number of Outpatient Visits	3.6	4.6	3.4
Mean Total Outpatient Cost	$2,320	$2,826	$2,410
Emergency Department			
Received ED Services (%)	11.5	12.1	26.7
Number of ED visits (mean)	1.9	2.2	3.0
Mean Total ED Cost	$1,876	$2,301	$2,981
Years 5-8 after exit from Juvenile Systems (2002 Cohort)			
N	8368	2388	268
Inpatient			
Received Inpatient Services (%)	2.8	2.7	4.3
Mental Health Inpatient Stay (%)	0.2	0.1	1.3
Mean Number of Inpatient Stays	1.6	1.7	1.2
Mean Total Number of Inpatient Days	9.7	12.0	8.7
Mean Length of Inpatient Stay	7.2	6.9	7.9
Mean Total Inpatient Cost	$32,629	$37,813	$26,743
Outpatient			
Received outpatient Services (%)	11.9	13.5	17.6
Mean Number of Outpatient Visits	4.2	4.8	3.6
Mean Total Outpatient Cost	$2,707	$3,251	$2,217
Emergency Department			
Received ED Services (%)	10.2	9.4	19.7
Number of ED visits (mean)	2.1	2.3	1.9
Mean Total ED Cost	$2,180	$2,257	$1,974

Table 1.3.2 Most Frequently Occurring DHS Diagnoses

JUVENILE PROBATION GROUP

Years 1-4 after exit from Juvenile Systems (2004 Cohort)		Years 5-8 after exit from Juvenile Systems (2002 Cohort)	
Diagnosis	**% with Diagnosis**	**Diagnosis**	**% with Diagnosis**
Other non-organic psychoses (298)	2.5	Follow up treatment (V67.5)	2.6
Follow up treatment (V67.5)	2.3	Cellulitis/Abcess (682)	2.4
Attention to surgical dressing (V58.3)	2.1	Abdominal problems (789)	2.0
Head wound (873)	2.0	Other non-organic psychoses (298)	2.0
Abdonmial problems (789)	2.0	Diseases of hard tissue of teeth (521)	1.9
Cellulitis/Abcess (682)	1.9	Head wound (873)	1.9
Injury (959)	1.8	Attention to surgical dressing (V58.3)	1.9
After care for fracture (V54.1)	1.7	Follow up care for surgery (V70.0)	1.7
Episodic Mood Disorder (296)	1.6	Episodic Mood Disorder (296)	1.7
Other unspecified examination (V72.8)	1.5	After care for fracture (V54.1)	1.5

CHILD WELFARE GROUP

Years 1-4 after exit from Juvenile Systems (2004 Cohort)		Years 5-8 after exit from Juvenile Systems (2002 Cohort)	
Diagnosis	**% with Diagnosis**	**Diagnosis**	**% with Diagnosis**
Episodic Mood Disorder (296)	2.6	Follow up treatment (V67.5)	3.3
Routine Medi-Cal Exam (V70.0)	2.3	Abdominal problems (789)	2.3
Cellulitis/Abcess (682)	2.2	Cellulitis/Abcess (682)	2.1
Supervision of Pregnancy (V22.1)	2.2	Other complications of pregnancy (646)	1.9
Follow up treatment (V67.5)	2.2	Routine Medi-Cal Exam (V70.0)	1.9
Other non-organic psychoses (298)	2.1	Dental caries (521)	1.8
Abdominal problems (789)	2.1	Other non-organic psychoses (298)	1.6
Gynecological Exam (V72.3)	1.8	Inflammatory disease of female reproductive organs (616)	1.5
Acute respiratory infection (465)	1.4	Other back disorders (724)	1.5
Other disorders of urinary tract (599)	1.4	Gynecological Exam (V72.3)	1.4

CROSSOVER YOUTH

Years 1-4 after exit from Juvenile Systems (2004 Cohort)		Years 5-8 after exit from Juvenile Systems (2002 Cohort)	
Diagnosis	**% with Diagnosis**	**Diagnosis**	**% with Diagnosis**
Episodic Mood Disorder (296)	3.0	Other non-organic psychoses (298)	4.7
Other non-organic psychoses (298)	2.7	Gynecological Exam (V72.3)	3.4
Other symptoms involving abdomen (789)	2.3	Episodic Mood Disorder (296)	2.7
Head wound (873)	2.0	Symptoms involving respiratory system (786)	2.7
Injury (959)	2.0	Diseases of hard tissue of teeth (521)	2.0
Dental Exam (V72.2)	2.0	Other complications of pregnancy (646)	2.0
Cellulitis/Abcess (682)	1.7	Cellulitis/Abcess (682)	2.0
Soft tissue disorders (729)	1.7	Other back disorders (724)	2.0
Orthopedic care (V54.8)	1.7	Symptoms involving digestive system (787)	2.0
Routine Medi-Cal Exam (V70.0)	1.7	Symptoms involving urinary system (788)	2.0

Table 1.3.3 – Mental Health Services Utilization (LA County Department of Mental Health)

Years 1-4 after exit from Juvenile Systems (2004 Cohort)			
	JP Exiter	**CW Exiter**	**Crossover Youth**
N	8855	2300	330
Inpatient			
Received MH Inpatient Services (%)	0.7	1.1	3.5
Mean Number of MH Inpatient Stays	1.7	2.1	1.4
Mean Total MH Inpatient Cost	$24,367	$42,330	$31,708
Outpatient			
Received Outpatient Services (%)	10.4	16.9	46.2
Mean Number of Outpatient Visits	30.3	49.2	45.6
Mean Total Outpatient Cost	$6,110	$10,867	$10,623
Day Treatment			
Received Day Treatment Services (%)	1.6	2.5	9.0
Mean Total Day Treatment Cost	$8,497	$9,450	$13,730
Years 5-8 after exit from Juvenile Systems (2002 Cohort)			
	JP Exiter	**CW Exiter**	**Crossover Youth**
N	8368	2388	268
Inpatient			
Received MH Inpatient Services (%)	0.6	0.6	3.0
Mean Number of MH Inpatient Stays	1.3	2.8	9.4
Mean Total MH Inpatient Cost	$33,461	$54,624	$37,513
Outpatient			
Received Outpatient Services (%)	4.8	8.6	14.1
Mean Number of Outpatient Visits	32.3	42.2	40.3
Mean Total Outpatient Cost	$8,429	$9,095	$13,255
Day Treatment			
Received Day Treatment Services (%)	1.7	1.7	4.7
Mean Total Day Treatment Cost	$10,692	$8,409	$16,304

Table 1.3.4 – Drug & Alcohol Services Utilization (SAPC)

Years 1-4 after exit from Juvenile Systems (2004 Cohort)			
	Type of Exiter		
	JP Exiter	**CW Exiter**	**Crossover Youth**
N	8855	2300	330
Detox			
Received Detox Services	0.3	0.0	0.0
Number of Detox Service Episodes (mean)	1.7	--	--
Total Days of Detox Service Receipt (mean)	18.1	--	--
Total Cost of Detox Service Use (mean)	$4,907	--	--
Outpatient Counseling			
Received OC Services	3.8	3.0	10.4
Number of OC Service Episodes (mean)	1.6	1.5	1.8
Total Days of OC Service Receipt (mean)	172.1	184.0	135.9
Total Cost of OC Service Use (mean)	$11,870	$13,958	$9,340
Residential Services			
Received RS	2.0	1.1	2.8
Number of RS Episodes (mean)	1.6	1.7	1.3
Total Days of RS Receipt (mean)	108.1	115.4	131.5
Total Cost of RS Use (mean)	$9,398	$11,950	$9,747
Years 5-8 after exit from Juvenile Systems (2002 Cohort)			
N	8368	2388	268
Detox			
Received Detox Services	0.6	0.1	0.9
Number of Detox Service Episodes (mean)	1.7	1.2	1.3
Total Days of Detox Service Receipt (mean)	24.9	16.3	118.1
Total Cost of Detox Service Use (mean)	$6,647	$6,121	$44,133
Outpatient Counseling			
Received OC Services	4.4	2.9	6.4
Number of OC Service Episodes (mean)	1.7	1.6	2.1
Total Days of OC Service Receipt (mean)	173.7	185.8	259.9
Total Cost of OC Service Use (mean)	$12,774	$15,186	$21,303
Residential Services			
Received RS	2.0	1.0	4.3
Number of RS Episodes (mean)	1.5	1.5	2.0
Total Days of RS Receipt (mean)	94.1	142.4	127.3
Total Cost of RS Use (mean)	$8,262	$15,476	$12,814

Table 1.4.1 - Employment/Vocational Services

Years 1-4 after exit from Juvenile Systems (2004 Cohort)			
	Type of Exiter		
	JP Exiter	CW Exiter	Crossover Youth
N	8855	2300	330
Received CSS Services (%)	0.6	1.7	0.7
Number of CSS Service Episodes (mean)	2.4	2.9	3.5
Years 5-8 after exit from Juvenile Systems (2002 Cohort)			
N	8368	2388	268
Received CSS (%)	0.3	0.3	0.9
Number of CSS Service Episodes (mean)	2.1	2.1	3.0

Table 1.4.2 - Employment and Earnings (EDD)

Years 1-4 after exit from Juvenile Systems (2004 Cohort)			
	Type of Exiter		
	JP Exiter	CW Exiter	Crossover Youth
N	8855	2300	330
Had EDD Earnings (%)	--	48.0	47.6
Consistently Employed (%)	--	22.5	10.3
Mean Quarters w/ EDD Earnings	--	8.4	6.2
Mean Total EDD Earnings	--	$29,350	$13,443
Years 5-8 after exit from Juvenile Systems (2002 Cohort)			
N	8368	2388	268
Had EDD Earnings (%)	--	49.6	44.1
Consistently Employed (%)	--	10.3	4.9
Mean Quarters w/ EDD Earnings	--	8.0	4.8
Mean Total EDD Earnings	--	$39,887	$18,189

Table 1.5.1 High School Outcomes, 10th Grade Entry Cohorts

	Type of Exiter					
	JP Exiter		CW Exiter		Crossover Youth	
	n	%	n	%	n	%
N	301	100	98	100	15	100
Degree awarded						
High School Diploma	75	24.9	20	20.4	0	0
GED	0	0.0	0	0.0	0	0
Completed Adult Education or ROP Program	5	1.7	**	**	0	0
Number of high schools attended						
1	227	75.4	59	60.2	9	60.0
2 or more	74	24.6	39	39.8	6	40.0
Enrollment Status by grade level						
10th grade	301	100.0	98	100.0	15	100.0
11th grade	171	56.8	50	51.0	**	**
12th grade	128	42.5	46	46.9	**	**

**** Cell values were suppressed when the n is less than or equal to 5

Table 1.5.2 Community College Outcomes, 2000-2010, by exiter type

	Type of Exiter					
	JP Exiter		CW Exiter		Crossover Youth	
	n	%	n	%	n	%
N	15639	100	4507	100	596	100
Record of Community College Enrollment	4897	31.3	2100	46.6	237	39.8
Highest degree/certificate received						
Associates degree	112	2.3	35	1.7	**	**
Achieved transfer ready status						
Eligible for transfer to UC or CSU system	90	1.8	14	0.7	**	**
Elgibile for transfer to CSU system only	44	0.9	14	0.7	**	**

**** Cell values were suppressed when the n is less than or equal to 5

Table 1.5.3 University Outcomes, 2000-2010, by exiter type

	Type of Exiter					
	JP Exiter		CW Exiter		Crossover Youth	
	n	%	N	%	n	%
N	15639	100	4507	100	596	100
Record of Enrollment	135	0.9	89	2.0	**	**
Prior Community College Enrollment	119	88.1	74	83.1	**	**
Highest degree earned						
Bachelor	18	13.3	12	13.5	**	**
Graduate/Professional	8	5.9	5	5.6	**	**

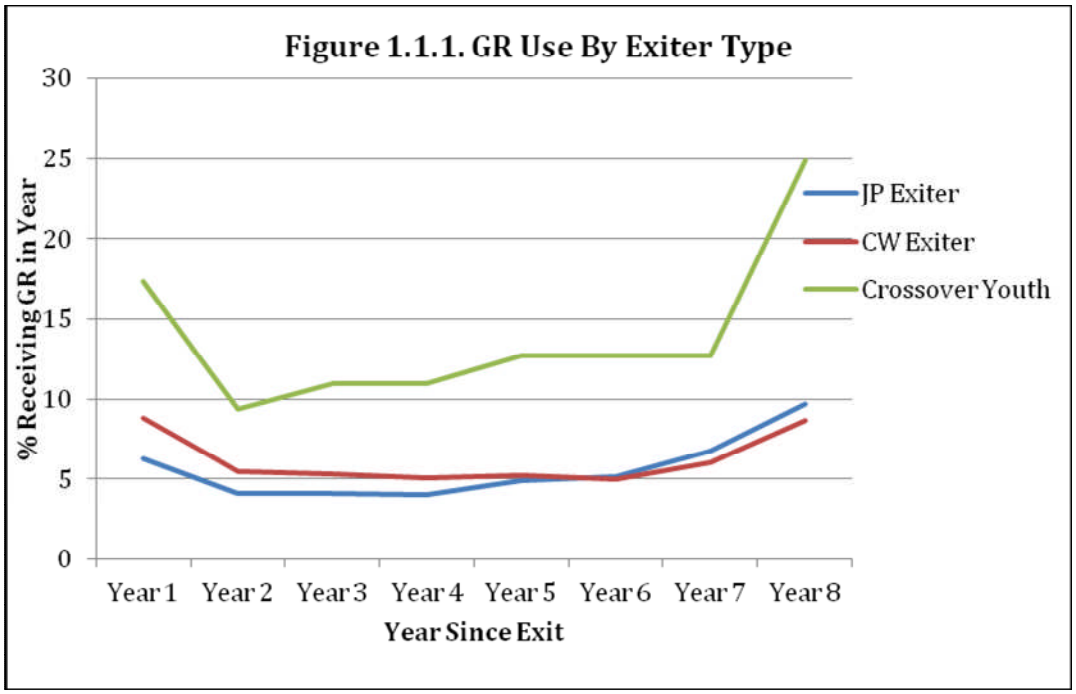
** Cell values were suppressed when the n is less than or equal to 5

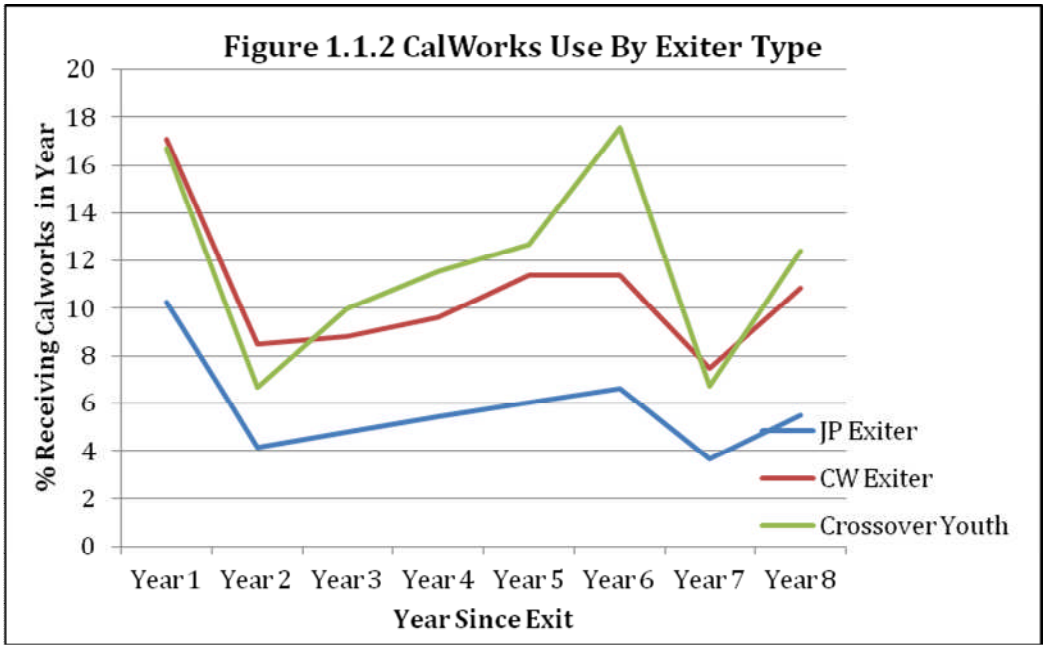
Table 1.5.4 Highest Level of Educational Attainment Among Youth Who Achieved Transfer Ready Status, by exiter type

	Type of Exiter					
	JP Exiter		CW Exiter		Crossover Youth	
	n	%	n	%	n	%
N	15639	100	4507	100	596	100
No community college/No university	10816	69.2	2334	51.8	363	60.9
Some community College	4651	29.7	2051	45.5	233	39.1
Transfer ready status	44	0.3	7	0.2	**	**
Associates degree	83	0.5	26	0.6	**	**
Some university	109	0.7	72	1.6	**	**
Bachelor's degree or higher	26	0.2	17	0.4	**	**

** Cell values were suppressed when the n is less than or equal to 5

Figures for Section 1.1 – Public Welfare Services (income assistance and Medi-Cal coverage)





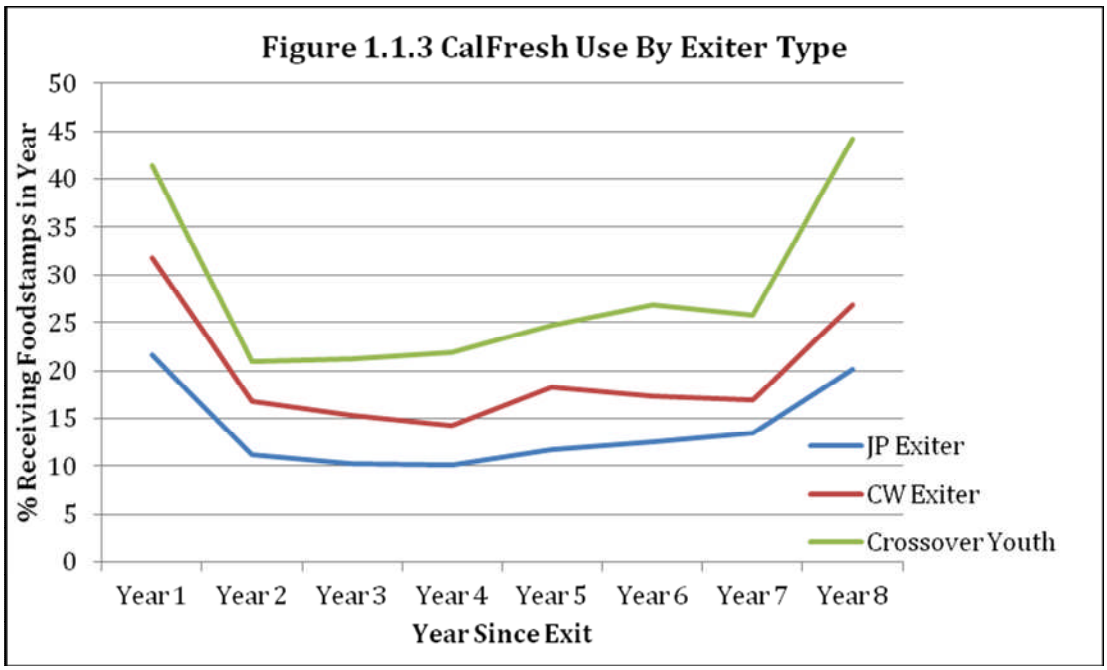


Figure 1.1.3 CalFresh Use By Exiter Type
% Receiving Foodstamps in Year
50
45
40
35
30
25
20
15
10
5
0
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year Since Exit
JP Exiter
CW Exiter
Crossover Youth

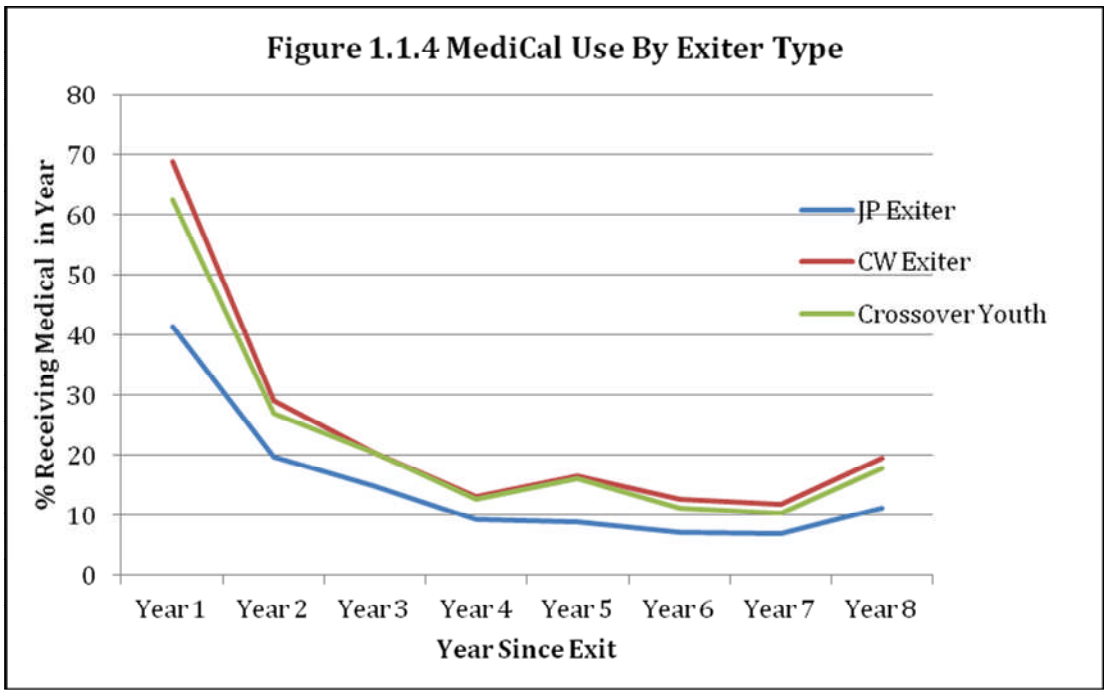
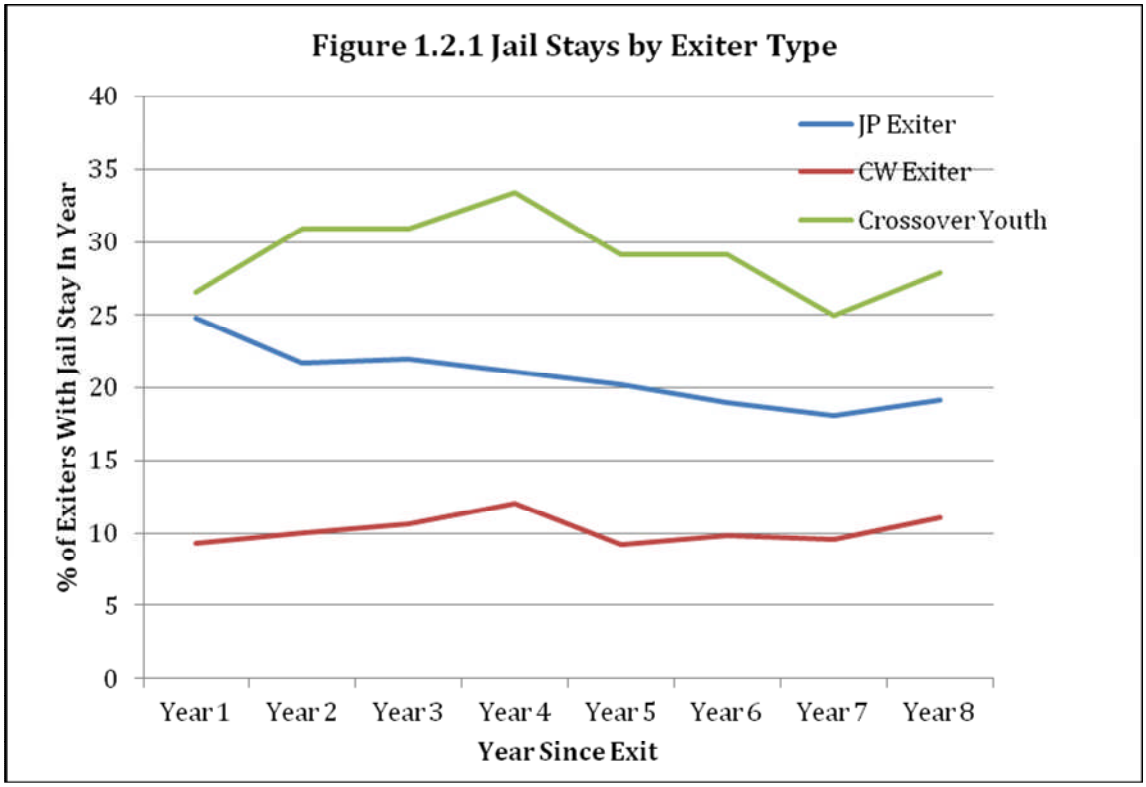
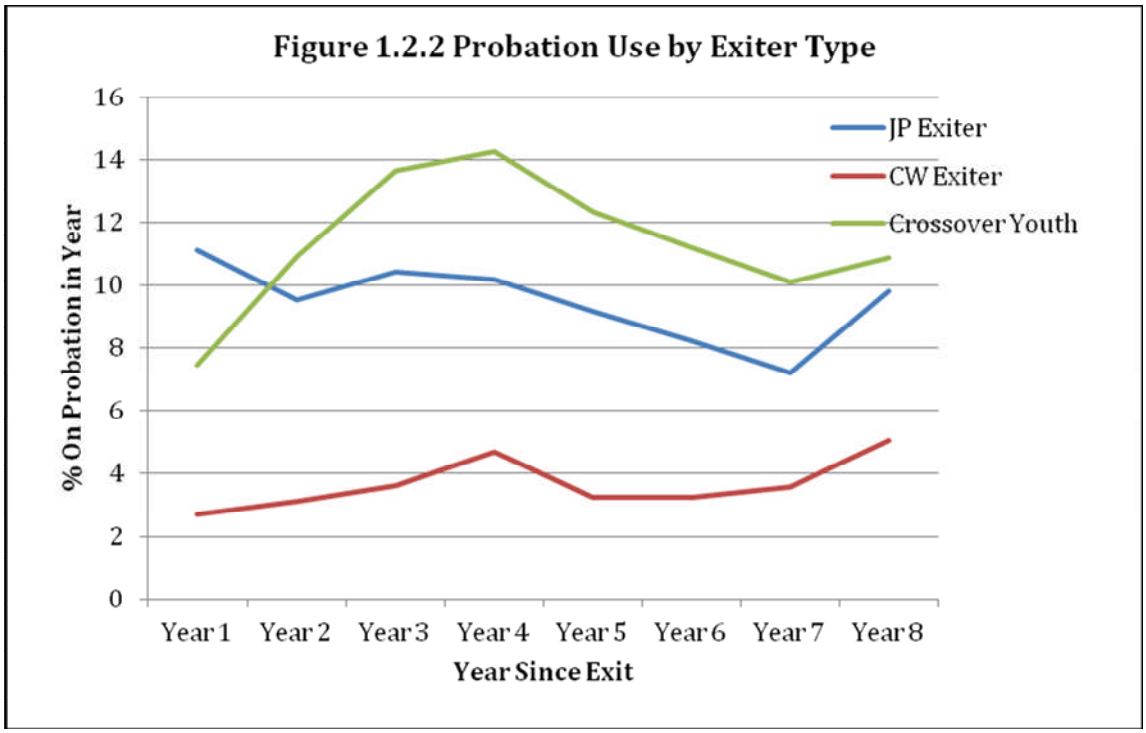


Figure 1.1.4 MediCal Use By Exiter Type
% Receiving Medical in Year
80
70
60
50
40
30
20
10
0
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year Since Exit
JP Exiter
CW Exiter
Crossover Youth

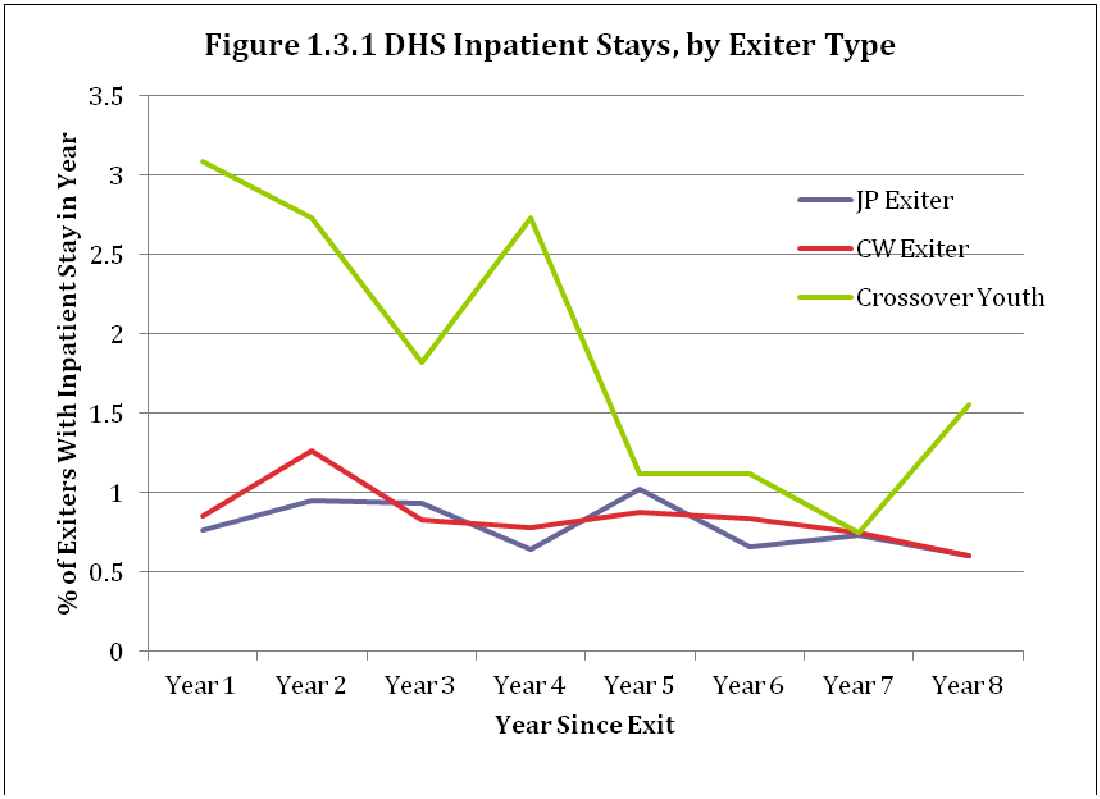
Figures for Section 1.2 – Criminal Justice Services (jail and adult probation)





Figures for Section 1.3 – Health Services (inpatient, outpatient & emergency), Mental Health Services (inpatient, outpatient & day treatment), and Substance Abuse Services (detoxification, outpatient & residential)

Health Services (LA County Department of Health Services)



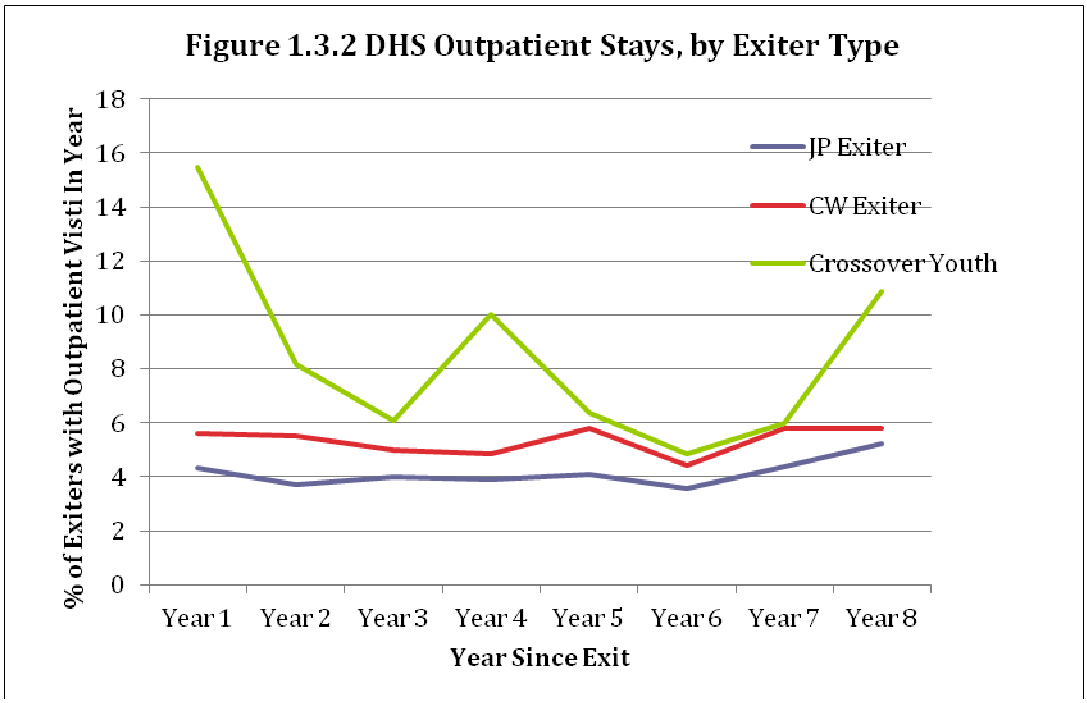


Figure 1.3.2 DHS Outpatient Stays, by Exiter Type
% of Exiters with Outpatient Visti In Year
18
16
14
12
10
8
6
4
2
0
JP Exiter
CW Exiter
Crossover Youth
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year Since Exit

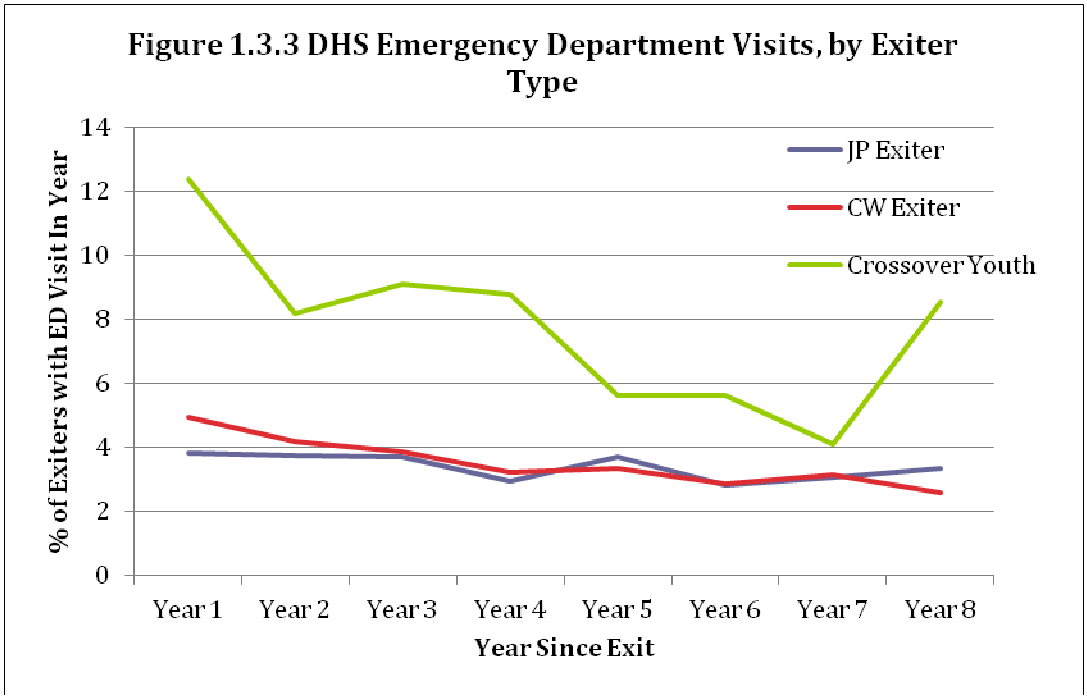
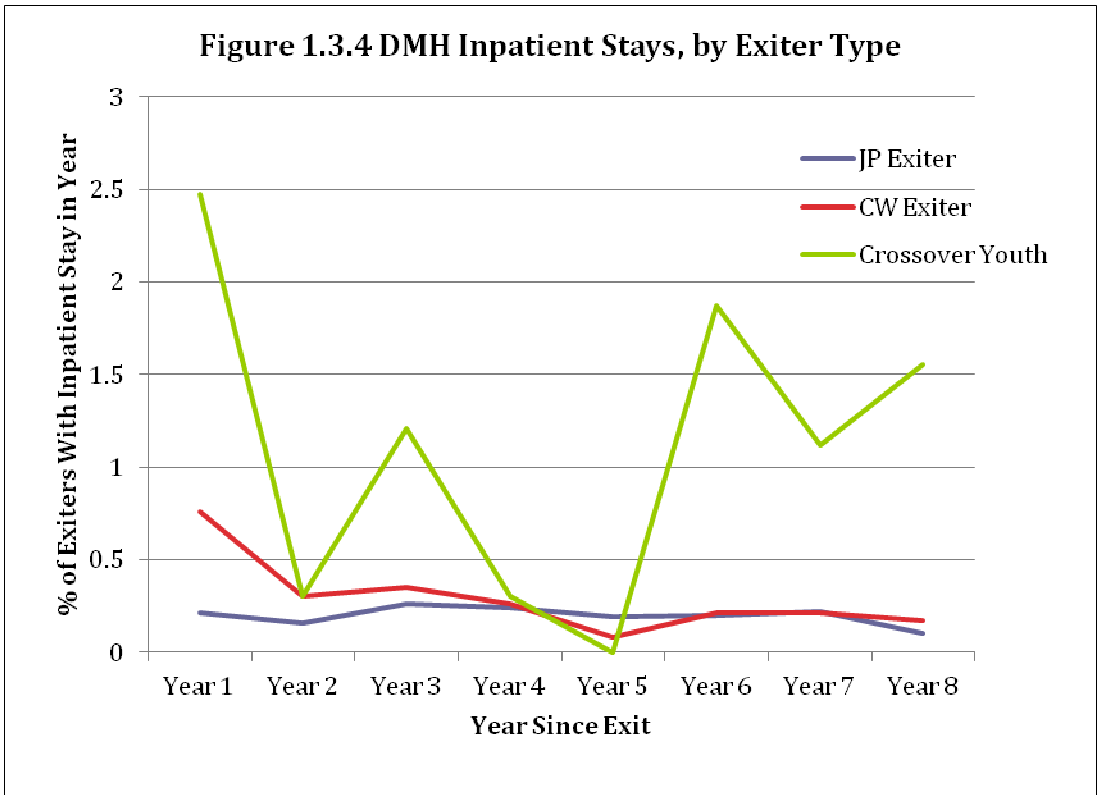
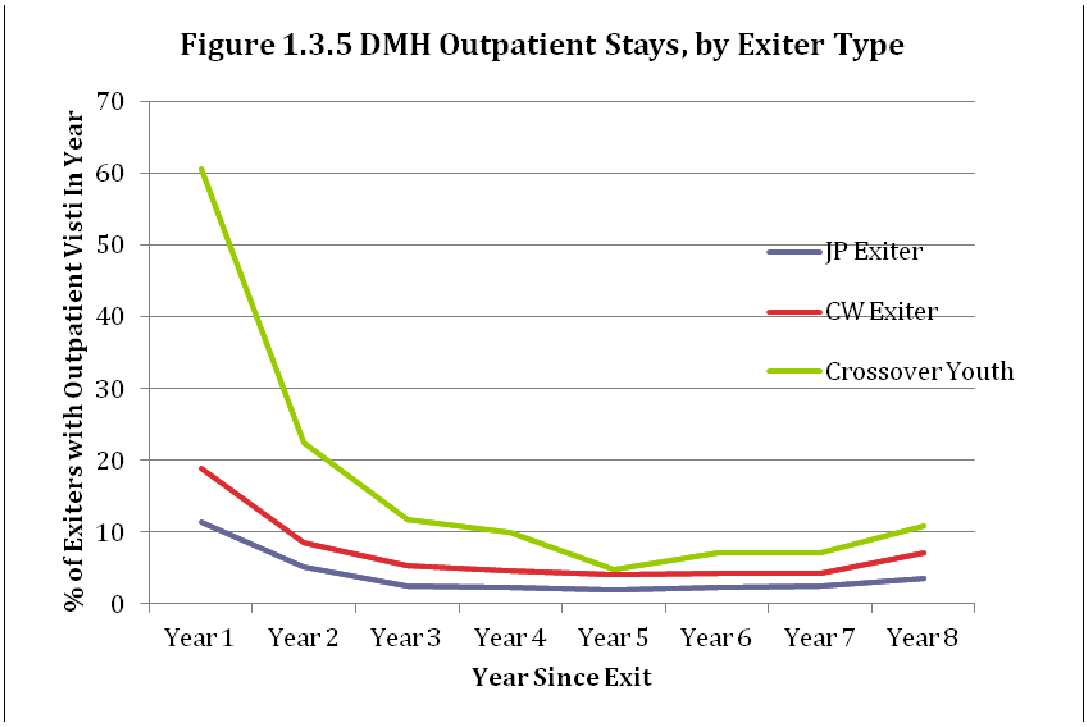
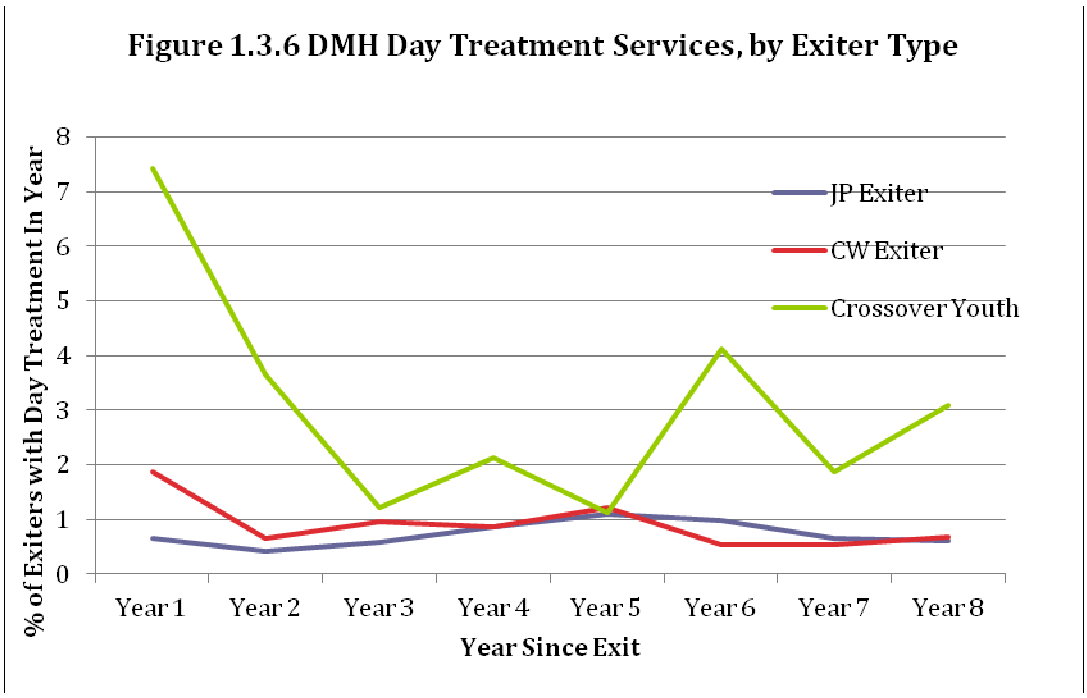


Figure 1.3.3 DHS Emergency Department Visits, by Exiter Type
% of Exiters with ED Visit In Year
14
12
10
8
6
4
2
0
JP Exiter
CW Exiter
Crossover Youth
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year Since Exit

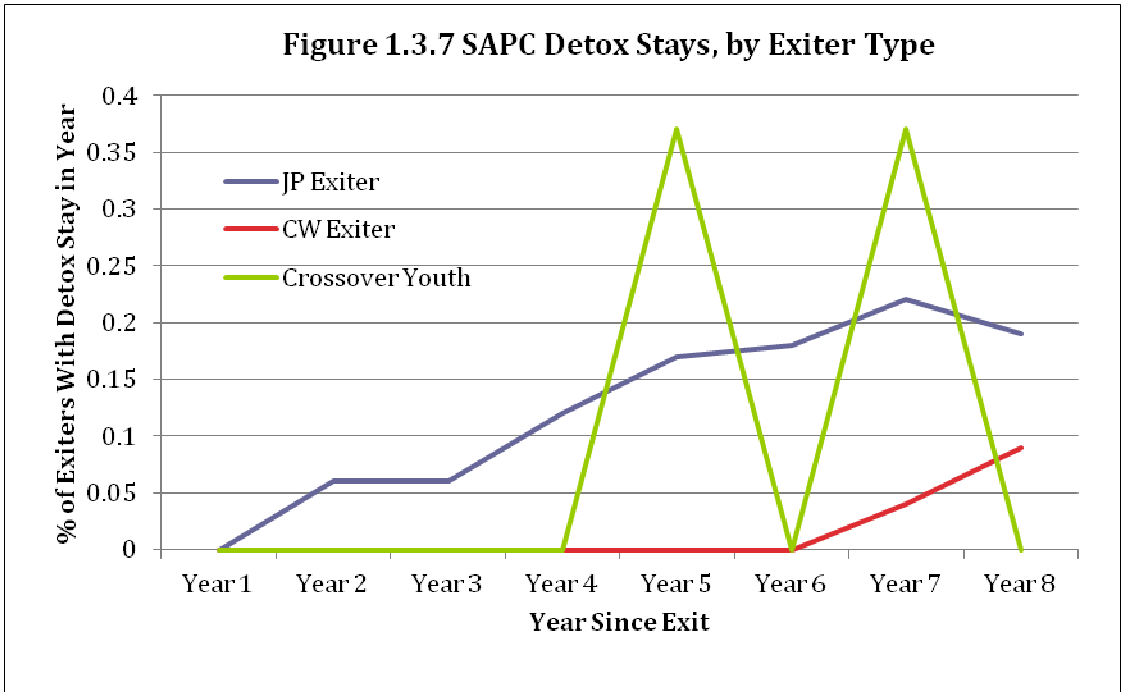
Mental health services (Department of Mental Health)







Substance Abuse Treatment (SAPC)



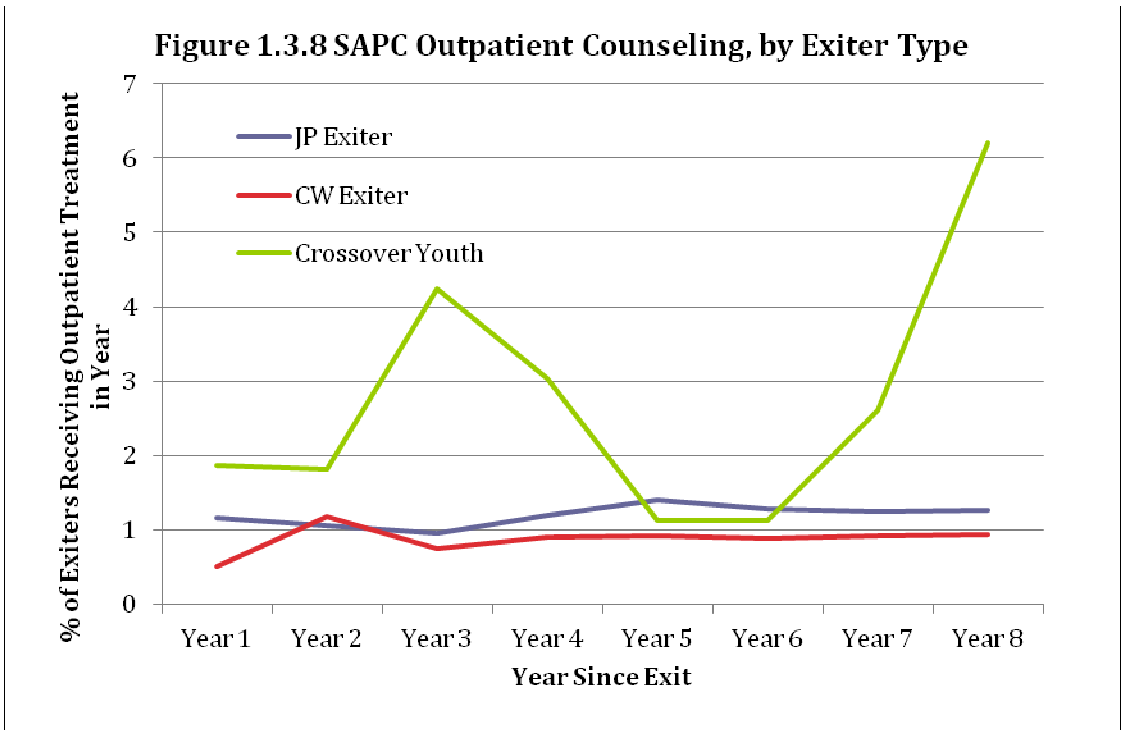


Figure 1.3.8 SAPC Outpatient Counseling, by Exiter Type
% of Exiters Receiving Outpatient Treatment in Year
7
6
5
4
3
2
1
0
JP Exiter
CW Exiter
Crossover Youth
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year Since Exit

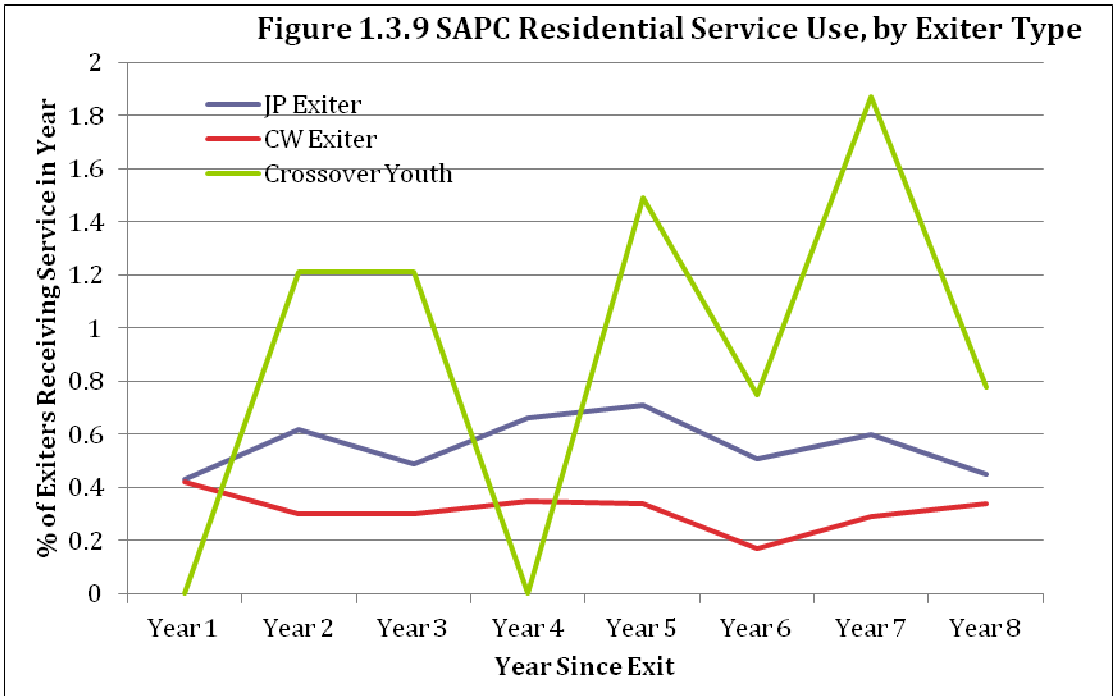


Figure 1.3.9 SAPC Residential Service Use, by Exiter Type
% of Exiters Receiving Service in Year
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
JP Exiter
CW Exiter
Crossover Youth
Year 1
Year 2
Year 3
Year 4
Year 5
Year 6
Year 7
Year 8
Year Since Exit

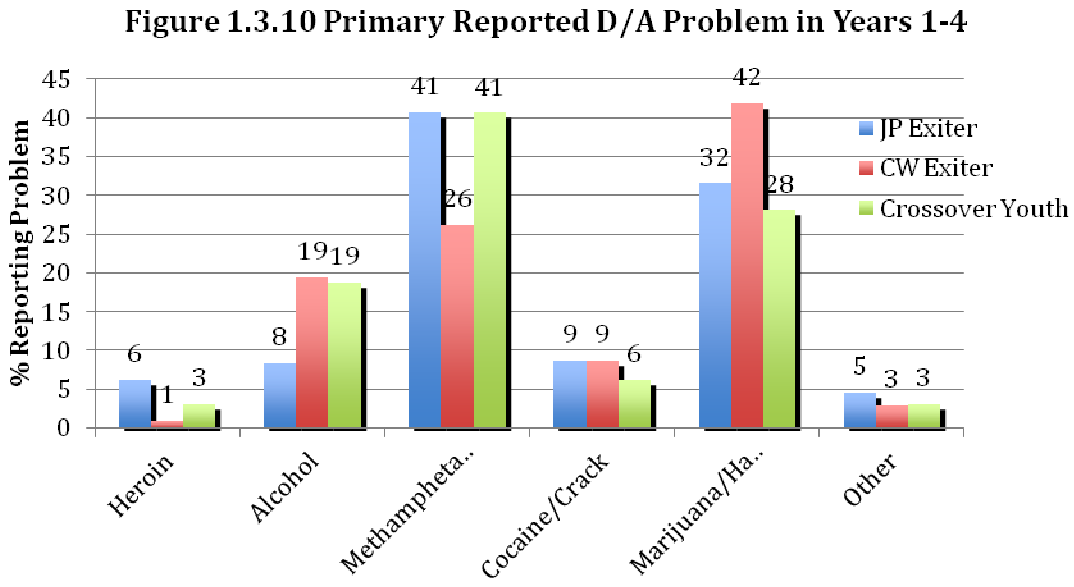


Figure 1.3.10 Primary Reported D/A Problem in Years 1-4
% Reporting Problem
45
40
35
30
25
20
15
10
5
0
6
1
3
8
19
19
41
26
41
9
9
6
32
42
28
5
3
3
Heroin
Alcohol
Methampheta..
Cocaine/Crack
Marijuana/Ha..
Other
JP Exiter
CW Exiter
Crossover Youth

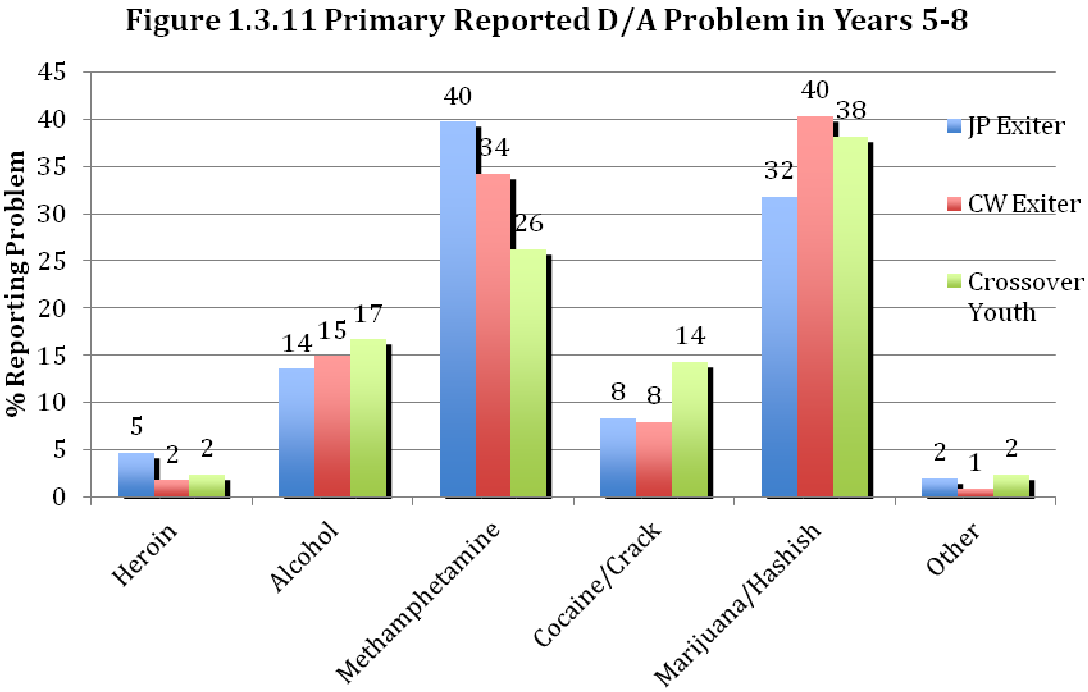
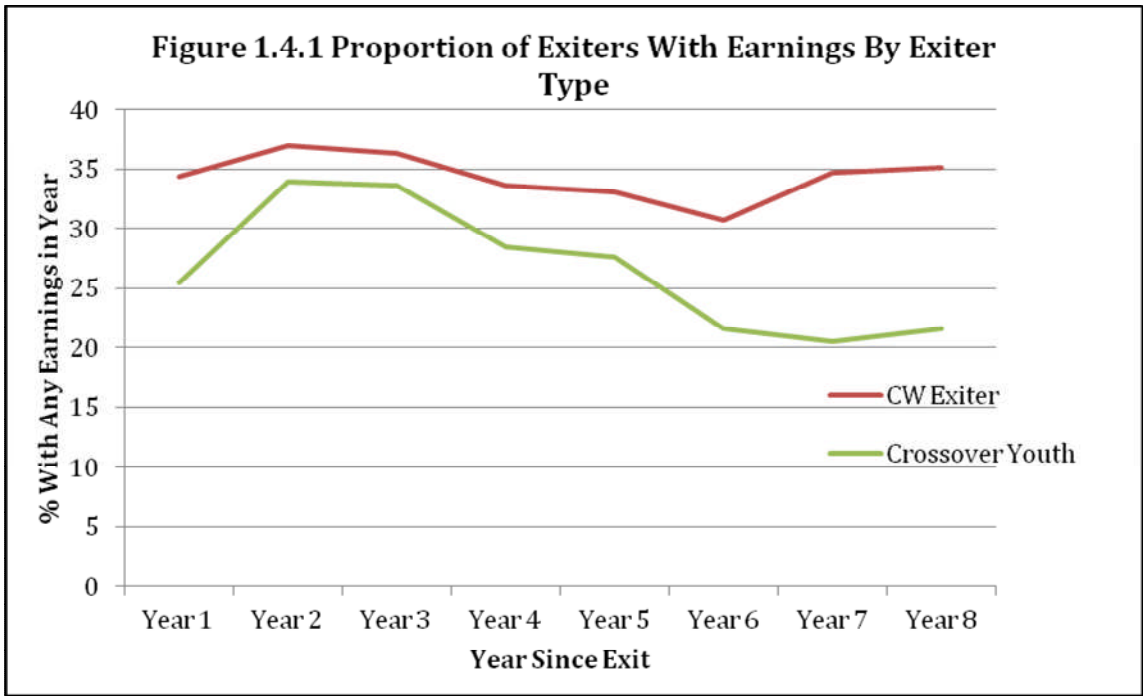
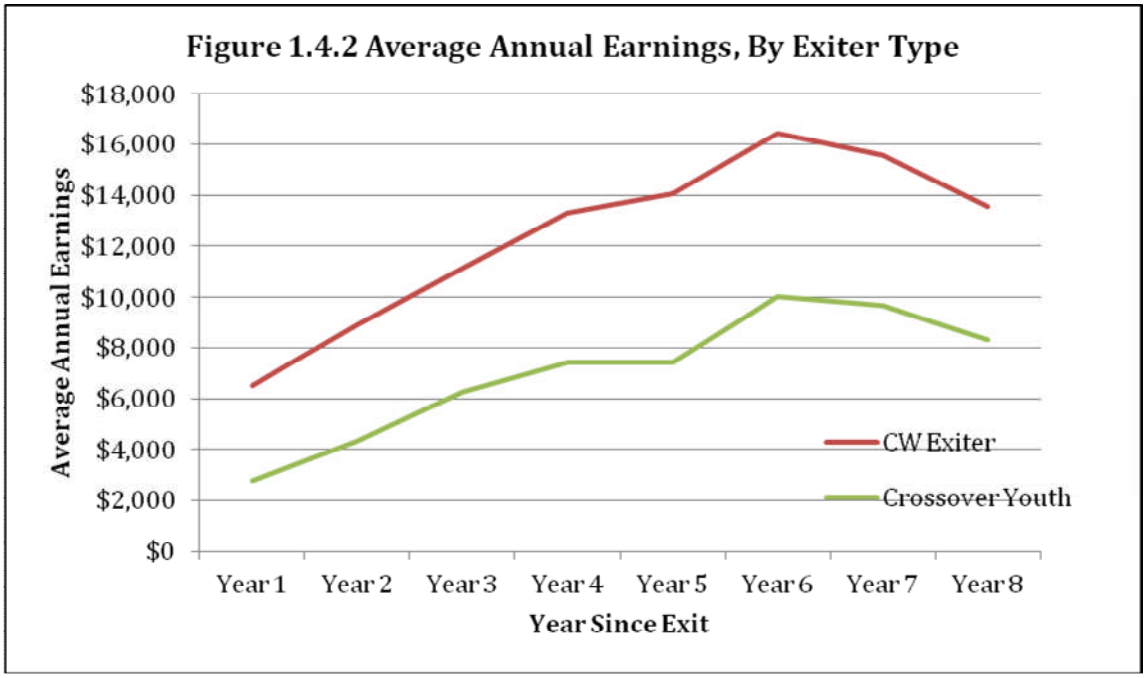


Figure 1.3.11 Primary Reported D/A Problem in Years 5-8
% Reporting Problem
45
40
35
30
25
20
15
10
5
0
5
2
2
14
15
17
40
34
26
8
8
14
32
40
38
2
1
2
Heroin
Alcohol
Methamphetamine
Cocaine/Crack
Marijuana/Hashish
Other
JP Exiter
CW Exiter
Crossover Youth

Figures for Section 1.4 Employment and Earnings





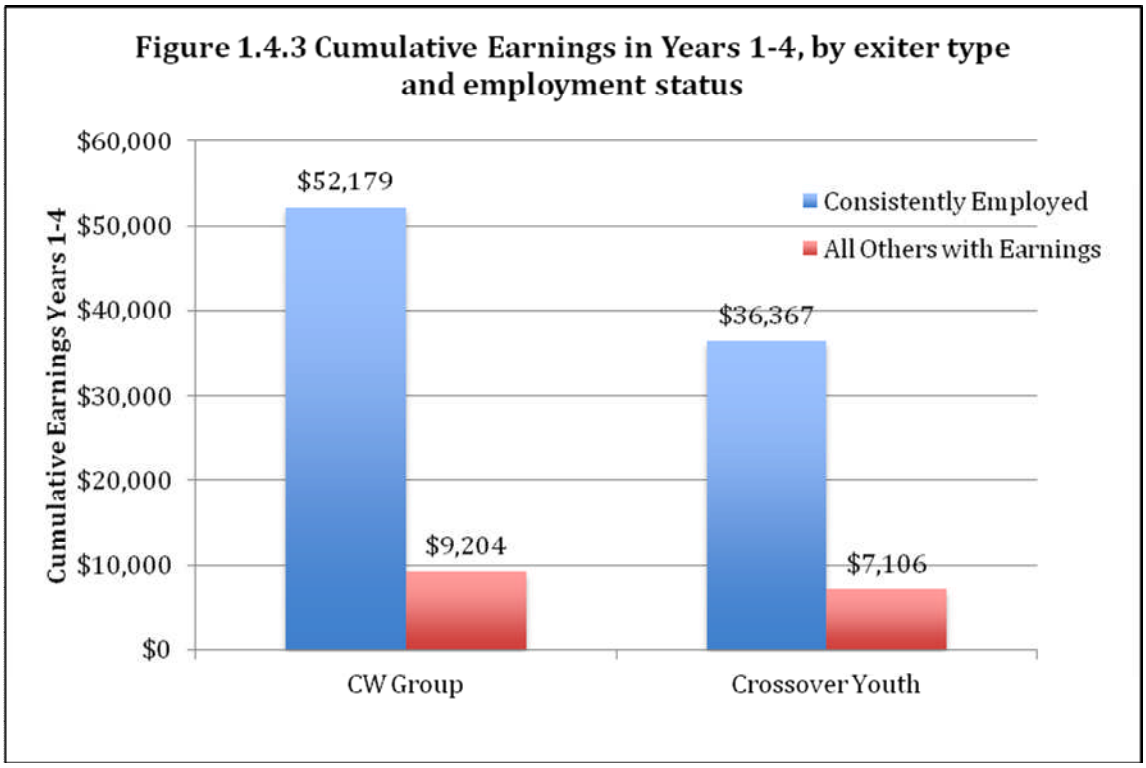


Figure 1.4.3 Cumulative Earnings in Years 1-4, by exiter type and employment status
Cumulative Earnings Years 1-4
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
$52,179
$9,204
$36,367
$7,106
Consistently Employed
All Others with Earnings
CW Group
Crossover Youth

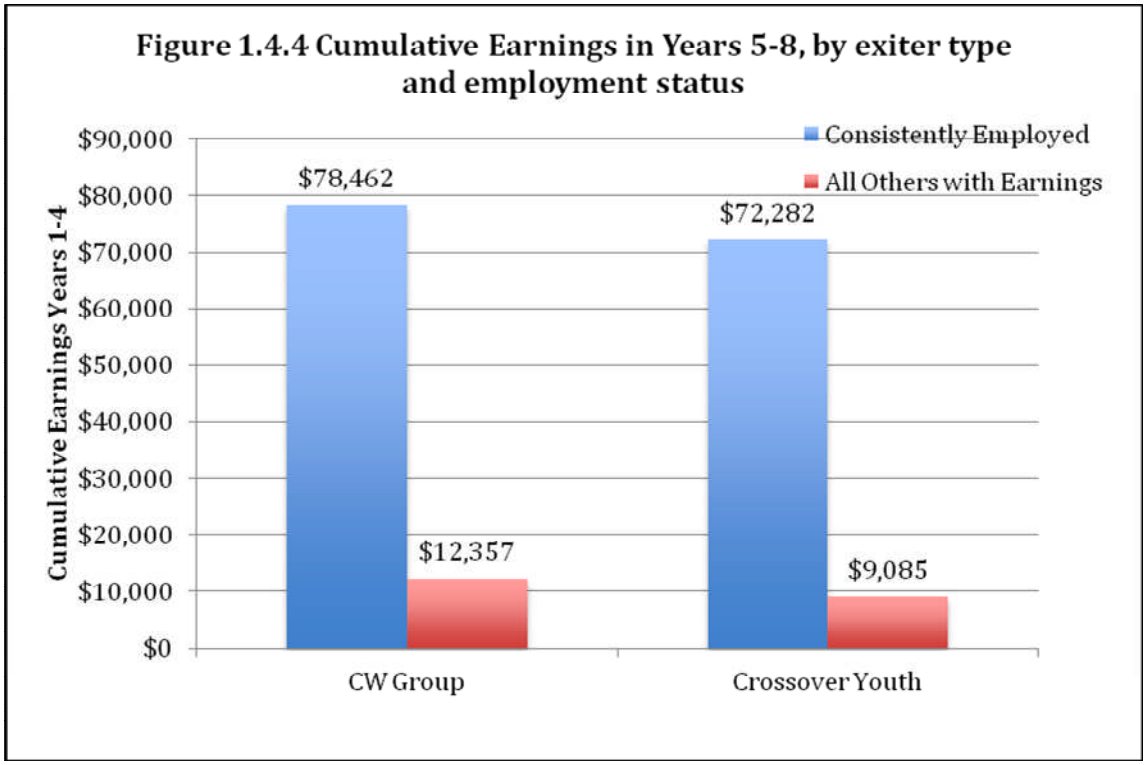
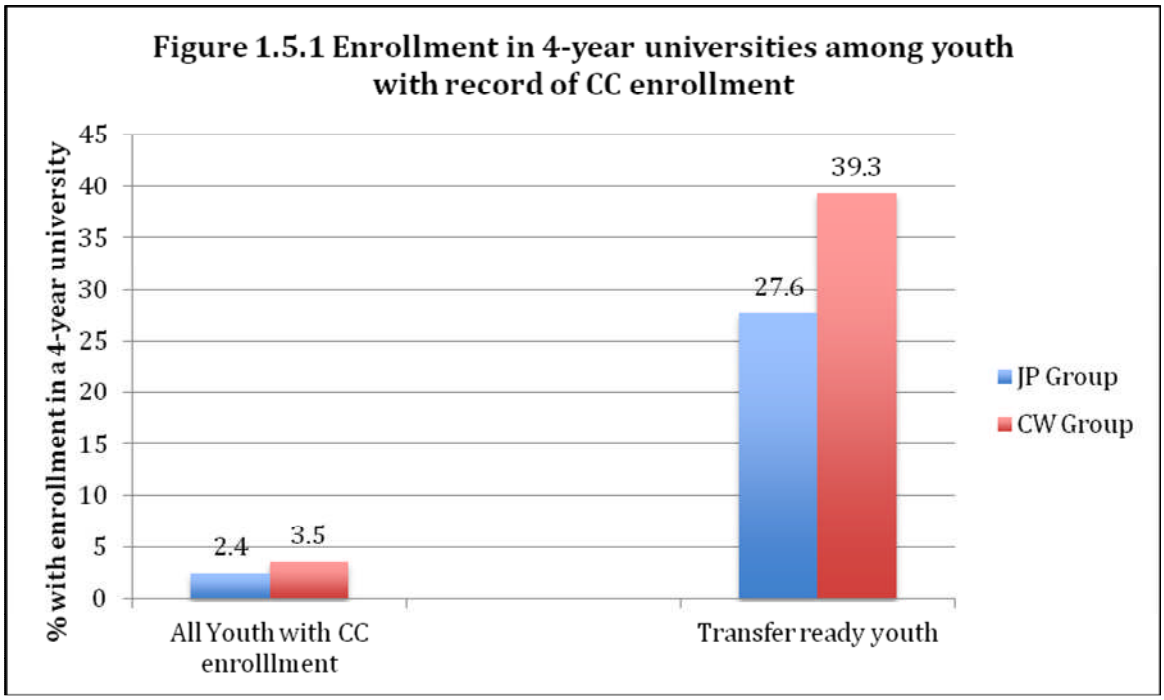
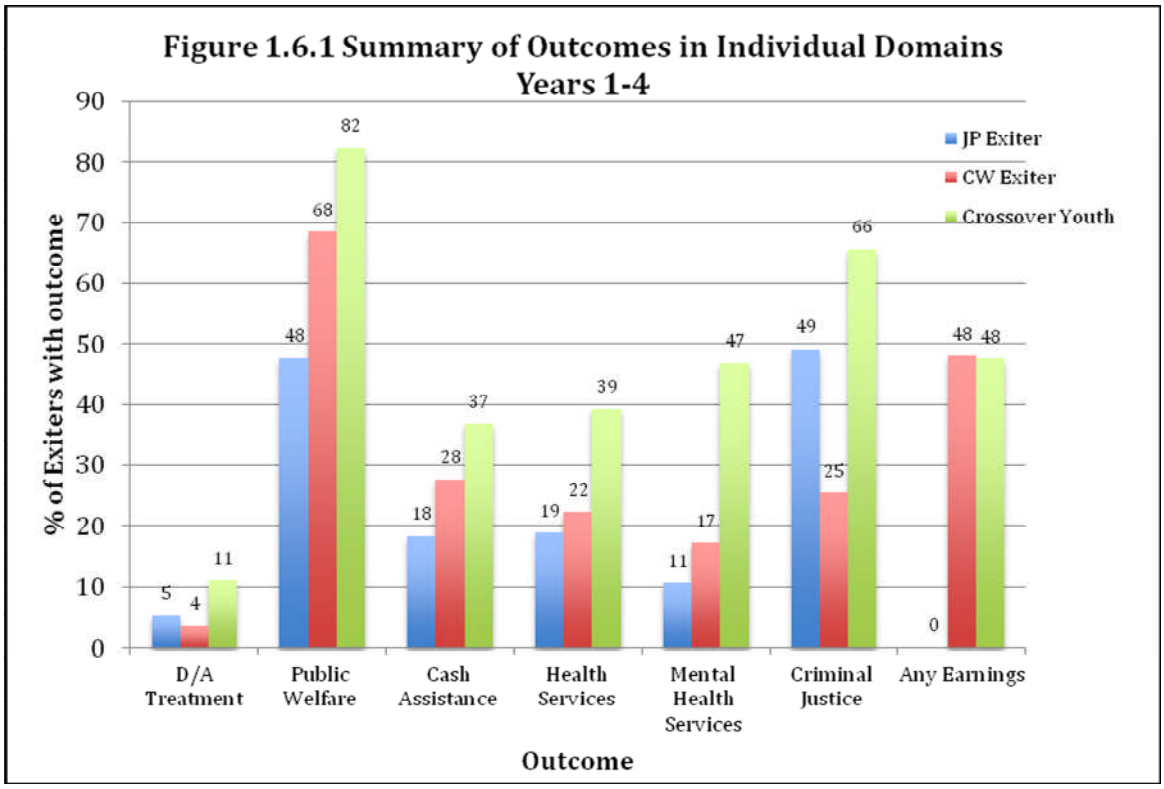


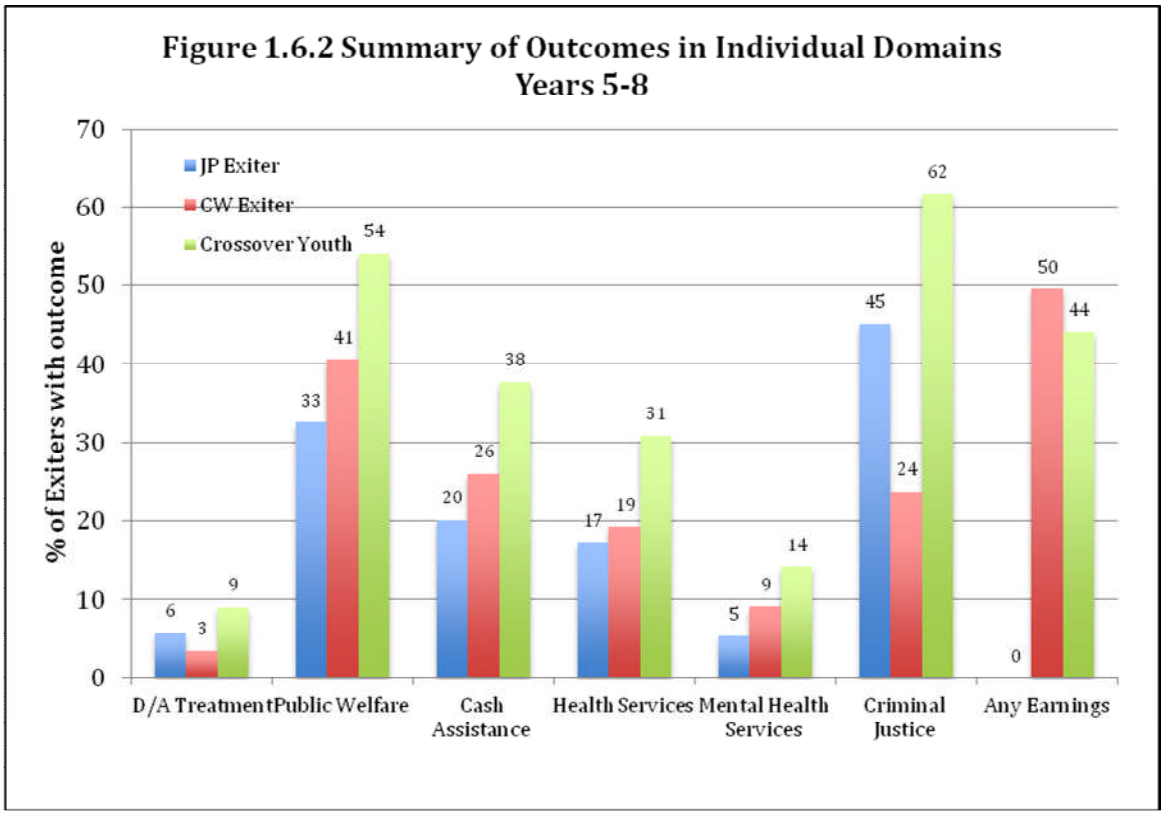
Figure 1.4.4 Cumulative Earnings in Years 5-8, by exiter type and employment status
Cumulative Earnings Years 1-4
$90,000
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
$78,462
$12,357
$72,282
$9,085
Consistently Employed
All Others with Earnings
CW Group
Crossover Youth

Figures for Section 1.5 Education



Figures for Section 1.6 Summary





Section 2: Young Adult Outcomes Across Multiple Domains

In the previous section of this report, the analyses of the young adult outcomes of youth exiting the child welfare and/or juvenile probation systems were presented in the context of single service systems or domains. This section expands on the previous section by providing a more integrated portrait of service utilization and outcomes across the service systems that were explored on an individual basis in the previous section. More particularly, this section is focused on addressing the following question:

> *What are the patterns of multi-system use by youth who exit child welfare services and juvenile probation supervision? Among youth who make use of publicly funded services, what is the net impact of such service use and what are the most common patterns of service utilization?*

In answering this question, this section proceeds in two parts. First, it examines the rate of service utilization by youth exiters during their young adult years across multiple domains. This includes identifying the most frequently occurring combinations of service use across multiple domains, as well as other patterns of multiple domain service utilization that are of interest (e.g. receipt of both health and mental health treatment). Second, this section assesses the net cost of service utilization in the young adult years by all three groups of youth across multiple service systems. This includes a comparison of service costs and earnings, as well as an exploration of the distribution of the cumulative cost of services used across multiple domains. In exploring young adult outcomes across multiple domains, this section preserves the analytic framework of the previous section in that it focuses on comparing the outcomes of juvenile probation, child welfare and crossover youth in the initial four years and in years five through eight subsequent to their exit from care.

2.1 Outcomes Across Multiple Domains

Multiple Services Use

In the previous section, it was clear that the highest rates of service use during the young adult years among individuals who had histories in the CW and/or JP systems occurred in the criminal justice and public welfare systems. In exploring outcomes in single systems, however, the previous section did not provide any insight as to the extent to which individuals used *any* type of public service subsequent to their exit from care, nor did it allow for an assessment of the degree to which young adults who received services in one domain or system also made use of services in another. Therefore, Figures 2.1.1 and 2.1.2 provide an overview of service use by members of all three study groups across multiple domains in years 1 through 4 and 5 to 8 following exit. The five domains included in this analysis are: 1) criminal justice (i.e. any probation episode or any Sheriff Department jail stay), 2) health services (i.e. any utilization of DHS services), 3) mental health services (i.e. any utilization of DMH services), 4) drug/alcohol treatment (i.e. any utilization of SAPC services), 5) and public welfare (i.e. any receipt of GR, CalWORKs, Medi-Cal or CalFresh).

In examining these figures a number of findings stand out. First, in years 1 through 4, a majority of members of all three groups made use of a public service in at least one of the five domains described above. Nearly all 90% of the crossover youth received at least one type of public service, which was higher than the roughly 8 out of 10 members of the CW group and the roughly three quarters of the JP group who did so. Fairly large proportions of all exiter types also used services in at least two domains in years 1 to 4, although again, the more than three quarters of crossover youth who received services in at least two domains represented a much higher proportion of either the CW or JP group. As the number of domains increases, the utilization rates declined for all exiter groups, but crossover youth continued to have substantially higher rates of service receipt in multiple domains. Fairly similar proportions of the CW and JP groups used services in three, four or all five domains, although the proportion of crossover youth who did so was more than double that of either the other two groups in each instance.

Although the rates of multiple domain service utilization were lower for all three groups in years 5 to 8, the trends that were observed in years 1 to 4 continued in years 5 to 8. A majority of all three groups received a public service provided in at least one of the five domains, although the 80% of crossover youth who used at least one type of service was markedly higher than the approximately 60% of both the CW and JP groups who did so. Likewise, much as in years 1 to 4, fairly similar proportions of CW and JP groups had involvement with two, three, four or all five domains in years 5 to 8. However, there was a consistently higher rate of service utilization in these multiple domains among members of the crossover group. Indeed, while the roughly one third of crossover youth who received services in three domains in years 5 to 8 was noticeably lower than the 49% of crossover youth who did so in years 1 through 4, it still was substantially higher than the 16% of the JP group and 12% of the CW who received services in three or more domains in years 5 to 8.

Tables 2.1.3 and 2.1.4 offer a different perspective on service use across multiple domains by identifying the three most frequently occurring patterns of service utilization in any two domains in years 1 through 4 and 5 to 8 following exit from care. It is important to note that in this analysis, the only types of public welfare utilization that were considered were those that provided cash assistance (i.e. GR and CalWORKs). This was done so as to focus on the types of public welfare of greatest interest when looking at specific combinations of services use across domains.

Varying combinations of jail stays, health services utilization, and cash assistance represented the most frequently occurring combinations of multiple domain service use in both years 1 to 4 and 5 through 8. Receipt of any DHS health service and experiencing a jail stay represented the most commonly occurring combination of dual domain service receipt in years 1 to 4. However, the more than one quarter of crossover youth who used this service combination was double the proportion of the JP group who did so and triple the proportion of the CW group. Likewise, while JP and CW exiters had similar rates of cash assistance receipt and jail stays, the rate among the crossover group was more than double that of either the JP or CW group. While, the

combination of cash assistance receipt and DHS health services utilization was less commonly used by members of all three groups, here again, the proportion of crossover youth who used this combination was higher than that of the other two groups. It is important here to reiterate what was noted in Section 1 that these figures do not account for the difference in gender composition between groups that may play a role in rates of receipt of cash assistance. Section 3 will fully account for these differences by controlling for gender when examining receipt of cash assistance as an outcome in a multivariate statistical model.

The rates of utilization of each combination in years 5 through 8 were largely similar to those in years 1 to 4. The major difference between the time periods is that cash assistance and jail represents the most commonly used combination of services in years 5 to 8. Additionally, higher proportions of all three groups made use of both cash assistance and DHS health services in years 5 to 8 following exit. Nonetheless, much as in years 1 to 4 the proportion of crossover youth using each combination of services was higher than that of either the CW or JP groups.

Health and Behavioral Health Services Use

While they were not among the most frequently occurring combinations of service utilization across multiple domains described in Figures 2.1.3 and 2.1.4, rates of utilization for different combinations of health, mental health and substance abuse treatment services provide some indication as to the prevalence of individuals with multiple or co-occurring health and behavioral health needs among youth exiting the child welfare system and/or probation supervision. Alternatively, the extent to which individuals access services across these domains may point to the need for greater collaboration between systems in meeting the health and behavioral health needs of youth exiters as they transition into adulthood.

Figures 2.1.5 and 2.1.6 provide an overview of the rates of utilization of different combinations of health services provided by DHS, mental health services provided DMH and SAPC drug/alcohol treatment services in years 1-4 and 5-8 following exit from care. In years 1 to 4, the most notable finding was that nearly one quarter of youth in the crossover group made use of both health and mental health services, which was far in excess of the 4% of the JP group and 7% of the CW group who did so. Otherwise, only a small minority of youth in all three study groups (10% or less) made use of either, mental health and drug/alcohol treatment or health and drug/alcohol treatment, although rates of use were highest among crossover youth in both cases. These findings provide some tentative, although far from conclusive, evidence that a fairly limited number of youth in the JP and CW groups have both health and behavioral health needs. On the other hand, when comparing groups, crossover youth have higher rates of involvement in multiple health/behavioral health systems.

Turning to years 5 to 8, similar trends were observed, although there were lower rates of utilization for all three combinations of health and behavioral health services. This was particularly true for use of both health and mental health services, where there was

a significant drop in the proportion of crossover youth who used both types of services. Otherwise, crossover youth continued to have the highest rates of combinations of health and behavioral health service utilization, although only a minority of persons in all three groups used such combinations.

As an alternative method of assessing the prevalence of complex or co-occurring health and behavioral health needs among youth exiting the CW and/or JP systems, Figures 2.1.7 and 2.1.8 look at whether youth received inpatient/residential treatment in any health or behavioral health domain, or whether youth received treatment for mental health and/or drug/alcohol disorders in any domain. More specifically, these figures attempt to identify the proportion of youth in each group who experience the following outcomes:

- *Any inpatient stay*-Defined as having one of the following: a DHS inpatient stay, a DMH inpatient stay, or an SAPC detox or residential treatment episode
- *Any treatment for a serious mental illness*-Defined as having a primary diagnosis for a serious mental illness (i.e. ICD9 code beginning with 295 or 296) associated with a DHS or DMH treatment episode.
- *Any drug/alcohol treatment*-Defined as having an episode of SAPC treatment of any type, or a primary diagnosis for a drug/alcohol disorder (i.e. ICD9 codes beginning with 291, 292, 303, 304 or 305) associated with a DHS or DMH treatment episode of any type.
- *Treatment for serious mental illness and drug/alcohol disorders*-Defined as meeting the above described criteria for both any treatment for a serious mental illness and any drug/alcohol treatment.

While these measures can provide some indication of the prevalence of serious mental illness and/or drug/alcohol disorders among youth in all three groups, they should be interpreted cautiously, given the way in which they were constructed. More specifically, the DMH and DHS records only provided one diagnosis for each service episode, although multiple diagnoses are often associated with a treatment contact. As a result, these measures likely underreport the presence of serious mental illness and/or drug/alcohol disorders among the study groups. Therefore, the findings presented in Figures 2.1.7 and 2.1.8 should be understood as representing conservative estimates.

A minority of youth in all three groups experienced an inpatient stay in years 1 to 4 following exit from care. However, the roughly 13% of crossover youth who experienced an inpatient stay in any domain was more than double the proportion of JP and CW youth who had an inpatient stay. Rates of treatment for a serious mental illness were higher, with more than one in five crossover youth and one in ten CW youth having received treatment related to a serious mental illness. On the other hand, the rate of receipt of treatment for a serious mental illness among the JP group was half that of the CW group and less than one quarter that of the crossover group. Looking at treatment for a drug/alcohol disorder, 17% of persons in the crossover group received treatment associated with a drug/alcohol disorder in any system during years 1 to 4. This was roughly double the rate of either the CW or JP group. Likewise, while only

small proportions of each group received treatment for both a drug/alcohol disorder and a serious mental illness, the crossover youth had much higher rates of receipt of both types of treatment than their JP or CW counterparts.

The patterns observed in years 1 to 4 remained effectively unchanged in years 5 to 8. The major difference between the two periods is that lower proportions of members of all three groups received each type of treatment. However, cross system youth continued to have the highest rates of receipt of any inpatient services, as well as for any type of treatment associated with a serious mental illness or drug/alcohol disorder, and both a serious mental illness and a drug/alcohol disorder. Nonetheless, the disparity in rates of treatment between the three groups was less pronounced in years 5 to 8, and treatment continued to be limited to a relatively small minority of persons in all three groups.

2.2 Cost of Service Use Across Multiple Domains

Examining the cost of service use (as opposed to the services themselves) across domains allows for a more comprehensive portrait of the overall impact of youth exiters on public services. Moreover, an analysis of the cost of service utilization allows for more detailed comparison of the three study groups in terms of their impact on public health, behavioral health, public welfare and criminal justice systems. Figures 2.2.1 and 2.2.2 present the average cumulative costs of service utilization per user across the health, behavioral health, public welfare and criminal justice systems in years 1-4 and in years 5-8. The calculations of average costs presented in these figures included all persons in each group, regardless of whether they had any service use.

Before discussing the findings presented in the figures, it is important to note that caution should be exercised when interpreting the average costs of service utilization and average earnings as such estimates can be greatly skewed by outliers with extremely high values. In the context of this analysis, a fair number of youth in each group did not have any public service costs or any earnings subsequent to their exit from care, while on the other end of the spectrum, some youth had extremely high service costs or earnings. Thus, the primary limitation of presenting the average cost of service use and earnings is that it cannot convey information about the nature of the underlying distribution of these measures, and therefore leaves certain questions about the extent of service utilization by youth exiters unresolved. To help resolve some of these issues, the underlying distribution of the costs of public service use across multiple domains will be examined below as well.

A number of results from Figures 2.2.1 and 2.2.2 are striking. First, in years 1 to 4, the average costs per person across all domains were much higher for crossover youth than for members of either the CW or JP group. Indeed, the average per user cost for this group ($35,171) was more than double that of youth in the JP ($15,985) and CW ($12,532) groups, who had fairly similar average costs. Second, costs associated with involvement in the criminal justice system accounted for the largest single share of the average cumulative cost for all three groups. However, for the crossover and JP

groups, criminal justice costs accounted for 55% and 68% of total average costs, respectively, whereas it was more evenly distributed in the CW group. For the JP and CW groups, after criminal justice costs, public welfare costs accounted for the next largest share of overall public service utilization costs on average. This was different among the crossover group, where mental health services represented the next largest expense after criminal justice system costs.

In years 5 to 8, the trends are generally similar with a few important differences. First, average per person public service utilization costs were lower for all three groups in the latter time period, although this difference is most noticeable among youth in the crossover group. Nonetheless, the average cost of public service use among members of the crossover group was more than double that of the CW group and almost double that of the JP group. Second, criminal justice system costs accounted for an even larger share of the average per user cost for all groups in years 5 to 8. Among those in the JP and crossover group, criminal justice involvement accounted for about 70% of public service costs on average, compared to about 40% of the average cost among persons in the CW group and 60% of the average cost for the crossover group. In all three groups, public welfare costs accounted for the next highest share of the average cost per user.

As has been noted, presenting information about the average cumulative costs of health behavioral health, public welfare and criminal justice service utilization masks the nature of the underlying distribution of such cumulative costs. Therefore, Figures 2.2.3 and 2.2.4 examine the distribution of costs associated with public service utilization. In creating these figures, youth who had any service costs in any domains (i.e. cumulative service costs greater than zero) were grouped into four groups of equal size, or quartiles, on the basis of their total public service use costs in years 1-4 or 5-8 subsequent to exit from care. Next, the percent of the overall cost of service utilization accounted for by each quartile was calculated so as to provide insight regarding the extent to which certain youth in each of the three study groups made disproportionate use of public services across domains.

The results presented in Figures 2.2.3 and 2.2.4 are also striking. In both time periods the cost of service utilization was heavily concentrated in the top quartile of service users in all three groups. Youth in the top quartile of each group accounted for roughly 75% of the public service costs tallied by all members in their respective groups. Put differently, members in this top quartile made highly disproportionate use of public services, accounting for a share of the cumulative cost that was roughly three times larger than their share of members of their respective group who had any costs associated with public service utilization. On the other end of the spectrum, those in the lowest quartile in each group accounted for only about 1% of the total cost of services used by each group. Figures 2.2.5 through 2.2.10 provide additional details about the nature of the service use for individuals who fall into each of the cost quartiles portrayed in Figures 2.2.3 and 2.2.4. Here the average cost of service use by those in the top quartile of all three study groups greatly exceeded the service use of those in the other three quartiles. Moreover, in looking specifically at the CW and crossover groups, there

was a clear trend where those with lower costs associated with their public service use generally have higher average earnings.

2.3 Summary

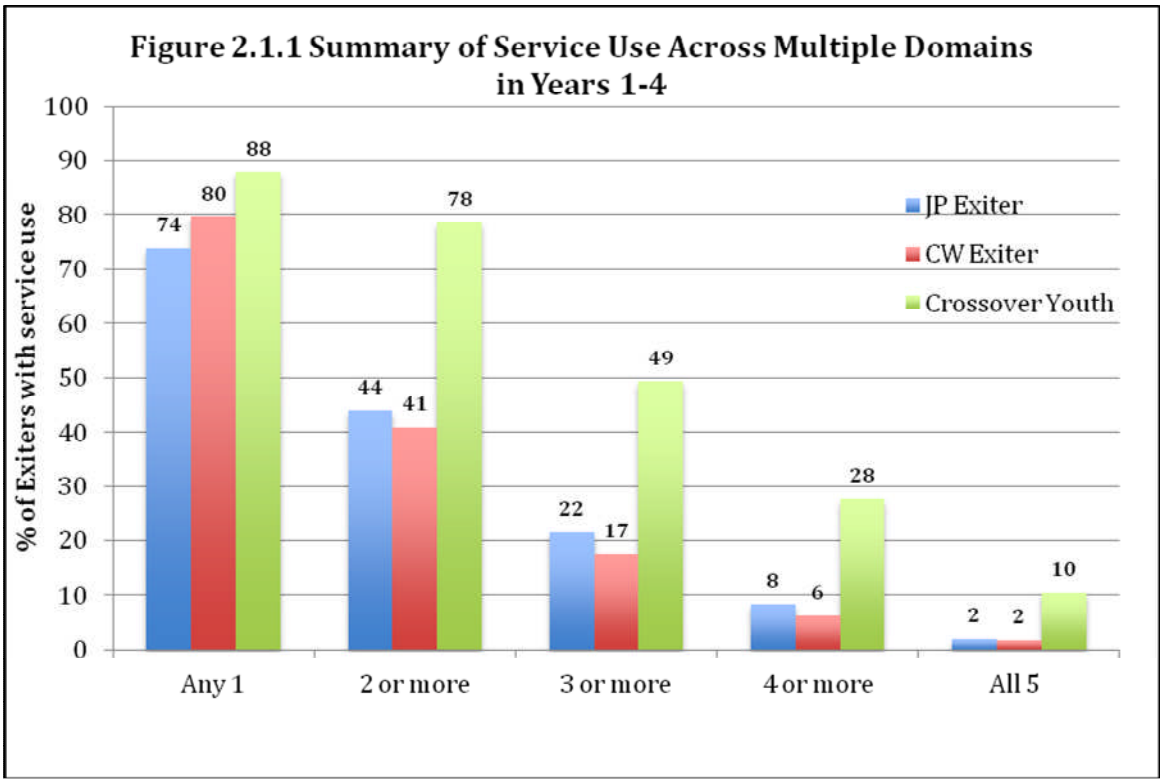
This section examined the extent of public service use across multiple systems of care during the young adult years of the persons who had prior involvement with the CW and/or JP systems. Three findings in particular from this section bear reiterating.

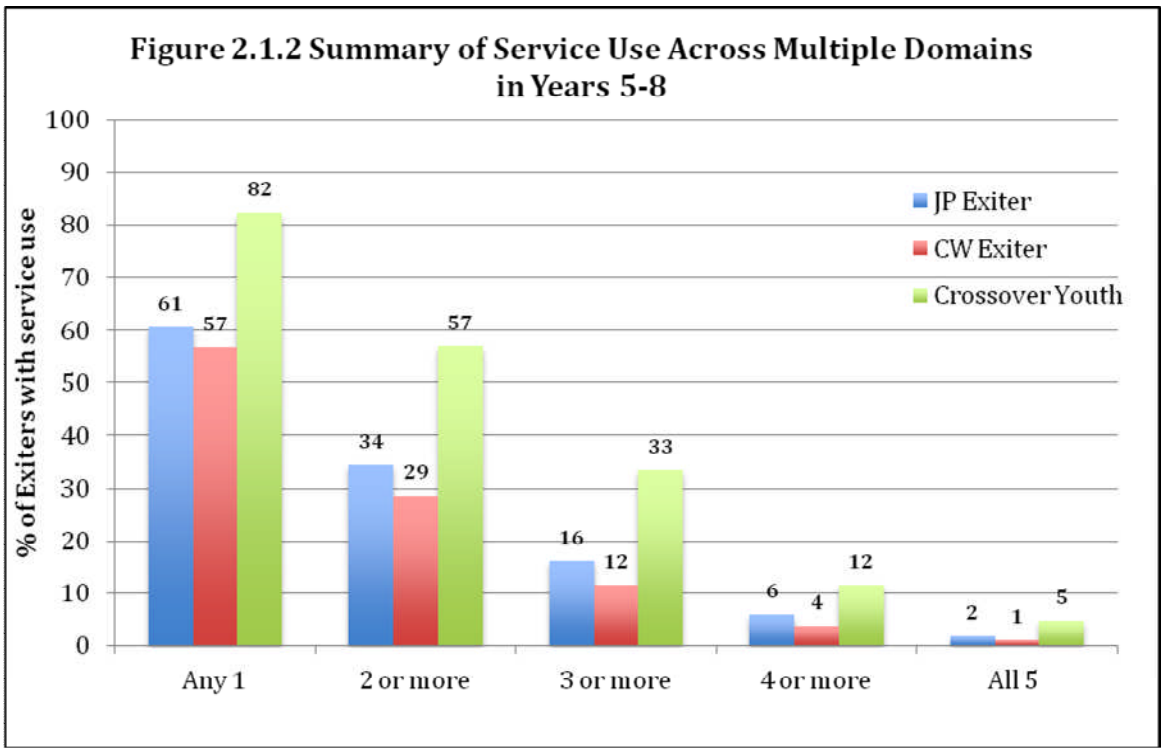
First, a majority of persons in all three study groups made use of some form of public service during their young adult years and a relatively large proportion of individuals in all three groups made use of services in multiple systems or domains. There are a number of ways to interpret the extent of service use in multiple systems, including that service use in multiple systems might indicate that individuals are accessing multiple systems of care in order to meet a broad array of needs. However, the fact that receipt of cash assistance and experiencing a jail stay represented one of the most commonly occurring combinations of multi-system service use is quite telling.

Second, the disparity between persons in the crossover group and individuals in either the JP or CW group was quite large on most measures of multiple system service use. Persons in the crossover group had highest rates of service use in multiple systems and also had the highest rate of receipt of any form of inpatient/residential treatment, as well as the highest rates of treatment for serious mental illness, and/or a drug/alcohol disorders. Moreover, in examining the costs associated with public service use during the young adult years of youth having had involvement in the CW and/or JP systems, the crossover youth had average public service costs that were more than double those observed in the other two study groups. These findings are largely consistent with what was seen in Section 1 of this report, and again suggest that crossover youth are a particularly high-risk group and face even greater obstacles in transitioning to adulthood than members of either the JP or CW group. The next section of this report will test this assertion more directly and examine the extent to which various young adult outcomes vary between the three study groups, even when taking into account differences in the characteristics and experiences of the members of all three groups.

Finally, these findings suggest that “heavy” (i.e. extensive and highly costly) service use in multiple public systems was limited to a fairly small number of youth exiting the CW and/or JP systems. Such findings on heavy users are also a potential initial step for identifying youth exiting the CW and/or JP system who would make the best candidates for targeted interventions at their time of exit from care. However, the analyses here was limited in providing information about what individual or program level factors might be indicators associated with disproportionate use of public services. Moreover, it is not possible to tell from these findings whether persons in one group are more likely to make extensive and expensive use of public services than persons in the other two groups. Section 3 addresses these issues more directly, by identifying individual level characteristics and factors associated with the likelihood that an individual will be a “heavy user” of public services.

SECTION 2 FIGURES





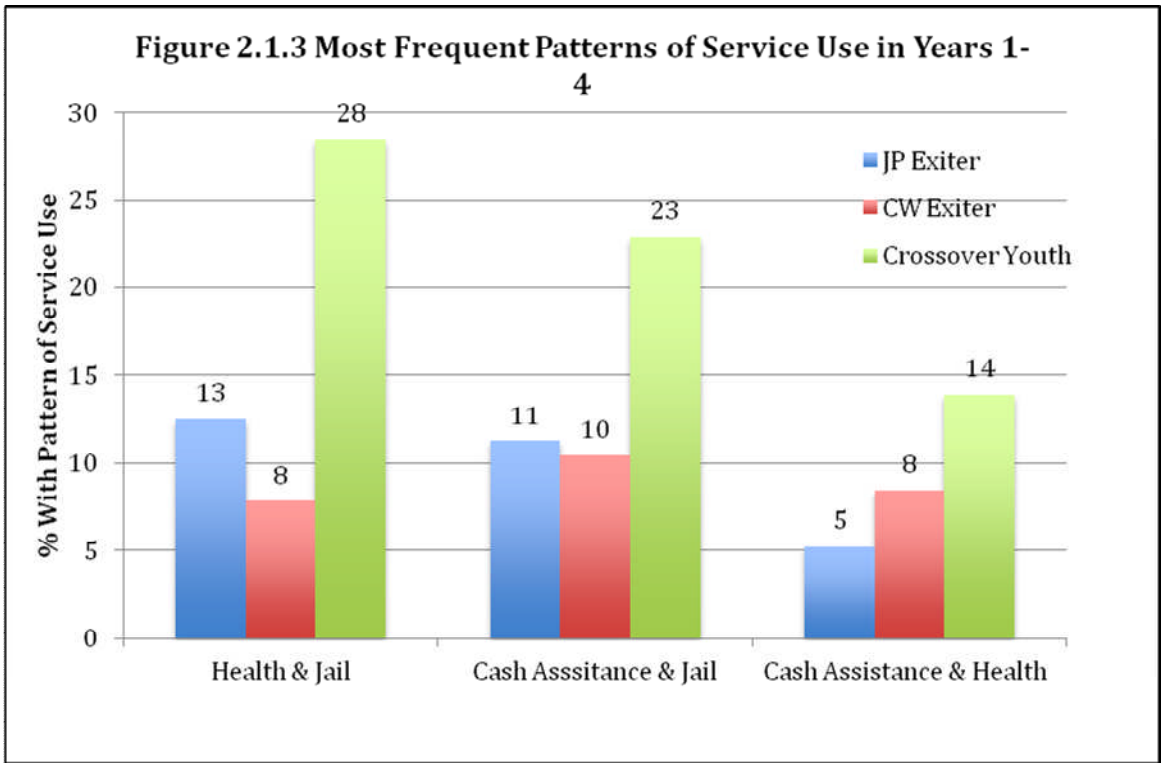


Figure 2.1.3 Most Frequent Patterns of Service Use in Years 1-4
% With Pattern of Service Use
30
25
20
15
10
5
0
JP Exiter
CW Exiter
Crossover Youth
13
8
28
11
10
23
5
8
14
Health & Jail
Cash Asssitance & Jail
Cash Assistance & Health

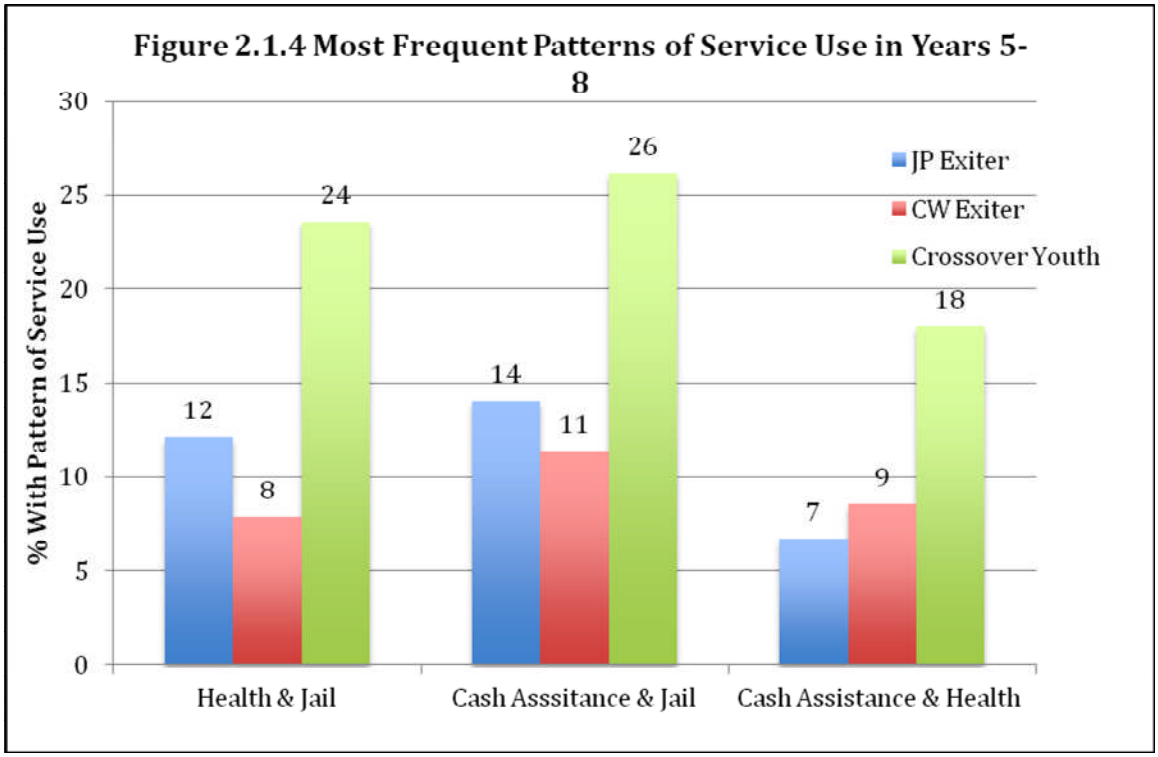


Figure 2.1.4 Most Frequent Patterns of Service Use in Years 5-8
% With Pattern of Service Use
30
25
20
15
10
5
0
JP Exiter
CW Exiter
Crossover Youth
12
8
24
14
11
26
7
9
18
Health & Jail
Cash Asssitance & Jail
Cash Assistance & Health

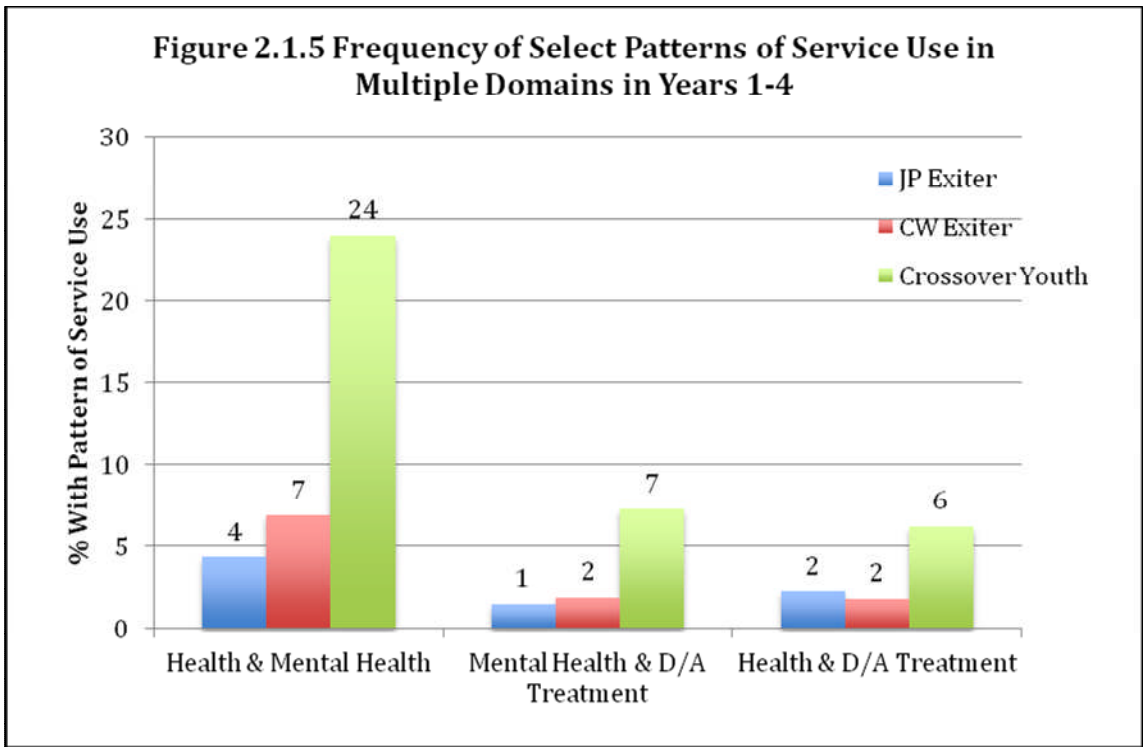


Figure 2.1.5 Frequency of Select Patterns of Service Use in Multiple Domains in Years 1-4
% With Pattern of Service Use
30
25
20
15
10
5
0
JP Exiter
CW Exiter
Crossover Youth
4
7
24
1
2
7
2
2
6
Health & Mental Health
Mental Health & D/A Treatment
Health & D/A Treatment

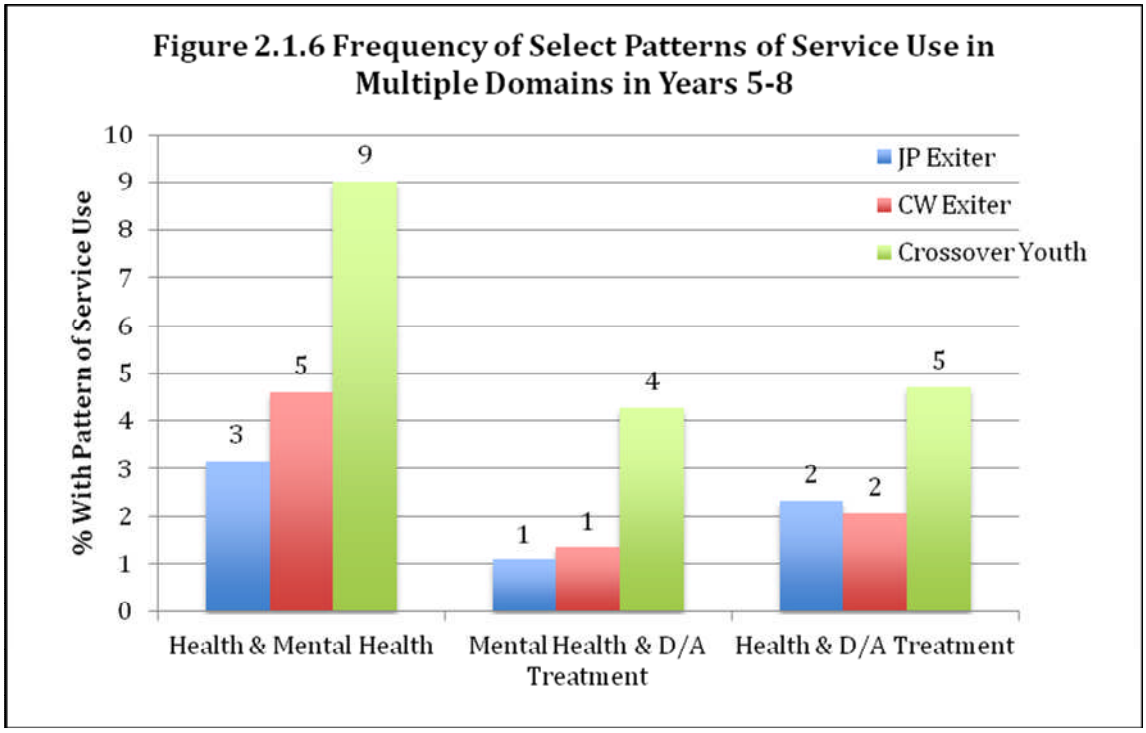


Figure 2.1.6 Frequency of Select Patterns of Service Use in Multiple Domains in Years 5-8
% With Pattern of Service Use
10
9
8
7
6
5
4
3
2
1
0
JP Exiter
CW Exiter
Crossover Youth
3
5
9
1
1
4
2
2
5
Health & Mental Health
Mental Health & D/A Treatment
Health & D/A Treatment

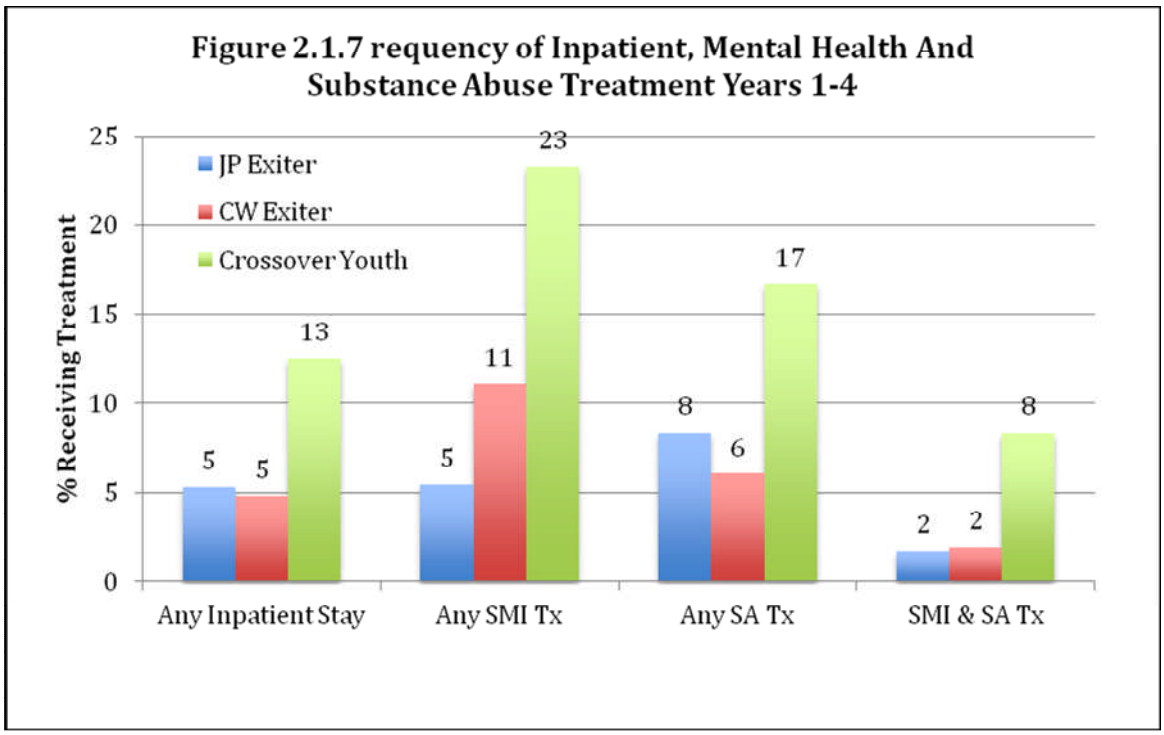


Figure 2.1.7 requency of Inpatient, Mental Health And Substance Abuse Treatment Years 1-4
% Receiving Treatment
25
20
15
10
5
0
JP Exiter
CW Exiter
Crossover Youth
5
5
13
5
11
23
8
6
17
2
2
8
Any Inpatient Stay
Any SMI Tx
Any SA Tx
SMI & SA Tx

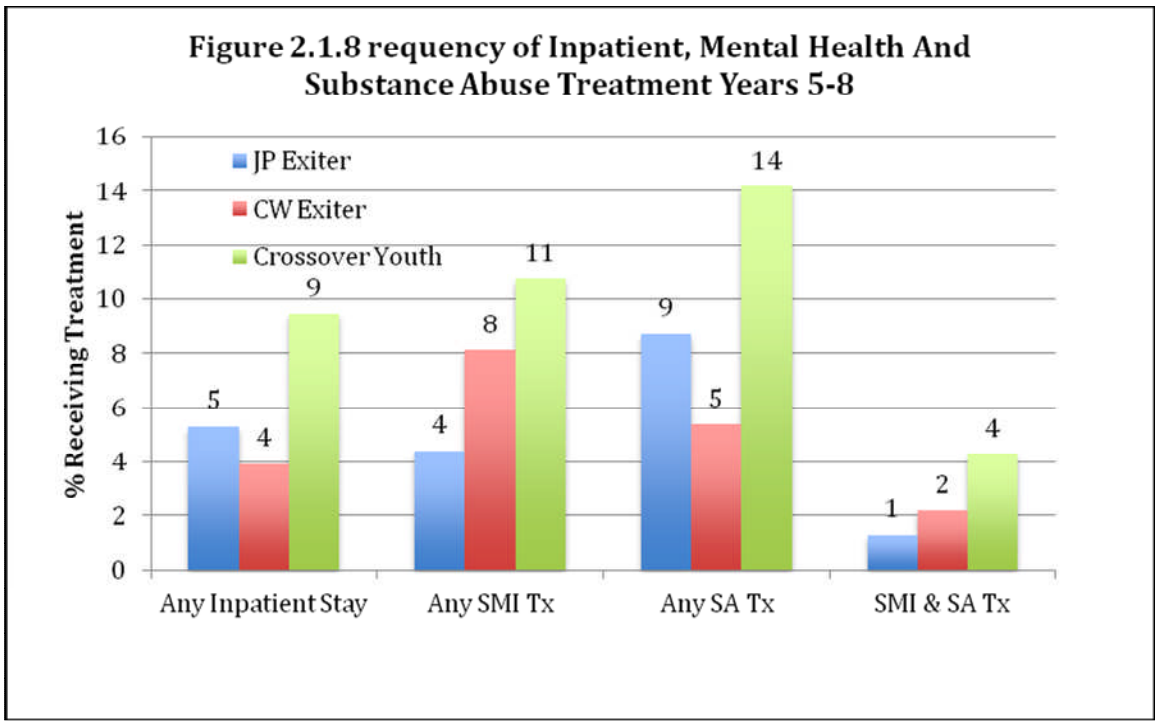


Figure 2.1.8 requency of Inpatient, Mental Health And Substance Abuse Treatment Years 5-8
% Receiving Treatment
16
14
12
10
8
6
4
2
0
JP Exiter
CW Exiter
Crossover Youth
5
4
9
4
8
11
9
5
14
1
2
4
Any Inpatient Stay
Any SMI Tx
Any SA Tx
SMI & SA Tx

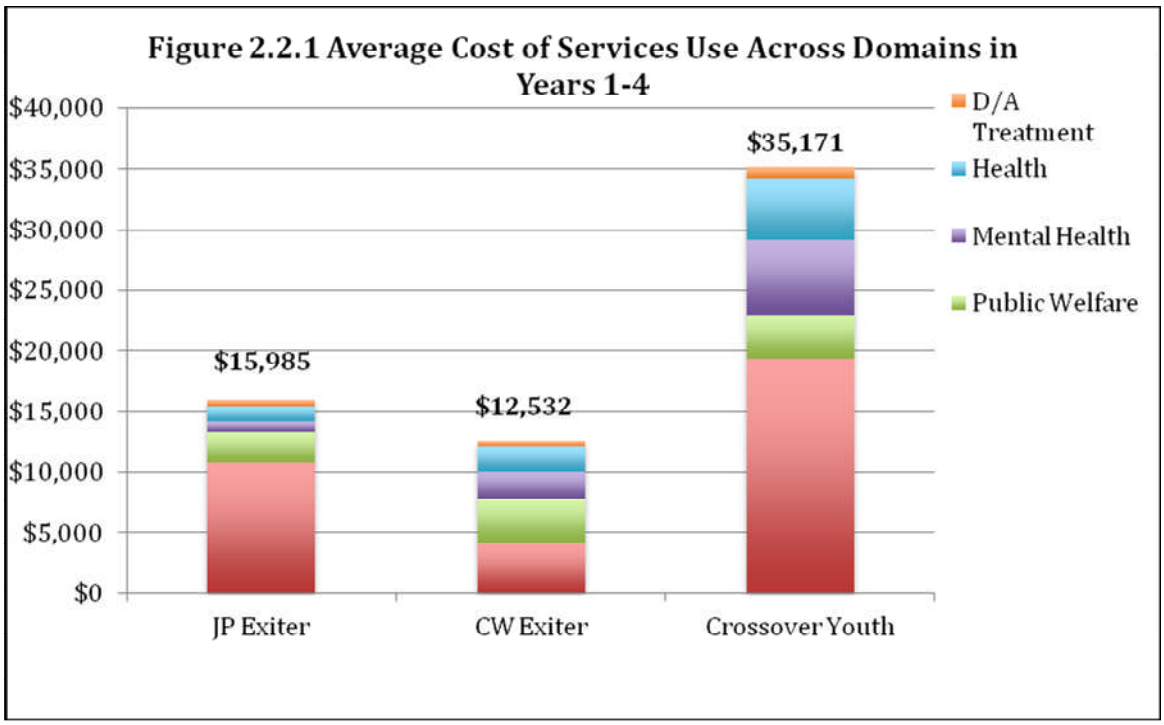


Figure 2.2.1 Average Cost of Services Use Across Domains in Years 1-4
$40,000
$35,000
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
$15,985
$12,532
$35,171
JP Exiter
CW Exiter
Crossover Youth
D/A Treatment
Health
Mental Health
Public Welfare

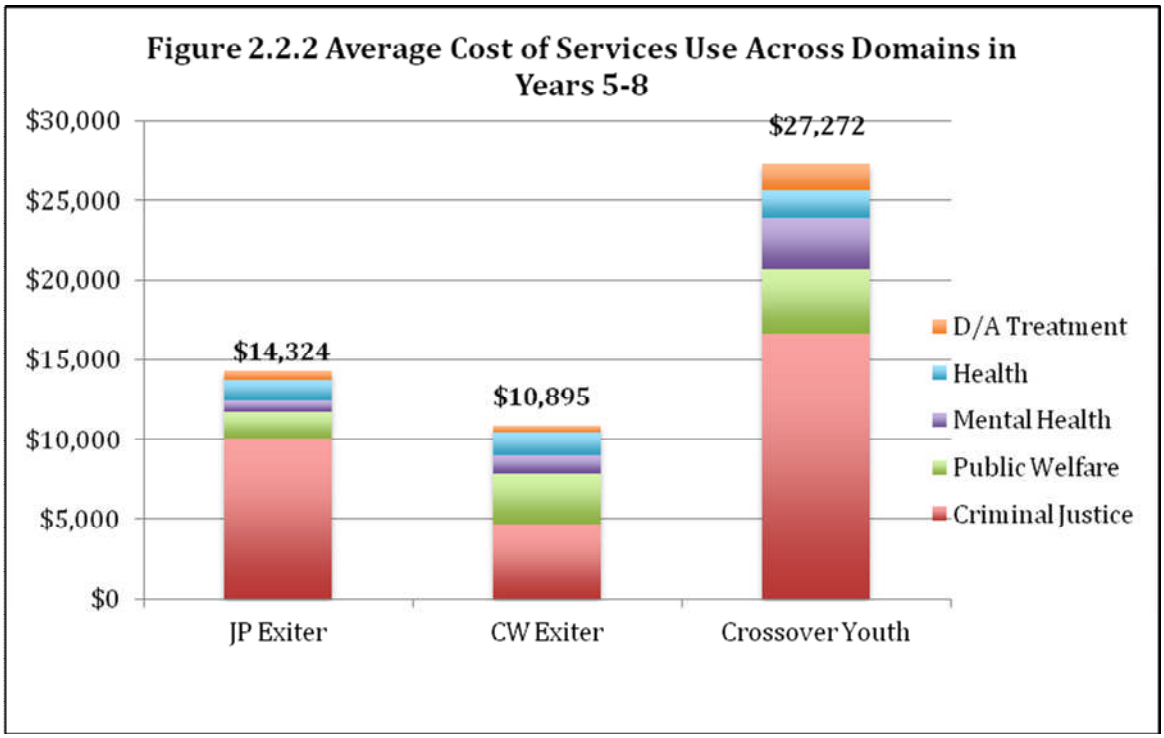


Figure 2.2.2 Average Cost of Services Use Across Domains in Years 5-8
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
$14,324
$10,895
$27,272
JP Exiter
CW Exiter
Crossover Youth
D/A Treatment
Health
Mental Health
Public Welfare
Criminal Justice

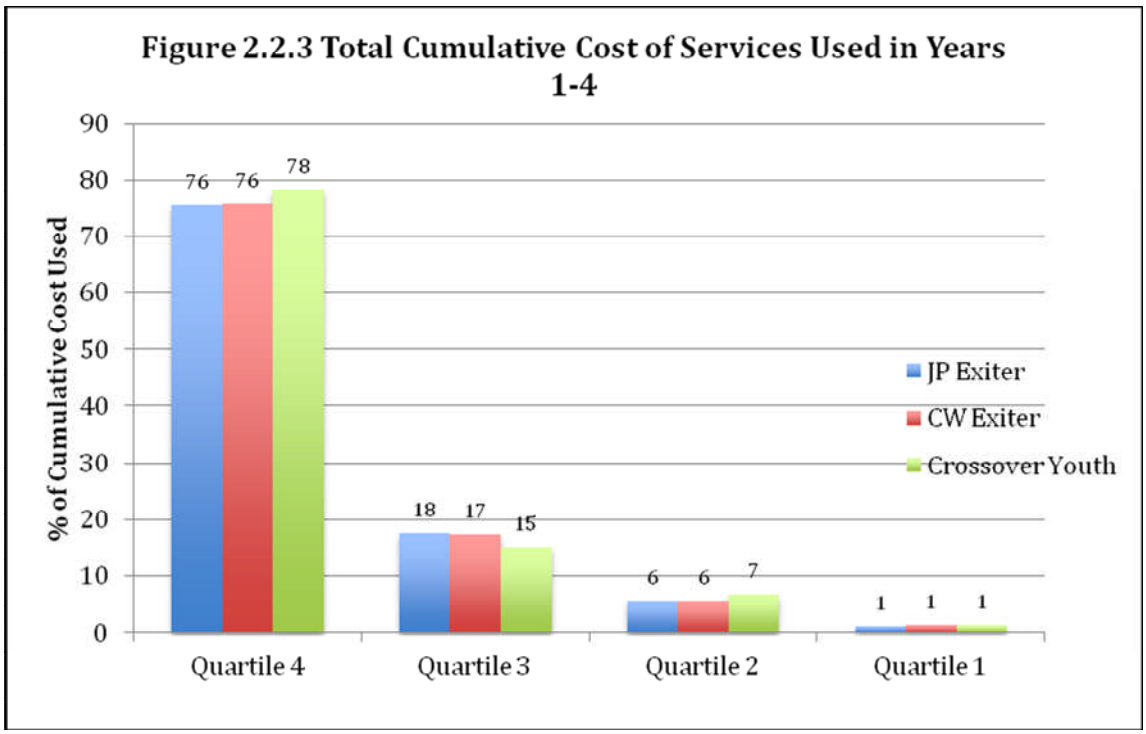


Figure 2.2.3 Total Cumulative Cost of Services Used in Years 1-4
% of Cumulative Cost Used
90
80
70
60
50
40
30
20
10
0
76
76
78
18
17
15
6
6
7
1
1
1
Quartile 4
Quartile 3
Quartile 2
Quartile 1
JP Exiter
CW Exiter
Crossover Youth

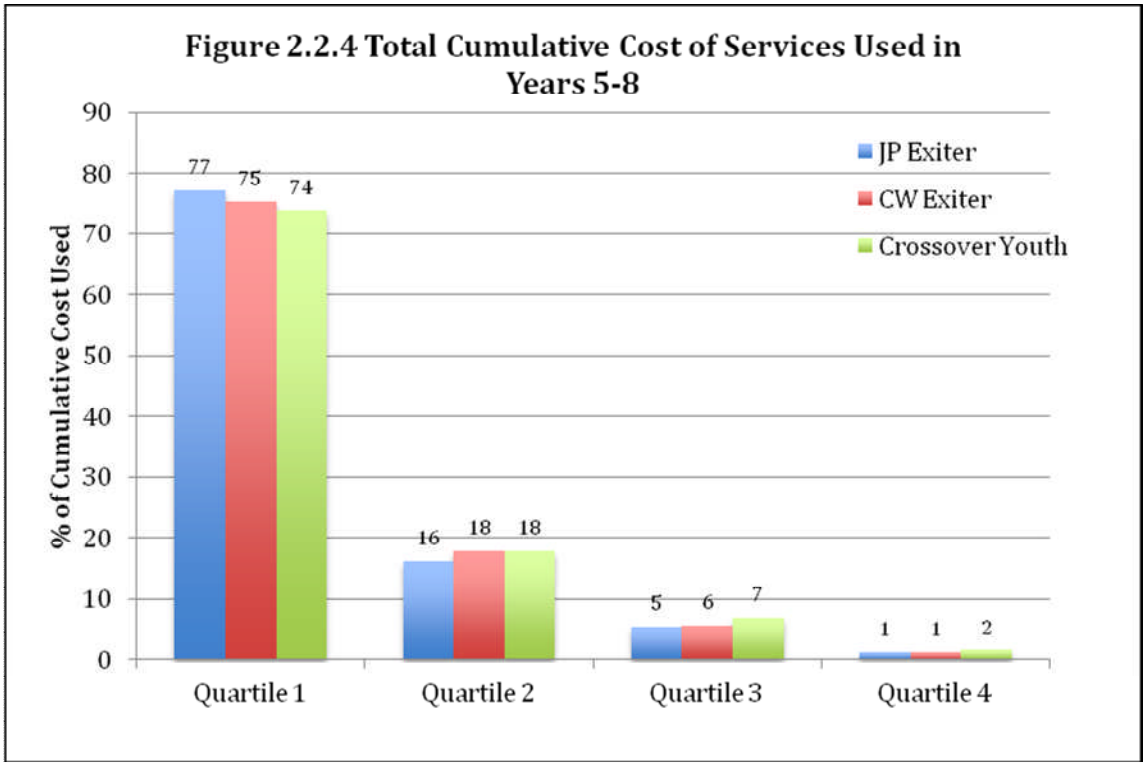


Figure 2.2.4 Total Cumulative Cost of Services Used in Years 5-8
% of Cumulative Cost Used
90
80
70
60
50
40
30
20
10
0
77
75
74
16
18
18
5
6
7
1
1
2
Quartile 1
Quartile 2
Quartile 3
Quartile 4
JP Exiter
CW Exiter
Crossover Youth

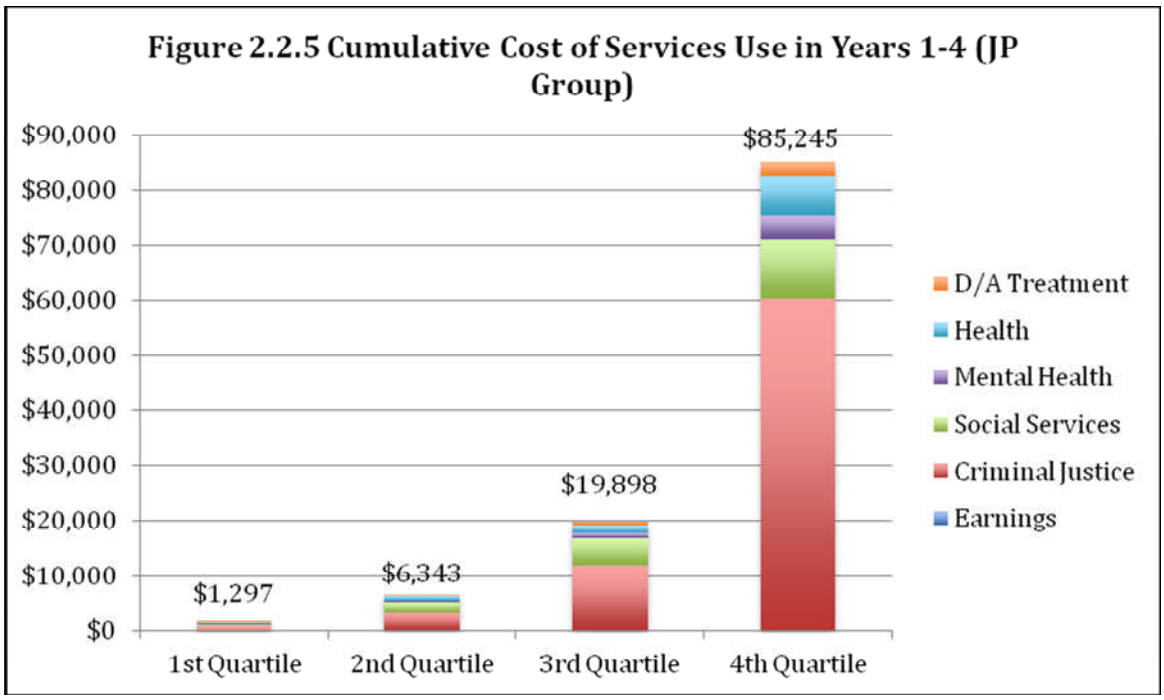


Figure 2.2.5 Cumulative Cost of Services Use in Years 1-4 (JP Group)
$90,000
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
$1,297
$6,343
$19,898
$85,245
1st Quartile
2nd Quartile
3rd Quartile
4th Quartile
D/A Treatment
Health
Mental Health
Social Services
Criminal Justice
Earnings

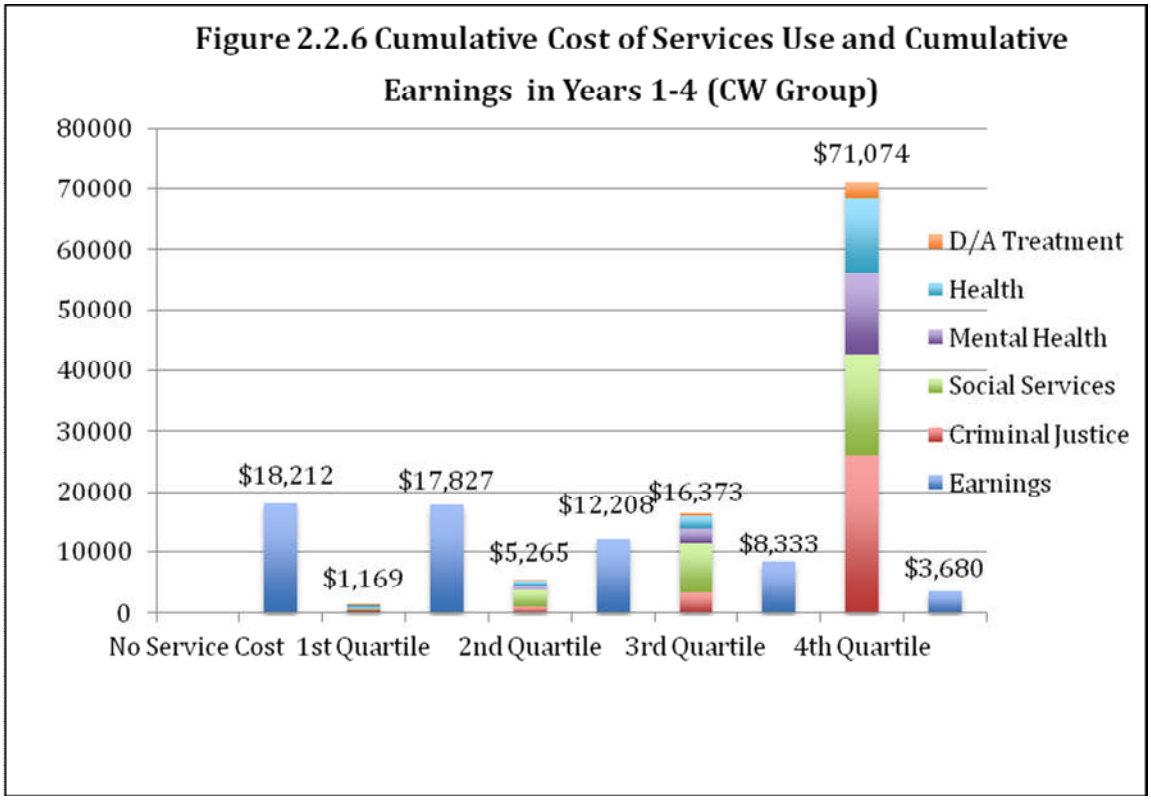


Figure 2.2.6 Cumulative Cost of Services Use and Cumulative Earnings in Years 1-4 (CW Group)
80000
70000
60000
50000
40000
30000
20000
10000
0
$18,212
$1,169
$17,827
$5,265
$12,208
$16,373
$8,333
$71,074
$3,680
No Service Cost
1st Quartile
2nd Quartile
3rd Quartile
4th Quartile
D/A Treatment
Health
Mental Health
Social Services
Criminal Justice
Earnings

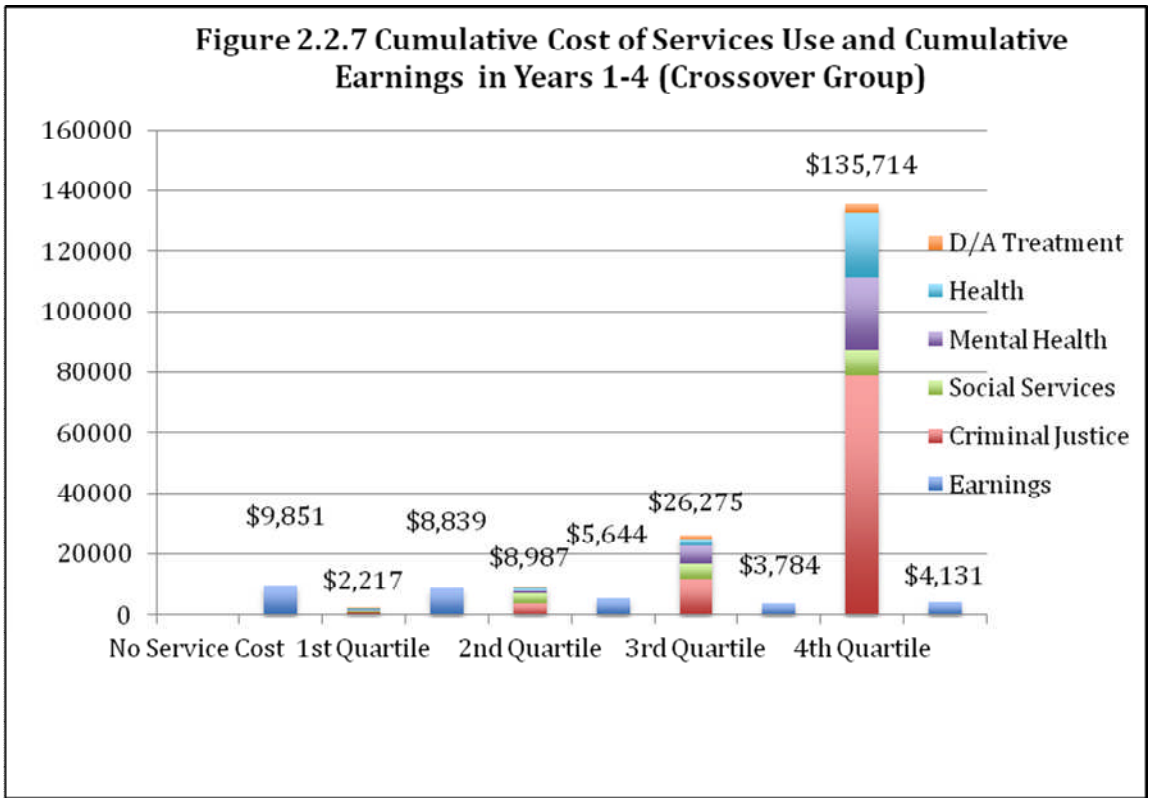


Figure 2.2.7 Cumulative Cost of Services Use and Cumulative Earnings in Years 1-4 (Crossover Group)
160000
140000
120000
100000
80000
60000
40000
20000
0
$9,851
$2,217
$8,839
$8,987
$5,644
$26,275
$3,784
$135,714
$4,131
No Service Cost
1st Quartile
2nd Quartile
3rd Quartile
4th Quartile
D/A Treatment
Health
Mental Health
Social Services
Criminal Justice
Earnings

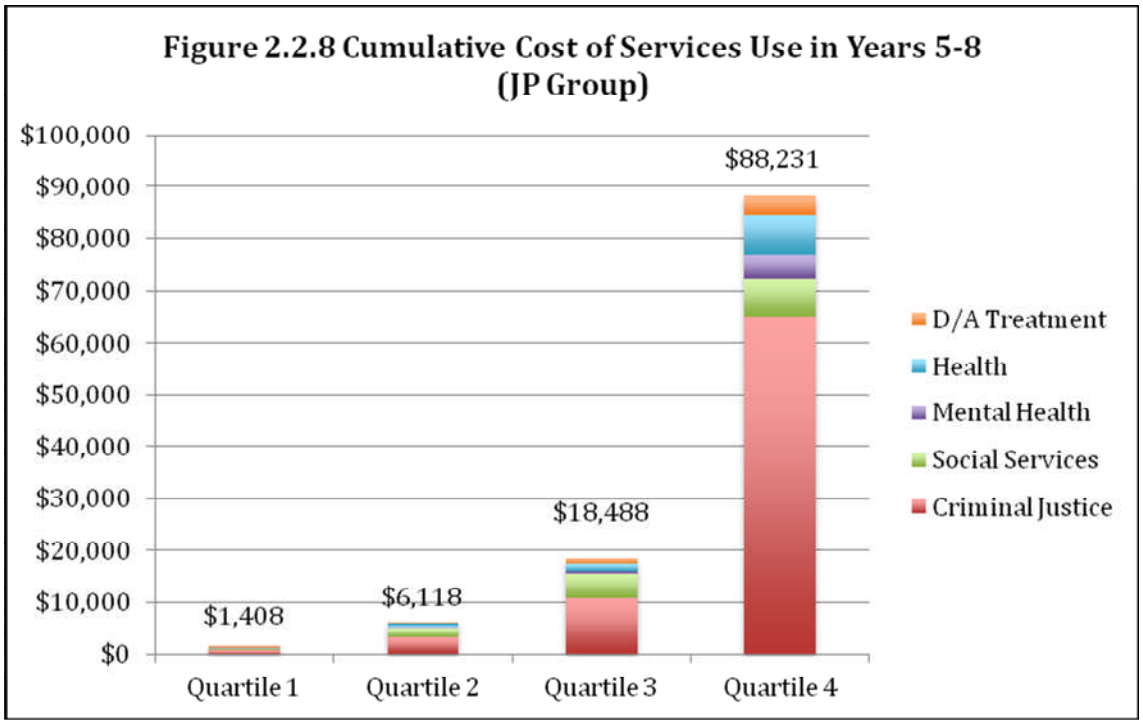


Figure 2.2.8 Cumulative Cost of Services Use in Years 5-8 (JP Group)
$100,000
$90,000
$80,000
$70,000
$60,000
$50,000
$40,000
$30,000
$20,000
$10,000
$0
$1,408
$6,118
$18,488
$88,231
Quartile 1
Quartile 2
Quartile 3
Quartile 4
D/A Treatment
Health
Mental Health
Social Services
Criminal Justice

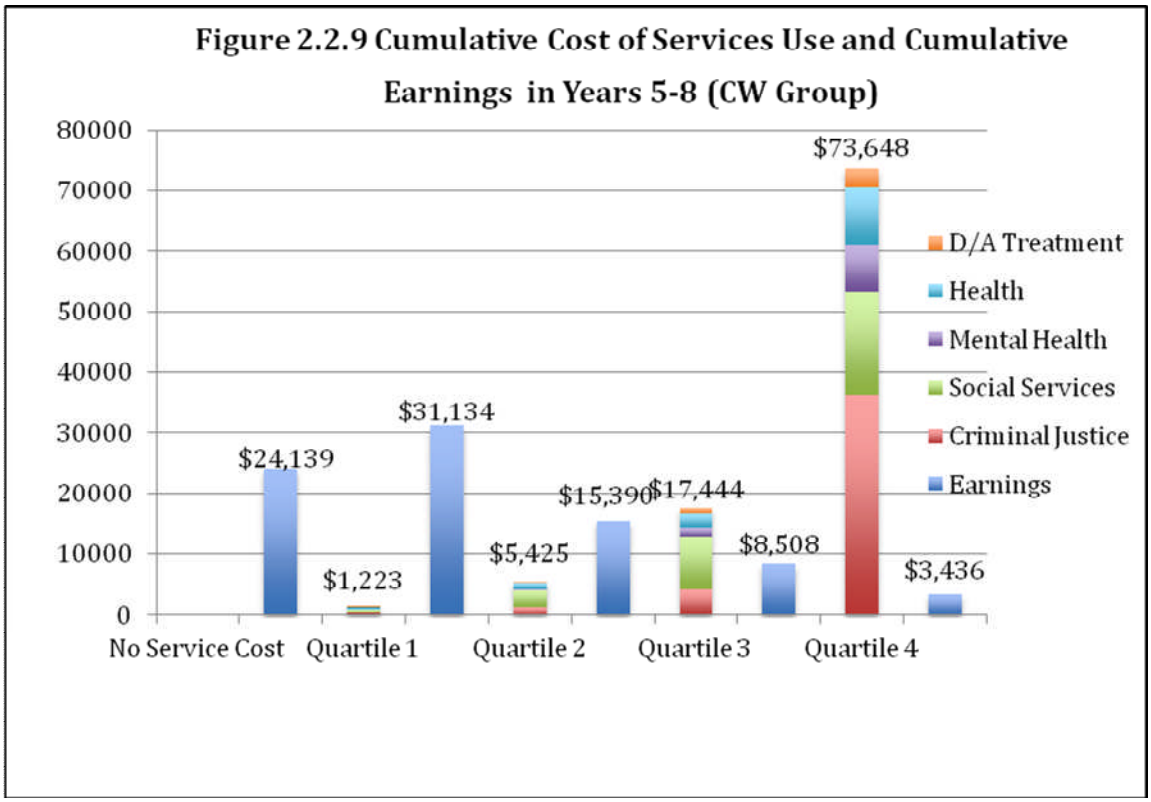


Figure 2.2.9 Cumulative Cost of Services Use and Cumulative Earnings in Years 5-8 (CW Group)
80000
70000
60000
50000
40000
30000
20000
10000
0
$24,139
$1,223
$31,134
$5,425
$15,390
$17,444
$8,508
$73,648
$3,436
No Service Cost
Quartile 1
Quartile 2
Quartile 3
Quartile 4
D/A Treatment
Health
Mental Health
Social Services
Criminal Justice
Earnings

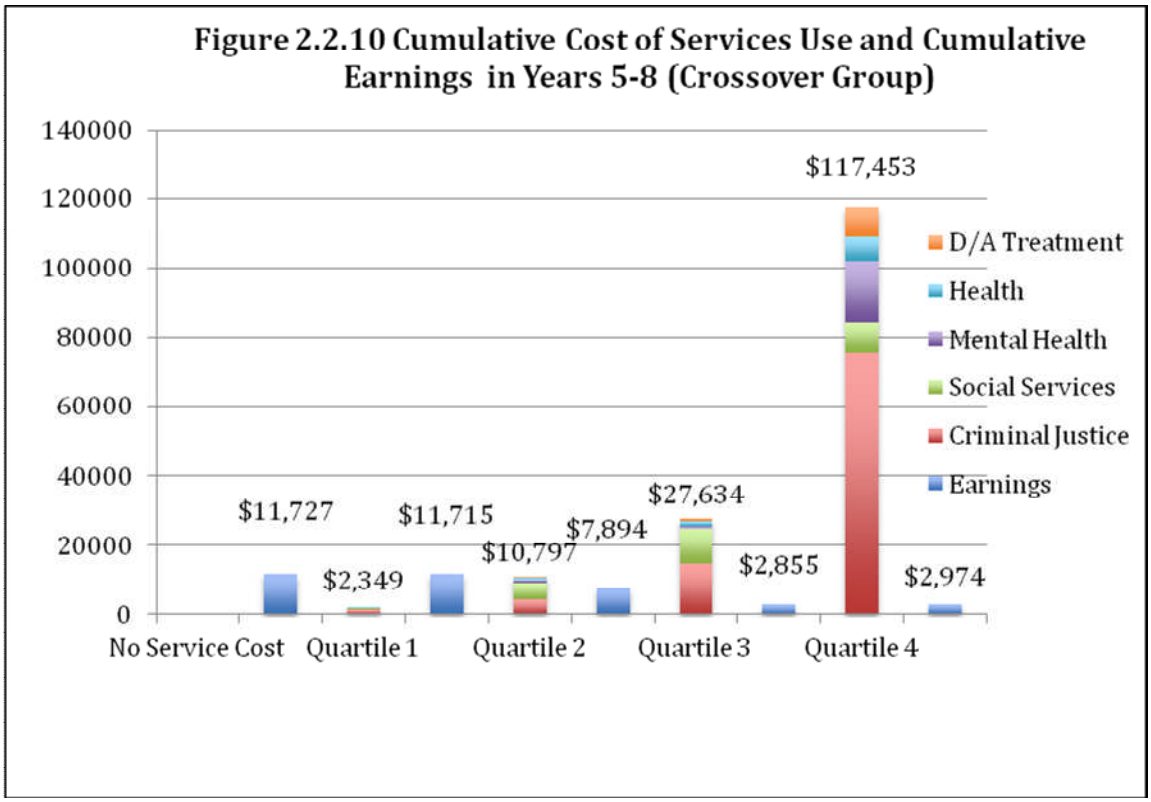


Figure 2.2.10 Cumulative Cost of Services Use and Cumulative Earnings in Years 5-8 (Crossover Group)
140000
120000
100000
80000
60000
40000
20000
0
$11,727
$2,349
$11,715
$10,797
$7,894
$27,634
$2,855
$117,453
$2,974
No Service Cost
Quartile 1
Quartile 2
Quartile 3
Quartile 4
D/A Treatment
Health
Mental Health
Social Services
Criminal Justice
Earnings

Section 3: Relationship Between Select Factors and Young Adult Outcomes

The two previous sections of this report described young adult outcomes of youth with histories in the JP and/or CW systems within single domains and across multiple domains. The findings presented in those sections were largely descriptive, and while they suggested that there were differences between the three exiter groups (i.e. CW exiter, JP exiters, and crossover youth) it was not possible to tell from those sections whether the differences between groups were attributable to differences in the characteristics, experiences or other underlying factors associated with membership in each group. This section builds on the previous two sections by attempting to more directly assess the impact of a number of factors on young adult outcomes subsequent to their exit from foster care or probation. More specifically, this section aims to answer the following questions:

> *Do outcomes vary differentially by involvement in the child welfare and juvenile justice systems, and involvement in both systems? Furthermore, are factors such as demographic characteristics, age at entry into care, level of educational attainment, consistent employment, and (where applicable) type of exit and type of placement at exit associated with adult outcomes including public service utilization, earnings and employment?*
>
> *Is participation in Independent Living Programs (ILPs) associated with the outcomes of youth exiting the child welfare system?*

To better understand the relationship between select individual or program level factors and the young adult outcomes of youth with histories in the JP and/or CW system, this section examines such relationships for the following seven outcomes:

- Total earnings
- Consistently employed
- Total cost of public service use
- Heavy use of public services
- Jail Stays
- Timing and use of cash assistance (i.e. GR or CalWORKs)
- High educational attainment

This section uses multivariate modeling techniques to examine the relationship between a set of select factors and these six outcomes. Results will be summarized in the text and more detailed findings are reported in the tables at the end of this section. Multivariate modeling methods allow for an estimation of the strength and direction of the association between each factor and the outcome of interest while taking into account, or controlling for, the impact of all the other factors included in the model. More specifically, the following three types of multivariate modeling techniques will be employed:

- Ordinary least squares regression (OLS)—This method is used when the outcome of interest is a continuous measure. OLS will be used in examining total earnings and total cost of public service use across domains, both of which are continuous outcomes. In reading OLS regression model results, positive (and significant) coefficient values for the factors listed as independent variables indicate a positive relationship with the outcome in question, and greater absolute value for the coefficient indicates stronger magnitudes of association.
- Logistic regression—This method is appropriate for examining dichotomous outcomes. Logistic regression will be used when examining heavy use of public services (i.e. the likelihood that an individual is or is not a heavy user of county services) and jail stays and consistent employment (i.e. the likelihood that an individual will or will not experience a jail stay or attain consistent employment). The coefficients are expressed in odds ratios, where values greater than one indicate an increased likelihood of making heavy use of public services, while odds ratios less than one indicate a decreased likelihood of being a heavy user of public services.
- Cox proportional hazards regression—this is a survival analysis technique that is used when studying the relationship between a set of factors and the timing and occurrence of events. Cox proportional hazards regression will be used when examining the timing and use of cash assistance. The coefficients are referred to as hazard ratios, and should be interpreted in a similar fashion to odds ratio values in logistic regression models. This means that hazard ratios above one indicate that an individual faced an increased likelihood of experiencing the event at a given point in time during the risk period, and hazard ratios less than one indicate that an individual was at a decreased likelihood of experiencing such an event.

Using these methods, two parallel sets of models will be estimated for each outcome. The first will include members of all three groups from both the 2002 and 2004 exit cohorts. This will allow for an assessment of the nature of the relationship between group membership and the outcome of interest (e.g. assessing whether crossover youth are more likely than CW or JP youth to experience a jail stay), while also examining the association between a limited set of additional covariates and the outcome of interest (e.g. assessing whether age at exit is associated with higher public service costs). The second set of models will include only those individuals in the CW and crossover groups from both the 2002 and 2004 exit cohorts. This separate set of analyses allows for the use of additional data that is only available for the CW youth that provides information about a number of factors specific to involvement with the child welfare system (e.g. reason for exit from care, type of CW placement at exit, participation in ILPs).

This section uses an analytic approach that is different from the approach used in the previous two sections. With a few exceptions, the previous sections presented parallel sets of analysis of that examined outcomes that occurred within the initial four years of exit from care for the 2004 exit cohort and in years five to eight subsequent to exit for the 2002 exit cohort. Instead, this section groups them together. In order to do this, the outcome measures used in this section are assessed according to the calendar time for

which data are available, rather than for the time elapsed since exit from care. For example, in Section 2, total cost of public service use for the 2004 exit cohort was calculated so as only to include service use that occurred within the initial four years subsequent to exit. Similarly, for the 2002 cohort, any service use that occurred prior to the beginning of the fifth year following their exit from care was excluded from total cost calculations. In other words, in this section the total cost of service use for both those who exited in 2002 and 2004 is calculated for the five-year period of calendar time stretching from January 1, 2005 until December 31, 2009. In the case of the models that focus on earnings, receipt of cash assistance, and educational attainment, as will be explained in more detail below, the periods of calendar time used to measure outcomes were even longer. Nonetheless, by including an indicator of year of exit from care as a covariate in each multivariate model, this section is still able to provide information about whether outcomes of youth vary as a function of the amount of time that has elapsed since exit from care.

The remainder of this section proceeds by first providing additional details about the six outcome measures that were used as dependent variables in the multivariate models, as well as of the factors used as independent variables in these models. After doing so, this section presents the results of each of the models, and then concludes by highlighting important trends that emerge when synthesizing the results of all of the models.

3.1 Descriptive Measures and Descriptions of Outcomes

Table 3.1.1 provides descriptive statistics for the six outcome measures used in this section. Each outcome measure is detailed in turn below:

- ***Total earnings***—is the cumulative amount that an individual earned between the first quarter of 2004 and the last quarter of 2009, as indicated by the EDD records. The natural logarithm of total earnings for each individual is used as the outcome measure here. This is a common means by which to correct for the type of skewed distributions that are commonly found when looking at income/earnings. Earnings information was only available for youth having involvement with the child welfare system, and as a result, this outcome measure is only modeled for the sample comprised of CW and crossover youth.

- ***Consistently employed***—is a dichotomous indicator of whether youth displayed a consistent pattern of earnings, defined as having any earnings in at least two thirds of the quarters between 2004 and 2009, as reported in the EDD data. Since this outcome is derived from the same source as the earnings data, it is only modeled for youth in the CW and crossover combined sample.

- ***Total cost of public service use***—is a measure of the combined cost of public services used by youth in the period stretching from January 1, 2005 until December 31, 2009. This cumulative cost aggregates the cost of the following services: health services provided by DHS, DMH mental health services, drug/alcohol treatment from SAPC, Sheriff Department jail stays, episodes of

adult probation, and CalFresh, GR and CalWORKs provided through DPSS. As with the total earnings measure, the natural logarithm of the total cost is used here as the outcome variable.

- ***Heavy use of public services***—is a dichotomous outcome variable indicating whether or not a youth was in the top quartile in terms of total cost of public service use in the period from January 1, 2005 until December 31, 2009.

- ***Jail Stay***—is also a dichotomous outcome variable indicating whether or not an individual experienced a Sheriff Department jail stay at any point between January 1, 2005 and December 31, 2009.

- ***Timing and use of cash assistance***—is a measure that simultaneously considers whether or not an individual received GR or CalWORKs and the amount of time elapsed between exit from the CW or JP system and the first date of receipt of GR or CalWORKs.

- ***High educational attainment***—is a dichotomous measure of whether an individual had high educational attainment, which is defined as meeting any of the following two criteria between 2000 and 2010: 1) Received an Associate of Arts (A.A.) or Associate of Science (A.S.) degree from a community college; 2) Had a record of enrollment in a four-year university in the UC or CSU system.

3.2 Descriptive Measures and Descriptions of Select Factors/Covariates

Table 3.2.2 presents descriptive measures of the factors that were included as covariates/independent variables in modeling each of the six outcome measures. Certain outcome measures (e.g. high educational attainment, consistent employment) are included as covariates in certain models. These covariate measures are grouped into several categories, although some covariates are only relevant for youth having had involvement in the CW system, and thus were only included in the models that were estimated using the CW/crossover sample.

<u>Demographic Characteristics</u>

- ***Age at entry***—is the age of youth at the time of the beginning of their last DCFS placement or the date of their first arrest, for probation exiters.

- ***Age at exit***—is a categorical variables with the following three levels: aged 17 and younger at exit, aged 18 at exit and aged 19 and over at exit. The exit age measure was constructed in this manner so as to allow for comparison of the outcomes of youth who exited care prior to their 18th birthday, and who are therefore unlikely to use forms of care intended for adults immediately upon exit, to those youth who exited care as adults.

- ***Race/Ethnicity***—this is grouped into white (non-Hispanic), black (non-Hispanic), Hispanic (any race) and "other" race/ethnicity.

- ***Sex***—male and female.

Other Characteristics

- ***Any Drug/Alcohol***—Is a dichotomous variable indicating whether or not an individual received treatment for a drug and/or alcohol disorder from either DHS or DMH at any point January 1, 2005 and December 31, 2009. For DHS and DMH, any drug/alcohol corresponds to having received primary diagnosis during any contact with either system for a drug/alcohol disorder (i.e. ICD9 codes beginning with 291, 292, 303, 304 or 305) associated with a DHS or DMH treatment episode of any type. As noted previously, this measure underestimates the true presence of drug/alcohol disorders.

- ***Any serious mental illness***—is a dichotomous variable indicating whether an individual received treatment from either DHS or DMH for a serious mental illness between January 2005 and December 2009. This measure was developed in a manner similar to that used to construct the any substance abuse indicator, in that an individual was considered to have a serious mental illness if they received a primary diagnosis for a serious mental illness (i.e. ICD9 code beginning with 295 or 296) in association with a DHS or DMH treatment episode. Like the substance abuse indicator, it underreports the presence of serious mental illness.

- ***Any CSS***—This dichotomous variable indicates whether an individual received any type of employment/vocational training services provided by the Department of Community and Senior Services (CSS) at any point between January 1, 2005 and December 31, 2009.

- ***Exiter type***—This groups the records by study group – CW, JP and crossover youth.

- ***Community college credits earned***—is a continuous variable that represents the sum of credits earned by individuals at a community college that were transferable to either the UC or CSU system. The log transformation of this variable was used as a covariate in the models.

- ***Exit cohort***—indicates whether an individual was part of the 2004 or 2002 exit cohort, and allows for comparisons between the two cohorts.

- ***Type of placement at exit***—is a measure that is only relevant for youth who had child welfare involvement and therefore is only included in the models that use the CW/crossover sample. The categories represent placement types at time of exit: care from relatives, foster care, a group home, other type of placement.

- ***Reason for exit***—like type of placement at exit, is a measure that is only relevant for youth who had child welfare involvement. The categories for this measure include reunification with family, aging out/emancipation, running away/absconding from care, guardianship, incarceration and a residual "other" category.

- ***Number of DCFS out of home placements***—is a continuous measure representing the number of out of home placements (i.e. distinct instances of out-of-home placement during which an individual might experience one or more placement changes), as indicated by the DCFS data, that youth who in the CW or crossover group experienced prior to their exit from care.

- ***Number of placement locations during last DCFS out of home placement***—another continuous measure that represents the number of distinct locations in which youth were placed during their last placement prior to their exit from care.

Transitional Services

Data were also available for these analyses on the participation of youth in the CW and crossover group in a variety of transitional services and programs funded by the federal Independent Living Program (ILP). A fairly broad array of services, including education funds (e.g. assistance in paying for tuition or supplies) life skills and vocational training, housing assistance (e.g. move in costs, payment of security deposits), and financial assistance for transportation costs, are available to youth through ILP programs. ILP services were available to youth ages 16 to 21 who were in out of home placements at any time from their 16th to 19th birthday.

While this potentially encompassed all members of the CW and crossover group, certain ILP services/programs have additional eligibility criteria. For example, receipt of assistance through the Transitional Housing Placement Program (THPP) requires youth to be attending high school or a vocational training program on a full time basis. Similarly, a number of ILP housing programs (e.g. the Athena or B.R.I.D.G.E.S program) require youth to meet certain mental health diagnostic criteria. These restrictive criteria mean that participation in many ILP services is limited to a selected group of youth who also meet eligibility criteria. Many of these programs also had limited resources, and none of the programs accommodated more than 9% of the study group. Any effect of ILP services may be associated with the effect of the program itself, and/or with the types of youth chosen to participate in these selective programs.

The ILP services (whose frequency distributions are on the bottom of Table 3.2.1) included in this section's analyses consist of:

- ***Educational Expenses***—collapses receipt of several types of assistance in paying for educational expenses into one indicator. These services are: payment for books/supplies, clothing for educational purposes, and payment

for expenses associated with high school graduation/diploma. Educational expenses is a dichotomous variable indicating receipt or non-receipt of any of these services.

- ***Tuition assistance/scholarships***—is a dummy variable indicating whether a youth received any of the following: tuition assistance, a scholarship from DCFS, or a scholarship from the Probation Department's "Success if Our Future" program.

- ***Job skills/vocational training***—combines receipt of several types of job skills and vocational training into one dichotomous variable. Youth who received job development services, assistance in paying for dues, tools or clothing for work related purposes, and youth who received assistance in paying tuition for vocational training were all considered to have received job skills/vocational training.

- ***HHPI startup services***—is an indicator of whether youth did or did not receive Homeless Housing Prevention Initiative (HHPI) startup services. A more complete description of what HHPI startup services provided to youth was not available.

- ***Rental assistance in market units (move in/security deposit)***—is an indicator of whether youth did or did not receive assistance paying for move in expenses or the security deposit for a unit in the private rental market. This was the most widely available ILP program among the study group.

- ***Rental assistance with relatives***—A dichotomous measure of whether youth received rental assistance when living with relatives or a foster family.

- ***Other housing assistance***—is an indicator of whether youth received any of the following types of housing assistance: rental assistance for dorms or startup apartment/dorm move in or startup costs.

- ***Mental health based housing***—is a dichotomous variable indicating whether an individual participated in one of the following housing programs for youth with mental illness: the Athena Program, B.R.I.D.G.E.S program, the Hillview program or the Step Out program. All of these programs require participants to have an Axis 1 mental health diagnosis.

- ***CDC/LAHSA services***—is an indicator of whether youth received services from the Community Development Commission (CDC) and the Los Angeles Homeless Services Authority (LAHSA), which are partners in providing emergency shelter, transitional housing and support services to youth transitioning out of the child welfare system. From the available data, it was not possible to identify which specific services among these were provided to youth.

- ***Transportation assistance***—A number of forms of transportation related assistance are available to youth. This is a dichotomous measure of whether youth received one of these services which can include driving lessons, assistance in paying for auto insurance, parking fees and other forms of assistance.

3.3 Results of Models

Tables 3.3.1 and 3.3.2 present the results of the multivariate regression models that were used to assess the nature of the relationship between the factors described in Section 3.2 and the outcomes described in Section 3.1. In the set of models that uses the combined sample of all three study groups less than 1% (n=134) of cases were dropped due to missing values for one or more of the covariates. In the set of models that uses the sample of CW and crossover youth, about 3% of cases (n=146) were dropped due to missing values on one or more covariates.

This section briefly summarizes the findings for each outcome, and Section 3.4 will then highlight important observations that emerge when looking at the regression results on a collective basis.

Employment Outcomes - Total Earnings and Consistent Employment

Both of these employment outcomes were only available for youth who had involvement in the child welfare system, and as a result, regression results were only available for the combined CW/crossover sample. The total earnings results were based an OLS regression model and the consistent employment results were based on a logistic regression model.

Based on table 3.3.2, the principal results are grouped into facilitating factors, which are associated with improved employment outcomes, and inhibiting factors, which are associated with diminished employment outcomes.

Among facilitating factors:

- The strongest facilitating factor for employment outcomes was having obtained community college credit. This likely means that young adults with greater attachment to the workforce were also more inclined to go to college. However, this association may be limited, as high educational attainment lacked any additional association with employment outcomes.
- Outcomes associated with CSS services are also mixed, as participation in this program was associated with higher earnings but not a higher likelihood of consistent employment.
- Among transitional services, the only component with a significantly positive outcome was rental assistance to a market unit.

- Among factors that were included primarily as control measures, being in the 2004 exit cohort and male sex were associated with higher earnings and, for male sex, with greater likelihood of consistent employment. Likewise, exiting from a guardianship placement was associated only with increased earnings.

Among Inhibiting factors –

- Crossover youth, compared to the CW group, were substantially less likely to attain consistent employment, though the differences in their earnings were non-significant.
- Multiple placement locations during the last CW out-of-home placement was associated with negative outcomes in both earnings categories, as did group home and "other" placement type at the point of exit from CW involvement.
- Looking at control measures, the running away and "other" CW exit categories were associated with lower earnings only.
- Treatment for a serious mental illness was associated negative outcomes for both earnings and total employment, but there was no significant relationship found between these outcomes and treatment for a drug/alcohol disorder.
- Black (non-Hispanic) race had associations with lower earnings and lower likelihood of consistent employment when compare to other race/ethnicity categories.

Total cost of public service use (as a young adult) and heavy use of public services

Two outcome measures related to cost of adult services administered by LA County are summarized in this subsection. The first outcome is total cost of public service use, as a logged continuous outcome, is assessed using OLS regression modeling. The second outcome, heavy use of public services, used logistic regression to model the relationship between individual level factors and the likelihood that an exiter would be in the top quartile in terms of total cost of services used across the health, behavioral health, public welfare and criminal justice systems. This summary uses findings from both the full model in Table 3.3.1 and the model limited to those youth with CW records in Table 3.3.2.

<u>Full model</u> – summarizing the results in Table 3.3.1:

- Facilitating factors for both outcomes (i.e., factors associated with incurring increased services costs and increased likelihood of being a "heavy" user) included, most prominently, being in the crossover youth group.
- The two adult education measures, community college credits and high educational attainment, were associated with lower public service costs and reduced odds of making heavy use of public services.
- Participation in CSS services was also positively associated with higher services costs.

- Inhibiting factors for both outcomes included the adult education measures (i.e., having community college credit and having high educational attainment), and, interestingly, being in the CW group.
- Among the control variables, male sex, black race and Hispanic ethnicity (compared to white race), older age at exit, and being in the 2004 exit cohort (cost outcome only) were also facilitating factors.

Child Welfare Only model – summarizing the results from Table 3.3.2:

- Among the covariates added to this model that were not present in the overall model, consistent employment was an inhibiting factor for both outcomes, and receiving HHPI and rental assistance services (to market units) were associated with decreased public service costs.
- No services were significantly associated with any change in the likelihood of being a heavy services user.
- An Increased number of CW placements and an increased number of placement locations during the last placement instance were associated with increases in both outcomes, as was leaving child welfare services from a group home.
- Receiving mental health based housing services was associated with increased costs, while exiting to a guardianship situation or aging out of the CW system (both compared to reunification exit type) were associated with decreased costs.
- Exits to incarceration were associated with substantially higher likelihood of being a heavy user.
- With the prominent exceptions of crossover youth status and receipt of CSS services, the values for many of the common covariates in the full and CW only models also differed in the nature and/or significance of their effects upon the total cost outcome. This indicates that there may be different dynamics among youth in the JP group, who largely outnumber those in the CW group. A prominent example of this is the earning community college credit, which was associated with increased services costs and with a non-significant relationship to heavy user status.

Jail Stays

Jail stays, like heavy use of public services, was treated as a binary outcome measure, with exiters differentiated according to whether or not they experienced a jail stay subsequent to their exit from the JP and/or CW systems. Thus, like heavy service use, logistic regression was used to model jail stays, and odds ratios are again presented to describe the relationship between each covariate and the likelihood of experiencing a jail stay.

Full model – The results in Table 3.3.1 show:

- Crossover youth, compared to JP youth, had a 2.4 times greater odds of having a jail stay, and the CW group had only 0.6 times the odds that the JP group did.

Clearly, one of the strongest predictors of an adult jail stay is juvenile justice involvement.

- Behavioral health measures also had strong positive associations with jail stay, given the odds ratios (OR) for adult treatment for SMI (OR of 2.4) and substance abuse (OR of 4.0).
- Receipt of CSS services was also associated with higher odds off a jail stay.
- The two adult education measures, community college credits and high educational attainment, were associated with reduced odds of a jail stay.
- Otherwise, being male and of black race or Hispanic ethnicity were also associated with increased odds of a jail stay.

Child Welfare Only model – the CW model results on Table 3.3.2 were generally consistent with the full model results, with:

- Strong effects noted in association with crossover youth and with substance abuse and SMI treatment.
- CSS services, as in the full model, had a strong positive association.
- Only one of the two educational measures, high educational attainment, had a negative association with jail stay.

Among those measures that were added to the model:

- A record of consistent employment strongly reduced the odds for a jail stay.
- Increased numbers of CW placements and more placements within the last out-of-home placement instance each were associated with higher likelihoods for a jail stay.
- The CW exit category "running away" was associated with increased odds.
- Among the transitional services, mental health based housing was associated with a substantially increased odds (OR of 2.0) and HHPI startup services and rental assistance to market units both were associated with substantially reduced odds (both with ORs of approximately 0.6).

Timing and use of cash assistance (i.e. GR or CalWORKs)

A competing-risk Cox proportional hazard rate regression model was used to assess the relationship between the set of covariates and the timing and use of cash assistance in the form of either GR or CalWORKs. The objective of this type of modeling approach is to estimate the impact that the covariates have on the probability, or hazard, that an individual will use either GR or CalWORKs at any given point in time subsequent to their exit from care.

In this analysis, youth were considered "at risk" of using GR or CalWORKs use starting on their date of exit from care. Youth who received CalWORKs or GR for the first time prior to their exit from care were excluded from this analysis, since, having already received either GR or CalWORKs prior to exit from care, it was not possible for them to be considered "at risk" of receiving it for the first time subsequent to their exit from care.

Moreover, GR and CalWORKs receipt are considered "competing" because, although youth could be considered as being "at risk" of receiving either GR or CalWORKs in the period of time following their exit from care, they could only receive one type of assistance initially. Here, hazard ratios indicate the relationship between the covariates and the likelihood that an individual would begin receiving either CalWORKs or GR at a given point in time following exit from care.

Full model – The main findings from table 3.3.2 include:

- Being in the crossover youth group was strongly associated with substantially increased hazards for both CalWORKs and GR receipt. Compared to the JP group, the CW group was associated with a greater hazard of CalWORKs receipt only.
- Males were substantially less likely to receive CalWORKs. This disparity likely also influenced the aforementioned association between CW group membership and CalWORKs receipt, as the CW group is mostly female.
- Adult SMI treatment was associated with a substantially increased hazard for both outcomes, while adult substance abuse treatment was associated with increased hazard for GR receipt (but not for CalWORKs receipt).
- The two adult education measures were both associated with reduced hazards for both outcomes.
- CSS services participation was associated with increased hazard of GR receipt.
- There were also racial and ethnic differences associated with these outcomes, as black race and, for CalWORKs, Hispanic ethnicity were associated with substantially increased hazards.

Child Welfare Only model – the results from Table 3.3.3 show that:

- Some of the associations that were significant in the full model did not come out as significant in this model, including the associations of crossover youth with receipt of CalWORKs, SMI treatment with CalWORKs receipt, substance abuse treatment with GR receipt, all of the associations between the two education measures and the two outcomes (except of the still-significant association between high educational attainment and CalWORKs. Receipt of CSS services also had a non-significant association with the outcome variables.
- Among the measures appearing only in the CW model, consistent employment was associated with a substantially reduced hazard for both types of benefits receipt.
- In terms of type of placement at time of exit from care, youth in foster care were less likely to receive GR than youth in the care of relatives.
- Persons who aged out of care were less likely to receive GR than those who reunified.
- Higher number of placement locations during an individual's last out of home placement was associated with a higher hazard of both GR and CalWORKs receipt, although the overall number of DCFS out of home placements did not

have any significant relationship with the likelihood of receiving either GR or CalWORKs.

- Finally, in examining forms of ILP assistance, persons receiving HHPI start up services and those receiving assistance in paying move in costs for market housing were substantially less likely to receive GR. On the other hand, rental assistance while living with relatives, which was associated with an increased likelihood of CalWORKs receipt, was the only type of ILP service that had a statistically significant relationship with the hazard of CalWORKs receipt.

High educational attainment

High educational attainment was treated as a binary outcome measure, with exiters divided into two groups according to whether they had either received an Associates degree or enrolled in a four-year college, or had not. Thus, logistic regression was used to model high educational attainment, and odds ratios are again presented to describe the relationship between each covariate and the likelihood of having high educational attainment. In looking at the model that included members of all three study groups,

Full model – Table 3.3.1 shows that:

- Youth in the CW group were 1.5 times more likely than youth in the JP group to have high educational attainment, and youth in the crossover group were 91% less likely to have high educational attainment than youth in the JP group.
- Youth who exited care between the ages of 19 and 21 were 26% less likely to have high educational attainment than youth who exited at 18.
- Males were 46% less likely than females to have high educational attainment.
- African Americans were 48% and Hispanics 64% less likely than whites to have high educational attainment, while youth of other races were more than twice as likely as whites to receive an Associates degree or enroll in a four-year university.

Child Welfare Only model – Looking specifically at the sample comprised of CW and crossover youth, there were very few factors that had statistically significant associations with the likelihood of having high educational attainment. More specifically, Table 3.2.2 shows the following factors to have a statistically significant relationship with high educational attainment:

- Males were 39% less likely than females to have high educational attainment.
- Youth who exited care in 2004 were about 1.8 times more likely to have high educational attainment than youth who exited in 2002.
- More placement locations during an individual's last out of home DCFS placement was associated with a decreased likelihood of high educational attainment.
- Youth who received HHPI services were more than three times as likely to have high educational attainment.

3.4 Summary of Findings From Regression Models

This section concludes by synthesizing the results of all of the regression models presented in Tables 3.3.2 and 3.3.3. In doing so, a number of key patterns emerge with respect to the various factors that are included as covariates in the models. These patterns are important as they highlight potential focal points for additional research on the young adult outcomes of youth who age out of the CW and/or JP systems, and also since they offer potential direction for creating policy and programs intended to serve youth aging out of either of these systems.

- ***Membership in the crossover group was a strong and consistent predictor of less desirable outcomes –*** Compared to the other study groups, crossover youth status was associated with more public services costs; were far more likely to be heavy users of public services and to experience a jail stay; and were much less likely to have attained adult educational achievements. Moreover, crossover youth were more likely than JP youth to receive both GR and CalWORKs, suggesting that poverty poses a more substantial problem for members of this group. Collectively, these findings suggest that youth who have histories of both child welfare and juvenile probation involvement are members of a particularly high-risk group of youth who may face substantial barriers in transitioning to adulthood.

- ***Higher educational attainment was associated with positive young adult outcomes –*** There was strong evidence that higher levels of educational attainment were associated with positive outcomes. Earning more credits at a community college was associated with higher earnings, lower cost of public service use, a higher likelihood of being consistently employed, and a decreased likelihood of being a heavy user of public services, of experiencing a jail stay and of receiving either GR or CalWORKs. Moreover, youth who had high educational attainment (i.e. earned an Associates degree or had enrolled in or graduated from a four-year university) had drastically lower costs associated with their use of public services, and were far less likely to be heavy users of public services, to experience a jail stay or to need GR or CalWORKs assistance. Collectively, these findings indicate that higher educational attainment is an important pathway to economic self-sufficiency for youth who exit from the child welfare and/or criminal justice system and that it can also serve as a protective factor against poor outcomes such as jail stays.

- ***Steady employment was associated with positive young adult outcomes –*** While complete employment and earnings data were only available for youth in the CW and crossover groups, consistent employment was an important factor for predicting positive outcomes among these groups. Youth who had a pattern of consistent earnings had lower public service costs, and were far less likely to have been heavy users of public services, to have experienced a jail stay and to have made use of GR and CalWORKs assistance. Taken together, these

findings indicate that a consistent pattern of earnings is consistent with much fewer negative outcomes.

- ***Members of the CW group had more favorable outcomes than the JP group in some respects, but less favorable in others –*** When compared to members of the JP group, persons in the CW group had lower costs associated with the use of public services during their young adult years, and were less likely to be heavy users of public services, or experience a jail stay. On the other hand, they were more likely to receive CalWORKs, which could be reflective of the larger proportion of women that made up the CW group (as CalWORKs is primarily received by single mothers and their children). Finally, youth in the CW group were more likely to have high educational attainment than their JP counterparts.

- ***Factors associated with higher educational attainment need to be studied more closely –*** Youth who were older at the time of their exit from care, males, ethnic/racial minorities and members of the crossover group were all less likely to have high educational attainment (i.e. to obtain an associate's degree or attend four-year university). On the other hand, youth in the CW group were more likely than those in the JP group to have high educational attainment. While these findings are informative, they do not provide in depth information about points of intervention for promoting high educational attainment among youth. Additional research should look more closely at the pathways that youth who obtain high education after exiting from juvenile systems of care take in order to better understand how to promote more positive educational outcomes.

- ***Among child welfare involved youth, older age at entry into care was consistently associated with less desirable outcomes –*** In the models that focused solely on youth in the CW and crossover groups, older age at the time of an individual's last out of home placement was associated with lower earnings, a decreased likelihood of consistent employment, higher total costs of public service use, as well as increased likelihoods of experiencing a jail stay, and of receiving GR or CalWORKs.

- ***Age at exit from juvenile systems of care had an inconsistent relationship with young adult outcomes –*** When grouping together youth from all three study groups (i.e. CW, JP and crossover youth), youth who exited care at age 18 had higher costs of public services use, and higher likelihoods of being a heavy user of public services, of experiencing a jail stay and of receiving GR than youth who exited at ages 16 or 17. However, there was little difference between youth who exited at 19 and over and those who exited at 18. These findings are expected as youth who exit at age 17 or younger are not likely to engage with adult systems of care immediately following exit from care. On the other hand, when looking only at the sample of CW and crossover youth (i.e. those youth who had some involvement with the CW system), and controlling for factors related to involvement in the CW system, the only significant relationships between age at exit from care and the outcomes considered were that youth

who exited at age 19 to 21 made more costly use of public services and were more likely to be heavy users of public services than those who exited care at 18.

- ***A history of treatment for a serious mental illness is associated with an increased likelihood of a jail stay, receipt of GR and/or CalWORKs as well as lower earnings –*** In both sets of models, persons with a history of treatment for a serious mental illness were found to have an increased likelihood of experiencing a jail stay and receiving GR. In addition, treatment for a serious mental illness was associated with lower earnings and a less consistent pattern of employment. Collectively, these findings suggest that youth with a serious mental illness who age out from the CW and/or JP system have increased rates of poverty and increased difficulty achieving financial self-sufficiency as young adults. This potentially points to the importance of identifying and assisting youth with serious mental illnesses and other disabilities who are transitioning out of the CW and/or JP systems in targeting them for assistance in, among other things, applying for Supplemental Security Income (SSI) benefits.

- ***Young adult outcomes varied according to time since exit from care –*** In both sets of models, there were significant, although not always consistent, differences between the 2002 and 2004 exit cohorts with respect to several outcomes. Most importantly, individuals who exited in 2004 were found to have higher public service costs than persons in the 2002 exit cohort, suggesting that service utilization is more intensive in the years directly following a youth's exit from juvenile care than in later years. This finding merits closer examination.

- ***In terms of type of placement at time of exit from the child welfare system, being in a group home is the most consistent predictor of young adult outcomes –*** In comparison to those who were in the care of relatives, those living in a group home at the time of exit from care had greater likelihoods for lower earnings, inconsistent employment, had higher cumulative costs of service use following their exit from care, and were more likely to be heavy users of services. The patterns of statistically significant findings between other types of placements and selected outcomes considered in the regression models were less consistent. This group could face potentially elevated barriers in transitioning to successful adulthood and therefore might be a potential target population for intervention.

- ***There is tentative evidence that ILP programs providing housing assistance promote positive young adult outcomes, but the relationship between ILP programs and young adult outcomes needs to be studied more carefully –*** The findings relative to the relationship between ILP services and young adult outcomes should be interpreted cautiously. Housing assistance in the form of the payment of move in expenses and/or security deposits for market rate rental units and receipt of HHPI assistance were generally associated with favorable outcomes (i.e. higher earnings, more consistent

employment, high educational attainment, lower public service costs, decreased likelihood of jail stay and receipt of cash assistance). However, such findings may be due to the characteristics of the persons these programs serve more or to the nature of the services provided. To better understand the impact of ILP programs and other types transitional services on young adult outcomes is of great importance for informing policy and programs.

SECTION 3 TABLES

Table 3.1.1 Summary of Outcome Measures Used in Multivariate Models

	All Exiters (n=22,509)	CW and crossover youth(n=5,286)
Total Earnings, 2004-2009, (median)	-	$1,929
Total Cost of Services, 2005-2009 (median)	$1,442	$1,098
"Heavy" Service Use	Over $31,006	Over $29,298
Jail Stay (%)	41.7	28.9
Cash Assistance, 2002-2009 (%)		
GR Receipt	13.1	14.6
CalWORKs Receipt	14.9	21.2
High Educational Attainment (%)	1.5	2.1
Consistently Employed(%)	--	17.7

Table 3.2.1 Summary of Measures of Select Factors/Model Covariate

	All Exiters (n=23,393)	CW and Crossover Youths (n=7,699)
Age at Entry (mean)	15.1	11.8
Age at Exit (%)		
16-17	26.3	27.4
18	35.8	36.7
19-21	37.9	35.9
Male (%)	71	42.3
Race/Ethnicity (%)		
White	13.5	14.3
Black	28.7	44.2
Hispanic	51.9	35.6
Other	5.9	5.9
Any D/A (%)	1.1	0.7
Any SMI (%)	5.5	9.7
Any CSS (%)	0.8	1.3
Group (%)		
JP Exiter	76.5	-
CW Exiter	20.8	88.3
Crossover Youth	2.7	11.7
Community College Credits Earned (mean)	5.5	6.6
2004 Exit Cohort (%)	51	49.8
Type of Placement at Exit (%)		
Foster Care	-	34.1
Group Home	-	17.4
Relative	-	37.9
Other	-	10.6
Reason for Exit (%)		
Age Out/Emancipation	-	56.3
Ran Away/Absconded	-	6
Guardianship	-	5.3
Incarcerated	-	2.6
Reunification	-	29.8
Other	-	8.7
Number of DCFS out of home placements (mean)	-	1.8
Number of out of home placement locations during last DCFS out of home placement (mean)	-	4.5
Transitional Services (%)		
Educational Expenses	-	1.3
Tuition Assistance/Scholarships	-	0.6
Jobs Skills/Vocational Training	-	0.5
HHPI Start Up Services	-	4.9
Rental Assistance In Market Units (Move In/Security Deposit)	-	9
Rental Assistance With Relatives	-	1.3
Other Housing Assistance	-	0.3
Mental health based housing	-	6.3
CDC and LAHSA Services	-	1.1
Transportation Assistance	-	1.5

Table 3.3.1 Results of Multivariate Regression Models Estimating Associations Between Select Factors and Outcomes of Youth Exiters, All Exiters Combined

	All Exiters (n=23,256)					
	Total Cost of Services (Logged)	**"Heavy" User of Services**	**Jail Stay**	**GR**	**CalWORKs**	**High Educational Attainment**
	B	**Odds Ratio**	**Odds Ratio**	**Hazard Ratio**	**Hazard Ratio**	**Odds Ratio**
Age at Entry	0.01	1.00	1.01	1.01	1.01	1.02
Age at Exit (1)						
16-17	**-0.04*** **	**0.76*** **	**0.71*** **	**0.76*** **	0.92	1.21
19-21	0.01	**1.15** **	0.99	1.00	0.98	**0.74* **
Male	**0.03** **	**1.16** **	**2.65*** **	1.08	**0.18*** **	**0.54*** **
Race/Ethnicity (2)						
Black	**0.22*** **	**2.60*** **	**2.16*** **	**3.15*** **	**2.28*** **	**0.52*** **
Hispanic	**0.09*** **	**1.32*** **	**1.44*** **	0.90	**1.83*** **	**0.36*** **
Other	**-0.03*** **	**0.76* **	**0.72*** **	**0.73* **	**1.38* **	**2.01*** **
Group (3)						
Child Welfare	**-0.02*** **	**0.83** **	**0.56*** **	1.03	**1.28*** **	**1.45** **
Crossover Youth	**0.16*** **	**2.87*** **	**2.36*** **	**1.81*** **	**1.65*** **	**0.09*** **
Community College Credits	**-0.02** **	**0.79*** **	**0.81*** **	**0.87** **	**0.87* **	--
High Educational Attainment	**-0.04*** **	**0.49** **	**0.50*** **	**0.41* **	**0.52* **	**--**
SMI Treatment	--	--	**2.39*** **	**2.07*** **	**1.41*** **	0.75
D/A Treatment	--	--	**4.01*** **	**1.73*** **	0.77	<0.01
CSS Services	**0.04*** **	1.17	**1.60* **	**1.91* **	1.57	0.35
2004 Exit Cohort (4)	**0.04*** **	1.06	**1.09** **	**1.09* **	**0.88* **	1.18

*p<.05; **p<.01; ***p<..001
1 – age 18 is reference category
2 – white race is reference category
3 – juvenile probation is reference category
4 – compared to 2002 exit cohort

Table 3.3.2 Results of Multivariate Regression Models Estimating Associations Between Select Factors and Outcomes of Youth Exiters with Records of Out of Home Child Welfare Placements

	Total Earnings (Logged)	Consistently Employed	Total Cost of Services (Logged)	"Heavy" User of Services	Jail Stay	GR	CalWORKs	High Educational Attainment
	B	Odds Ratio	B	Odds Ratio	Odds Ratio	Hazard Ratio	Hazard Ratio	Odds Ratio
Age at Entry	**-0.05*** **	**0.98** **	**0.05*** **	1.02	**1.03** **	**1.02* **	**1.03** **	1.00
Age at Exit								
16-17	-0.01	0.87	0.02	1.09	1.03	**0.75** **	0.97	0.93
19-21	-0.02	1.06	**0.04** **	**1.42*** **	1.07	0.98	1.08	0.66
Male	**0.12*** **	**1.37*** **	-0.01	0.97	**2.82*** **	**1.37*** **	**0.13*** **	**0.61* **
Race/Ethnicity								
Black	**-0.05* **	**0.55*** **	**0.22*** **	**2.36*** **	**2.05*** **	**3.07*** **	**2.32*** **	0.92
Hispanic	0.01	1.11	**0.06*** **	1.32	**1.25* **	0.84	**1.53** **	0.85
Other	-0.01	1.07	-0.02	1.00	0.81	1.00	1.06	1.43
Crossover Youth	-0.01	**0.51*** **	**0.15*** **	**2.02*** **	**3.16*** **	**1.50*** **	1.29	0.36
SMI Treatment	**-0.06*** **	**0.56** **	--	--	**1.70*** **	**1.77*** **	1.14	0.49
D/A Treatment	<0.01	0.74	--	--	**2.74* **	1.22	0.35	<0.01
CSS Services	**0.03* **	0.96	**0.04** **	**2.20* **	**2.28** **	1.51	1.10	<.01
Consistently Employed	--	--	**-0.13*** **	**0.19*** **	**0.62*** **	**0.48*** **	**0.19*** **	**--**
Community College Credits	**0.16*** **	**2.13*** **	**0.04** **	1.11	0.95	0.95	1.08	**--**
High Educational Attainment	0.02	1.37	**-0.05** **	**0.36* **	**0.36** **	0.42	**0.47* **	**--**
2004 Exit Cohort (3)	**0.04** **	1.05	**0.03** **	**0.84* **	1.03	1.03	0.86	**1.82* **
Type of placement at exit (4)								
Foster Care	-0.03	0.87	-0.02	0.87	0.93	**0.82* **	0.89	0.76
Group Home	**-0.07*** **	**0.46*** **	**0.04** **	**1.28* **	1.14	0.94	0.86	0.65
Other	**-0.06*** **	**0.56*** **	-0.02	0.96	0.93	**0.68** **	**0.54*** **	0.53
Type of Exit (5)								
Age Out/Emancipation	0.04	1.28	**-0.07*** **	1.08	0.97	**0.65*** **	0.81	1.10
Ran Away/Absconded	**-0.03** **	0.72	-0.01	1.26	**1.54** **	1.01	0.82	0.19
Guardianship	**0.04** **	1.28	**-0.04** **	0.98	**0.70* **	0.98	0.73	1.28
Incarcerated	-0.02	0.54	0.01	**2.87*** **	1.47	0.71	0.73	<0.01
Other	**-0.04* **	0.86	**-0.08*** **	1.18	**0.74* **	**0.58*** **	**0.44*** **	0.73
Number of DCFS out of home placements	**0.05*** **	1.00	**0.03* **	**1.07* **	**1.07* **	1.00	1.01	1.04
Number of out of home placement locations during	**-0.05*** **	**0.93*** **	**0.13*** **	**1.07*** **	**1.05*** **	**1.03*** **	**1.03*** **	**0.93*** **

last DCFS out of home placement								
Transitional Services								
Educational Expenses	0.01	1.30	-0.01	0.47	0.68	1.15	0.47	1.71
Tuition Assistance/ Scholarships	0.02	1.37	-0.02	0.31	0.28	0.53	0.22	1.30
Jobs Skills/Vocational Training	<0.01	0.56	0.01	0.45	0.53	0.40	1.08	<0.01
HHPI Start Up Services	0.01	1.30	**-0.04***	0.61	**0.55***	**0.51***	0.99	**2.92***
Rental Assistance In Market Units (Move In/Security Deposit)	**0.05*****	**1.51*****	**-0.04****	0.76	**0.59*****	**0.68***	0.76	0.82
Rental Assistance With Relatives	<0.01	1.10	<0.01	0.71	0.94	1.10	**1.75***	0.97
Other Housing Asssitance	-0.01	0.63	-0.01	0.9	0.47	0.54	1.20	2.45
Mental health based housing	0.03	0.94	**0.04***	1.57	**1.97*****	1.18	1.00	2.50
CDC and LAHSA Services	-0.02	0.86	-0.01	0.86	0.63	1.65	0.39	1.01
Transportation Assistance	0.01	1.67	<0.01	0.83	0.70	1.33	1.36	0.39

*p<.05; **p<.01; ***p<.001
1 – age 18 is reference category
2 – white race is reference category
3 – compared to 2002 exit cohort
4 – placement at relative's home is reference category
5 – reunification is reference category

Section 4: Implications For Policy and Research

This study has produced a rich and broad array of findings related to early adult outcomes for youth transitioning out of the foster care and juvenile probation systems. Based on these findings, the report concludes with policy recommendations and topics for future research based upon these findings.

1) Crossover youth—i.e those involved in both child welfare and juvenile justice systems—comprise a particularly vulnerable group of exiters. Policymakers might consider specifically targeting this group for ongoing outreach and intervention in an effort to increase the likelihood that, as adults, they will successfully adapt to and assimilate mainstream norms and expectations.

Crossover youth are those youth who have records of involvement in both the CW and JP systems, and this more extensive systems involvement continued into adulthood for the youth identified as such for this study. Youth in the crossover group went on to accrue higher adult services costs and had higher rates of engaging in multiple adult services systems, had increased risk for being incarcerated and receiving welfare benefits –a proxy for experiencing extreme poverty, and had much lower vocational and educational attainment compared to the other two study groups. Among the starker findings about this group was that among crossover youth who made the heaviest use of public services the average member (shown on figures 2.2.7 and 2.2.10) used upwards of $117,000 in County adult services while earning about $4,000 during the four-year study period. Sixty percent of all crossover youth went on to experience an adult incarceration. And while 40% had some community college instruction, less than 1% attained any type of significant college achievement beyond that.

The statistical models deployed for this report reinforce this picture, showing that membership in the crossover group substantially increases the likelihood of less desirable outcomes. Not surprisingly, then, crossover youth are an especially costly presence within the County when they become adults. In the initial four years following exit from their respective County systems, service utilization costs for crossover youth were more than double those of the JP group and almost triple those of the CW group. Moreover, in years five through eight after exit, service utilization costs for the crossover group were more than double those of the CW group and almost double those of the JP group.

While this study is the first to systematically document adult outcomes among a crossover youth population, the undesirable outcomes that appear endemic to this group are consistent with the poor adolescent outcomes described in other research. Of all the youth who are aging out of juvenile systems and transitioning to adulthood, members of this readily identifiable group appear as the best candidates for interventions to support them in this process. Policymakers might consider taking steps to identify this youth as early as possible so as to provide them with targeted services and supports that would improve their chances of making a successful transition to adulthood and life beyond the child welfare and juvenile justice systems. Insofar as

improved outcomes for crossover youth would render them less costly for the County as adults, providing them with proactive, targeted attention and services would represent a strategic investment in long-term cost avoidance.

The youth in this group comprised 11% and 14% of the 2002 and 2004 child welfare cohorts, respectively, but this is likely an undercount due to definitional parameters and data limitations that are detailed in the introductory section. Alternate means of identifying this group, which did not strictly conform with the criteria laid out in Herz, Ryan and Bilchik (2010), identified a substantially larger group whose characteristics were similar to the smaller group identified in this study. This suggests that the size of the crossover youth group in this study, and the extent of the differences between this group and the other two, were conservative assessments.

2) Sizeable proportions of youth in all three study groups continue to make substantial demands upon public services systems upon reaching adulthood. This basic finding is consistent with other studies of youth aging out of the foster care system into adulthood. Direct comparisons across studies are difficult due to differences in research designs, but the findings speak for themselves. Depending on the time period and the study group, 24% to 45% of the study groups received CalFresh at some point during the study periods, 23% to 64% of the study groups experienced a jail stay, and well over half (57% to 88%) of the study group used some LA County health, mental health, substance abuse, public welfare, or criminal justice service during one of the four-year study periods. This underscores the need to attend to the general issue of adult outcomes by youth in juvenile justice and foster care systems, as large proportions of the youth in these study groups continued experiencing hardship into early adulthood, at considerable personal as well as public cost.

Improved adult outcomes for youths exiting dependent and delinquent care can be reasonably expected to decrease dependency on public services. Preventive policy guided by a long-term perspective can therefore be framed as an investment in both cost avoidance and the promotion of self-sufficiency.

3) Policies must accommodate the varied outcomes and heterogeneous subgroups that exist among the youths in the study groups. The findings in this report showed that the youth examined here were by no means monolithic in terms of the young adult outcomes tracked here. For example, heavy use and related costs of services were concentrated among approximately one quarter of the youths studied, with a large drop-off in services use among the rest of the combined study group. Relatively small groups of youth showed consistent employment patterns or attainment of adult education milestones, but sizeable proportions of youth had records of enrollment in community college and histories of some employment. These issues will be addressed more closely later on in this section. At a minimum, one set of policies should address how to ameliorate the need for heavy services use and related outcomes among the more troubled persons in this group, while another set needs to focus on how to facilitate more of the youth who have casual involvement in either the

workforce or in college to deepen their investments and achievements in either system (or both).

4) More focus needs to be placed on the at-risk youth who secured a stable attachment to the workforce. Substantial attention has been focused, here and elsewhere, on the negative outcomes associated with aging out of the child welfare system. Less is known about those youth who appear to make successful transitions to adulthood. One indicator of such a transition that was examined here was consistent employment history. Data showed that, among those in the child welfare study group, those who were consistently employed (i.e., had earnings records of any amount in at least 10 of the 16 quarters in one of the four-year periods) comprised 22% of the 2004 child welfare cohort. Not surprisingly, this outcome was consistently associated with reduced risk for undesirable outcomes such as heavy services use, jail stays, and welfare benefits receipt. Also noteworthy here is that roughly half of the child welfare study group (including those who were consistently employed) had some record of employment. One obvious policy goal here would be to provide supportive services that would help more of those who had some involvement with the labor force join the ranks of those who are consistently employed. This can involve a range of approaches and services, including some transitional services that are examined in this study and that will be discussed in more detail later in this chapter.

In addition, more research is needed to answer questions about youth who make positive transitions to adulthood. What are the keys to their success? To what extent do they evince shared characteristics and patterns of programmatic participation? These questions should be addressed in further research and their answers could inform a process of crafting policy and implementing programs that seek to replicate the experiences of successful exiters.

5) Youth enrolled in college present another potential intervention point for services to facilitate successful transitions into adulthood among these at-risk youth. In a pattern that is similar to the employment outcomes that were just discussed, a relatively small proportion of the study group attained a set of adult education milestones that were tracked in this study, while a much higher proportion had a record of being enrolled in at least some college. Thirty percent of the juvenile probation study group and 45% of the child welfare study group had records of some enrollment in community college, but 1.5% and 2.1% of the JP and CW study groups, respectively, had what we considered to be “high educational attainment,” meaning that they attained an Associates degree or had a record of enrolling in a University of California or California State University institution.

Both community college enrollment and high educational attainment are, like consistent employment, indicators that are associated with better outcomes in the transition period to adulthood, and this group likely includes many youth who, for a variety of reasons, are better disposed to make a successful transition to adulthood. Having campus based support services to work with this group presents a relatively targeted

intervention that can increase the proportions of college enrollees in this group who proceed to achieve successful college outcomes.

6) Identify heavy services users and provide them with intensive services that facilitate better outcomes and generate net cost savings. When costs were estimated for the use of the County services studied here, and the costs of the services were then combined, the result was that 25% of heaviest users among the youth in the study groups consumed about three-quarters of the services used by the entire study group. Youths in this quartile had an average cost of (depending on the group and study period) of over $70,000 per person. Identifying youths in this quartile, ideally while they are still in the juvenile systems, and providing housing, coordinated health and mental health care, case management, and other services would stand to reduce their need for expensive services and assist these youth while saving substantial County services expenditures. This approach, investing in the coordinated, multi-disciplinary care of heavy services users, has been adopted successfully in targeting chronic adult homeless persons, and a similar approach could be adapted and applied to the at-risk youth studied here.

Particular subgroups of at-risk youth present themselves as targets for such intensive interventions. As with homelessness, those at-risk youth who received treatment for substance abuse and mental health services showed elevated likelihoods of being heavy services users, incurring jail stays, and receiving public assistance. Youth who need such behavioral health services face added hurdles in transitioning to adulthood, and better coordination of care for these youth could yield decreases in negative outcomes while reducing costs. Similarly, youth with juvenile probation involvement had higher risks for adult incarceration and heavy services use. Interventions among this group would be more diffuse, as this group is larger, but this represents another area where focusing on youth with known risks could be the basis for cost-effective strategies that improve outcomes.

7) There were few clear differences in outcomes between the child welfare and juvenile probation study groups. Another unique opportunity provided by the data used in this study is to assess whether or not the outcomes for youth exiting the child welfare system into adulthood differs substantially from another group of system-involved youth who presumably have stronger ties with their families of origin. While there are many differences between the two groups that preclude a direct comparison, having a group of youth exiting the juvenile probation system does provide some perspective for the CW youth outcomes. For most outcomes, the CW group had similar outcomes when compared to the JP group (crossover youth excluded from the comparison). Two exceptions to this are welfare receipt (GR, CalWORKs, and CalFresh) and jail, where CW had higher rates for the former and lower rates for the latter when compared to the JP group. These differences may be mitigated, however, by the CW group having had a considerably higher proportion of women. When controlling for this and other factors in section 3, the CW group was much less likely to be incarcerated (not surprising, given the JP group's legal history), more likely to

receive CalWORKs (not surprising, given the gender disparity), and about as likely as the JP group to receive GR benefits.

This reasons for this lack of clear differences between the groups warrants further examination. Obvious areas on which to focus include the role family in supporting transitions to adulthood among JP-involved youth, and the extent to which JP-involved youth represent another high-risk group for poor adult outcomes.

8) Conduct further research on how (a) time of exit from the child welfare system and (b) the circumstances under which exits are made, affect adult outcomes. Table 3.3.2 presents regression results that show the impact of various CW-only factors on eight adult outcomes. The CW group included all youth who were still in the CW system at age 16 or older (late exiters), and many ultimately exited the CW system for reasons other than emancipation upon or after reaching adult status. Surprisingly, exit through emancipation was not associated with increased risk for any outcomes when compared to other exit types, and late exit from the CW system was not associated with decreased risk for any outcomes. Factors which did impact these outcomes more consistently, and which may have suppressed associations with age of exit and type of exit, are numbers of CW episodes and numbers of placements in the final CW episode; older age of entry into the CW system, and crossover youth status.

While the dynamics behind these findings need to be better understood, they do suggest that poor adult outcomes among CW-involved youth go beyond those youth who, strictly speaking, “age out” of the CW system to all youth who exit the system at a late age (i.e., 16 or over).

Additionally, there were no clear associations found between the adult outcomes studied here and exiting from the CW system after age 18. This has implications for the implementation of California legislation AB 12, which, effective in 2012, extends the period in which a youth may stay in foster care beyond their 18th birthday. However, until the dynamics underlying these results are better understood, this finding remains tentative.

Most of the transitional services that assisted foster care youth in their transition to adulthood had non-significant effects, and also assisted very small proportions of the study group. The three services with the highest proportions served were the only ones with measurable associations with outcomes. The most widely distributed assistance, where rental assistance was given to youth moving into housing units with market rents, was associated with enhanced outcomes across five of the eight measures. Homeless Housing Prevention Initiative (HHPI) startup services was associated with enhanced outcomes for three measures. The third more widely used transitional service, mental health-based housing, was associated with increased services costs and a higher risk of incarceration. The HHPI and rental assistance programs were likely to have assisted youth who are already predisposed towards better outcomes than the overall CW group, but nonetheless it is encouraging to find these programs linked with positive outcomes.

9) Further research. This research illustrates the insights that are available from the analysis of large, integrated administrative datasets. The results presented here give a broad overview of the interactions between youth in the child welfare and juvenile probation systems and their risk for subsequent negative adult outcomes. As such, many of the topics examined in this study could be explored in considerable additional detail, with more specific insights, more in-depth analyses, and further implications for particular aspects of this transition period to adulthood. Some of these areas have already been mentioned in the earlier policy recommendations of this section.

In another direction for future research, additional datasets, from other systems and other geographic areas, can further expand the scope of this project to provide a more comprehensive profile of outcomes among young adults who leave the child welfare and juvenile probation systems.

In conclusion, this study has provided an overview of adult outcomes among three groups of at risk youth on a broad scale and, for the crossover youth group, represents the first systematic study of adult outcomes. The findings are rich, broad and varied, and provide the basis for a variety of policy recommendations and further research.

References

Altshuler, D., Stangler, G., Berkley, K., Burton, L. (2009). *Supporting Youth in Transition to Adulthood: Lessons Learned from Child Welfare and Juvenile Justice.* Washington D.C.: The Center for Juvenile Justice Reform (Georgetown University) and the Jim Casey Youth Opportunities Initiative.

Courtney, M.E., Dworsky, A. & Pollack, H. (2007). *When should the state cease parenting? Evidence from the Midwest Study.* Chicago: Chapin Hall Center for Children at the University of Chicago.

Fowler, P.J., Toro, P.A., & Miles, B. (2009). Pathways to and from homelessness and associated psychosocial outcomes among adolescents leaving the foster care system. *American Journal of Public Health, 99,* 1453-1458.

Halemba, G.J., Siegel, G., Lorgd, R.D., & Zawacki, S. (2004). *Arizona dual jurisdiction study: Final report*. Pittsburgh, PA: National Center for Juvenile Justice.

Herz, D.C., & Ryan, J.P. (2008). *Exploring the characteristics and outcomes of 241.1 youth crossing over from dependency to delinquency in Los Angeles County*. San Francisco, CA: Judicial Council of California.

Herz, D.C., & Ryan, J.P. & Bilchik, S. (2010). Challenges facing crossover youth: An examination of juvenile-justice decision making and recidivism. *Family Court Review*, 48(2): 305-321.

Kelly, B., Thornberry, T., & Smith, C. (1997). *In the wake of childhood violence*. Washington, DC: National Institute of Justice.

Needell, B., Cuccaro-Alamin, S., Brookhart, A., Jackman, W., & Shlonsky, A. (2002). *Youth emancipating from foster care in California: Findings using linked administrative data*. Berkeley, CA: Center for Social Services Research, University of California Berkeley.

Pecora, P., Kessler, R., Williams, J., O'Brien, K., Downs, C., English, D. White, J., Hiripi, E., White, C.R., Wiggins, T. & Holmes, K. (2005). *Improving family foster care: Findings from the Northwest Foster Care Alumni Study*. Seattle, WA: Casey Family Programs.

Pergamit, M.R. & Johnson H. (2009). *Extending foster care to age 21: Implications and estimates from youth aging out of foster care in Los Angeles*. Washington, DC: The Urban Institute.