Descriptive Analysis of Core Services Outcomes in Larimer County

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Executive Summary

Child welfare agencies traditionally have struggled with how to integrate the diverse service and placement options they provide to more effectively and efficiently serve children and families. In response to this challenge, Colorado policymakers enacted House Bill 04-1451 (HB 1451) to facilitate the "collaborative management of multiagency services provided to children." The Larimer County Interagency Oversight Group (LCIOG) was established to assist in the implementation of this legislation. To compare how different Core Services met performance measures related to HB 1451 and federal Program Improvement Plan (PIP) goals, this study employed a between-groups design to compare the child welfare outcomes of children in Larimer County.

The selected sample was drawn from children ages 0-18 who exited services in Larimer County during the 2004 fiscal year (FY04), 2005 fiscal year (FY05), and 2006 fiscal year (FY06). The total sample was comprised of 3599 cases that met these criteria, with 705 cases from FY04, 1318 cases from FY05, and 1576 cases from FY06. Outcome data for this study were collected from three distinct databases. Specifically, child welfare and Division of Youth Corrections data were collected from *Colorado Trails*, judicial and probation data were collected from *ICON*, and Poudre School District data were collected from *SILK*. Descriptive statistics were generated to determine if there were differences between service types on selected outcomes and whether preliminary trends existed across fiscal years and the implementation of HB1451.

According to the results, many of the services offered by the Larimer County

Department of Human Services are associated with positive child welfare outcomes. For

example, family group conferencing, life skills classes, conflict mediation, and foster support groups were the highest performing service types on all comparison metrics. Additionally, substance abuse treatment, mental health services, and special economic assistance were near the top in all comparisons while demonstrating positive trends over the three fiscal years in the study. At the other end of the spectrum, residential treatment centers, sexual abuse treatment, and intensive family therapy were the lowest performing service types. Although the trend and pre/post results are preliminary, an argument can be made that integrated service delivery appears to be effective for some Core Services in improving the safety, permanency, and well-being of children and families in Larimer County.

Although this study encountered several methodological limitations regarding sample size and the equivalency of groups, the results may yield important implications for the practice, policy, and research of child welfare in Larimer County and Colorado. Most notably, the services identified as the most effective should be expanded and enhanced to better serve more children and families. The services identified as being less effective also should be reexamined to better utilize these options. The main policy implication is that there should be more emphasis and support for Core Services that demonstrate effectiveness on child welfare outcomes. As for future research, the implementation of HB 1451 should be analyzed over a longer period of time to truly capture the interaction between service integration and service types. Furthermore, studies that directly explore the relative effectiveness of service options and providers should be conducted. To accomplish this, additional outcomes should be analyzed including service completion, service satisfaction, and other service specific measures.

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INTRODUCTION

The Larimer County Department of Human Services (LCDHS) commissioned this study in accordance with their Continuum of Care Plan Memorandum of Understanding (MOU) pursuant to House Bill 04-1451 (HB 1451). The MOU established the Larimer County Interagency Oversight Group (LCIOG), which is a collaboration between the following entities: (1) LCDHS; (2) 8th Judicial District including the Probation Department; (3) Larimer County Department of Health and Environment; (4) Poudre School District; (5) Larimer Center for Mental Health; (6) Northeast Behavioral Health Organization; and (7) District Attorney of Larimer County.

Context

Formally referred to as family preservation services, the Colorado Core Services

Program is based on "assistance that focuses on family strengths and includes services
that empower a family by providing alternative problem-solving techniques, child-rearing
practices, and responses to living situations creating stress for the family" (C.R.S.

265.5103). The Core Services Program also includes the provision of resources (e.g.,
special economic assistance) to serve as support systems for children and families.

According to C.R.S. 26-5.3-103(2), these services are to be provided to "children at
imminent risk of being placed out-of-home."

Rationale

In addition to fiscal and programmatic oversight, the LCIOG is accountable for meeting performance measures as specified by the Colorado Department of Human Services. Phase one of the study was conducted to address this purpose, in that outcome data were collected and analyzed to determine if performance measures related to

integrated service delivery under HB 1451 were achieved. The purpose of the phase two study was to compare child welfare outcomes for the different Core Services offered by LCDHS.

Research Questions

For phase two of the study, there were three research questions. However, only the first question was considered for this report because of a lack of data to answer the second and third questions. However, preliminary results for question two are provided.

- 1. Is there a difference between service types in regard to selected child welfare outcomes?
- 2. Is there an interaction between service types and HB 1451 implementation in regard to selected child welfare outcomes?
- 3. Is there a difference between service providers in regard to selected child welfare outcomes?

METHODS

This study employed a between-groups design to compare the overall, trend, and pre/post service outcomes of children in Larimer County. The sample selection criteria, data collection techniques, and data analysis procedures are described in the methods section.

Sample Selection

The selected sample was drawn from children who exited services in Larimer County during the 2004 fiscal year (FY04), 2005 fiscal year (FY05), and 2006 fiscal year (FY06). It is possible that a child, parent, or both could have received a service, and that children may have received multiple services during this timeframe. As displayed in Table 1, children in the sample exited from the following service types offered through LCDHS.

Table 1

Overall Service Types

Service	Frequency	Percent
Substance Abuse Treatment	512	14.2
Family Safety and Resource Team (FSRT)	488	13.6
Mental Health Services	469	13.0
Residential Treatment Center (RTC)	355	9.9
Life Skills Classes	325	9.0
Foster Support Groups	322	8.9
Special Economic Assistance (SEA)	288	8.0
Parent Child Conflict Mediation	254	7.1
Sexual Abuse Treatment	118	3.3
National Youth Program Using Minibikes (NYPUM)	99	2.8
Family Group Conferencing	80	2.2
Multi-Systemic Therapy (MST)	77	2.1
Intensive Family Therapy (IFT)	76	2.1
Drug Court	74	2.1
Day Treatment	62	1.7

The actual sample included children ages 0-18 that were under delinquency and/or dependency and neglect (D&N) court actions or were diverted from court action through voluntary service participation. The total sample was comprised of 3599 cases that met these criteria, with 705 cases from FY04, 1318 cases from FY05, and 1576 cases from FY06. It should be noted that Larimer County added additional services in FY05, so the number of children who exited services in FY05 and FY06 was substantially higher than in FY04.

As displayed in Table 2, the sample was comprised mostly of White and Hispanic children with almost equal numbers of males and females. Most children from each group were in Program Area 5 (child protection) followed by Program Area 4 (delinquent or beyond control of parents) and Program Area 6 (developmentally disabled or adoptive

children). Lastly, the sample primarily contained children with D&N court actions with a smaller percentage of delinquent children. The unknown category most likely represents children diverted from court action.

As for service recipients, the sample was divided with cases where parents, children, and both received services. The mean service length of stay for the sample was 3.8 months and the mean age at start of service was 9.6 years. The mean age at start of service was 10.9 years for the FY04 group, 9.6 years for the FY05 group, and 9.1 years for the FY06 group. Lastly, the mean service length of stay was 4.4 months for the FY04 group, 4.2 months for the FY05 group, and 3.1 months for the FY06 group.

Data Collection

Data for this study were collected from three distinct databases. First, data were collected from individual case records entered into *Colorado Trails*, which is Colorado's Statewide Automated Child Welfare Information System (SACWIS). *Colorado Trails* is an online data management and analysis system used for child welfare and Division of Youth Corrections (DYC) case management documentation. Specifically, demographic, service, and outcome data (i.e., reentry, reunification, adoption, placement settings, substantiated abuse, recurrence of abuse, institutional abuse, hospitalization, DYC commitment, and negative moves) were collected from *Colorado Trails*. In addition, out-of-home placement data were accessed from *Colorado Trails*. Specifically, children in the sample experienced the following placement types: paid and certified kinship care, kinship/tribal custody, family foster home, child placement agency, group home, residential treatment center, Platte Valley Detention Center, Division of Youth Corrections, psychiatric hospital, independent living, emancipation, and adoption.

Table 2 $Sample\ Characteristics\ (N=3599)$

	FY	04	FY	05	FYC	06	Tota	1
Service	\overline{n}	%	\overline{n}	%	\overline{n}	%	\overline{n}	%
Service Recipient								
Child	339	48.1	492	37.3	359	22.8	1190	33.1
Parent	314	44.5	533	40.4	589	37.4	1436	39.9
Both	52	7.4	293	22.2	628	39.8	973	27.0
Gender								
Male	405	57.4	734	55.7	812	51.5	1951	54.2
Female	300	42.6	584	44.3	764	48.5	1648	45.8
Ethnicity								
White	506	71.8	963	73.1	1127	71.5	2596	72.1
Hispanic	149	21.1	296	22.5	364	23.1	809	22.5
Black	13	1.8	21	1.6	40	2.5	74	2.1
Asian	4	0.6	3	0.2	8	0.5	15	0.4
Other	12	1.7	20	1.5	16	1.1	48	1.3
Unknown	21	3.0	15	1.1	21	1.3	57	1.6
Program Area								
PA4	253	35.9	319	24.2	328	20.8	900	25.0
PA5	338	47.9	799	60.6	1130	71.7	2267	63.0
PA6	81	11.5	132	10.0	106	6.7	319	8.9
Other	16	2.3	22	1.7	8	0.5	46	1.3
Unknown	17	2.4	46	3.5	4	0.3	67	1.9
Court Action								
D&N	389	55.2	823	62.4	1038	65.9	2250	62.5
Delinquent	179	25.4	268	20.3	207	13.1	654	18.2
Both	43	6.1	73	5.5	53	3.4	169	4.7
Unknown	94	13.3	154	11.7	278	17.6	526	14.6

Second, outcome data (i.e., new charges, probation termination) were collected from the judicial system through the *ICON* database. Third, outcome data (i.e., school dropout) were collected from the Poudre School District through the *SILK* database. The definitions that guided data collection for all of the outcome measures are detailed in

Appendix C. For this study, all demographic, service, placement, and outcome data were collected through 5/31/06.

Data Analysis

Before beginning data analysis, the case-level data were transmitted in Excel spreadsheets to the Social Work Research Center with the unique child identifiers removed. The demographic, service, placement, and outcome data were entered into the Statistical Package for Social Sciences (SPSS), checked for missing and incorrect data, and recoded into the appropriate variables. Descriptive statistics were generated from the data to answer the research questions posed in the study. Specifically, frequencies and percentages were used to determine if there were overall differences between service types on selected child welfare outcomes.

For the overall analysis, data were aggregated across the three fiscal years for each service (except for conflict mediation, FSRT, family group conferencing, and drug court for which there were only two years of data). As the trend and pre/post analyses were severely limited by the small sample sizes for some services and outcomes, the findings are presented in preliminary form. Furthermore, only 15 of the Core Services were included in this study because of the removal of psychological evaluations and home-based services, which had sample sizes under 50 (less than 1% of total sample).

The sample for this study was comprised of duplicated cases, in that outcomes for children who received multiple services during the same fiscal year were counted for each service type. Furthermore, children who received the same service but from different providers were counted multiple times, as were children who received the same service from the same provider but at different times during the fiscal year. Nonetheless,

the demographic characteristics of the duplicated sample for this study are almost identical to the original unduplicated sample from the phase one study.

RESULTS

The results for the primary HB 1451 outcomes are presented first followed by the secondary HB 1451 outcomes and then the federal Program Improvement Plan (PIP) outcomes. In these sections, the overall results for each service type are presented followed by the preliminary trend and pre/post results for each service type.

Primary HB 1451 Outcomes

The primary HB 1451 outcome measures for this study are reentry into out-of-home care, termination of probation, dropout from school, and hospitalization and RTC placement.

Reentry

As shown in Table 3, only one of the services (life skills classes) met the goal for this outcome, which is that 8.6% or less of children who returned home reentered out-of-home care within 12 months. However, seven other services (foster support groups, conflict mediation, family group conferencing, FSRT, mental health services, substance abuse treatment, SEA) had reentry rates that were lower than the overall mean of 17.7%. According to the preliminary results, several of the services demonstrated positive trends in reentry rates. For example, substance abuse treatment and residential treatment centers had a decline in reentry rates for each fiscal year in the study. Furthermore, five additional services (day treatment, IFT, conflict mediation, SEA, sexual abuse treatment) had declines from pre-1451 to post-1451.

Table 3

Reentry Overall Results (PIP Goal: 8.6%)

	Reen	tered	Did Not I	Reenter
Service	Frequency	Percent	Frequency	Percent
Life Skills Classes	4	4.3	89	95.7
Foster Support Groups	6	9.8	55	90.2
Conflict Mediation	5	12.5	35	87.5
Family Group Conferencing	3	12.5	21	87.5
FSRT	16	14.4	95	85.6
Mental Health Services	21	16.5	106	83.5
Substance Abuse Treatment	22	17.5	103	82.5
SEA	12	17.6	56	82.4
Sexual Abuse Treatment	4	21.1	15	78.9
NYPUM	3	23.1	10	76.9
IFT	6	25.0	18	75.0
RTC	46	25.4	135	74.6
Drug Court	5	26.3	14	73.7
MST	11	34.4	21	65.6
Day Treatment	4	36.4	7	63.6
Total/Mean	168	17.7	780	82.3

Probation Termination

As shown in Table 4, seven services (life skills classes, drug court, MST, family group conferencing, sexual abuse treatment, mental health services, NYPUM) had probation termination rates that were higher than the overall mean of 37.8%. According to the preliminary results, only one service demonstrated positive trends in probation termination rates. Specifically, substance abuse treatment had an increase in probation termination rates for each fiscal year in the study. However, two additional services (conflict mediation, life skills classes) had increases from pre-1451 to post-1451.

Table 4

Probation Termination Overall Results

	Termi	nated	Not Terminated		
Service	Frequency	Percent	Frequency	Percent	
Life Skills Classes	3	60.0	2	40.0	
Drug Court	36	59.0	25	41.0	
MST	18	43.9	23	56.1	
Family Group Conferencing	3	42.9	4	57.1	
Sexual Abuse Treatment	11	39.3	17	60.7	
Mental Health Services	14	38.9	22	61.1	
NYPUM	5	38.5	8	61.5	
Substance Abuse Treatment	26	35.6	47	64.4	
RTC	44	33.6	87	66.4	
Day Treatment	9	33.3	18	66.7	
Foster Support Groups	2	25.0	6	75.0	
Conflict Mediation	3	23.1	10	76.9	
FSRT	2	22.2	7	77.8	
SEA	4	20.0	16	80.0	
IFT	2	20.0	8	80.0	
Total/Mean	182	37.8	300	62.2	

School Dropout

As shown in Table 5, eight services (day treatment, foster support groups, MST, NYPUM, conflict mediation, sexual abuse treatment, drug court, substance abuse treatment) had school dropout rates that were lower than the overall mean of 33.1%. According to the preliminary results, several of the services demonstrated positive trends in school dropout rates. For example, residential treatment centers, foster support groups, and mental health services had a decline in school dropout rates for each fiscal year in the study. In addition, all other services had declines from pre-1451 to post-1451.

Table 5
School Dropout Overall Results

	Droppe	d Out	Did Not Drop Out		
Service	Frequency	Percent	Frequency	Percent	
Day Treatment	2	20.0	8	80.0	
Foster Support Groups	12	22.6	41	77.4	
MST	7	24.1	22	75.9	
NYPUM	4	25.0	12	75.0	
Conflict Mediation	16	25.8	46	74.2	
Sexual Abuse Treatment	7	28.0	18	72.0	
Drug Court	2	28.6	5	71.4	
Substance Abuse Treatment	32	29.1	78	70.9	
Family Group Conferencing	1	33.3	2	66.7	
Mental Health Services	26	34.7	49	65.3	
IFT	7	35.0	13	65.0	
SEA	19	35.2	35	64.8	
Life Skills Classes	8	38.1	13	61.9	
FSRT	22	41.5	31	58.5	
RTC	54	43.5	70	56.5	
Total/Mean	219	33.1	443	66.9	

Hospitalization

As shown in Table 6, nine services (life skills classes, FSRT, conflict mediation, family group conferencing, substance abuse treatment, foster support groups, mental health services, SEA, RTC) had hospitalization rates that were lower than the overall mean of 5.7%. According to the preliminary results, several of the services demonstrated positive trends in hospitalization rates. For example, foster support groups, substance abuse treatment, MST, and sexual abuse treatment had a decline in hospitalization rates for each fiscal year in the study. Furthermore, three additional services (day treatment,

family group conferencing, mental health services) had declines from pre-1451 to post-1451.

Table 6

Hospitalization Overall Results

	Hospita	alized	Not Hospitalized		
Service	Frequency	Percent	Frequency	Percent	
Life Skills Classes	4	1.2	321	98.8	
FSRT	15	3.1	473	96.9	
Conflict Mediation	8	3.1	246	96.9	
Family Group Conferencing	3	3.8	77	96.2	
Substance Abuse Treatment	24	4.7	488	95.3	
Foster Support Groups	15	4.7	307	95.3	
Mental Health Services	23	4.9	446	95.1	
SEA	14	4.9	274	95.1	
RTC	19	5.4	336	94.6	
IFT	8	10.5	68	89.5	
MST	10	13.0	67	87.0	
NYPUM	13	13.1	86	86.9	
Sexual Abuse Treatment	19	16.1	99	83.9	
Day Treatment	13	21.0	49	79.0	
Drug Court	16	21.6	58	78.4	
Total/Mean	204	5.7	3395	94.3	

Secondary HB 1451 Outcomes

The secondary HB 145l outcome measures for this study are negative placement moves, new criminal charges, and DYC commitments.

Negative Moves

As shown in Table 7, five services (life skills classes, foster support groups, conflict mediation, FSRT, family group conferencing) had negative moves rates that were lower than the overall mean of 17.3%. According to the preliminary results, several of the

services demonstrated positive trends in negative moves rates. For example, mental health services, SEA, and life skills classes had a decline in negative moves rates for each fiscal year in the study. Furthermore, four additional services (family group conferencing, substance abuse treatment, conflict mediation, sexual abuse treatment) had declines from pre-1451 to post-1451.

Table 7

Negative Moves Overall Results

	Positive	Negative	Neutral	No Moves
Service	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)
Life Skills Classes	96 (29.5%)	29 (8.9%)	1 (0.3%)	199 (61.2%)
Foster Support Groups	121 (37.6%)	32 (9.9%)	5 (1.6%)	164 (50.9%)
Conflict Mediation	50 (19.7%)	26 (10.2%)	0 (0.0%)	178 (70.1%)
FSRT	117 (24.0%)	54 (11.1%)	4 (0.8%)	313 (64.1%)
Family Group Conferencing	` ′	10 (12.5%)	0 (0.0%)	43 (53.8%)
Mental Health Services	105 (22.4%)	82 (17.5%)	4 (0.9%)	278 (59.3%)
SEA	56 (19.4%)	52 (18.1%)	3 (1.0%)	177 (61.5%)
IFT	29 (38.2%)	15 (19.7%)	0 (0.0%)	32 (42.1%)
Substance Abuse Treatment	115 (22.5%)	106 (20.7%)	6 (1.2%)	285 (55.7%)
NYPUM	9 (9.1%)	22 (22.2%)	0 (0.0%)	68 (68.7%)
RTC	208 (58.6%)	80 (22.5%)	6 (1.7%)	61 (17.2%)
Sexual Abuse Treatment	18 (15.3%)	29 (24.6%)	1 (0.8%)	70 (59.3%)
MST	9 (11.7%)	23 (29.9%)	1 (1.3%)	44 (57.1%)
Drug Court	2 (2.7%)	31 (41.9%)	0 (0.0%)	41 (55.4%)
Day Treatment	5 (8.1%)	31 (50.0%)	0 (0.0%)	26 (41.9%)
Total/Mean	967 (26.9%)	622 (17.3%)	31 (0.8%)	1979 (55.0%

New Charges

As shown in Table 8, nine services (life skills classes, foster support groups, FSRT, family group conferencing, SEA, conflict mediation, mental health services, substance abuse treatment, sexual abuse treatment) had new charges rates that were lower

than the overall mean of 11.4%. According to the preliminary results, several of the services demonstrated positive trends in new charges rates. For example, foster support groups, substance abuse treatment, MST, SEA, sexual abuse treatment, NYPUM, and day treatment had a decline in new charges rates for each fiscal year in the study. In addition, all other services (except conflict mediation) had declines from pre-1451 to post-1451.

Table 8

New Charges Overall Results

	New Ch	arges	No New Charges		
Service	Frequency	Percent	Frequency	Percent	
Life Skills Classes	7	2.2	318	97.8	
Foster Support Groups	9	2.8	313	97.2	
FSRT	20	4.1	468	95.9	
Family Group Conferencing	4	5.0	76	95.0	
SEA	17	5.9	271	94.1	
Conflict Mediation	23	9.1	231	90.9	
Mental Health Services	46	9.8	423	90.2	
Substance Abuse Treatment	55	10.7	457	89.3	
Sexual Abuse Treatment	13	11.0	105	89.0	
Drug Court	13	17.6	61	82.4	
IFT	14	18.4	62	81.6	
RTC	106	29.9	249	70.1	
NYPUM	34	34.3	65	65.7	
MST	27	35.1	50	64.9	
Day Treatment	22	35.5	40	64.5	
Total/Mean	410	11.4	3189	88.6	

DYC Commitment

As shown in Table 9, seven services (life skills classes, foster support groups, FSRT, conflict mediation, mental health services, substance abuse treatment, SEA) had DYC commitment rates that were lower than the overall mean of 7.2%. According to the

preliminary results, several of the services demonstrated positive trends in DYC commitment rates. For example, foster support groups, substance abuse treatment, and SEA had a decline in DYC commitment rates for each fiscal year in the study. Furthermore, seven additional services (family group conferencing, MST, RTC, day treatment, conflict mediation, FSRT, life skills classes) had declines from pre-1451 to post-1451.

Table 9

DYC Commitment Overall Results

	Comr	nitted	Not Committed		
Service	Frequency	Percent	Frequency	Percent	
Life Skills Classes	1	0.3	324	99.7	
Foster Support Groups	4	1.2	318	98.8	
FSRT	10	2.0	478	98.0	
Conflict Mediation	9	3.5	245	96.5	
Mental Health Services	18	3.8	451	96.2	
Substance Abuse Treatment	32	6.3	480	93.8	
SEA	19	6.6	269	93.4	
Family Group Conferencing	6	7.5	74	92.5	
NYPUM	10	10.1	89	89.9	
IFT	8	10.5	68	89.5	
Sexual Abuse Treatment	15	12.7	103	87.3	
Drug Court	14	18.9	60	81.1	
MST	16	20.8	61	79.2	
RTC	78	22.0	277	78.0	
Day Treatment	18	29.0	44	71.0	
Total/Mean	258	7.2	3341	92.8	

PIP Outcomes

The PIP outcome measures in this study are reentry within 12 months, reunification within 12 months, number of placement settings within 12 months, adoption within 24 months, substantiated abuse, recurrence of abuse within past 6 months, and institutional abuse. However, reentry was analyzed and reported as a primary HB 1451 outcome for this study.

Reunification

As shown in Table 10, only two of the services (IFT, NYPUM) did not meet the goal for this outcome, which is that 76.2% or more of reunified children return home within 12 months. Furthermore, seven of the services (FSRT, drug court, conflict mediation, RTC, family group conferencing, MST, substance abuse treatment) had reunification rates that were higher than the overall mean of 87.6%. According to the preliminary results, several of the services demonstrated positive trends in reunification rates. For example, RTC, IFT, life skills classes, and substance abuse treatment had an increase in reunification rates for each fiscal year in the study. Furthermore, six additional services (day treatment, MST, conflict mediation, sexual abuse treatment, mental health services, FSRT) had increases from pre-1451 to post-1451.

Table 10

Reunification Overall Results (PIP Goal: 76.2%)

	Reuni	fied	Not Reunified		
Service	Frequency	Percent	Frequency	Percent	
FSRT	111	95.7	5	4.3	
Drug Court	18	94.7	1	5.3	
Conflict Mediation	37	92.5	3	7.5	
RTC	176	91.7	16	8.3	
Family Group Conferencing	22	91.7	2	8.3	
MST	31	91.2	3	8.8	
Substance Abuse Treatment	120	90.9	12	9.1	
SEA	63	87.5	9	12.5	
Mental Health Services	112	84.8	20	15.2	
Day Treatment	9	81.8	2	18.2	
Life Skills Classes	77	80.2	19	19.8	
Foster Support Groups	50	76.9	15	23.1	
Sexual Abuse Treatment	16	76.2	5	23.8	
IFT	19	76.0	6	24.0	
NYPUM	8	61.5	5	38.5	
Total/Mean	869	87.6	123	12.4	

Placement Settings

As shown in Table 11, only three of the services (RTC, day treatment, sexual abuse treatment) did not meet the goal for this outcome, which is that 86.7% or more of children in placement less than 12 months have two or fewer placements during that time. Furthermore, nine of the services (drug court, NYPUM, MST, substance abuse treatment, family group conferencing, life skills classes, mental health services, SEA, IFT) had placement setting rates that were higher than the overall mean of 90.4%. According to the preliminary results, only one service demonstrated a positive trend in placement setting rates. Specifically, mental health services had an increase in placement setting rates for

each fiscal year in the study. However, five additional services (day treatment, MST, conflict mediation, IFT, substance abuse treatment) had increases from pre-1451 to post-1451.

Table 11

Placement Settings Overall Results (PIP Goal: 86.7%)

	2 Or Less P	lacements	More Than 2 Placements		
Service	Frequency	Percent	Frequency	Percent	
Drug Court	19	100.0	0	0.0	
NYPUM	8	100.0	0	0.0	
MST	30	96.8	1	3.2	
Substance Abuse Treatment	116	96.7	4	3.3	
Family Group Conferencing	21	95.5	1	4.5	
Life Skills Classes	81	95.3	4	4.7	
Mental Health Services	110	91.7	10	8.3	
SEA	58	90.6	6	9.4	
IFT	19	90.5	2	9.5	
FSRT	102	90.3	11	9.7	
Foster Support Groups	50	89.3	6	10.7	
Conflict Mediation	32	88.9	4	11.1	
RTC	145	82.4	31	17.6	
Day Treatment	8	80.0	2	20.0	
Sexual Abuse Treatment	13	76.5	4	23.5	
Total/Mean	812	90.4	86	9.6	

Adoption

As shown in Table 12, seven of the services (RTC, conflict mediation, SEA, life skills classes, substance abuse treatment, IFT, mental health services) met the goal for this outcome, which is that 51.6% or more of adopted children are adopted within 24 months. Furthermore, these same seven services had adoption rates that were higher than the overall mean of 51.8%. Four services (MST, family group conferencing, day

treatment, drug court) were not included in the analysis because they had no cases for this outcome. According to the preliminary results, only one service demonstrated a positive trend in adoption rates. Specifically, mental health services had an increase in adoption rates for each fiscal year in the study. However, three additional services (sexual abuse treatment, IFT, substance abuse treatment) had increases from pre-1451 to post-1451.

Table 12

Adoption Overall Results (PIP Goal: 51.6%)

	Adop	oted	Not Adopted		
Service	Frequency	Percent	Frequency	Percent	
RTC	2	100.0	0	0.0	
Conflict Mediation	1	100.0	0	0.0	
SEA	9	75.0	3	25.0	
Life Skills Classes	6	66.7	3	33.3	
Substance Abuse Treatment	16	61.5	10	38.5	
IFT	4	57.1	3	42.9	
Mental Health Services	13	56.5	10	43.5	
FSRT	3	50.0	3	50.0	
Foster Support Groups	16	36.4	28	63.6	
Sexual Abuse Treatment	1	20.0	4	80.0	
NYPUM	0	0.0	2	100.0	
Total/Mean	71	51.8	66	48.2	

Substantiated Abuse

As shown in Table 13, ten services (IFT, NYPUM, sexual abuse treatment, MST, drug court, day treatment, mental health services, conflict mediation, foster support groups, RTC) had substantiated abuse rates lower than the overall mean of 5.9%.

According to the preliminary results, several of the services demonstrated positive trends in substantiated abuse rates. For example, foster support groups, mental health services,

substance abuse treatment, SEA, life skills classes, NYPUM, and day treatment had a decrease in substantiated abuse rates for each fiscal year in the study. Furthermore, six additional services (MST, sexual abuse treatment, IFT, FSRT, RTC, family group conferencing) had increases from pre-1451 to post-1451.

Table 13
Substantiated Abuse Overall Results

	Abus	ed	Not Abused		
Service	Frequency	Percent	Frequency	Percent	
 IFT	0	0.0	4	100.0	
NYPUM	2	2.0	97	98.0	
Sexual Abuse Treatment	4	3.4	114	96.6	
MST	3	3.9	74	96.1	
Drug Court	3	4.1	71	95.9	
Day Treatment	3	4.8	59	95.2	
Mental Health Services	24	5.1	445	94.9	
Conflict Mediation	13	5.1	241	94.9	
Foster Support Groups	17	5.3	305	94.7	
RTC	20	5.6	335	94.4	
Family Group Conferencing	5	6.3	75	93.7	
Substance Abuse Treatment	34	6.6	478	93.4	
FSRT	34	7.0	454	93.0	
Life Skills Classes	23	7.1	302	92.9	
SEA	22	7.6	266	92.4	
Total/Mean	211	5.9	3388	94.1	

Recurrence of Abuse

As shown in Table 14, eight of the services (family group conferencing, IFT, sexual abuse treatment, MST, day treatment, drug court, NYPUM, foster support groups) met the goal for this outcome, which is that 6.1% or less of children with an incident of substantiated abuse experience a recurrence of abuse. Furthermore, three other services

(life skills classes, SEA, RTC) had recurrence of abuse rates that were lower than the overall mean of 12.3%. According to the preliminary results, only mental health services had a decrease in recurrence of abuse rates for each fiscal year in the study. However, five other services (conflict mediation, life skills classes, FSRT, SEA, foster support groups) had decreases from pre-1451 to post-1451.

Table 14

Recurrence of Abuse Overall Results (PIP Goal: 6.1%)

	Abus	ed	Not Abused		
Service	Frequency	Percent	Frequency	Percent	
Family Group Conferencing	0	0.0	5	100.0	
IFT	0	0.0	4	100.0	
Sexual Abuse Treatment	0	0.0	4	100.0	
MST	0	0.0	3	100.0	
Day Treatment	0	0.0	3	100.0	
Drug Court	0	0.0	3	100.0	
NYPUM	0	0.0	2	100.0	
Foster Support Groups	1	5.9	16	94.1	
Life Skills Classes	2	8.7	21	91.3	
SEA	2	9.1	20	90.9	
RTC	2	10.0	18	90.0	
Conflict Mediation	2	15.4	11	84.6	
FSRT	6	17.6	28	82.4	
Substance Abuse Treatment	6	17.6	28	82.4	
Mental Health Services	5	20.8	19	79.2	
Total/Mean	26	12.3	185	87.7	

Institutional Abuse

As shown in Table 15, seven of the services (life skills classes, SEA, foster support groups, conflict mediation, family group conferencing, day treatment, NYPUM) met the goal for this outcome, which is that 0.57% or less of children with an incident of

substantiated abuse experience institutional abuse. Furthermore, three additional services (FSRT, substance abuse treatment, mental health services) had institutional abuse rates that were lower than the overall mean of 8.5%. According to the preliminary results, there were no service trends in institutional abuse rates. However, five services (MST, IFT, FSRT, mental health services, substance abuse treatment) had decreases from pre-1451 to post-1451.

Table 15
Institutional Abuse Overall Results (PIP Goal: 0.57%)

	Abus	sed	Not Abused		
Service	Frequency	Percent	Frequency	Percent	
Life Skills Classes	0	0.0	23	100.0	
SEA	0	0.0	22	100.0	
Foster Support Groups	0	0.0	17	100.0	
Conflict Mediation	0	0.0	13	100.0	
Family Group Conferencing	0	0.0	5	100.0	
Day Treatment	0	0.0	3	100.0	
NYPUM	0	0.0	2	100.0	
FSRT	1	2.9	33	97.1	
Substance Abuse Treatment	1	2.9	33	97.1	
Mental Health Services	1	4.2	23	95.8	
IFT	1	25.0	3	75.0	
Drug Court	1	33.3	2	66.7	
MST	1	33.3	2	66.7	
Sexual Abuse Treatment	2	50.0	2	50.0	
RTC	10	50.0	10	50.0	
Total/Mean	18	8.5	193	91.5	

Overall Service Comparison

To facilitate an overall service comparison, three analyses were conducted. The first comparison for the 15 service types is based on the following ranking scale. For each outcome, a service received three points if it was in the top five, two points if it was in the middle five, and one point if it was in the bottom five. As displayed in Table 16, family group conferencing, life skills classes, conflict mediation, foster support groups, and FSRT placed in the overall top five ranking.

Table 16

Overall Service Rankings*

Service	Total Points	Average
Family Group Conferencing	32	2.67
Life Skills Classes	31	2.38
Conflict Mediation	31	2.38
Foster Support Groups	28	2.15
FSRT	28	2.15
Substance Abuse Treatment	26	2.00
Mental Health Services	26	2.00
SEA	26	2.00
NYPUM	25	1.92
MST	23	1.92
Drug Court	23	1.92
Sexual Abuse Treatment	22	1.69
IFT	22	1.69
Day Treatment	20	1.67
RTC	20	1.54

^{*} Total points represent the summed total of outcome rankings for each service.

When there were ties among services, the service with more cases for that outcome was placed before the service with fewer cases. As a result, some services were moved to a different ranking if there were already five services at that level (e.g., foster

support groups in the hospitalization outcome). In addition, the average score is based on the total points divided by the number of outcomes for that service. Thus, four services (family group conferencing, MST, drug court, day treatment) had point totals that were divided by 12 because these services had no data for the adoption outcome. The rankings for each service type and each outcome are displayed in Appendix A and Appendix B.

The second comparison is based on the number of times each service had outcomes better than the overall mean for this sample. As displayed in Table 17, family group conferencing, substance abuse treatment, life skills classes, and conflict mediation had percentages better than the mean for ten outcomes while mental health services and foster support groups had percentages better than the mean for nine outcomes.

Table 17
Overall Service Mean Comparison*

Service	Frequency	Percent	
Family Group Conferencing	10	83.3	
Substance Abuse Treatment	10	77.0	
Life Skills Classes	10	77.0	
Conflict Mediation	10	77.0	
Mental Health Services	9	69.2	
Foster Support Groups	9	69.2	
SEA	8	61.5	
FSRT	7	53.8	
NYPUM	6	46.2	
MST	5	41.6	
Drug Court	5	41.6	
RTC	5	38.5	
Day Treatment	4	33.3	
IFT	4	30.8	
Sexual Abuse Treatment	3	23.1	

^{*} Frequency values represent the number of times each service had outcomes better than the mean.

The third comparison is based on the number of times each service had outcomes that met the federal PIP goals. As displayed in Table 18, life skills classes met the goals for five of the six outcomes while family group conferencing met the goals for four of five outcomes. Foster support groups, special economic assistance, and conflict mediation met the PIP goals for two-thirds of the outcomes.

Table 18

Overall Service PIP Outcome Comparison*

Service	Frequency	Percent	
Life Skills Classes	5	83.3	
Family Group Conferencing	4	80.0	
Foster Support Groups	4	66.7	
SEA	4	66.7	
Conflict Mediation	4	66.7	
MST	3	60.0	
Drug Court	3	60.0	
Day Treatment	3	60.0	
Substance Abuse Treatment	3	50.0	
Mental Health Services	3	50.0	
NYPUM	3	50.0	
IFT	3	50.0	
FSRT	2	33.3	
RTC	2	33.3	
Sexual Abuse Treatment	2	33.3	

^{*} Frequency values represent the number of times each service had outcomes that met the PIP goals.

DISCUSSION

The following discussion summarizes the findings from this study regarding the outcomes for children who receive Core Services in Larimer County. The conclusions and implications should be interpreted in light of the methodological limitations of the study.

Conclusions

According to the results, many of the services offered by the Larimer County

Department of Human Services are associated with positive child welfare outcomes. For example, family group conferencing, life skills classes, conflict mediation, and foster support groups were the highest performing service types on all three comparison metrics. Additionally, substance abuse treatment, mental health services, and special economic assistance were near the top in all three comparisons while demonstrating positive trends over the three fiscal years in the study. At the other end of the spectrum, residential treatment centers, sexual abuse treatment, and intensive family therapy were the lowest performing service types on all three comparison metrics. In addition, day treatment and drug court were near the bottom in all three comparisons.

The federal PIP outcomes that were met by the most service types were recurrence of abuse, institutional abuse, and adoption. The HB 1451 and PIP outcomes that showed the most positive three-year trends were new charges, substantiated abuse, reunification, negative moves, and hospitalization. Although the trend and pre/post results are preliminary, an argument can be made that integrated service delivery appears to be effective for some Core Services in improving the safety, permanency, and well-being of children and families in Larimer County.

Limitations

This study encountered several methodological limitations. The primary weakness was the low sample sizes for some services, especially for the trend and pre/post analyses. For example, there were six service types with less than 100 cases, which led to very small cell values for some outcomes (e.g., adoption, institutional abuse). As a result, some services look promising in a relative sense, even though there were only a few cases being assessed.

For the overall comparisons, the samples for each service type appeared to be equivalent based on available demographic, service, and placement characteristics. However, covariates and matching procedures were not used in the analyses. As a result, contaminating events and other service related factors may have accounted for some of the observed differences in outcomes between the services. For example, to the extent that different services are delivered to different types of children, the outcomes could be confused with pre-existing differences between samples. Furthermore, the assumption of group independence was compromised, as some children exited multiple services during the same fiscal year and over the three fiscal years considered in the study.

There were inconsistencies in data collection and data entry for the service, placement, and outcome variables. The information entered into and extracted out of the three databases may have been inaccurate and incomplete for some cases because of human error and discrepancies in data entry requirements. For example, data from *Colorado Trails* contained a relatively small number of missing and erroneous values for some outcomes (e.g., DYC commitment). Lastly, data were collected for only 11 months in FY06, which might have impacted the results for some outcomes and services.

Implications

The results of this study may yield important implications for the practice, policy, and research of child welfare in Larimer County and Colorado. Most notably, the services identified as the most effective should be expanded and enhanced to better serve more children and families. The services identified as being less effective also should be reexamined to better utilize these options. Furthermore, interagency collaboration should be refined and strengthened where needed to more effectively and efficiently manage service delivery integration.

The main policy implication is that there should be more emphasis and support for Core Services that demonstrate effectiveness on child welfare outcomes. Thus, decision makers should enact legislation that adequately funds services that meet evidence-based practice standards for serving children and families in the child welfare system.

As for future research, the implementation of HB 1451 should be analyzed over a longer period of time to truly capture the interaction between service integration and service types. Furthermore, studies that directly explore the relative effectiveness of service options and providers should be conducted. To accomplish this, additional outcomes should be analyzed including service completion, service satisfaction, and other service specific measures. Lastly, qualitative research on the experiences of children in the Core Services Program should be undertaken to gain a better understanding of how the treatment or therapeutic programs influence measurable outcomes.

Appendix A

Service Rankings for HB 1451 Outcomes*

Services	Reentry	Probation	School	Hospital	Negative	New	DYC
			Dropout		Moves	Charges	Commit
Substance	2	2	2	3	2	2	2
Abuse							
FSRT	3	1	1	3	3	3	3
Mental	2	2	2	2	2	2	3
Health							
RTC	1	2	1	2	1	1	1
Life Skills	3	3	1	3	3	3	3
Foster	3	1	3	2	3	3	3
Support							
SEA	2	1	1	2	2	3	2
Conflict	3	1	3	3	3	2	3
Mediation							
Sexual	2	3	2	1	1	2	1
Abuse							
NYPUM	2	2	3	1	2	1	2
Family	3	3	2	3	3	3	2
Conferencing							
MST	1	3	3	1	1	1	1
IFT	1	1	1	2	2	1	2
Drug Court	1	3	2	1	1	2	1
Day	1	2	3	1	1	1	1
Treatment * A ranking of							

^{*} A ranking of 3 indicates the service was in the top five for the outcome; a ranking of 2 indicates the service was in the middle five; a ranking of 1 indicates the service was in the bottom five.

Appendix B

Service Rankings for PIP Outcomes*

Services	Reunification	Placement	Adoption	Substantiated	Recurrence	Institutional
		Settings		Abuse	of Abuse	Abuse
Substance	2	3	2	1	1	2
Abuse						
FSRT	3	2	2	1	1	2
Mental	2	2	2	2	1	2
Health						
RTC	3	1	3	2	1	1
Life Skills	1	2	3	1	2	3
Foster	1	1	1	2	2	3
Support						
SEA	2	2	3	1	2	3
Conflict	3	1	3	2	1	3
Mediation						
Sexual	1	1	1	3	3	1
Abuse						
NYPUM	1	3	1	3	2	2
Family	3	3	NA	1	3	3
Conferencing						
MST	2	3	NA	3	3	1
IFT	1	2	2	3	3	1
Drug Court	3	3	NA	3	2	1
			N			
Day	2	1	NA	2	3	2
Treatment						

^{*} A ranking of 3 indicates the service was in the top five for the outcome; a ranking of 2 indicates the service was in the middle five; a ranking of 1 indicates the service was in the bottom five.

Appendix C

Outcome Definitions

Primary HB 1451 Outcomes

- 1. *Reentry:* Compare the reentry rates in FY06 to FY04 & FY05. There is no set percentage decrease for this measure. **This also is listed as a PIP Outcome.**
 - a. Yes = Child was reunified and did reenter the system within 12 months
 - b. No = Child was reunified and did not reenter the system within 12 months
 - c. NA = Child was either never removed from the home or the child did not reunify (e.g., child was still in placement or in guardianship/adoption)
- 2. *Probation Termination:* Increase successful terminations of probation in the 8th Judicial District by 2% in FY06 when compared to FY04 & FY05.
 - a. Yes = Child successfully terminated probation
 - b. No = Child unsuccessfully terminated probation
 - c. NA = Child was never on probation
- 3. *School Dropout:* Decrease school dropout rate by 1% in FY06 when compared to FY04 & FY05. The school data were collected for children 15 years or older at the start of service and were available only for children who attended Poudre School District.
 - a. Yes = Child dropped out of school
 - b. No = Child did not drop out of school
 - c. NA = Child did not attend Poudre School district
- 4. *Hospitalization:* Decrease use of hospitalization, including RTC, by 2% in FY06 when compared to FY04 & FY05. Hospitalization data were collected from the first placement and current placement variables.
 - a. Yes = Child was placed in psychiatric hospital or residential treatment center during first or current placement
 - b. No = Child was not placed in psychiatric hospital or residential treatment center during first or current placement

Secondary HB 1451 Outcomes

- 1. *Negative Moves:* Decrease the rate of negative moves by 5% in FY06 when compared to FY04 & FY05. Placement at start of service was compared with first placement during or after service.
 - a. Positive = Child moved to a lower or less restrictive level of care
 - b. Negative = Child moved to a higher or more restrictive level of care
 - c. Neutral = Child moved to independent living or emancipation
 - d. None = Child remained in same placement type

- 2. *New Charges:* Decrease the rate of new criminal charges by 5% in FY06 when compared to FY04 & FY05.
 - a. Yes = Child had new criminal charge during or after service
 - b. No = Child did not have a new criminal charge during or after service
- 3. *DYC Commitment:* Compare the rate of DYC commitments in FY06 to FY04 & FY05. There is no set percentage decrease for this measure. Commitment data were collected from the first placement and current placement variables.
 - a. Yes = Child was committed to DYC during first or current placement
 - b. No = Child was not committed to DYC during first or current placement

PIP Outcomes

- 1. **Reunification:** If the child was reunified, was he/she reunified within 12 months? (Federal Goal = 76.2% or more)
 - a. Yes = Child was reunified within 12 months
 - b. No = Child was reunified but in longer than 12 months
 - c. NA = Child was either never removed from the home or the child was still in placement at the time of the study
- 2. **Reentry:** If the child returned home, did he/she reenter foster care system within 12 months? (Federal Goal = 8.6% or less)
 - a. Yes = Child was reunified and did reenter the system within 12 months
 - b. No = Child was reunified and did not reenter the system within 12 months
 - c. NA = Child was either never removed from the home or the child did not reunify (e.g., child was still in placement or in guardianship/adoption)
- 3. **Placement Settings:** If the child was in placement less than 12 months, did he/she have two or less placement settings during that time? (Federal Goal = 86.7%)
 - a. Yes = Child was in placement less than 12 months and had two or less placement settings
 - b. No = Child was in placement less than 12 months and had three or more placement settings
 - c. NA = Child was either never in placement, was in placement longer than 12 months, or was still in placement at the time of the study
- 4. *Adoption:* If the child was adopted, was he/she adopted within 24 months from the date of the last removal from home? (*Federal Goal* = 51.6% or more)
 - a. Yes = Child was adopted within 24 months from the date of the last removal from home
 - b. No = Child was adopted but not within 24 months from the date of the last removal from home
 - c. NA = Child was never adopted

- 5. *Substantiated Abuse:* Was there an incident of substantiated abuse on the child either during (i.e., after 30 days in the service) or after the service ended? Compare the incidence of substantiated abuse in FY06 to FY04 & FY05. There is no Federal Goal for this measure.
 - a. Yes = There was an incident of substantiated abuse either during or after the service ended
 - b. No = There was no incident of substantiated abuse either during or after the service ended
- 6. **Recurrence of Abuse:** If there was an incident of substantiated abuse either during or after the service ended, was this a recurrence of substantiated abuse (i.e., was there a prior substantiation of abuse within six months from the start of the service)? (Federal Goal = 6.1% or less)
 - a. Yes = There was a recurrence of substantiated abuse within six months
 - b. No = There was no recurrence of substantiated abuse within six months
 - c. NA = There was no incident of substantiated abuse
- 7. *Institutional Abuse:* If there was an incident of substantiated abuse either during or after the service ended, did the abuse occur in a placement facility? (Federal Goal = 0.57% or less)
 - a. Yes = The substantiated abuse occurred in a placement facility
 - b. No = The substantiated abuse did not occur in a placement facility
 - c. NA = There was no incident of substantiated abuse

It should be noted that there is a difference in how this outcome is measured for federal and HB 1451 purposes. Specifically, institutional abuse is calculated as a federal PIP goal by dividing the number of children who experienced institutional abuse by the total number of children in foster care. For this study, the outcome was measured by dividing the number of children who experienced institutional abuse by the total number of children with an incident of substantiated abuse. As a result, the analysis generated a much higher percentage of institutional abuse than exists according to federal guidelines.