Overlap of Child Welfare and Mental Health High Intensity Service Utilizers with Children and Young Adults Served in the Developmental and Intellectual Disabilities Division

A Supplemental Report

Strong minds, strong futures.

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#### **BACKGROUND**

Two previous analyses, Youth with High Behavioral Health Needs in Colorado and Colorado's High Intensity Mental Health Service Utilizers, serve as the basis for this report. The previous work evaluated the system overlap of youth who were high utilizers of services either in the Child Welfare or Public Mental Health systems. The aim of this report is to add information about how many of these youth also received services through the Developmental and Intellectual Disabilities (DID) system.

The focus on youth with developmental and intellectual disabilities stems from the basic question of effective, efficient services to this population. The persons with DID who are in the system require long-term attention to their needs from the public system. As a result, they tend to have high costs. The question of additional public system needs, and whether they are proportionate in people with DID permits planning for such specialized services as needed. In addition, multiple system involvement necessitates consideration of duplication of services, and eliminating redundancy.

Historical data from Developmental and Intellectual Disabilities Division that included any case open July 1, 2006 to June 30, 2013 was obtained from Colorado Department of Health Care, Policy, and Financing. These records were merged with two other COACT projects to determine the extent of multi-system usage in Colorado. The first analyses project contained system usage by high cost youth (in the top 20% for the year) in Colorado Child Welfare (CW) (n=1,881), during FY2011-12. The second analyses contained system use by youth receiving high intensity services (defined as inpatient hospitalization) in Colorado's Public Mental Health (MH) System (n=6,392), also during FY2011-12. Both of these analyses looked at system overlap with two additional systems; the Division of Youth Corrections (DYC) and public Substance Abuse Services (SA). This report depicts the overlap of all five systems for two populations of high service utilizing children and young adults age 0-24.





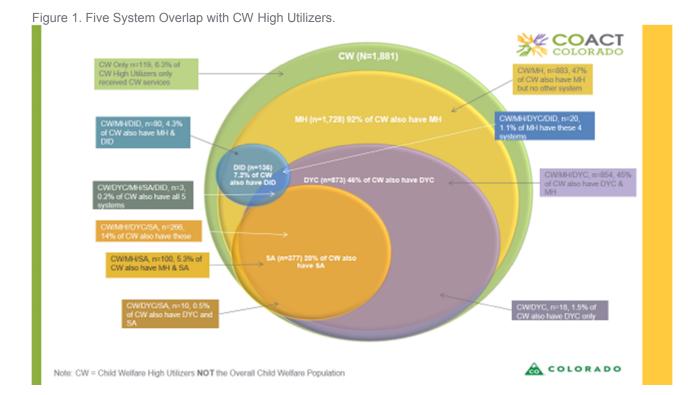




## DEVELOPMENTAL AND INTELLECTUAL DISABILITIES SYSTEM OVERLAP

The children and young adults in the Child Welfare High Utilizers (CWHU) and the Mental Health High Intensity Service Utilizer (MHHISU) samples were compared to the 32,912 individuals served in the DID system, over a seven year period. There were 136 (7.2%) individuals in the CWHU sample and 170 (2.7%) individuals in the MHHISU sample who also received DID services. This is compared to a national rate of 1.8% and a rate of 1.9% in the general Colorado population of individuals 0-24 years of age<sup>2</sup>.

Of the 136 children and youth who were both CWHU and served by the DID system the vast majority (n=105) were also served by the public mental health system accounting for 77.2% of the DID clients (blue circle) and 5.6% of the overall CWHU (green circle). Additionally, 23 of the CWHU/DID clients were also involved with the DYC system. This accounts for 16.9% of the DID clients (blue circle) and 1.3% of the overall CWHU (green circle).



<sup>1</sup> Carlton, M., Kliethermes, M., Tallant, B., Taverne, A., & Tishelman, A. The National Child Traumatic Stress Network: "Facts on Truamtic Stress and Children with Developmental Disabilities http://www.nctsnet.org/sites/default/files/assets/pdfs/traumatic stress developmental disabilities final.pdf accessed online October 22, 2015.

<sup>&</sup>lt;sup>2</sup> Calculated using the number of clients served in the DID system divided by CO's youth and young adult population. CO's population data in July 2011 www.google.com/publicdata accessed October 19, 2015.

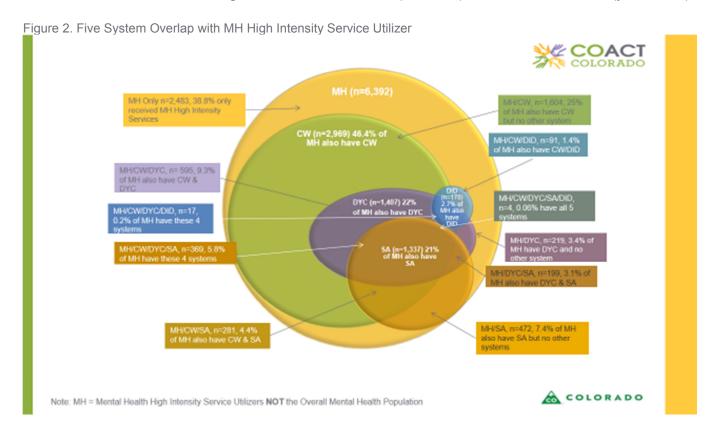








Figure 2 depicts the five system overlap starting with the MH High Service Intensity sample. A similar pattern of overlap was observed for the children and youth who received High Intensity MH services to the CWHU. Of the 170 children and youth who were both MHHISU and served in the DID system a large proportion (n=120) also had CW involvement. These individuals accounted for 70.6% of the DID service recipients (blue circle) and 1.9% of the MHHISU (yellow circle). The overlap with DYC was also fairly similar for the DID clients within the MHHISU sample. A total of 25 individuals also had involvement with DYC accounting for 14.7% of the DID clients (blue circle) and 0.4% of the MHHISU (yellow circle).



# DEMOGRAPIC DESCRIPTIONS OF PREVIOUSLY IDENTIFIED HIGH UTILIZERS WHO OVERLAP WITH THE DID SYSTEM

This section of the report focuses on the demographic characteristics of those clients who received services from the DID system (the blue circles in the two preceding figures) in comparison to all of the High Utilizers from the respective analyses (largest circles in the two preceding figures). The CWHU who also received services in the DID system were nearly the same age as the rest of the CWHU who were not served in the DID system (median ages of 15.1 and 14.9 years respectively). However, the CWHU who were served in the DID system were more likely to be white than those who did not overlap with the DID system. Additionally, more CWHU served in the DID system were male (see figure 3).









The Mental Health High Service Intensity Utilizers who did not receive DID services were younger than those who did receive DID services, with a mean age of 15.7 and 16.7 years respectively. The DID children and youth were slightly less likely to be white than those individuals in the larger MH High Utilizer sample, although this difference did not reach the level of statistical significance. There was also a greater proportion of male youth in the MH High Intensity Service Utilizer sample who also received DID services than in the larger sample of MHHISU without DID services (see figure 3).

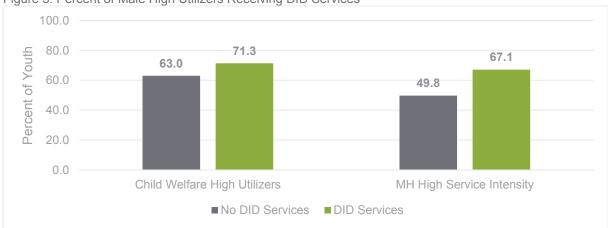


Figure 3. Percent of Male High Utilizers Receiving DID Services

By definition, all children from the MHHISU study received services through the public mental health system and thus have a mental health diagnoses reported to the Office of Behavioral health through the CCAR system. All but 31 of the 136 children and young adults in the CWHU sample that overlapped with the DID system also received services in the public mental health system and have a mental health diagnosis reported. The most recent MH diagnosis for the High Utilizers is displayed in figures 4 and 5 below. It appears that a greater percentage of children and young adults from MHHISU group that overlap DID system have more serious MH diagnoses than do the DID youth from CWHU group. The rates of anxiety, bipolar, thought disorders and conduct disorder are higher in the MH and DID group than in the CW and DID group.

# Populations to Keep In Mind

CWHU: TOP 20% OF CHILD WELFARE'S HIGHEST UTILIZERS IN FY2011-12

MHHISU: CHILDREN AND YOUNG ADULTS WHO RECEIVED PUBLIC MENTAL HEALTH SERVICES DURING FY2011-12 AND HAD A HISTORY OF INPATIENT HOSPITALIZATION









Figure 4. Most Recent MH Diagnosis of CW High Utilizers Also Receiving DID Services (n= 105) 11 ■ Non - MH Diagnosis Adjustment Anxiety ADD Bipolar 18 Thought Disorders Major Disprssion Other Childhood Disorders Conduct Disorder Other Medical Mental Disorder Percent of Diagnoses

Figure 5. Most Recent MH Diagnosis of MH High Intensity Service Utilizers Also Receiving DID Services (n= 170) ■ Non - MH Diagnosis Adjustment Anxiety ADD 31 Bipolar 12 Thought Disorders Major Disprssion Other Childhood Disorders 17 Conduct Disorder Other Medical Mental Disorder Personality Impulse Percent of Diagnoses









## **CONCLUSIONS**

Overall, the rates of receiving DID services are higher in both of the High Utilizer samples analyzed than in Colorado's youth and young adult population in general. CWHU more than tripled the state rate of DID service recipients (7.2% vs 1.9%). The difference was not as dramatic for MH High Service Intensity Utilizers (2.7% vs 1.9%), though rate of DID service utilization was still 50% higher in the MHHISU sample than the general population. These different rates for HU populations (CW vs. MH) reflect higher need in both systems; greater need in CW may reflect the impact of a chronic disability on the family.

The individuals who received DID services were compared to the larger populations of High Utilizers and it was found that they differed from the CWHU on both gender and race/ethnicity but not on age. Additionally those who received both MH High Intensity Services and DID services differed from those in the larger MHHISU sample on age and gender but not race/ethnicity. In both CW and MH populations, DID were more likely to be male and white, perhaps highlighting issues of access.

Results indicating significantly higher levels of DID in both CW and MH high utilizer populations show the need for system coordination, and possibly preventative programing to reduce DID involvement in other systems.

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