

Retrospective Study of Civil Admissions of Adults with Developmental Disabilities  
to State Hospitals Operated by the Department of Behavioral Health and  
Developmental Services

FY 2015 (July 1, 2014 thru June 30, 2015)

Report Finalized: 11/15/16

## **Report Intent/Utilization**

### **Analysis & Implications of Data on Systems Improvements**

The data within the report is the result of a review of 269 admissions of 200 unique individuals who were identified upon time of admission to a state operated mental health hospital with a developmental disability, including those with an intellectual disability, during FY15. This review of admissions followed a standardized process by a qualified professional with extensive experience with individuals with challenging behaviors. The process was not designed or intended to be based upon more stringent protocols applied to research projects. Throughout this document are noted recommendations and observations which, when addressed, may facilitate the continued development of community services for this population.

The data within this report reflects the initial report by the reviewer. The Department of Behavioral Health and Developmental Services (DBHDS) will continue to review this data, including if needed returning to the source materials compiled during the review process. DBHDS's internal review committee created to vet and review the report and other data includes professionals from:

- Division of Developmental Services, including facilities and community operations;
- Division of Mental Health & Forensic Services, including facilities and community operations;
- Division of Quality Management and Development, including Data Warehouse and Risk Management, and;
- Representatives of REACH (adult community crisis system)

The committee will review this working document and additional data from REACH, Critical Incident Reports, Regional Support Teams (RST), and other community data sources as part of the ongoing process of developing, supporting and expanding community services. The committee meets the 2nd Thursday of the month, beginning October 13, 2016 and will most likely meet through fiscal year 2017.

## **Purpose**

This study provides information about the number and characteristics of civil admissions of adults with Developmental Disabilities (DD) to state hospitals operated by the Commonwealth of Virginia's Department of Behavioral Health and Developmental Services (DBHDS) during FY 2015 (July 1, 2014 thru June 30, 2015). The body of the report focuses upon summarizing data to help utilize the report for planning purposes and to frame questions which may merit additional exploration for the improvement of services. Observations and recommendations about what the data may or may not convey are included; however, readers must be cautioned that this was not a formal research study, but a detailed retrospective review focused upon individuals' contacts with the mental health and developmental disability systems and the specific factors that may have led to their admission to state hospitals. The retrospective was conducted for the purpose of improving the system for individuals who have a developmental disability, a co-occurring mental health diagnosis, and who were admitted, primarily involuntarily, into a state operated mental health facility.

This review does not presuppose that each and every individual reviewed falls within the DOJ target population as defined in the Commonwealth's settlement agreement with the United States Department of Justice. DBHDS does not at this time intend to do a repeat review in this detail of all admissions in subsequent years. References in this report to the system during FY2015, such as connectivity to the REACH Adult Crisis System or Community Services Boards, may or may not be indicative of the system of services as of September 2016 because these systems are in a period of continual development.

## **Methodology**

The retrospective study reviewed Avatar admission/discharge data, which DBHDS verified through each state hospital's Health Information Management admission/discharge data and its Master Client Index maintained by DBHDS. A chart review was completed between February 1 and April 7, 2016 for each DD admission episode that occurred in FY 2015. Please note that Piedmont Geriatric Hospital was not included in this study because the facility does not provide services for acute psychiatric admissions, and in-patient supports are limited to individuals over 65 years of age. The Division of Developmental Services created a standard tool for the chart review to collect information from a variety of documents including:

- Name of each individual
- Gender and age
- Admission and discharge dates
- Length of stay (LOS)
- Reason for admission
- Hospital admitting diagnoses
- Hospital discharge diagnoses
- Living residence prior to admission
- Living residence at discharge
- Could the admission have been diverted
- REACH involvement

Data was analyzed and reported across the DBHDS mental health hospitals. Data related to specific state hospitals is highlighted for emphasis as needed.

The reviewer specifically focused his review of the files as follows: diagnosis upon admission and the diagnosis upon discharge; if the individual was living in the community system upon admission, whether the adult crisis system, including REACH, was involved prior to, during, or post discharge; if the individuals returned to their home or group home upon discharge or if the admission resulted in disrupting their current living arrangement and if any issues could be identified that applied statewide or more narrowly to a specific region or hospital. State hospitals provided access to all records and medical professionals at the facilities. Detailed follow-up to either REACH programs or local Community Services Boards was not part of this review process but will occur. Also, it should be noted by the reader that as of July 15, 2015, the state operated hospitals began reporting to DBHDS on a daily basis the admission of anyone identified with a developmental disability. The local REACH program is now contacted within one business day by DBHDS if REACH involvement with the individual was not noted in this daily report.

**Admissions:**

According to Avatar admission data, the state hospitals in fiscal year 2015 reported a total 253,192 bed days of services. Individuals with DD utilized 16,429 of those bed days, or 6.5% of the total. A comparison of the number of bed days utilized and number of admissions of individuals with DD by each state hospital and the percentage of utilization is presented in Table 1.

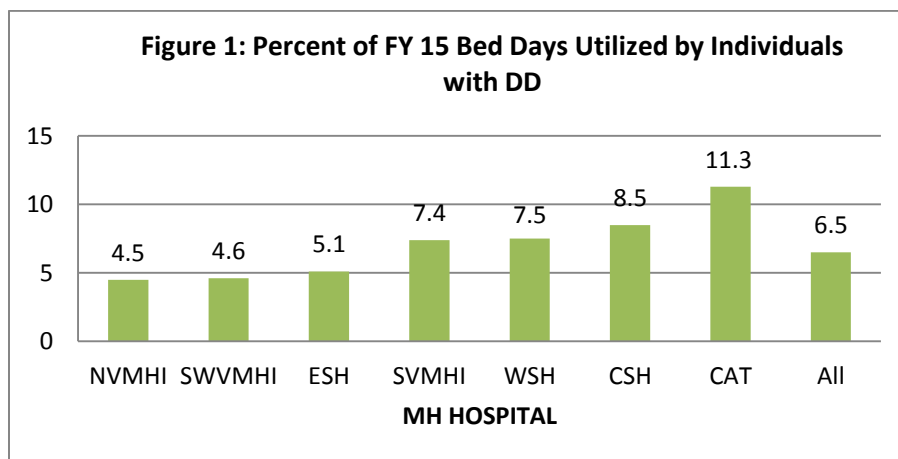
Table 1: FY 15 State Hospital Bed Utilization

MH Hospital	Total Beds Utilized by MH Hospitals Included in these totals are beds from Program Codes: Acute Intensive Psych Certified, Community Preparation, Psychosocial & Long-term Rehabilitation	# of Bed Days Utilized by Individuals with DD	% Bed Days Utilized by Individuals with DD	# of Admissions of Individuals with DD
SVMHI	16,030	1,180	7.4	19
ESH	31,833	1,635	5.1	68
CAT	16,621	1,876	11.3	15
NVMHI	42,892	1,946	4.5	31
SWVMHI	49,435	2,263	4.6	51
CSH	29,618	2,520	8.5	33
WSH	66,763	5,009	7.5	52
<b>Total</b>	<b>253,192</b>	<b>16,429</b>	<b>6.5</b>	<b>269</b>

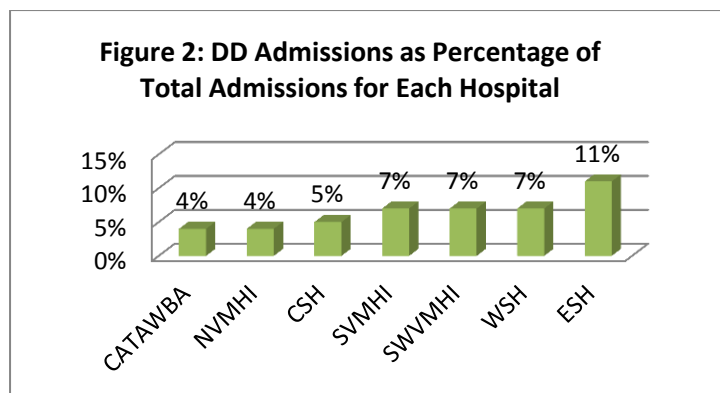
Eastern State Hospital (ESH) had the most DD admissions (68) followed in order by Western State Hospital (WSH) (52), Southwestern Virginia Mental Health Institute (SWVMHI) (51), Central State Hospital (CSH) (33), Northern Virginia Mental Health Institute (NVMHI) (31), Southern Virginia Mental Health Institute (SVMHI) (19), and Catawba Hospital (CAT) (15). The highest percentage of bed days utilized by individuals with DD was at Catawba.

The 269 admissions included forty-two (42) individuals who were admitted more than once during the study period. These forty-two individuals account for 38% (102/269) of the total state hospital admissions by individuals with DD and 27% percent (4,377/16,429) of all bed days utilized by individuals with DD.

The percentage of bed days utilized by individuals with DD varied across state hospitals. As shown in Figure 1, NVMHI, SWVMHI and ESH are similar with a lower percentage of bed utilization by individuals with DD. SVMHI, WSH and CSH are also similar. Catawba is an outlier. Figure 2 again demonstrates similar groupings, with a different mix of high to low. Catawba had a lower rate of admissions with longer stays, while ESH had a higher rate of admissions and shorter stays for the indicated population.

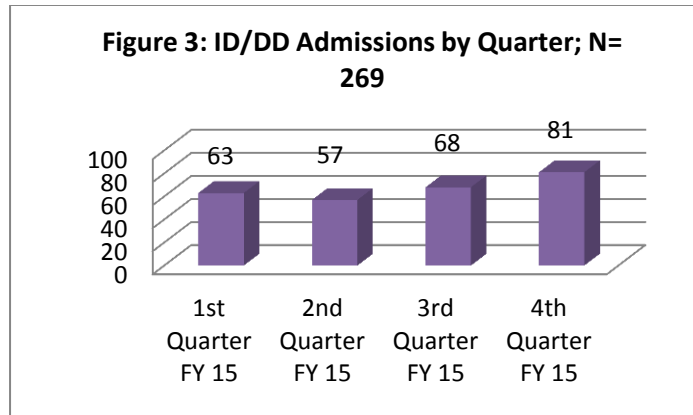


Admission of individuals with developmental disabilities (DD) as the percentage of total admissions by MH Hospital is presented in Figure 2.



Admissions of individuals with DD accounted for 11% of the total admissions at ESH (68/628); 7% of the total admissions at each of WSH (52/786), SWVMHI (51/730) and SVMHI (19/282); 5% of the total admissions at CSH (33/620); and 4% of the total admissions at NVMHI (31/822) and Catawba (15/345).

As shown below in Figure 3, admissions of individuals with intellectual and developmental disabilities fell slightly in the 2<sup>nd</sup> quarter of FY 15 and then began an increasing trend in quarterly admissions by the end of FY 15. This trend is similar to that reported by state hospitals for all admissions by quarter for FY15.



While there were 269 specific admissions during FY15, 200 unique individuals with DD were admitted. Most individuals were admitted only one time, but 42 individuals were admitted more than once to an MH Hospital. These 42 individuals accounted for 102 admissions, or 38% (102/269) of all admissions of individuals with DD.

*The data above would merit additional review to determine what is driving repeat admissions, which could assist DBHDS in identifying possible evidence-based strategies to reduce disruptions for individuals living within their communities.\**

*Additionally, it would be worth exploring length of time between readmissions to see if this is a factor in readmissions.\**

**Demographics of Individuals with DD Admitted to MH Hospitals**

**Admission Legal Status of Individuals with DD:**

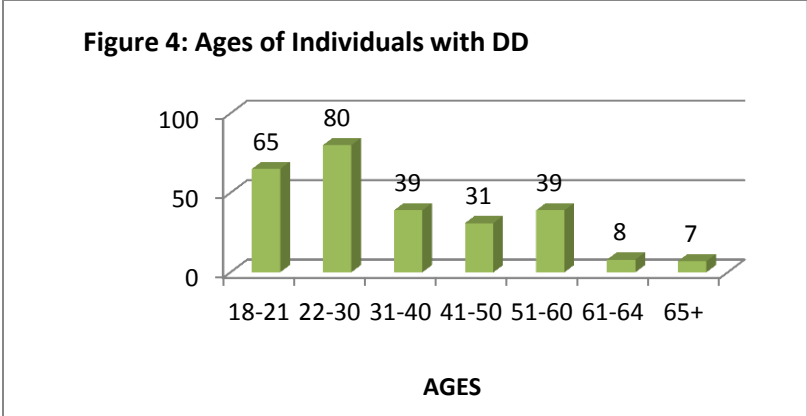
A Temporary Detention Order (TDO) is an order issued by a magistrate when the magistrate finds probable cause to believe that a person meets the commitment criteria for inpatient hospitalization or treatment. The chart review as to TDOs indicated during FY 15 that:

- 82% percent (221/269) of admissions of individuals with DD were pursuant to a TDO,
- 11% were involuntary civil admissions,
- 3% were voluntary admissions, and
- 1% were court-ordered admissions for treatment of an incompetent defendant.

*Again this data may merit additional review to determine if there are regional differences or if there are specific issues which result in TDOs that will enable DBHDS to focus resources to reduce or divert potentially unnecessary admissions.\**

**Gender and Age:**

Male admissions were 67% of the admissions of individuals with DD (181/269), whereas females accounted for 33% of the total admissions of individuals with DD (88/269). Figure 4 presents the age range upon admission across all state hospitals.



A majority (54%; 145/269) of admissions of individuals DD who were admitted to a MH Hospital were ages 30 and under. The largest percentage of individuals was in the 22-30 age range upon admission (30%; 80/269), followed by individuals in the 18-21 age range (24%; 65/269).

*While the largest percentage of admissions tend to be of younger individuals, which would be expected, the spike for individuals 51 to 60 is not clear and therefore this data merits additional reviews to determine if health issues may be a factor during those years.\**

*Comparing age of admission of the DD population against the non-DD population would provide additional context for this data to help determine if there is an identified family support need versus a trend of onset of mental health symptomatology.\**

Residential Living Situations Prior to Admission and Post Discharge

Individuals with DD lived in a variety of settings before their admission to an MH Hospital and after discharge. Table 2 presents the different types of residential settings where individuals with DD lived prior to admission and post discharge. Residential settings with a similar living configuration (e.g., family type homes vs. congregate care facilities) were grouped for ease of comparison. As can be seen in Table 2 below, most individuals with DD lived in family type homes prior to and post discharge. Family type homes accounted for 33% of the living situations for both pre-admission and post discharge. Single family homes were most prevalent. Group homes (i.e., licensed congregate residential) were the next most common living situation prior to admission (20%) and after discharge (20%). There was not a significant difference in use of congregate care facilities pre-admission (11%) and post discharge (13%).

Table 2: Residential Locations for Individuals with DD Prior to Admission and Post Discharge

<u>RESIDENTIAL LOCATION</u>	<u>PRIOR TO ADMISSION</u>	<u>DISCHARGED TO</u>
<b>FAMILY TYPE HOMES</b>		
Family home	69	68
Foster Home	2	0
Home of non-relative	2	3
Own home	8	9
Sponsored residential placement	7	2

Supervised Apartment	1	3
<b>Total</b>	<b>89 (33%)</b>	<b>85 (33%)</b>
<b>GROUP HOMES</b>		
Group home	52	52
Boarding Home	1	0
<b>Total</b>	<b>53 (20%)</b>	<b>52 (20%)</b>
<b>CONGREGATE CARE FACILITIES</b>		
Adult living facility	18	21
Assisted Living Facility	6	8
Skilled Nursing Facility	5	5
<b>Total</b>	<b>29 (11%)</b>	<b>34 (13%)</b>
<b>DBHDS FACILITIES</b>		
DBHDS - Transfer	16	16
Not Discharged	0	11 ( not in total)
<b>Total</b>	<b>16 (6%)</b>	<b>16 (6%)</b>
COMMUNITY PSYCHIATRIC HOSPITAL	<b>43 (16%)</b>	<b>18 (7%)</b>
REACH COMMUNITY THERAPEUTIC HOME	<b>13 (5%)</b>	<b>33 (13%)</b>
JAIL	<b>18 (7%)</b>	<b>10 (4%)</b>
HOMELESS SHELTER/HOTEL	<b>8 (3%)</b>	<b>10 (4%)</b>
DEATH	0	1
<b>TOTALS</b>	<b>269 admissions</b>	<b>258 discharges</b>

Individuals with DD were transferred from one DBHDS facility to another DBHDS facility 6% of the time. DBHDS facility transfers were done to obtain specialized treatment, to return the individual to his home MH Hospital catchment area, or the individual wanted to be closer to family supports. Sixteen percent (16%) of admissions were of individuals with DD who were receiving mental health treatment in community psychiatric hospitals prior to admission to a state hospital. Data indicated that transfer admissions from community psychiatric hospitals to state hospitals occurred apparently to obtain longer term mental health treatment and/or to provide more time to stabilize. Data indicates that discharges from a state hospital to community psychiatric hospitals (7%) occurred when the individual with DD no longer required the level of clinical care provided by a state hospital. While 5% of admissions of individuals with DD to state hospitals were from REACH Therapeutic Crisis Homes, 33% of individuals with DD were discharged (stepped down) to the REACH Therapeutic Crisis Home for clinical treatment or as a temporary respite location until another community location was available. Seven percent of admissions of individuals to state hospitals were from jails. Typically, these admissions were for competency to stand trial assessment and restoration of competency or because a judge ordered mandatory inpatient treatment when dismissing legal charges. Individuals with DD were discharged to jails only 4% of the time. This typically occurred to finish out mandatory jail terms or because legal charges were filed while the individual was in the state hospital. Individuals with DD were admitted from homeless shelters/hotels to state hospitals 3% of the time. While 4% of individuals with DD were discharged from



state hospitals to homeless shelters/hotels, these discharges usually occurred when an individual was on voluntary admission status and requested to leave the state hospital without permanent housing.

The majority of individuals with DD admitted to state hospitals returned to the same residential location or type of residence they were living in before admission as compared to after discharge:

- 57% (146/258) of individuals with DD moved back to the exact same living situation they were residing in prior to admission;
- 43% (111/258) of individuals with DD moved to a different residential location or residence type after discharge.

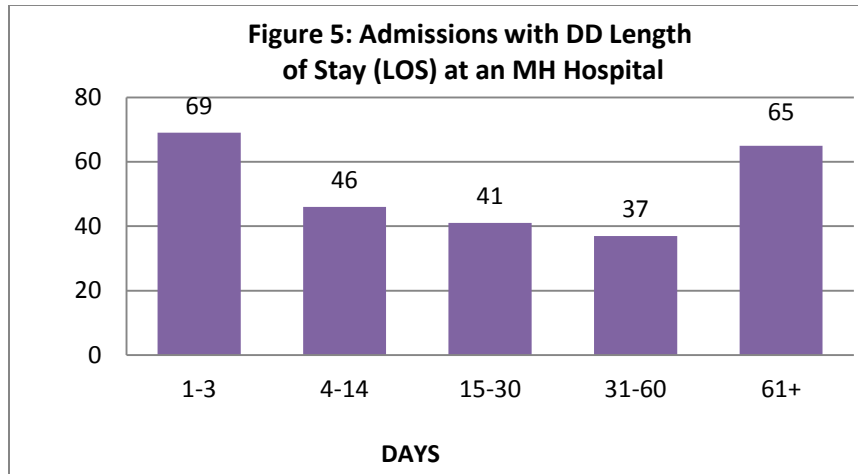
Data indicated that typical reasons for not moving back to the same living location or residence type after discharge were:

- Individual required a different level of clinical care and support after discharge than was provided before admission to the MH Hospital
- Residential provider prior to admission had discharged the individual with DD or did not want them to return
- Location was no longer available because the bed was filled while the individual with DD was in the state hospitals
- Individual with DD or their family wanted a new residential placement
- Individual with DD was transferred to a community psychiatric facility for further treatment

*The data review in the section above reflects that admission into a state MH hospital in FY15 resulted in the likelihood that an individual did not return to his or her home over 40% of the time. Again, this data merits further review to determine causes and trends with respect to individuals not returning to where they lived prior to admission. DBHDS will need additional information to either ensure appropriate placement, training of staff and treatment prior to admission or review strategies to increase return, as appropriate, to their current residence is indicated as needed.\**

### **Length of Stay (LOS)**

During the study period, there were 269 admissions of individuals with DD to a state hospital and 258 discharges. For 11 of these admissions, individuals remained in a state hospital for additional treatment. Of the admissions of individuals with DD to state hospitals in FY 15, 96% (258/269) were discharged within FY15. Figure 5 presents median Length of Stay (LOS) in days for individuals admitted to an MH Hospital.

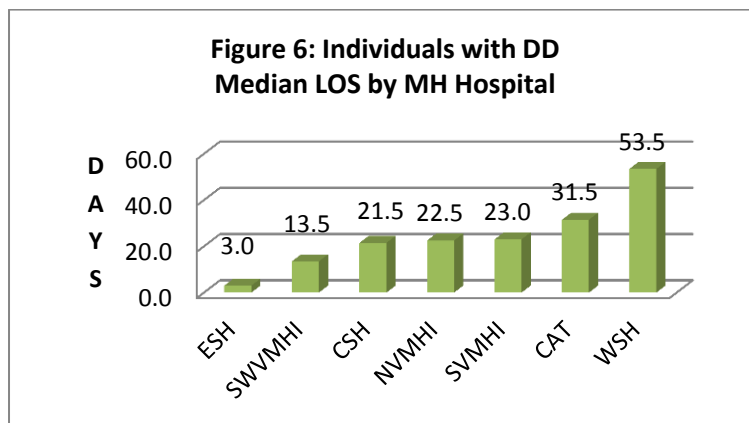


The most common length of stay (LOS) was 1-3 days, and 46% (115/258) of discharges were after a LOS that was 14 days or less. 88 individuals had a length of stay from 15 to 60 days.

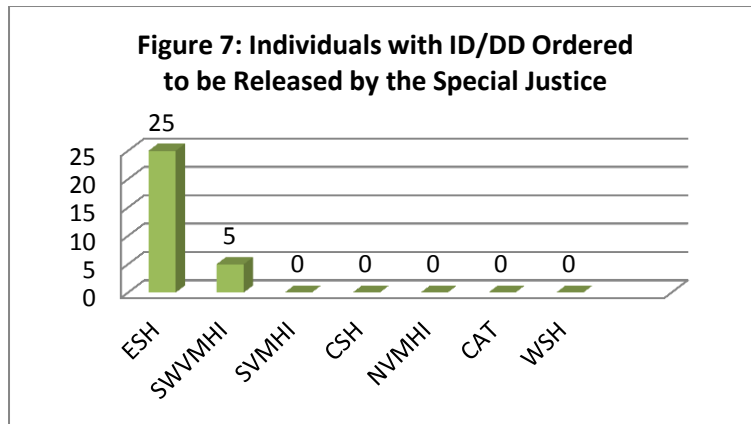
Data from the review indicated that individuals with DD who required longer LOS typically had a history of:

- previous psychiatric admissions,
- complicated or chronic MH issues,
- more than one clinical diagnosis,
- required multiple psychotropic drug adjustments, and
- longer period of time to respond to clinical interventions.

Median LOS data presented in Figure 6 below indicates a dramatic difference in median LOS for individuals with DD across MH Hospitals. Individuals with DD admitted to ESH had the lowest median LOS at 3 days and SWVMHI is next lowest with a median LOS of 13.5 days. Individuals with DD who were admitted to CSH, NVMHI and SVMHI had similar median LOS days (low 20s), while the median LOS was longer (31.5 days) for individuals admitted to Catawba, which is primarily a geriatric setting. WSH median LOS (53.5 days) was much longer than other state hospitals, and was 18 times higher than that of ESH which had the lowest median LOS (3 days).

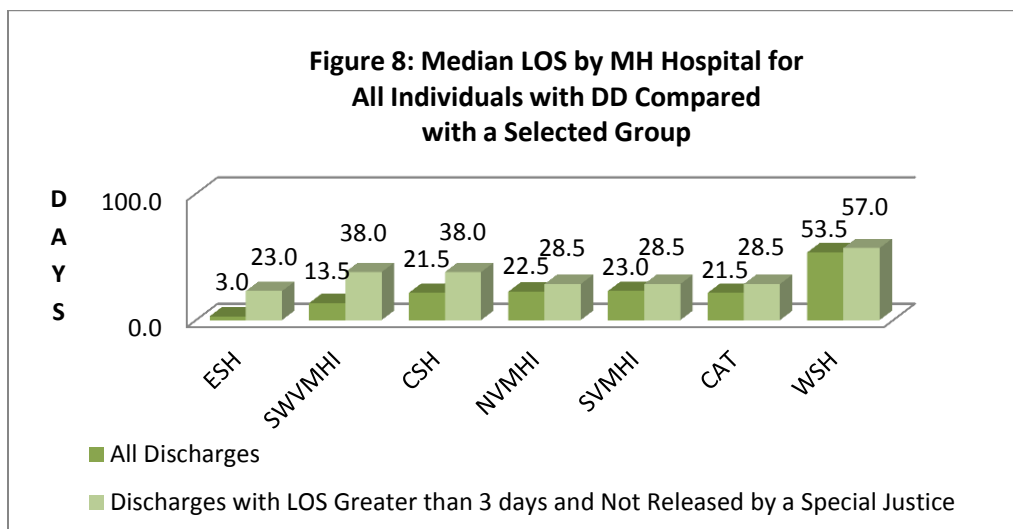


Most of the median LOS variation for individuals with DD who were admitted to ESH and SWVMHI can be explained by the data presented in Figure 7.



The Code of Virginia provides that a person can be held pursuant to a TDO for involuntary admission for up to 72 hours, by which time a hearing by a special justice must take place if the involuntary admission is to be extended. If a special justice determines the individual does not meet the criteria for involuntary admission, they order the state hospital to release them. Figure 7 shows the number of times a special justice determined an individual with DD admitted pursuant to a TDO did not meet criteria for involuntary admission and ordered them released from the hospital. The LOS in these cases was between 1 and 3 days. As noted in Table 7 above, special justices did not extend involuntary admissions pursuant to a TDO in 37% (25/68) of cases at ESH and 10% (5/51) of cases at SWVMHI. The special justices at the other state hospitals did not dismiss any of the TDO orders. At ESH and SWVMHI, the special justices typically made their determinations based upon a diagnosis of Autism and/or ID with challenging behaviors without a co-occurring diagnosis of a mental health disorder.

If individuals who were ordered released from the state hospital by the special justice and those who only had an LOS of 3 days or less were not included in the data set, a different picture of median LOS in state hospitals emerges as noted in Figure 8 below.



As expected, the median LOS increased for all state hospitals when individuals who had a LOS of 3 days or less and those who were released by a special justice were omitted from the data set. SWVMHI had the largest change in median LOS (13.5 to 38.0 = 24.5) followed by ESH (3.0 to 23.0 = 20.0) and CSH (21.5 to 38.0 = 16.5). In comparison NVMHI and SVMHI median LOS changes were not so dramatic. WSH still had the highest median LOS of all MH Hospitals.

*Overall, additional vetting and review may be merited to determine how DBHDS may reduce the time that an individual remains in a mental health hospital, as best practice indicates shorter stays reduce the risk of additional moves or repeat admissions as connections to one’s community supports tend to remain in place. Reviewing additional data at WSH may prove helpful in addressing regional challenges and opportunities to reduce length of stay.\**

*Comparing length of stay for the DD population against the non-DD population may also provide additional context to this data. The need for this further study will be determined as this report receives additional vetting.\**

**Diagnosis of Developmental Disabilities Including Intellectual Disabilities**

The number of individuals discharged from state hospitals (258) who had a diagnosis of intellectual disability, developmental disability, or both are presented in Figure 9. The majority of individuals (65%; 167/258) at discharge had a diagnosis of intellectual disability only, while 10% (25/258) had a diagnosis of developmental disability only, and 17% (44/258) had diagnoses of both intellectual disability and developmental disability at discharge. Eight percent (22/258) of individuals had neither a diagnosis of intellectual disability or developmental disability at discharge; however, they did have a diagnosis of intellectual or developmental disability at admission.

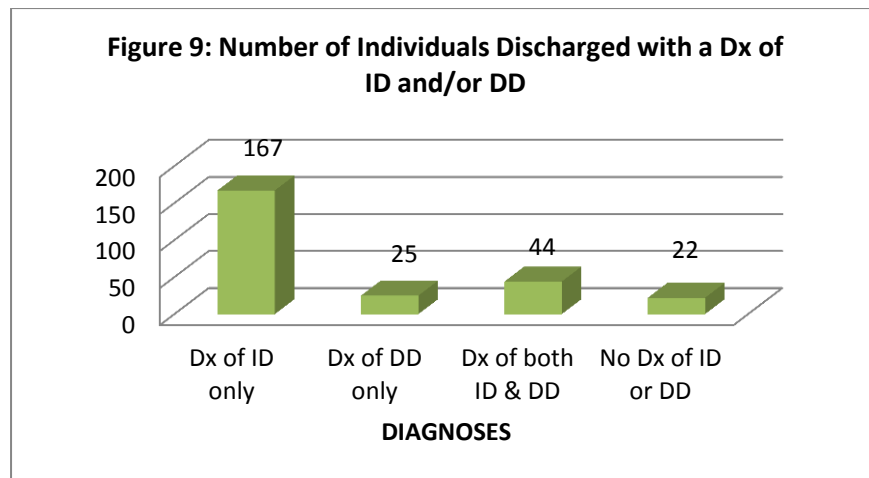
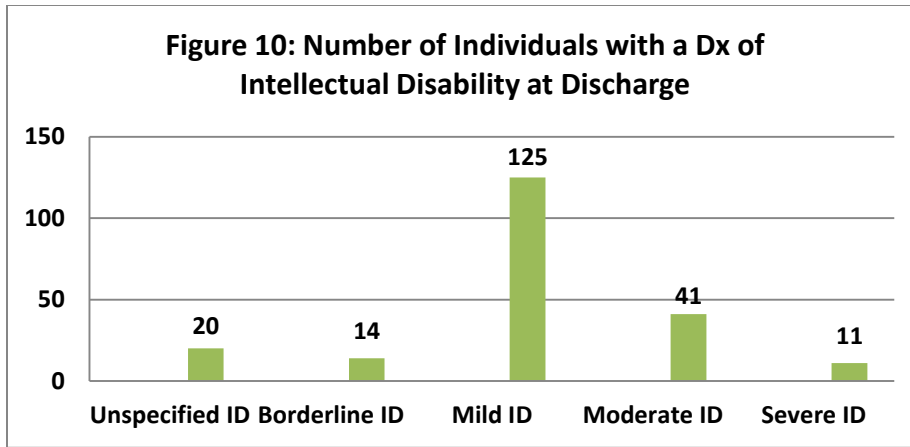
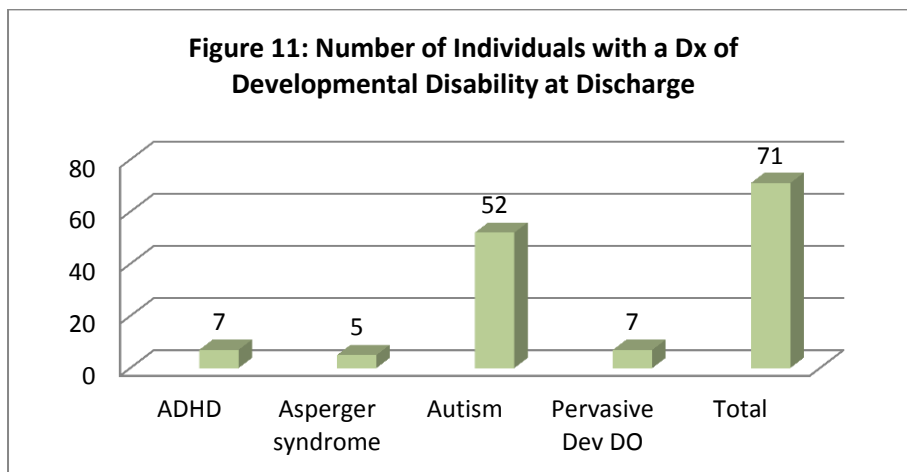


Figure 10 below presents the number of individuals discharged with a diagnosis of intellectual disability and their level of functioning. The majority of individuals with ID who were discharged had an ID diagnosis of mild ID (59%; 125/211), followed by a diagnosis of moderate ID (19%; 41/211). Nine percent (20/211) of individuals with ID who were discharged had a diagnosis of unspecified ID, and 7% (15/211) had a diagnosis of borderline intellectual functioning. Five percent (11/211) of individuals discharged had a diagnosis of severe ID, and none had a diagnosis of profound ID.



As presented in Figure 11 below, 71 individuals had a diagnosis of developmental disability at discharge. The most common diagnosis (73%; 52/71) was Autism. Of the 17% (44/258) of individuals with discharge diagnoses of both intellectual and developmental disabilities, the most common mix was ID and Autism, followed by ID and ADHD.



*The above data indicates that individuals with a mild intellectual disability, moderate intellectual disability or autism spectrum comprise the largest subgroups. Additional discussion and review is needed prior to recommending or determining if the addition of resources to increase access to community mental health services would likely result in better overall outcomes. Specifically, DBHDS should determine if increasing the number of mental health providers with greater expertise in providing both community living supports and mental health services may affect frequency of hospitalizations and duration. Many of these individuals with mild ID or autism spectrum also may not be covered by Virginia’s DD waivers which impacts the availability of long term community supports.\**

**Mental Health Issues for Individuals with DD**

The full range of mental health diagnoses that exist in the general population also can co-exist in persons who have ID or DD. The types of psychiatric disorders persons with ID or DD experience are the same as those seen in the general population, although the individual’s life circumstances or level of intellectual

functioning may alter the appearance of the symptoms (Charlot & Beasley, 2013; Fletcher, 2015; NADD, 2016). Estimates of the frequency of dual diagnosis (having both DD and a mental health disorder) vary widely; however, many professionals have adopted the estimate that 30-35% of all persons with ID or DD have a psychiatric disorder (Aman, Alvarez, Benefield, et al, 2000; Cooper, S., Smiley, E., Morrison, J., Williamson, A., & Allan, L. 2006; Fletcher, 2015; NADD, 2016). In the general non-DD population, 18.5% of individuals experience a mental illness in a given year (NIMH, 2015). Several factors have been suggested for the increased vulnerability to mental health problems for persons with DD:

Stress is a risk factor for mental health problems. Persons with DD experience negative social conditions throughout the life span that contribute to excessive stress. These negative social conditions include social rejection, stigmatization, and the lack of acceptance in general. Social support and coping skills can buffer the effect of stress on mental health. In persons with DD, limited coping skills associated with language difficulty, inadequate social supports, and a high frequency of central nervous system impairment, all contribute to the vulnerability of developing mental health problems.

Individuals with DD are at greater risk for trauma than the general population. Individuals with DD are at increased risk for abuse as compared to the general population (Gil, 1970; Mahoney & Camilo, 1998; Ryan, 1994). Individuals with disabilities are over four times as likely to be victims of crime as the nondisabled population (Sobsey, 1996). Individuals with disabilities are 2-to-10 times more likely to be sexually abused than those without disabilities (Westat Ind., 1993).

Another explanation for the increased prevalence of mental health problems in the DD population relates to behavioral phenotypes and genetic syndromes. In addition to the characteristic physiological signs associated with genetic syndromes, many syndromes have characteristic behavior and emotional patterns. These behavioral phenotypes may contribute to the increased rate of behavioral and mental health problems among persons with DD (Hodapp & Dykens, 2005).

### **Diagnosis of Mental Health Issues in Current FY15 Review**

Out of the 269 individuals with an intellectual or developmental disability who were admitted to a MH Hospital, 88% (238/269) were diagnosed with a mental health disorder. Admissions were the result of an acute mental health crisis or chronic mental health disorders and related behaviors. Twelve percent (12%; 31/269) of individuals admitted did not have a co-occurring mental health diagnosis; they only had a diagnosis of ID, DD or combination. These individuals were admitted due to their challenging behavioral issues associated with their DD diagnoses. For a few individuals with DD and a co-occurring mental health diagnosis, the MH Hospital admitting psychiatrists documented that a person's admission was based upon behavioral issues related to DD, not their mental health disorder.

*Data collected during this time period should be compared against more current data to determine the need or benefit of assuring accurate psychiatric diagnoses, and if providing for behavioral consultation and training at the state hospitals addresses challenging behavioral issues associated with a DD diagnoses.\** Training areas could include:

- Training in functional assessment,
- Development of behavior support plans, and
- Training and monitoring of direct support staff in behavior support plan implementation is needed.

A combination of behavior support and psychiatric treatment potentially could generate benefits for the entire population of individuals at the MH Hospitals, not just individuals with DD.

The most common mental health diagnoses at discharge for those individuals with DD fell into ten primary groupings as reflected in Table 3.

Table 3: Most Common MH Diagnoses at Discharge for Individuals with DD

<b>MH Diagnoses at Discharge</b>	<b>Number of Individuals Discharged (n=258) and Percent of Total</b>
Schizoaffective Disorders	46; 18% (Most common is bipolar type )
Substance Abuse/Use/Dependence Disorders	41; 16% (Most common are nicotine at 27% and alcohol at 24%, but cannabis and polysubstance abuse both account for 16% and 15% respectively)
Personality Disorders	41; 16% (Most common is borderline PD; females = 17/23 or 74% of borderline PD )
Schizophrenia	39; 15% (Most common are undifferentiated & paranoid)
Mood Disorders	37; 14% (Most common is not otherwise specified, NOS)
Bipolar Disorders	29; 11% (Most common is not otherwise specified, NOS)
Psychosis/Psychotic Disorders	20; 8%
Impulse Control Disorder	14; 5%
Adjustment Disorders	14; 5% (Most common is with disturbance of emotion and conduct)
Depressive Disorders	14; 5% (Includes depression, major depression, and dysthymic)

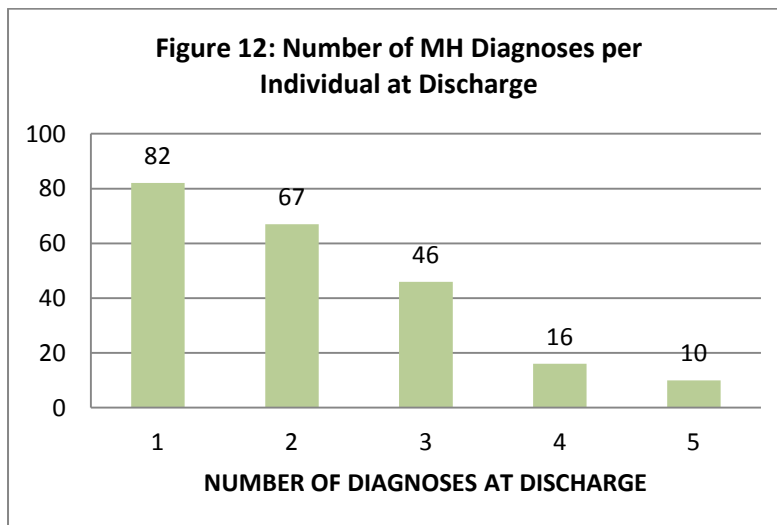
The most common mental health diagnoses at discharge for individuals with DD were Schizoaffective Disorders (46; 18%) followed by Substance Abuse/Dependence Disorders (41;16%), Personality Disorders (41; 16%), Schizophrenia (39; 15%), Mood Disorders (37; 14%), Bipolar Disorders (29; 11%), Psychosis/Psychotic Disorders (20; 8%), Impulse Control Disorder (14; 5%), Adjustment Disorders (14; 5%) and Depressive Disorders (14; 5%). While Substance Abuse/Dependence Disorders were never the primary admitting diagnoses, 16% of individuals with DD (41/258) had a co-occurring diagnosis of Substance Abuse/Use /Dependence Disorders. While this is of less impact, assuring access to substance abuse treatment should routinely occur. The data collectively aligns with other published reports that, while risk factor may be high, actual utilization is low as summarized below:

While the prevalence of alcohol and illicit drug use in the DD population is low, the risks of having a substance-related problem among individuals with DD are comparatively high (Slayter & Steenrod, 2009; McGillicuddy & Blane, 1999; McGillicuddy, 2006). Individuals that warrant special attention are those with borderline and mild ID, individuals with co-occurring mental illness, and individuals with DD who are or have a history of being incarcerated (Cocco & Harper, 2002; Chaplin, Gilvarry & Tsakanikos, 2011). Service providers typically do not have the skills required to assess, treat, or manage substance abuse and related problems (Degenhardt, 2000; VanDeNagel,

Kiewik, Buitelaar & DeLong, 2011), and typical substance abuse treatment programs are not geared toward individuals with DD. In addition, individuals with DD who also have substance abuse issues are less likely to receive substance abuse treatment or remain in treatment (Slayter, 2010 b,c).

For those individuals with DD who were diagnosed with a Personality Disorder, the most common type was Borderline Personality Disorder, and females accounted for 74% of the individuals with this diagnosis. Individuals diagnosed with Borderline Personality Disorder typically had multiple admissions and when discharged moved to a different location than they had lived prior to admission.

As noted in Figure 12, most individuals with DD (82) were discharged with only one (1) mental health diagnosis; however, a large number of individuals were discharged with two (2) and three (3) mental health diagnoses. Fewer people had four (4) or five (5) mental health diagnoses at discharge. None of the individuals with DD had more than five (5) mental health diagnoses at discharge. Clinical case formulation and treatment issues become more complicated with multiple mental health diagnoses.



The purpose of this retrospective review was not to question the accuracy or validity of the diagnoses made by the MH Hospitals, but in the chart documentation reviewed, there was no mention of modified psychiatric criteria or the use of psychopathology tools developed specifically for persons with dual diagnoses.

*The record review does indicate that knowledge of and utilization of appropriate clinical tools could facilitate a more accurate psychiatric diagnosis and clinical treatment of individuals with DD to facilitate connecting with the appropriate community based professionals.\**

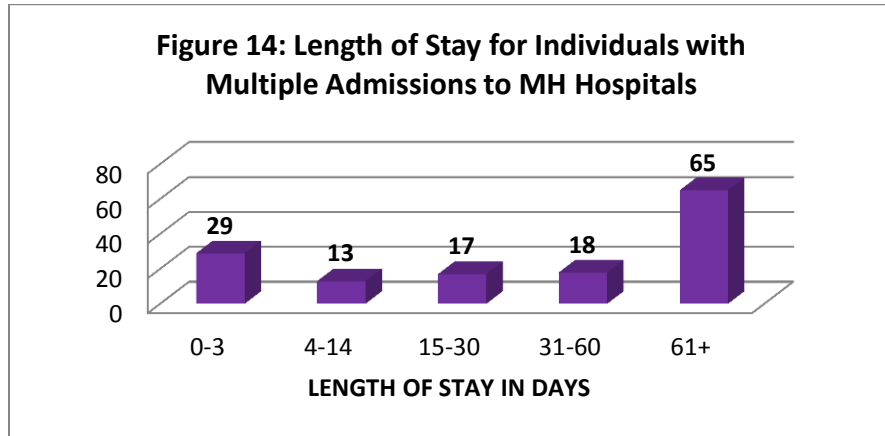
### **Individuals Who Had Multiple MH Hospital Admission in FY15**

While there were 269 admissions during FY15, 200 unique individuals with DD were admitted. Most individuals were admitted only once, but 42 individuals were admitted more than once to an MH Hospital. These 42 individuals accounted for 102 admissions, or 38% (102/269) of all admissions. Most repeat admissions were at the same MH Hospital; only 4 individuals had admissions at different MH

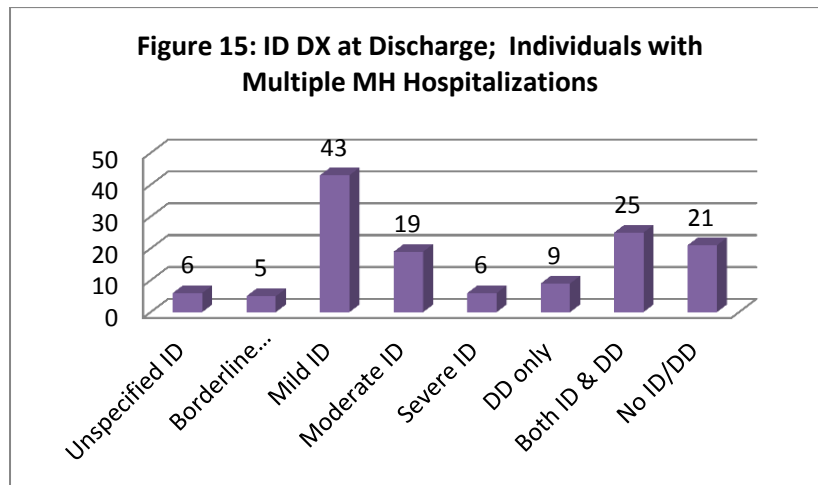


Hospitals. Out of the 16,429 bed days utilized by all individuals with DD, these 42 individuals used 4,377 bed days or 27% of the total bed days utilized by all individuals with DD.

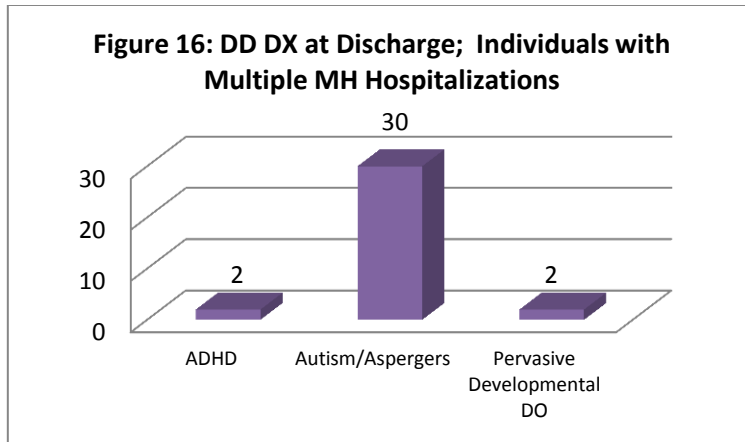
Figure 14 shows the average LOS for individuals who had multiple admissions to MH Hospitals. Most individuals LOS were 1-3 days (29). The number above 61 days reflects long-term admissions, which requires additional review to determine what issues are delaying discharge.



The number of individuals with multiple hospitalizations and their diagnoses at discharge of ID, DD, or a combination of an intellectual disability with another developmental disability is presented in Figure 15. Most individuals with multiple hospitalizations (42%, 43/102) had a discharge diagnosis of mild ID. However, 24% (25/102) had diagnoses of both ID and DD, while 20% (21/102) had neither a diagnosis of ID or DD.



As shown in Figure 16, of those individuals who had diagnoses of DD or DD alone at discharge, the most common diagnosis was Autism/Asperger Syndrome.



The residential placements before admission and post discharge for individuals who had multiple MH hospitalizations are presented in Table 4 below. As can be seen, 29% of these individuals were living in family type homes, while 27% were living in group homes prior to admission. Thirteen percent (13%) of individuals were transferred from Community Psychiatric Units to the state hospitals (13%), and 9% were transferred from other DBHDS state hospital. Some individuals were admitted from the REACH Therapeutic Home (7%) and Adult Living Facilities (6%), while fewer came from jails (4%) or homeless shelters/hotels (5%).

More individuals were discharged to group homes (32%) than family-type homes (25%). When comparing residential placements before admission and post discharge, fewer individuals transferred at discharge to other DBHDS MH Hospitals than were admitted (9% vs 7%), and more individuals were discharged to the REACH Therapeutic Homes than were admitted from that location (12% vs 7%). The same percent of individuals were admitted from jails and discharged to back jails (4%). Slightly more individuals were discharged to homeless shelters/motels than were admitted from those locations (7% vs 5%).

Table 4: Individuals with Multiple Admissions to MH Hospitals and Residential Locations Prior to Admission and Post Discharge

RESIDENTIAL LOCATION	PRIOR TO ADMISSION	DISCHARGED TO
<b>FAMILY TYPE HOMES</b>		
Family home	23	17
Foster Home	0	1
Home of non-relative	2	3
Own home	4	5
Sponsored residential placement	1	0
Supervised Apartment	0	0
<b>Total</b>	<b>30 (29%)</b>	<b>26 (25%)</b>
<b>GROUP HOME</b>		
Group home	28	33
Boarding Home	0	0
<b>Total</b>	<b>28 (27%)</b>	<b>33 (32%)</b>
<b>CONGREGATE CARE FACILITY</b>		

Adult living facility	6	5
Assisted Living Facility	0	0
Skilled Nursing Facility	0	1
<b>Total</b>	<b>6 (6%)</b>	<b>6 (6%)</b>
<b>DBHDS FACILITIES</b>		
DBHDS - Transfer	9	7
Not Discharged	na	2 (not in total)
<b>Total</b>	<b>9 (9%)</b>	<b>7 (7%)</b>
<b>COMMUNITY PSYCHIATRIC HOSPITAL</b>	<b>13 (13%)</b>	<b>5 (5%)</b>
REACH COMMUNITY THERAPEUTIC HOME	<b>7 (7%)</b>	<b>12 (12%)</b>
JAIL	<b>4 (4%)</b>	<b>4 (4%)</b>
HOMELESS SHELTER/HOTEL	<b>5 (5%)</b>	<b>7 (7%)</b>
<b>TOTALS</b>	<b>102</b>	<b>102</b>

Individuals with DD who had multiple admissions to state hospitals had a variety of psychiatric diagnoses. The majority of these individuals (52%; 52/102) had two (2) or more psychiatric diagnoses at discharge. However, 21 of these individuals had no co-occurring psychiatric diagnosis at discharge. The most common psychiatric diagnosis at discharge for individuals who had multiple admissions to state hospitals is presented in Table 5.

Table 5: Most Common MH Diagnoses at Discharge for Individuals with DD who had multiple admissions to MH Hospitals

<b>MH Diagnoses at Discharge</b>	<b>Number of Individuals with Multiple Admissions to MH Hospitals (n=102)</b>
Personality Disorders	24 (Most common is borderline PD = 15/24)
Mood Disorders	20 (Most common is not otherwise specified, NOS)
Schizoaffective Disorders	15 (Most common is bipolar type )
Substance Abuse/Use/Dependence Disorders	14 (Most common current use and by history of use are opioids, alcohol, cannabis and polysubstance abuse, respectively.
Schizophrenia	10 (Most common are undifferentiated & paranoid type)
Bipolar Disorders	10 (Most common is not otherwise specified, NOS)
Psychosis/Psychotic Disorders	9 (Most common is not otherwise specified, NOS)
Intermittent Explosive Disorder	8
Impulse Control Disorder	7

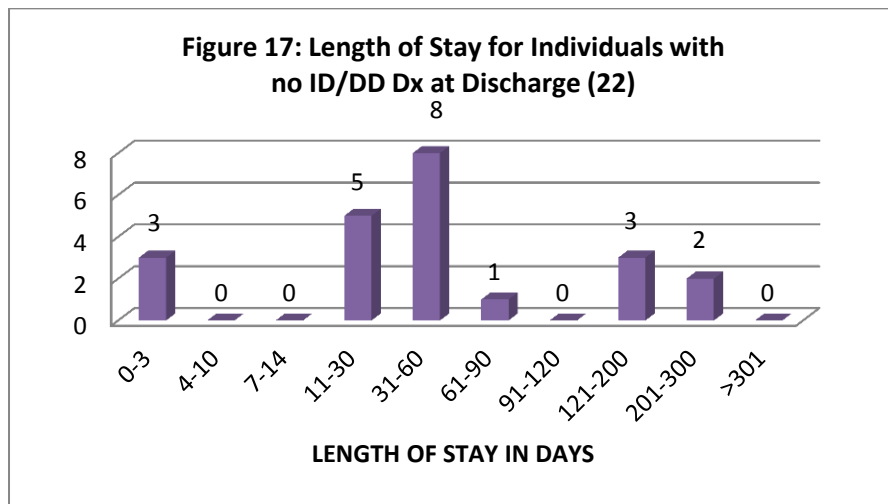
As indicated by the data above, those individuals with multiple admissions did not have outcomes significantly disparate from individuals with single admissions.

**Three (3) Subgroups of Special Interest**

Three (3) subgroups of individuals with DD are of special interest and require separate analyses because current interventions or future community services most likely may require uniquely different evidence informed treatment modalities. The first subgroup is inclusive of individuals discharged with no diagnosis of a developmental disability (22) but who were admitted with either an ID or another DD diagnosis. The second subgroup was individuals discharged with a diagnosis of either unspecified ID (20) or borderline intellectual functioning (14). The third and largest subgroup is individuals discharged with a diagnosis of mild ID (125). These three (3) subgroups are important in that they pose issues for service delivery because they may not be consistently eligible for the Medicaid DD Waiver based on diagnosis and adaptive daily living skills as determined through the level of functioning.

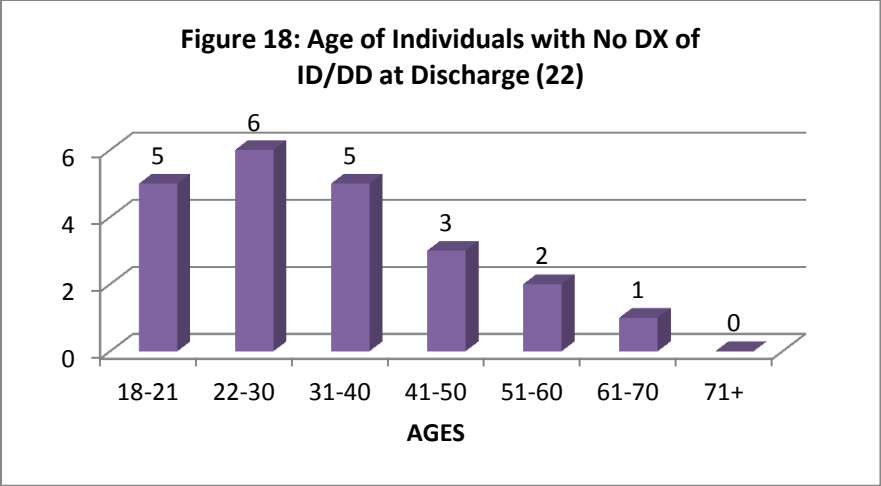
**Individuals discharged with no diagnosis of ID or DD**

Twenty-two (22) individuals who had a diagnosis of ID or DD at admission were discharged without a diagnosis of ID or DD. Figure 17 below presents the length of stay (LOS) for individuals with no diagnosis of ID or another developmental disability at discharge. The most common LOS was 31-60 days, followed by 11-30 days.



Of the 22 individuals discharged with no diagnosis of ID or another developmental disability, 41% (9/22) of these individuals had more than one (1) admission to an MH Hospital.

The ages of individuals discharged with no diagnosis of ID or another developmental disability is presented in Figure 18. As can be seen, approximately the same numbers of individuals were in the 3 youngest age ranges, with 72% (16/22) of individuals age 40 years or younger upon admission.



The residential locations prior to admission and post discharge for individuals discharged with no diagnosis of ID or DD are presented in Table 6. As can be seen, most individuals prior to admission to a state hospital lived in a family-type home (8, 36%) or were transferred from a community psychiatric hospital (8, 36%). Most individuals (11, 50%) were discharged to family-type homes, and there was a significant decrease in people returning to community psychiatric hospital (8 vs 1). More people were discharged to homeless shelters/hotels than were admitted from that location (4 vs 1). Individuals discharged with no diagnosis of ID or DD would not have been involved with REACH because they are not eligible for services due to not having a DD diagnosis.

Table 6: Residential location prior to admission and post discharge for individuals with No DX of DD at Discharge (N=22)

<u>RESIDENTIAL LOCATION</u>	<u>PRIOR TO ADMISSION</u>	<u>DISCHARGED TO</u>
<b>FAMILY TYPE HOMES</b>		
Family home	4	6
Foster Home	0	0
Home of non-relative	1	1
Own home	3	3
Sponsored residential placement	0	0
Supervised Apartment	0	1
<b>Total</b>	<b>8 (36%)</b>	<b>11 (50%)</b>
<b>GROUP HOME</b>		
Group home	0	0
Boarding Home	0	0
<b>Total</b>	<b>0</b>	<b>0</b>
<b>CONGREGATE CARE FACILITY</b>		
Adult living facility	1	2
Assisted Living Facility	0	0

Skilled Nursing Facility	1	0
<b>Total</b>	<b>2 (9%)</b>	<b>2 (9%)</b>
DBHDS FACILITIES		
DBHDS - Transfer	<b>1 (4%)</b>	<b>0</b>
COMMUNITY PSYCHIATRIC HOSPITAL	<b>8 (36%)</b>	<b>1 (4%)</b>
REACH COMMUNITY THERAPEUTIC HOME	<b>0</b>	<b>0</b>
JAIL	<b>2 (9%)</b>	<b>3 (13%)</b>
HOMELESS SHELTER/HOTEL	<b>1 (4%)</b>	<b>4 (18%)</b>
DEATH	<b>0</b>	<b>1</b>
<b>TOTALS</b>	<b>22</b>	<b>22</b>

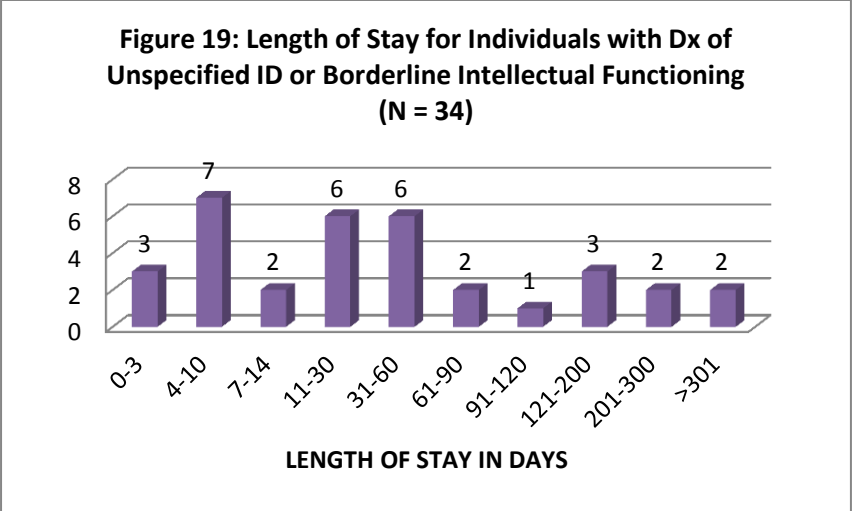
Individuals with no diagnosis of DD at discharge had a variety of psychiatric diagnoses. The majority of individuals (52%; 52/102) had two (2) or more psychiatric diagnoses at discharge. However, 21 individuals had no co-occurring psychiatric diagnosis at discharge. The most common psychiatric diagnoses for individuals who had no DD diagnoses at discharge from a state hospital are presented in Table 7.

Table 7: Most Common MH Diagnoses at Discharge for Individuals with no DX of DD.

<b>MH Diagnoses</b>	<b>Number of diagnosis given to individuals with no DD Dx at discharge from an MH Hospital (N=22)</b>
Personality Disorders	11 (Most common is borderline PD = 7/11)
Schizoaffective Disorders	11 (Most common is bipolar type )
Substance Abuse/Use/Dependence Disorders	18 (Most common are alcohol, cannabis, polysubstance, and nicotine, respectively.
Schizophrenia	5 (Most common are undifferentiated & paranoid type)
Bipolar Disorders	5 (Most common is not otherwise specified, NOS)

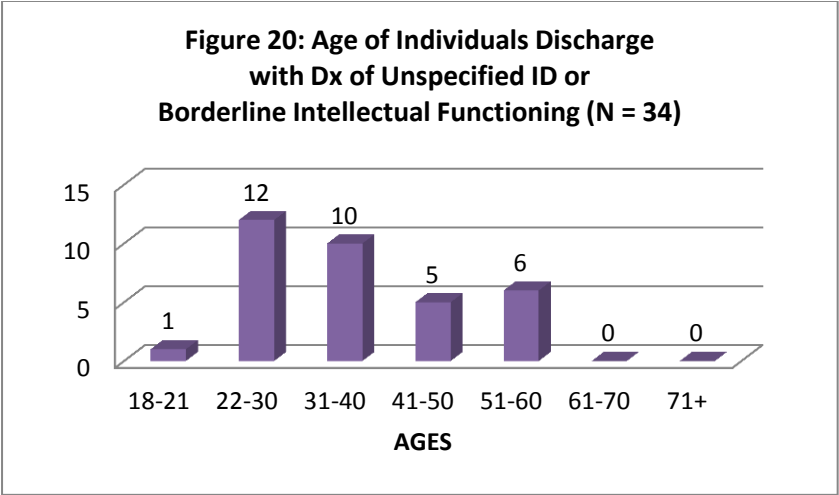
### **Individuals discharged with a diagnosis of Unspecified ID or Borderline Intellectual Functioning**

There were 20 individuals with a discharge diagnosis of unspecified ID and 14 individuals with a discharge diagnosis of borderline intellectual functioning (total combined = 34). Figure 19 below presents the length of stay (LOS) for individuals with a discharge diagnosis of unspecified ID or borderline intellectual functioning. The most common LOS was 4-10 days (7) followed closely by 11-30 days (6) and 31-60 days (6). Twenty-nine percent (29%; 10/34) of individuals had an LOS of 10 days or less.



Thirty-four (34) individuals were discharged with a diagnosis of unspecified ID or borderline intellectual functioning and 26% (9/34) of those individuals had more than one (1) admission to a MH Hospital.

The ages of individuals discharged with a diagnosis of unspecified ID or borderline intellectual functioning are presented in Figure 20. As can be seen, most of these individuals were in the 22-30 age group (12), followed closely by the 31-40 age group (10). Sixty-eight percent of individuals (68%; 23/34) were 40 years or younger, and the oldest was 60 years of age.



The residential locations prior to admission and post discharge for individuals discharged with a diagnosis of unspecified ID or borderline intellectual functioning are presented in Table 8. As can be seen, most of these individuals were at a community psychiatric hospital (11; 32%) or lived in a family-type home (10; 29%) prior to admission to a MH Hospital. The majority of these individuals were discharged to a family-type home (18; 53%), and only one (1) returned to a community psychiatric hospital.

Table 8: Residential location prior to admission and post discharge for individuals discharged with a diagnosis of unspecified ID or borderline intellectual functioning (N= 34)

<u>RESIDENTIAL LOCATION</u>	<u>PRIOR TO ADMISSION</u>	<u>DISCHARGED TO</u>
FAMILY TYPE HOMES		
Family home	8	9
Foster Home	0	1
Home of non-relative	1	1
Own home	1	6
Sponsored residential placement	0	0
Supervised Apartment	0	1
<b>Total</b>	<b>10 (29%)</b>	<b>18 (53%)</b>
GROUP HOME		
Group home	4	5
Boarding Home	0	0
<b>Total</b>	<b>4 (12%)</b>	<b>5 (15%)</b>
CONGREGATE CARE FACILITY		
Adult living facility	3	6
Assisted Living Facility	0	0
Skilled Nursing Facility	0	0
<b>Total</b>	<b>3 (9%)</b>	<b>6 (17%)</b>
DBHDS FACILITIES		
DBHDS - Transfer	1	2
COMMUNITY PSYCHIATRIC HOSPITAL	<b>11 (32%)</b>	<b>1 (3%)</b>
REACH COMMUNITY THERAPEUTIC HOME	<b>0</b>	<b>0</b>
JAIL	<b>4 (12%)</b>	<b>1 (3%)</b>
HOMELESS SHELTER/MOTEL	<b>1 (3%)</b>	<b>1 (3%)</b>
<b>TOTALS</b>	<b>34</b>	<b>34</b>

Individuals with a discharge diagnosis of unspecified ID or borderline intellectual functioning had a variety of psychiatric diagnoses. The majority of these individuals (65%; 22/34) had two (2) or more psychiatric diagnoses at discharge. The most common psychiatric diagnosis for individuals who had unspecified ID or borderline intellectual functioning diagnoses at discharge from an MH Hospital are presented in Table 9.



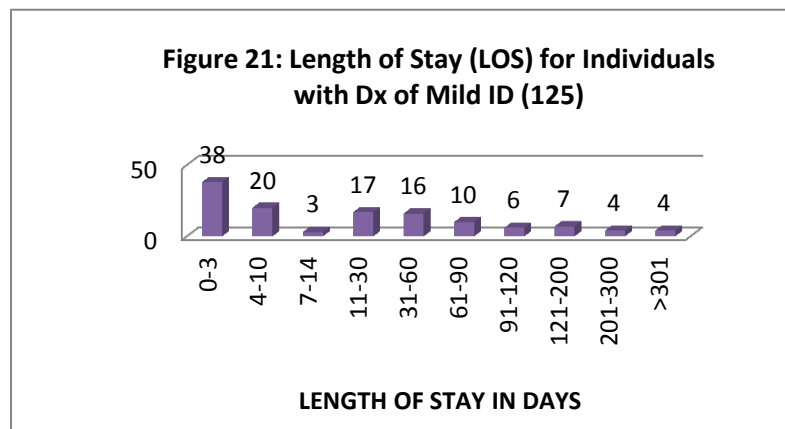
Table 9: Most Common MH Diagnoses at Discharge for Individuals with a Diagnosis of Unspecified ID or Borderline Intellectual Functioning

MH Diagnoses	Number of diagnosis given to individuals with a diagnosis of unspecified ID or borderline intellectual functioning at discharge from an MH Hospital (N=34)
Substance Abuse/Use/Dependence Disorders	12 (Most common are alcohol and cannabis, respectively.)
Personality Disorders	9 (Most common is personality unspecified; of note there were none with a Dx of borderline PD)
Schizoaffective Disorders	9 (Most common is bipolar type )
Schizophrenia	8 (Most common are undifferentiated & paranoid type)
Mood Disorders	8 (Most common is not otherwise specified, NOS)
Impulse Control Disorder	5

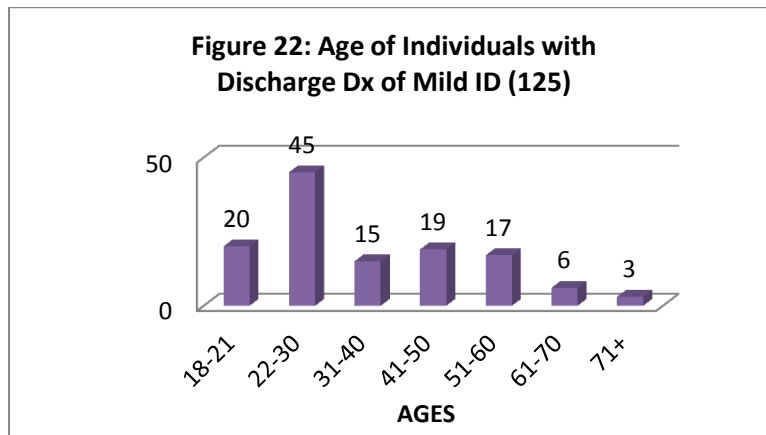
This record review confirmed that substance abuse/use/dependence disorders were never the primary psychiatric diagnosis for an individual and some individuals had more than one substance abuse/use/dependence diagnosis in this category (e.g., both alcohol and cannabis).

**Individuals discharged with a diagnosis of Mild ID**

There were 125 individuals with a discharge diagnosis of mild ID. Figure 21 below presents the length of stay (LOS) for individuals with a discharge diagnosis of mild ID. The most common LOS was 0-3 days (38; 30%), followed by 4-10 days (20; 16%), 11-30 days (17; 14%), and 31-60 days (16; 13%). Almost one-half of the individuals with a discharge diagnosis of mild ID (58; 46%) had a length of stay of 10 days or less. There was a decreasing trend in LOS after 10 days. Of the 125 individuals discharged with a diagnosis of mild ID, 18% (22/125) of these individuals had more than one (1) admission to an MH Hospital.



The ages of individuals discharged with a diagnosis of mild ID are presented in Figure 22. The age groups and prevalence were as follows: 22-30 (45), 18-21 (20), 41-50 (19), 51-60 (17), respectively. Fifty-two percent of individuals (52%; 65/125) were 30 years or younger.



The residential locations prior to admission and post discharge for individuals discharged with a diagnosis of mild ID are presented in Table 10. Most individuals with a diagnosis of mild ID at discharge were at a family-type home (40; 32%), a group home (28; 22%), or a congregate care facility (20; 16%) prior to admission to a state hospital. The majority of individuals were discharged to a family-type home (30; 24%), group home (25; 20%), or congregate care facility (21; 17%). Fewer of these individuals moved back to a family-type home after discharge (40 vs 30), and fewer individuals were also discharged to jail than were admitted from that location (10 vs 5). However, significantly more individuals were discharged to the REACH crisis therapeutic home than were admitted from that location (7 vs 22).

Table 10: Residential location prior to admission and post discharge for individuals discharged with a diagnosis of mild ID (N= 125)

<u>RESIDENTIAL LOCATION</u>	<u>PRIOR TO ADMISSION</u>	<u>DISCHARGED TO</u>
<b>FAMILY TYPE HOMES</b>		
Family home	31	26
Foster Home	1	1
Home of non-relative	0	1
Own home	3	0
Sponsored residential placement	4	1
Supervised Apartment	1	1
<b>Total</b>	<b>40 (32%)</b>	<b>30 (24%)</b>
<b>GROUP HOME</b>		
Group home	28	25
Boarding Home	0	0
<b>Total</b>	<b>28 (22%)</b>	<b>25 (20%)</b>
<b>CONGREGATE CARE FACILITY</b>		

Adult living facility	10	12
Assisted Living Facility	6	7
Skilled Nursing Facility	4	2
<b>Total</b>	<b>20 (16%)</b>	<b>21 (17%)</b>
<b>DBHDS FACILITIES</b>		
DBHDS - Transfer	<b>5 (4%)</b>	<b>7 (6%)</b>
COMMUNITY PSYCHIATRIC HOSPITAL	<b>9 (7%)</b>	<b>12 (10%)</b>
REACH COMMUNITY THEAPEUTIC HOME	<b>7 (6%)</b>	<b>22 (18%)</b>
JAIL	<b>10 (8%)</b>	<b>5 (4%)</b>
HOMELESS SHELTER/HOTEL	<b>6 (5%)</b>	<b>3 (2%)</b>
<b>TOTALS</b>	<b>125</b>	<b>125</b>

Individuals with a discharge diagnosis of mild ID had a variety of psychiatric diagnoses. The majority of individuals (54%; 68/125) had two (2) or more psychiatric diagnoses at discharge. The most common psychiatric diagnoses for individuals who had mild ID at discharge from a state hospital are presented in Table 11.

Table 11: Most Common MH Diagnoses at Discharge for Individuals with a Diagnosis of Mild ID

<b>MH Diagnoses at Discharge</b>	<b>Number of diagnoses given to individuals with a diagnosis of mild ID at discharge from an MH Hospital (N=125)</b>
Schizoaffective Disorders	26 (Most common is bipolar type )
Schizophrenia	23 (Most common are undifferentiated & paranoid type)
Mood Disorders	20 (Most common is not otherwise specified, NOS)
Personality Disorders	15 (Most common is borderline PD)
Psychosis	12 (Most common is not otherwise specified, NOS)
Substance Abuse/Use/Dependence Disorders	10 (Most common are nicotine, alcohol and polysubstance, respectively.)
Adjustment Disorder	8 (Most common is mixed disturbance of emotion & conduct)

Mental health diagnoses across the population appear to be consistent despite the level of intellectual disability.

**CSB Use of State Hospitals for all Individuals in FY15**

Thirty-eight (38) of the 40 CSBs admitted an individual with DD to a state hospital in FY15. Table 12 presents the top 10 CSBs which accounted for 52.0 % (140/269) of the state hospital admissions for individuals with DD.

Table 12: Top Ten CSBs that Admitted Individuals with DD to MH Hospitals in FY15 as compared to population

<b>CSB Provided Case Management to the Individual with DD</b>	<b>Number of Individuals with DD Admitted to State Hospitals</b>	<b>Population (people with I/DD on waiver or waiver waitlist in FY 15)</b>	<b>Percent of Population</b>
Hampton-Newport News	21	865	2.4%
Mt. Rogers	20	415	4.8%
Fairfax-Falls Church	17	2264	0.7%
Region 10	15	464	3.2%
Prince William	13	735	1.8%
Blue Ridge	13	676	1.9%
Norfolk	12	701	1.7%
Western Tidewater	10	374	2.7%
Highlands	10	194	5.2%
Danville-Pittsylvania	9	480	1.9%
<b>TOTAL</b>	<b>140</b>	<b>7168</b>	<b>1.9%</b>

The number of individuals with DD admitted to a state hospital by these CSBs as compared to other CSBs has to be considered in light of population differences. For example, Hampton-Newport News CSB and Fairfax-Falls Church CSB have very large populations as compared to Mt. Rogers CSB, but Mt. Rogers has the second highest number of individuals with DD admitted state hospitals. The high percentage of state hospital use by the Mt. Rogers CSB may suggest a lack of alternative community treatment options, a lack of CSB crisis stabilization use, and/or an over reliance on state hospitals in their region.

*Additional review of current admission patterns as to if significantly different for the regions would be required to determine if regionally specific strategies may be merited or not.\**

Case coordination and communication among CSB MH case management, CSB ID case management, CSB MH discharge planners, and MH Hospital Social Workers are critical to effective crisis management, support coordination, and discharge planning.

Not surprisingly the record reviewer noted that some concern was expressed by state hospital staff that CSB Discharge Planners lacked knowledge of the DD waivers, identification of residential and day activity providers, and whether alternative funding (DAP) could be used or not.

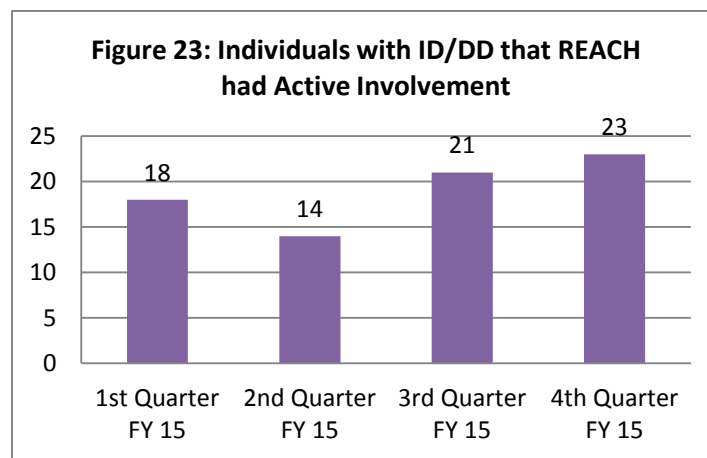
*Additional discussion and vetting to determine if training of discharge planners and state hospital social work staff assure an understanding of supports and services available to people with developmental disabilities, as well as eligibility criteria for these supports, should be targeted in the coming year and what impact may or may not result.\**

### **REACH Involvement and Potential Diversion**

Given that this was a retrospective review, it needs to be noted that DBHDS had recognized the need to ensure REACH was connected with admissions and changed processes. DBHDS established the standard

that if an individual with DD is admitted to a state hospital, REACH is expected to provide clinical consultation, aid in the facilitation of discharge planning, and assist with putting in appropriate supports upon discharge. DBHDS has increased expectations for REACH to be contacted by the CSB pre-screener when their assessment indicates that an individual has DD. REACH is then supposed to go to the location of the prescreening assessment to provide clinical consultation and to determine which REACH services can be provided. If possible, the goal is to divert the individual from a state hospital admission and assist with the necessary supports so the individual can be supported in a less restrictive setting. REACH can also provide a step-down from the state hospital for community stabilization or as a temporary respite until a new community provider is ready.

Figure 23 provides the number of cases from all state hospitals that REACH programs were actively involved with by quarter: (18/66) in the first quarter, 24% of the cases (14/57) in the second quarter, 31% of the cases (21/68) in the third quarter, and 28% of the cases (23/81) in the fourth quarter. Although there was a decrease in REACH activity from the 1<sup>st</sup> quarter to the 2<sup>nd</sup> quarter, a positive trend in REACH activity was noted in the 3<sup>rd</sup> and 4<sup>th</sup> quarters. In addition, for all of FY15, 12% (33/258) of individuals with DD used REACH as a step-down from a state hospital for additional stabilization before moving to an alternative community location.



During the record reviews, it was noted that there was not a standard location source at each hospital to document REACH involvement. Therefore, it is quite possible that REACH was more actively involved than the written documentation would indicate. Table 13 below provides information as to written documentation of REACH involvement found in the treatment records across FY 15 for all state hospitals.

Table 13: Documentation of REACH Activity for each State Hospital Admission in FY15. Using raw numbers and percentages, this table indicates if REACH was actively involved at the time admission or was not actively involved with the individual.

Hospital Admissions N= 269	REACH Active	Percent Active	REACH was not Active	Percent not Active
SVMHI (19)	0	0 %	19	100%
Catawba (15)	3	20 %	12	80 %
SWVMHI (51)	10	20%	41	80 %
ESH (68)	17	25 %	51	75 %
WSH (52)	18	35 %	34	65 %
NVMHI (31)	12	39 %	19	61 %
CSH (33)	15	45 %	18	55 %
TOTAL	75/269	28%	194/269	72%

As noted in Table 13, documentation indicated REACH was not actively involved in 72% of admissions during the time period selected for the review. REACH active involvement ranged from a low of 0% at SVMHI to a high of 45% at CSH. Documented REACH involvement was only found in 28% of total state hospital admissions.

While documentation of REACH involvement was not reported consistently during the time period under review, various factors contributed to this inconsistent reporting, which included:

- The CSB Emergency Services staff who completed the CSB prescreening did not consistently contact REACH, so REACH was unaware of the crisis and pending admission. (This has been addressed through a new requirement of emergency services staff as well as an exceptions reporting process when it does not occur)
- The state hospital staff did not consistently contact REACH after admission, so REACH was unaware of the MH Hospital admission.
- *The MH hospital charts as to where REACH involvement was recorded at time of admission was not standardized between hospitals\**

Part of this retrospective review was to determine if a diversion from a state hospital admission was possible based upon reasons for admission, psychiatric assessments, and other relevant clinical documentation. Table 14 below presents data regarding possible diversions from state hospitals. Based on this review, hospital admission was clinically appropriate for 158 of 269 individuals with DD (59%). 24% of state hospital admissions could have been diverted if the individuals had been connected to community resources (e.g., REACH, CSB crisis stabilization, mobile crisis, in-home supports, PACT Teams, etc.) at the time of these admissions. There was a general lack of documentation in the charts that diversion from state hospital admission was considered using CSB crisis stabilization services, PACT Teams, and REACH Crisis Therapeutic Homes or REACH in-home support.

Table 14: Comparison of Clinically Appropriate State Hospital Admission in FY15

Hospital Admissions N= 269	# of Individuals with DD Who Could Have Been Diverted	% Hospital Diversion that Could Have Occurred	# of Individuals with DD for Whom Clinically Advised	% Hospital Clinically Advised
SVMHI (19)	9	47%	10	53 %
Catawba (15)	5	33 %	10	67 %

SWVMHI (51)	21	41 %	29	57 %
ESH (68)	12	18 %	30	44 %
WSH (52)	7	13 %	40	77 %
NVMHI (31)	5	16 %	19	61 %
CSH (33)	5	15 %	20	61 %
TOTAL	64/269	24 %	158/269	59 %

There are an additional 17% of admissions where it could not be determined if the admission could have been diverted.

**Summary and Recommendations**

Again, it is noted that throughout this document are noted recommendations and questions which when addressed may facilitate the continued development of community services for this population. Specifically, a major conclusion from the review is that a small, but significant number of individuals with a developmental disability will continue to present themselves for crisis support services in the public system. There are short term options which may be put into place, as well as longer term solutions, which can be implemented with the development of some additional treatment models or community based facilities. The recommendations and observations within the report along with the additional questions (reflected in italics and with asterisks) will be reviewed and discussed by the DBHDS internal review committee and incorporated into the development and refinement of current and pending new services. It should be noted that the intent of services is not to restrict the access of individuals to mental health services as needed but to improve the outcomes and reduce disruptions that may result in living in more restrictive settings.

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