An Evaluation of the State of Colorado's Care and Treatment of People with Mental Illness: Title 27, Article 10 (C.R.S. 27-10-101 et seq.)

A Report from the Colorado Department of Human Services

Division of Behavioral Health

Fiscal Year 2009

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Executive Introduction to the Report

This report is the fourth iteration of the Colorado Department of Human Services, Division of Behavioral Health's (DBH) evaluation of the rights-restricted procedures, such as involuntary 72-hour holds and evaluations, provided to individuals with mental illness. The data in this report are for procedures that took place in the State Fiscal Year 2009 (July 1, 2008 – June 30, 2009). In the State Fiscal Year 2009 (FY 2009), 56 facilities were licensed to provide rights-restricted procedures (also known as 27-10 procedures) by DBH. All designated facilities were required to report data on rights-restricted procedures to DBH.

Several limitations (as outlined below) continue to exist for data reporting, collection, and analyses of rights-restricted procedures in Colorado. These problems, which may weaken the integrity of the data, prevent the full use of this data to make concrete conclusion or to confidently inform policy.

DBH provides designated facilities with a standardized data collection tool that includes definitions for required data points. Unfortunately, feedback from several facilities suggests that there is variation in the how each facility interprets the data points. Additionally, the data collection tool is often modified by each individual facility. The end result is that DBH receives approximately 56 differently formatted datasets with information regarding rights-restricted procedures. Lastly, some facilities do not submit any data, submit only partially complete data, and/or are inconsistent with submitting data from year to year despite the State statute that legally requires facilities to do so.

Because of these limitations, DBH presents these data with the strong caution that one should not interpret these data or make any conclusions from these data. Rather, the data are presented to describe and highlight the reported 27-10 procedures that took place in FY 2009. Readers are advised to review these data with extreme caution, taking the serious limitations into consideration.

Facilities have already begun submitting data for FY 2010. In order to increase the reliability and validity of the data, DBH is implementing a process to provide more immediate feedback to each facility on their dataset quality and consistency. Through the use of a standardized State data template and with more immediate feedback, DBH hopes to set clear guidelines for data submission. DBH's eventual goal is to exclude facilities' datasets from analyses if they do not meet the data guidelines. Using only data that are reliable and valid is important for allowing DBH to have confidence in making interpretations and conclusions from the data. Data interpretations and conclusions will increase the usefulness of the information for DBH, certified facilities, and mental health consumers.

Division of Behavioral Health
Data and Evaluation Unit

About this Report

In 2010, the Colorado Division of Behavioral Health (DBH) conducted an evaluation of rights-restricted services (e.g., seventy-two hour evaluation and treatment, seclusions, restraints, etc.) provided to individuals with mental illness in the State Fiscal Year 2009 (July 1, 2008-June 30, 2009). The evaluation project was approached with the following aims:

- Increase the use of a standardized data collection tool, thus increasing the usability of data;
- Collect data using this tool from all 27-10 designated community mental health centers/hospitals/agencies/residential child care facilities (known as facilities in the remainder of this document) that were certified by DBH to provide rights-restricted procedures;
- Evaluate these data to determine feasibility of identifying trends in upcoming years with respect to numbers of particular procedures provided;
- Promote ongoing data collection for future years;
- Revise the data collection tool based upon user feedback.

This report outlines the 27-10 legislation, details the results of the evaluation, method of data collection, problematic issues related to data collection, results and limitations of data analysis, and recommendations for future evaluations of 27-10 procedures.

What is the C.R.S. 27-10-101 et seq. legislation?

The C.R.S. 27-10-101 et seq. legislation (referred to as 27-10 legislation) provides rules and regulations regarding involuntary processes of individuals with mental illness in the State of Colorado. The legislation, originally adopted in 1977, was most recently revised in April 2004 with an effective adoption date of June 2004.

Facilities apply to become licensed by the Colorado Department of Public Health and Environment (CDPHE) and subsequently obtain approval and designation through the Colorado Department of Human Services (CDHS) to provide care under the 27-10 legislation. Facilities submit a formal application to CDHS via the Division of Behavioral Health (DBH) and participate in an on-site evaluation. Facilities are designated for a one-year period and must reapply annually. DBH is responsible for evaluating compliance with the 27-10 statutes, rules and regulations, procedure manual, and has the responsibility of investigating all 27-10 complaints.

Facilities can be designated to provide any or all of the following 27-10 services (See Appendix C for applicable definitions):

- Seventy-two hour treatment and evaluation
- Short-term certification and treatment
- Long-term certification and treatment
- Seclusions
- Restraints
- Involuntary medication management
- Electroconvulsive therapy
- Court-ordered imposition of disability or deprivation of rights
- Services to voluntary patients

All facilities abide by several requirements regarding provision of treatment, notification of clients' rights, provision of advocates, and data reporting, among others.

Data Collection FAQ

Why is reporting data about 27-10 necessary?

Reporting data regarding 27-10 procedures is important for the following reasons:

1. Clients' safety and the facilities' best interests given the sensitive nature of the procedures.
2. The 27-10 statutes require that all 27-10 facilities report data to CDHS annually.
3. DBH is invested in better understanding the overall picture of mental health services in Colorado; these data contribute to that knowledge.
4. DBH is responsible for providing data to the federal government pertaining to 27-10 procedures, upon request.

What types of data does DBH request and how are data collected?

Specific 27-10 service-level data are required including for involuntary seventy-two hour holds, short- and long-term certifications, voluntary patients, involuntary medications, seclusion and restraints, electroconvulsive therapy (ECT), and court-ordered imposition of legal disability or deprivation of a right (see Appendix C for definitions). Within each of these categories are specific data collection requirements including demographic information, procedure date, reason, and outcome of the procedure as well as other information.

Data are collected via an Excel spreadsheet generated by DBH that includes all of the aforementioned required data points/variables. This spreadsheet was distributed to all 27-10 designated facilities and is the current tool for annual data collection and reporting.

When are data requirements due and what is the reporting timeframe?

For the purpose of the State Fiscal Year 2009 (FY 2009) evaluation of 27-10 procedures, data were due August 1, 2009, approximately one month following the end of the Fiscal Year.

How were 27-10 data analyzed? What were the areas of focus in this evaluation?

The data for this specific fiscal year were analyzed in aggregate. Summative information about each category of data, including demographic information, was gathered and is reported in this

report. Ideally, procedural trends by demographic variables would have also been reported. However, the analyses and report were restricted due to multiple problematic data issues (see below); therefore, all data provided in this report should be interpreted with caution.

Data Collection Challenges

This report is the fourth iteration of the DBH 27-10 report. The FY09 data collection procedures were improved from previous years, noted by increased feedback and compliance from designated facilities. Nonetheless, a number of problematic issues were present for this round of data collection.

One critical issue in this data collection was the standardization of data. A total of 48 out of the 56 designated facilities submitted data (85.7%; See Appendix B for a complete summary). A total of 45 sites provided usable data (80.4%). Usable data was defined as facility-reported data on 27-10 procedures in the provided Excel spreadsheet from DBH that needed little or no formatting changes in order to be merged and analyzed with data from other facilities or facilities (n = 2) that reported having no data to submit (3.6%). While DBH had taken efforts to emphasize the use of the standardized data collection tool, some sites continued to submit data in their own electronic formatted files. Additionally, many providers altered the data collection spreadsheet prior to submission, which often required DBH data and evaluation staff to reformat the data to prepare it for analyses. In some instances, the departure from the original format was too significant to be included in the analyses. Such occurrences led to the exclusion of 3 sites (5.4%) in FY 2009, an improvement from FY 2008 when 7 sites were excluded (13%), and FY 2007, when 11 sites were excluded. The trend towards improved standardization of submitted data may indicate that sites were using the provided spreadsheet to collect the data throughout the fiscal year rather than inputting data into it at the end of the fiscal year. In addition, a data dictionary was provided for each variable of each category of 27-10 procedures, increasing the consistency of data entries across facilities.

Even though the consistency of data appeared to increase across facilities for this report, the reliability and validity of submitted data continued to be a problematic issue for FY 2009 data collection. While DBH had taken efforts to include a data dictionary--an attempt to enhance the reporting procedures and accuracy of data across sites--the evaluators received feedback from some facilities of confusion over the definitions. For example, some sites appeared to interpret the spreadsheet variable “Date 27-10 Procedure was Initiated” as the time a person was admitted to the facility rather than the time a 27-10 procedure was administered, even though the data dictionary defined this variable otherwise. It seemed that across providers, interpretations of the requested variables were not the same and some did not match the intentions of the data collection tool. In sum, it was difficult to assert that all data submitted were valid and reliable.

As the 27-10 project continues to evolve, DBH is aware that there may be some additional opportunities for improvements in the tool and is in the ongoing process of collecting feedback on the tool and making adjustments.

Despite these limitations, the following data are presented to describe and highlight the reported 27-10 procedures that took place in FY 2008. Readers should read the report with a very cautious interpretation of the results given the problematic issues in data collection noted above.

Results

Data were analyzed from 45 designated 27-10 facilities (out of a total of 56; 80.4%) across the State of Colorado. Please refer to Appendix A for a complete list of these facilities. As noted in the previous section, readers should read the report with a very cautious interpretation of the results given the problematic issues in data collection.

Holds and Certifications

What follows are data corresponding to 72-hour holds, short-term certifications and long-term certifications. There are 27,252 entries in total (including individuals with multiple certifications and holds) from the 37 designated facilities that reported data on holds or certifications. The first set of tables details information about legal status (see Appendix C for applicable definitions), persons responsible for initiating holds and certifications, reasons for the holds and certifications, and outcomes of the holds and certifications for all 27,252 entries. It is important to note that for some variables, much of the data are missing because the agency did not provide the information with their data submission. Percentages of missing data ranged from 21.9% to 37.2% across different variables.

Regarding legal status, or the reported type of hold or certification that was placed on the consumer, a majority (51.0%) were 72-hour holds. See Table 1 for the distribution of legal status options.

Table 1

Legal Status Distribution

Status	*Percentage*	*Frequency*
Involuntary 72-Hour Hold	51.0	13,891
Voluntary	15.0	4,082
Short-term Certification	9.9	2,691
Extended Short-Term Certification	0.2	52
Long-term Certification	1.8	492
Extended Long-Term Certification	0.3	75
Total Reported	78.1	21,283
Missing	21.9	5,969

Data collected regarding who initiated the hold or certification and the distribution of information are presented in Table 2. Facility-based personnel can include a variety of professionals based on the type of hold or certification. Peace officers and courts may also initiate holds. [See Procedure Manual and *Minimum Standards for the Care and Treatment of the Mentally Ill* (C.R.S. 27-10-101 et seq.) for more detail.]

Table 2

Distribution of Parties Responsible for Initiating Holds or Certifications

Party Responsible	*Percentage*	*Frequency*
Facility-Based Personnel	47.4	12,909
Police	16.7	4,557
Court	0.8	207
Total Reported	64.9	17,673
Missing/Mis-Coded	35.1	9,579

Table 3 presents information about the reported reason for the hold or certification. The "dangerous to self" option is reported as the most common reason for hold or certification (42.5%). Notably, 29.6% of the data are missing. This is a significant improvement from the FY 2007 data, where 49.4% of the data were missing but an increase from FY 2008, where 11.2% of the data were missing.

Table 3

Reason for the Hold or Certification

Reason	*Percentage*	*Frequency*
Dangerous to Self	42.5	11,579
Gravely Disabled	13.9	3,782
Dangerous to Others	4.1	1,118
Dangerous to Self and Others	4.4	1,186
Dangerous to Others and Gravely Disabled	2.1	569
Dangerous to Self and Gravely Disabled	2.3	617
Dangerous to Self, Others and Gravely Disabled	1.2	339
Total Reported	70.4	19,190
Missing/Mis-Coded	29.6	8,062

Persons who have been detained for a 72-hour evaluation and treatment can have a variety of disposition outcomes, including Voluntary, Dropped, Certified, Transferred, Continued, and Court-Ordered Dropped. Voluntary is defined as when an individual elects to engage in treatment nullifying the need for a certification or hold. Dropped is defined as when a 72-hour hold or certification expires or is terminated by a licensed professional. Certified is defined as when a 72-hour hold moves to a short-term certification by a licensed professional. Transferred is defined as when an individual is transferred to another 27-65 designated facility (not to their home). Continued is defined as when a certification is extended (e.g., that a certification moves to an extended short-term certification or extended long-term certification or when an extended

short-term certification moves to a long-term certification). Court-ordered dropped is defined as when a certification is contested in court and the court decides to terminate the certification.

The data for outcomes show that a little over 24% of certifications or holds were transitioned to a dropped status. However, this is the percentage for those outcomes that are reported. Slightly over thirty-seven percent of the data are missing. For the full distribution of outcome options, see Table 4. Again it is necessary to extend caution to readers of this report in interpreting the data included in this report given the multitude of caveats.

Table 4

Distribution of Hold and Certification Outcomes

Outcome	*Percentage*	*Frequency*
Dropped	24.6	6,707
Voluntary	19.5	5,305
Certified	7.1	1,932
Transferred	8.6	2,352
Court-Ordered Dropped	0.3	76
Total Reported	62.8	17,111
Missing/Mis-Coded	37.2	10,141

The following set of tables details information about demographic variables and the numbers of unique or unduplicated clients (n = 15,960) placed on a hold or certification in FY 2009 (i.e., if a client had multiple holds or certifications, only their last hold or certification was included in the following analyses). Missing data for unduplicated data ranged from 13.4% to 30.7% across variables.

Table 5 presents the number of unique holds and certifications represented in the legal status variable. As is evident in the table, the percentage of unique 72-hour holds (58.2%) is higher than the percentage of the total or duplicated set of 72-hour holds (51%). However, the percentage of unique short-term certifications (8.3%) is lower than the percentage of the total or duplicated short-term certifications (9.9%), while the percentage of long-term certifications remained the same for unique or duplicated data (1.8%). With better data integrity in the future, it will be possible to further analyze the demographic aspects of the consumers who require more frequent and intensive treatment.

Table 5

Unduplicated Legal Status Distribution

Status	*Percentage*	*Frequency*
Involuntary 72-Hour Hold	58.2	9,294
Short-term Certification	8.3	1,327

Voluntary	17.8	2,842
Extended Long-Term Certification	0.3	44
Long-term Certification	1.8	288
Extended Short-Term Certification	0.2	27
Total Reported	86.6	13,822
Missing	13.4	2,138

Table 6 describes who initiated the hold or certification for the set of unduplicated clients. The percentage of unique facility-based initiated holds/certifications (58.6%) was higher than for the set of duplicated clients (47.4%). The percentage of unique police initiated holds/certifications (13.7%) was lower than for the set of duplicated clients (16.7%). The percentage of court-initiated holds/certifications was almost the same for unique and duplicated clients (0.9% and 0.8% respectively). Please see Table 2 for more detailed information.

Table 6

Unduplicated Distribution of Parties Responsible for Initiating Holds or Certifications

Party Responsible	*Percentage*	*Frequency*
Facility-Based Personnel	58.6	9,349
Police	13.7	2,180
Court	0.9	139
Total Reported	73.1	11,668
Missing/Mis-Coded	26.9	4,292

Table 7 presents information about the reported reason for the hold or certification for the unduplicated set of consumers who are placed on a hold or certification. Dangerous to self is the most common reason (49.8%), which represents an increase compared to the total number of reported holds or certifications being a danger to self (42.5%).

Table 7

Unduplicated Reason for the Hold or Certification

Reason	*Percentage*	*Frequency*
Dangerous to Self	49.8	7,946
Gravely Disabled	14.6	2,323
Dangerous to Others	4.1	652
Dangerous to Self and Others	4.4	698
Dangerous to Others and Gravely Disabled	2.2	356

Dangerous to Self and Gravely Disabled	2.7	428
Dangerous to Self, Others and Gravely Disabled	1.0	166
Total Reported	78.8	12,572
Missing/Mis-Coded	21.2	3,388

The outcome data of the hold for the set of unduplicated consumers show that 30.5% of individuals with certification or holds are transitioned to a dropped status, which is a decrease in comparison to the 24.6% of duplicated cases with a dropped outcome. For the full distribution of unduplicated outcome options, see Table 8.

Table 8

Distribution of Unduplicated Hold and Certification Outcomes

Outcome	*Percentage*	*Frequency*
Dropped	30.5	4,860
Voluntary	23.5	3,757
Certified	7.4	1,184
Transferred	9.6	1,537
Court-Ordered Dropped	0.4	61
Continued	1.8	289
Total	73.2	11,688
Missing	26.8	4,272

Regarding demographics for the consumers who have a hold or a certification, 48.8% are female, compared to 51.2% males. The ethnic distribution is presented in Table 9.

Table 9

Ethnic Distribution of Consumers with Holds and Certifications

	Unique Consumers	
Ethnicity	*Percentage*	*Frequency*
African American	5.2	836
American Indian/Alaskan Native	0.7	118
Asian/Pacific Islander	0.9	148
Hispanic	12.4	1,973
Other	2.3	370
White/Caucasian	59.7	9,536

Total Reported	81.3	12,981
Missing	18.7	2,979

Tables 10 and 11 present information about the reported age distribution of clients with certifications and holds in FY 2009. Both bifurcated and grouped age distributions are presented for clients with certifications and holds in order to provide a clearer picture of the consumers who undergo 27-10 procedures. As with all of the data, readers should interpret the age distribution tables with caution, as it is unclear that facilities accurately and consistently report date of birth and/or date of the initial 27-10 procedure.

Table 10

Bifurcated Age Distribution of Consumers with Holds and Certifications

	Unique Consumers	
Age Group	*Percentage*	*Frequency*
Under 18	9.1	1,452
Over 18	60.2	9,614
Total Reported	69.3	11,066
Missing	30.7	4,894

Table 11

Age Distribution of Consumers with Holds and Certifications

	Unique Consumers	
Age Group in Years	*Percentage*	*Frequency*
0-5	0.2	34
6-11	1.2	196
12-17	7.7	1,222
18-25	11.6	1,855
26-59	41.7	6,649
60+	7.0	1,110
Total Reported	69.3	11,066
Missing	30.7	4,894

Seclusions and Restraints

The following data correspond to seclusions and restraints. There were 5,413 entries in total (including individuals with multiple seclusions and restraints) from 16 designated facilities. Percentages of missing seclusion and restraints data ranged from 0.1% to 14.9%.

The majority (46.4%) of the 5,413 entries were seclusions while 35.1% were restraints and 18.3% were a combination of seclusions and restraints.

An unduplicated descriptive analysis was also conducted to determine the number of unique consumers requiring a seclusion and/or restraint (n = 1,278) as well as the demographic composition of these consumers. Approximately 38.5% of these unique consumers experienced a seclusion, 36.9% required a restraint and the remaining 24.3% of unduplicated consumers required a combination seclusion and restraint procedure. See Table 12 for a comparison of the total or duplicated number of seclusions and restraints to the number of unique consumers requiring a seclusion and/or restraint.

Table 12

Comparison of Duplicated and Unduplicated Seclusions and Restraints.

	Total Seclusions and Restraints	Unique Consumers Requiring Seclusions and Restraints
Type	*Percentage (Frequency)*	*Percentage (Frequency)*
Restraint	35.1 *(1902)*	38.5 *(492)*
Seclusion	46.4 *(2509)*	36.9 *(471)*
Seclusion and Restraint	18.3 *(989)*	24.3 *(310)*
Total Reported	99.8 *(5400)*	99.6 *(1273)*
Missing	0.2 *(13)*	0.4 *(5)*

Regarding demographics for the unduplicated or unique consumers requiring a seclusion or restraint, 34.3% were female and 65.7% were male. Ethnic distribution is presented in Table 13.

Table 13

Ethnic Distribution of Consumers Requiring Seclusions and Restraints

	Unique Consumers	
Ethnicity	*Percentage*	*Frequency*
African American	13.1	167
American Indian/Alaskan	0.5	7
Asian/Pacific Islander	0.8	10
Hispanic	18.2	232
Other	5.7	73
White/Caucasian	58.1	742
Total Reported	96.3	1,231
Missing	3.7	47

Tables 14 and 15 present information about the age distribution of consumers with seclusion and/or restraints. Again, bifurcated and grouped age distributions are provided for consumers.

Table 14

Bifurcated Age Distribution of Consumers with Seclusions and Restraints

	Unique Consumers	
Age Group	*Percentage*	*Frequency*
Under 18	23.9	306
Over 18	61.2	782
Total Reported	85.1	1,088
Missing	14.9	190

Table 15

Age Distribution of Consumers with Seclusion and Restraints

	Unique Consumers	
Age Group in Years	*Percentage*	*Frequency*
0-6	0.4	5
6-11	7.9	101
12-17	15.6	200
18-25	16.6	212
26-59	39.1	500
60+	5.5	70
Total Reported	85.1	1,088
Missing	14.9	190

Involuntary Medications

What follows are data corresponding to involuntary psychiatric medication administrations. There were 2,425 entries in total (including individuals with multiple orders for involuntary medications) from 23 designated facilities. An unduplicated descriptive analysis was also conducted to determine the number of unique consumers receiving involuntary (court-ordered or emergency) psychiatric medication (n = 697) as well as the demographic composition of these consumers. Approximately 53.9% of these consumers received involuntary psychiatric medications on an emergency basis, and 36.3% were court ordered to take psychiatric medications. See Table 16 for a comparison of the total or duplicated number of involuntary psychiatric medication received to the number of unique consumers who received involuntary psychiatric medication.

Although percentages for unduplicated and duplicated orders for involuntary psychiatric medications appear to differ significantly, it is difficult to determine if this is a true difference or due to missing data. Percentages of missing data ranged from 5.5% to 34.3% across different variables. Data should be interpreted with caution accordingly.

Table 16

Comparison of Duplicated and Unduplicated Types of Involuntary Medication Order

Type	Total Involuntary Medication Orders	Unique Consumers Requiring Involuntary Medications
	Percentage (Frequency)	*Percentage (Frequency)*
Emergency	76.9 *(1866)*	53.9 *(376)*
Court Ordered	17.5 *(425)*	36.3 *(253)*
Total Reported	94.5 *(2291)*	90.2 *(629)*
Missing	5.5 *(134)*	9.8 *(68)*

Regarding demographics for the unduplicated or unique consumers requiring involuntary medication orders, 47.1% were female and 52.5% were male. Ethnic distribution is presented in Table 17.

Table 17

Ethnic Distribution of Consumers Requiring Involuntary Medication Orders

	Unique Consumers	
Ethnicity	*Percentage*	*Frequency*
African American	9.2	64
American Indian/Alaskan	0.4	3
Asian/Pacific Islander	1.1	8
Hispanic	11.5	80
Other	6.3	44
White/Caucasian	57.4	400
Total Reported	85.9	599
Missing	14.1	98

Tables 18 and 19 present information about the age distribution of consumers receiving involuntary psychiatric medications. Again, bifurcated and grouped age distributions are provided for consumers.

Table 18

Bifurcated Age Distribution of Consumers with Involuntary Medication Orders

	Unique Consumers	
Age Group	*Percentage*	*Frequency*
Under 18	3.7	26
Over 18	62.0	432
Total Reported	65.7	458
Missing	34.3	239

Table 19

Age Distribution of Consumers with Involuntary Medication Orders

	Unique Consumers	
Age Group in Years	*Percentage*	*Frequency*
0-5	0	0
6-11	0.6	4
12-17	3.2	22
18-25	12.1	84
26-59	41.0	286
60+	8.9	62
Total Reported	65.7	458
Missing	34.3	239

Electroconvulsive Therapy (ECT)

Five facilities provided data on electroconvulsive therapy (ECT), including consumer demographics, and those data are presented below. However, the number of instances and individuals reported for FY 2009 was higher than those reported in FY 2008 and significantly lower than those reported in FY 2007. It is unclear whether this fluctuation is due to lack of reporting by facilities or to true changes in the number of ECT instances over the years.

Overall, 653 instances of ECT for 181 individuals were reported to DBH for FY 2009 (compared to 453 instances of ECT for 30 individuals reported to DBH in FY 2008 and to 2,941 instances for 341 individuals reported in FY 2007). Regarding demographics for the unduplicated or unique consumers receiving ECT, 63.5% were female and 27.1% were male. Although ethnic distribution is presented in Table 20, a notably high percentage of the data is missing (87.3%). Because of this, caution is advised when interpreting this data.

Table 20

Ethnic Distribution of Consumers Undergoing ECT

	Unique Consumers	
Ethnicity	*Percentage*	*Frequency*
African American	0	0
American Indian/Alaskan	2.8	5
Asian/Pacific Islander	6.6	12
Hispanic	0.6	1
Other	0	0
White/Caucasian	2.8	5
Total Reported	12.7	23
Missing	87.3	158

Tables 21 and 22 present information about the age distribution of consumers receiving ECT. Again, bifurcated and grouped age distributions are provided for consumers.

Table 21

Bifurcated Age Distribution of Consumers Receiving Electroconvulsive Therapy (ECT)

	Unique Consumers*	
Age Group	*Percentage*	*Frequency*
Under 18	0	0
Over 18	99.4	180
Total Reported	99.4	180
Missing	0.6	1

Table 22

Age Distribution of Consumers Receiving Electroconvulsive Therapy (ECT)

	Unique Consumers*	
Age Group in Years	*Percentage*	*Frequency*
0-5	0	0
6-11	0	0
12-17	0	0
18-25	5.0	9
26-59	70.2	127
60+	24.3	44
Total Reported	99.4	180
Missing	0.6	1

Court-Ordered Imposition of Disability or Deprivation of Rights

Data were provided from four facilities on court orders for imposition of legal disability or the deprivation of a right including consumer demographics (see Appendix C for definitions). Overall, 58 instances of these court orders were reported to DBH for FY 2009. The number of consumers who received these court orders totaled 29. The number of court orders for FY 2009 was slightly higher than FY 2008 and was significantly reduced from FY 2007. It is unclear whether this change is due to changes in reporting by facilities or to an actual change in the number of court orders. Regarding demographics for the unduplicated or unique consumers being issued a court order, 65.5% were female and 34.5% were male. Ethnic distribution is presented in Table 23 and Age Distribution is presented in Tables 24 and 25.

Table 23

Ethnic Distribution of Consumers Who are Under a Court Order for Imposition of Legal Disability or the Deprivation of a Right

	Unique Consumers	
Ethnicity	*Percentage*	*Frequency*
African American	6.9	2
American Indian/Alaskan	0	0
Asian/Pacific Islander	0	0
Hispanic	17.2	5
Other	0	0
White/Caucasian	75.9	22
Total Reported	100	29
Missing	0	0

Table 24

Bifurcated Age Distribution of Consumers Who are Under a Court Order for Imposition of Legal Disability or the Deprivation of a Right

	Unique Consumers	
Age Group	*Percentage*	*Frequency*
Under 18	0	0
Over 18	96.6	28
Total Reported	96.6	28
Missing	3.4	1

Table 25

Age Distribution of Consumers Who are Under a Court Order for Imposition of Legal Disability or the Deprivation of a Right

	Unique Consumers	
Age Group in Years	*Percentage*	*Frequency*
0-5	0	0
6-11	0	0
12-17	0	0
18-25	13.8	4
26-59	72.4	21
60+	10.3	3
Total Reported	96.6	28
Missing	3.4	1

Recommendations

Given the large number of caveats peppered throughout the above report, it is important to describe several recommendations that aim to improve the data collection process and improve the integrity of future data. The recommendations are as follows:

1. DBH will strive for increased collaboration with facilities to help streamline the data collection process and increase the number of facilities who participate. Collaboration will encourage continued facility feedback to improve the data collection process.
2. The data collection tool will be improved by way of consolidating data to include only necessary and required data. Improvements are also recommended to allow for ease of use for both the facility user and the analyst; specifically, the tool ideally will be comprehensive and self-explanatory and will circumvent the need for the user to manipulate the form to meet their needs, which was problematic in this year's evaluation.
3. Forty-six facilities submitted data for 27-10 procedures during FY 2009. However, data from 43 facilities were accepted to be included in the analyses because they needed little or no modification to be analyzed with data from other facilities. DBH will work towards developing clear criteria for including or not including data from facilities to make this process transparent. DBH will continue to provide feedback to the facilities on the quality of their submitted data. Facilities could use this information to improve their data collection and reporting for 27-10 procedures for the following fiscal year.

Summary

This report reflects the evaluation DBH conducted of rights-restricted services provided to individuals with mental illness in the State Fiscal Year 2009 (July 1, 2008-June 30, 2009). This is the fourth year that data were formally collected in an effort to investigate trends of rights-

restricted procedures across all certified 27-10 facilities and to promote ongoing data collection in future years. The data are presented to describe and highlight the reported 27-10 procedures that took place in FY 2009. However, given the limitations of the data presented in this report, readers should read the report with a very cautious interpretation of the results.

Several problems are observed in this process, including the inconsistent use of the most recently updated DBH-generated data collection tool, which led to a limited ability to analyze and interpret the submitted data. Slightly more than 14% of facilities that submitted data are excluded from the data analyses because the departure of the data from the provided Excel spreadsheet format was too great. Fortunately, a higher number of facilities submitted appropriately formatted data in FY 2009 when compared to FY 2008 and FY 2007. However, facilities continue to struggle with submitting properly formatted data required by the 27-10 statutes. For some 27-10 procedures, significant amounts of required data are not provided. As more facilities use the data collection tool as their primary way of recording data related to 27-10 procedures, it is hoped that data collection and reporting will become more streamlined, benefiting both the facilities and DBH. Another essential component to this process is collaboration between DBH and designated facilities.

The 27-10 statutes mandate data submission on rights-restricted procedures. Facilities that are certified to provide these procedures are made aware of the data submission requirement. DBH will continue to work with facilities to improve their data submission and compliance with 27-10 mandates.

Although the amount and quality of submitted data increased from FY 2007 to FY 2008 to FY2009, a number of limitations and caveats pertain to the interpretation of the data. Therefore, only descriptive analyses are conducted and the following results should be interpreted with caution. With respect to holds and certifications, a total of 27,252 holds and certifications are represented in the data collected by DBH. In many cases, one consumer has multiple holds or certifications; when these duplications are accounted for, there are 15,960 unique individuals who are placed on a hold or certification. There are 5,413 seclusions and restraints in the total data set (including consumers with multiple procedures). When duplicate cases are removed from the analyses, a total of 1,278 unique clients requiring a seclusion and restraint remain. The number of instances of consumers receiving involuntary psychiatric medications reported total 2,425 with 697 unique consumers receiving these medications one or several times. Regarding ECT, 653 episodes of treatment are noted for 181 individuals. The ECT data is especially questionable, as FY 2009 data are significantly different from FY 2008 and FY 2007. It is unclear whether this is due to inconsistent reporting by facilities that provide ECT or an actual change in ECT instances. This issue is also present for court orders for imposition of legal disability or deprivation of a right (58 reported issued to 29 individuals).

It is recommended that the data collection tool be improved and collaboration with facilities be expanded to allow for a more successful data collection process. Although this year's evaluation is fraught with limitations, it marks an important step toward collecting complete, informative data about involuntary processes and rights-restricted procedures for mental health consumers in the State of Colorado. In the future, DBH will ideally have the ability to identify trends with respect to 27-10 procedures and demographic variables. This information is vital to having comprehensive, reliable information about the services that are being provided to individuals of mental health services in Colorado.

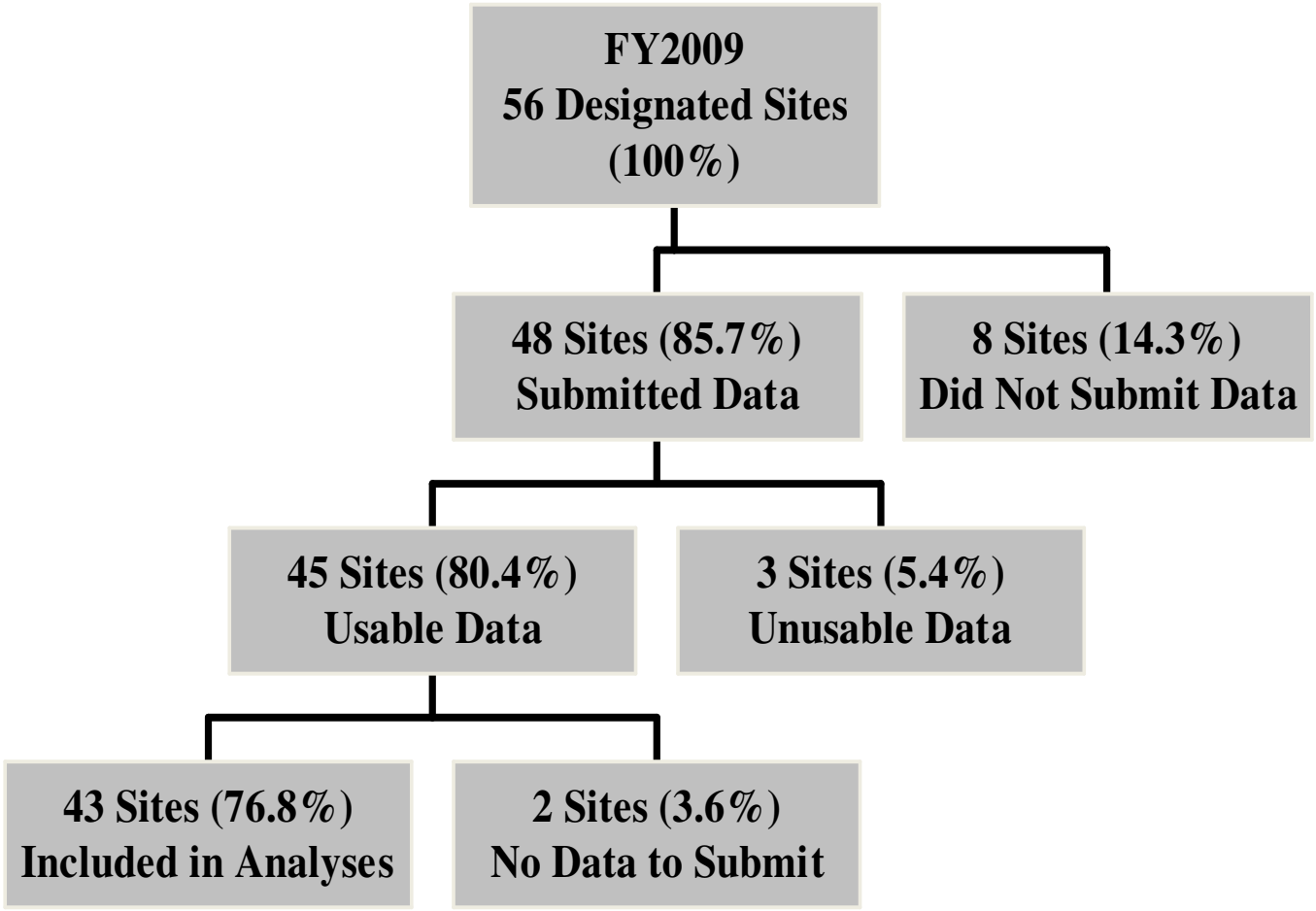
APPENDIX A

LEVELS OF PARTICIPATION BY 27-10 DESIGNATED FACILITY IN FY 2009 DATA COLLECTION[1]

[1] Data submitted includes facilities that informed DBH that they had no data to submit, meaning that they did not perform any 27-10 procedures in FY 2009. Data not submitted includes one facility that went out of business.

Facility	Data Submitted and Included in Analysis	Data Submitted but Not Included in Analysis	Did Not Submit Data
Adolescent and Family Institute of Colorado, Inc	X		
Arapahoe/Douglas Mental Health Network	X		
Aspire Behavioral Health of Colorado, LLC			X
Aurora Comprehensive Community Mental Health Center	X		
Boulder Community Hospital	X		
Cedar Springs Behavioral Health System	X		
Centennial Mental Health Center	X		
Centennial Peaks Hospital or Flatirons Behavioral Health Corp	X		
Children's Ark			X
Colorado Boys Ranch or CBR Youthconnect	X		
Colorado Mental Health Institute at Fort Logan	X		
Colorado Mental Health Institute at Pueblo	X		
Colorado West Regional Mental Health Center	X		
Community Reach Center	X		
Crossroads	X		
Denver Health Medical Center/Division of Psychiatric Services	X		
Devereux Cleo Wallace Center	X		
Exempla Saint Joseph Hospital		X	
Exempla West Pines	X		
Haven Behavioral Services of Pueblo	X		
HealthONE, Presbyterian Saint Luke's Medical Center		X	
Highlands Behavioral Health System			X
Jefferson Center for Mental Health	X		
Jefferson Hills – Aurora			X
Jefferson Hills – Lakewood			X
Larimer Center for Mental Health	X		
Longmont United Hospital	X		
Medical Center of Aurora TMCA (Gero-Psychiatric Unit)	X		
Mental Health Center of Boulder and Broomfield Counties	X		
Mental Health Center of Denver			X
Midwestern Colorado Mental Health Center	X		
Mountain Star (CMHI at Ft. Logan)	X		
NCMC Behavioral Health	X		
North Range Behavioral Health	X		
North Valley Rehabilitation Hospital	X		
Parkview Medical Center	X		
Penrose-St. Francis Health Services			X
Pikes Peak Mental Health Center	X		
Porter Adventist Hospital	X		
Presbyterian Saint Luke's Medical Center		X	
PVHS/Mountain Crest	X		
San Luis Valley Comprehensive	X		
Savio House	X		
Southeast Mental Health Services	X		
Southwest Colorado Mental Health Center/Axis Health Sys	X		
Spanish Peaks Mental Health Center	X		
St. Anthony Central Hospital Systems	X		
St. Anthony North Hospital Systems	X		
St. Anthony Summit Hospital Systems	X		
St. Mary-Corwin	X		
The Children's Hospital	X		
University of Colorado Hospital – Emergency Dept.	X		
VA Medical Center (DENVER)			X
VA Medical Center (Grand Junction)	X		
West Central Mental Health Center	X		
West Slope Mental Health Stabilization Center	X		

APPENDIX B
SUMMARY OF PARTICIPATION OF DESIGNATED FACILITIES IN FY2009 27-10 DATA SUBMISSION



APPENDIX C
DEFINITIONS RELATED TO 27-10 PROCEDURES

The following definitions relevant to 27-10 procedures are taken from the Procedure Manual and *Minimum Standards for the Care and Treatment of Persons with Mental Illness* (2 CCR 502-1).

Court means the district court in the county in which the person resides or was physically present immediately prior to being taken into custody. In the City and County of Denver, the court means the probate court.

Deprivation of Legal Right or Imposition of Legal Disability

1. If a person has a mental illness and is a danger to himself or others, or is gravely disabled or insane as defined in Section 16-8-101, C.R.S., and is not subject to a 72-hour hold or short-term certification, any interested person may petition the court in the county where the person lives (Form M-23) to request that:
    a. A specific legal right be deprived, or
    b. A specific legal disability be imposed.
2. The court or jury must find both that the person has a mental illness and is a danger to self or others or is gravely disabled; and that the loss of a right is both necessary and desirable.
3. The burden of proof is on the person seeking to have an imposition placed on another person to meet the above requirements by clear and convincing evidence.
4. The deprivation of a right or imposition of a legal disability lasts six (6) months and can be reaffirmed for another six (6) months if that is justified.

Designated Facility means a facility approved by the Colorado Department of Human Services pursuant to the provisions of the Care and Treatment of the Mentally Ill Act, C.R.S. 27-10-101, et seq.

Facility means a public hospital or a licensed private hospital, clinic, community mental health center or clinic, institution, sanitarium or residential child care facility (RCCF) that provides treatment for persons with mental illness.

Gravely Disabled means a condition in which a person, as a result of mental illness, is in danger of serious physical harm due to his/her inability or failure to provide him/herself the essential human needs of food, clothing, shelter, and medical care; or lacks judgment in the management of his/her resources, and in the conduct of his/her social relations, to the extent that his/her health or safety is significantly endangered and lacks the capacity to understand that this is so. Please refer to C.R.S. 27-10-102 for the complete statutory definition. This term shall not include persons with mental retardation by reason of their retardation alone.

Involuntary Medication means psychiatric medication administered without a person's consent.

Mechanical Restraint means a physical device used to involuntarily restrict the movement of an individual or the movement or normal function of a portion of his or her body. Types of mechanical restraints include, but are not limited to: restraint sheets, camisoles, belts attached to cuffs, leather armlets, restraint chairs, and shackles.

Physical restraint means the use of bodily, physical force to involuntarily limit an individual's freedom of movement, except that "physical restraint" does not include the holding of a child by one adult for the purpose of calming or comforting the child.

Seclusion means the confinement of a person alone in a room from which egress is prevented. Seclusion does not include the placement of patients, who are assigned to an intake unit in a secure treatment facility in locked rooms during sleeping hours pursuant to Section 19.312 of these regulations.

Therapy or treatments using special procedures means a therapy that requires an additional, specific consent, including electro-therapy treatment (electro-convulsive therapy), and behavior modifications using physically painful, aversive, or noxious stimuli.

Voluntary is any person who makes a voluntary application at any time to any public or private facility or mental health professional for mental health services, either by direct application in person or by referral from any other public or private facility or professional person. "A ward may be admitted to a hospital or institutional care and treatment for mental illness by consent of the guardian for so long as the ward agrees to such care and treatment. Within ten days of any such admission of the ward for such hospital or institutional care and treatment, the guardian shall notify in writing the court which appointed the guardian of the admission."