

An Evaluation of the State of Colorado's Care and Treatment of the Mentally Ill: Title 27, Article 10 (CSR 27-10-101)

A Report from the Colorado Department of Human Services

Division of Behavioral Health



Prepared by the Division of Behavioral Health, Data and Evaluation Section

Executive Introduction to the Report

This report is the second iteration of the Colorado Division of Behavioral Health's evaluation of the rights-restricted procedures, such as 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 2007 (July 1, 2006 – June 30, 2007). In the State Fiscal Year 2007, 55 facilities chose to become certified to provide rights-restricted procedures (also known as 27-10 procedures) by the Division of Behavioral Health (DBH). Among other requirements, all certified facilities are required to report data on rights-restricted procedures to DBH.

A number of problematic issues exist in terms of data reporting, collection, and analyses for rights-restricted procedures in Colorado. DBH provides certified facilities with a standardized data collection tool with definitions. Even with definitions, it appears that facilities do not interpret the data points consistently, affecting the reliability and validity of the data. In addition, the data collection tool can be modified and often is by each individual facility. The end result is that DBH receives approximately 55 differently formatted datasets with information regarding rights-restricted procedures. Moreover, a majority of the facilities do not provide complete data. In fact, for some data points, over half of the data are missing. Lastly, some facilities do not submit any data.

As outlined above, there are serious limitations to the data presented in this report. DBH presents this 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 2007. Readers are advised to review these data with extreme caution, taking the serious limitations into consideration.

Most facilities have already submitted data for FY 2008. DBH strives to give feedback to each facility on the quality and consistency of their datasets. Providing this feedback will allow facilities to make adjustments to data to increase the reliability and validity of the data for subsequent fiscal years. In addition, DBH plans to set clear guidelines for data submission. If facilities' datasets do not meet the guidelines, that data will not be included in the analyses. Using only data that are reliable and valid will allow 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.



David Menefee, Ph.D.
Director of Data and Evaluation

About this Report

In 2008, 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 2007 (July 1, 2006-June 30, 2007). 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 mental health centers/hospitals/agencies/residential child care facilities (known as facilities in the remainder of this document) who were certified by DBH to provide rights-restricted procedures;
- Analyze these data to identify trends 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 CSR 27-10-101 legislation?

The 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 certification 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 onsite 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 services (See Appendix B 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?

Data reporting is necessary for multiple reasons. Tracking 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 federal government poses questions to DBH pertaining to 27-10 procedures. In order to answer these questions, data from all of the facilities have to be analyzed. **3.** DBH is invested in better understanding the overall picture of mental health services in Colorado; these data contribute to that knowledge. **4.** The 27-10 statutes require that all 27-10 facilities report data to CDHS annually.

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

Specific data are required for 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. 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 with drop-down answer options corresponding to each variable. This spreadsheet was distributed to 27-10 designated facilities and remains 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 2007 (FY 2007) evaluation of 27-10 procedures, data were accepted on a rolling basis in order to collect and include as much data from 27-10 facilities as possible. These procedures were also continued for FY 2008 data collection. However, DBH requests that for Fiscal Year 2009, data be reported by July 31, 2009.

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. For the purposes of this report, summative information is provided regarding all of the designated 27-10 procedures (72-hour holds, short- and long-term certifications, seclusions, restraints, involuntary medications, electroconvulsive therapy, and court-ordered imposition of disability or deprivation of a right). 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 second iteration of the DBH 27-10 report. It reflects significant improvements from the FY06 report. The FY06 report was hampered by several data collection challenges including low/inconsistent data submission. Even though the FY07 report is improved, a number of problematic issues remain for this round of data collection.

One critical issue in this data collection was the standardization of data. While 42 out of the 55 designated facilities submitted data (76%), only 31 sites provided usable data (56%). 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 analyzed with data from other facilities. 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 or paper files. Additionally, many providers altered the data collection spreadsheet prior to submission, which often required DBH data and evaluation staff to spend a significant amount of time reformatting 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 11 sites (26%). Fortunately, the number of excluded sites was significantly improved from FY 2006, when 24 sites were excluded. Greater standardization of submitted data could 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 2007 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 encountered numerous occurrences of confusion regarding 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 from facility to facility.

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. (Please contact DBH with any of these concerns.)

Despite these limitations, the following data are presented to describe and highlight the reported 27-10 procedures that took place in FY 2007. 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 31 designated 27-10 facilities (out of a total of 55; 56%) 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.

72 hour holds, Short-term certifications, Long-term certifications

What follows are data corresponding to 72-hour holds, short-term certifications and long-term certifications. There are 17,583 entries in total (including individuals with multiple certifications and holds) from the 28 designated facilities that reported data on holds or certifications. The first set of tables details information about legal status (see Appendix B 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 17,583 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 4.9% to 54.5% across different variables.

Regarding legal status, or the reported type of hold or certification that was placed on the consumer, a majority (55.1%) were 72-hour holds. See Table 1 for the distribution of legal status options.

Table 1

Legal Status Distribution

Status	<i>P</i>	<i>n</i>
Involuntary 72-Hour Hold	55.1	9,215
Voluntary	23.4	3,914
Short-term Certification	14.3	2,387
Long-term Certification	4.2	697
Extended Long-Term Certification	2.2	372
Extended Short-Term Certification	.8	134
Total Reported	100.0	16,719
Missing	4.9	864

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 Persons with Mental Illness* (2 CCR 502-1) for more detail.)

Table 2

Distribution of Parties Responsible for Initiating Holds or Certifications

Party Responsible	<i>P</i>	<i>n</i>
Facility-Based Personnel	77.8	7,221
Police	18.9	1,752
Court	3.3	306
Total Reported	100.0	9,279
Missing	47.2	8,304

Table 3 presents information about the reported reason for the hold or certification. The “dangerousness to self” option is reported as the most common reason for hold or certification (63.9%). For this year’s evaluation, the options provided for the reason for hold or certification were expanded upon those provided in FY 2006, based on feedback from facilities. However, even with the more expansive set of options, 49.4% of the data are missing.

Table 3

Reason for the Hold or Certification

Reason	<i>P</i>	<i>n</i>
Dangerous to Self	63.9	5,692
Gravely Disabled	23.2	2,062
Dangerous to Others	5.6	502
Dangerous to Self and Others	2.3	202
Dangerous to Self and Gravely Disabled	2.0	176
Dangerous to Others and Gravely Disabled	1.7	147
Dangerous to Self, Others and Gravely Disabled	1.4	124
Total Reported	100.0	8,905
Missing	49.4	8,678

Persons who have been detained for a 72-hour evaluation and treatment can have a variety of disposition outcomes. The data for outcomes show that almost 40% of certifications or holds were transitioned to a voluntary status. However, this is the percentage for those outcomes that are reported. Fifty-four 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	<i>P</i>	<i>n</i>
Voluntary	38.5	3,087
Dropped	26.0	2,081
Certified	22.6	1,811
Transferred	12.8	1,029
Court-ordered Dropped	0.0	1
Total Reported	100.0	8,009
Missing	54.5	9,574

The following set of tables details information about demographic variables and the numbers of unique or unduplicated clients ($n = 11,954$) placed on a hold or certification in FY 2007 (i.e., if a client had multiple holds or certifications, only their last hold or certification was included in the following analyses).

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 (64.9%) is somewhat higher than the percentage of the total or duplicated set of 72-hour holds (55.1%). It is notable that the percentage of unique short-term and long-term certifications (12.7%) is lower than the percentage of the total or duplicated set of certifications (21.5%). It can be deduced that several consumers had multiple 27-10 procedures and often these interactions progressed with respect to length of stay (as determined by a larger percentage of certifications when multiple client cases were included in the analysis). 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	<i>P</i>	<i>n</i>
Involuntary 72-Hour Hold	64.9	7,287
Voluntary	22.4	2,519
Short-term Certification	7.2	813
Long-term Certification	3.2	359
Extended Long-Term Certification	1.9	211
Extended Short-Term Certification	.4	45
Total Reported	100.0	11,234
Missing	6.0	720

Table 6 describes who initiated the hold or certification for the set of unduplicated clients. The percentage of unique police, court-initiated, or facility-based holds/certifications (18.7%, 3.6%, and 77.7% respectively) is consistent with the total or duplicated set of police or court-initiated, or facility-based holds (18.9%, 3.3%, and 77.8% respectively).

Table 6

Unduplicated Distribution of Parties Responsible for Initiating Holds or Certifications

Party Responsible	<i>P</i>	<i>n</i>
Facility-Based Personnel	77.7	5,901
Police	18.7	1,421
Court	3.6	272
Total Reported	100.0	7,594
Missing	36.5	4,360

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. Dangerousness to self is the most common reason (67.9%), which represents a slight increase in comparison to the total or duplicated set of consumers who are placed on a hold or certification due to dangerousness to self concerns (63.9%).

Table 7

Unduplicated Reason for the Hold or Certification

Reason	<i>P</i>	<i>n</i>
Dangerous to Self	67.9	4,317
Gravely Disabled	20.0	1,273
Dangerous to Others	5.7	360
Dangerous to Self and Others	2.3	147
Dangerous to Self and Gravely Disabled	1.7	108
Dangerous to Others and Gravely Disabled	1.3	85
Dangerous to Self, Others and Gravely Disabled	1.1	67
Total Reported	100.0	6,357
Missing	46.8	5,597

The outcome data of the hold for the set of unduplicated consumers show that 41.3% of individuals with certification or holds are transitioned to a voluntary status, which is a slight increase in comparison to the 38.5% of duplicated cases with a voluntary outcome. For the full distribution of unduplicated outcome options, see Table 8.

Table 8

Distribution of Unduplicated Hold and Certification Outcomes

Outcome	<i>P</i>	<i>n</i>
Voluntary	41.3	2,594
Dropped	29.3	1,838
Certified	17.7	1,114
Transferred	11.7	734
Court-Ordered Dropped	0.0	1
Total	100.0	6,281
Missing	47.5	5,673

Regarding demographics for the consumers who have a hold or a certification, 50.9% are female, compared to 49.1% males. The ethnic distribution is presented in Table 9.

Table 9

Ethnic Distribution of Consumers with Holds and Certifications

Unique Consumers		
Ethnicity	<i>P</i>	<i>n</i>
Caucasian	66.2	6,107
Hispanic	19.1	1,760
African American	10.5	972
Other	2.5	232
Asian/Pacific Islander	1.0	89
American Indian/Alaskan Native	.7	61
Total Reported	100.0	9,221
Missing	22.9	2,733

Tables 10 and 11 present information about the reported age distribution of clients with certifications and holds in FY 2007. 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 27-10 procedure.

Table 10

Bifurcated Age Distribution of Consumers with Holds and Certifications

Age Group	Unique Consumers	
	<i>P</i>	<i>n</i>
Under 18	19.1	2,280
Over 18	80.9	9,649
Total Reported	100.0	11,929
Missing	.2	25

Table 11

Age Distribution of Consumers with Holds and Certifications

Age Group in Years	Unique Consumers	
	<i>P</i>	<i>n</i>
0-5.99	.3	35
6-11.99	2.2	257
12-17.99	16.7	1,988
18-59.99	74.9	8,931
60+	6.0	718
Total Reported	100.0	11,929
Missing	.2	25

Seclusions and Restraints

The following data correspond to seclusions and restraints. There were 6,328 entries in total (including individuals with multiple seclusions and restraints) from 13 designated facilities. Percentages of missing data were relatively low for data in seclusion and restraints, ranging from 1.2% to 7.9%.

The majority (46.3%) of the 6,328 entries were restraints while 37.0% were seclusions and 16.6% 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 ($n = 1,510$) as well as the demographic composition of these consumers. Approximately 61.3% of these consumers experienced a seclusion, 21.4% required a restraint and the remaining 17.3% 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.

Type	Total Seclusions and Restraints	Unique Consumers Requiring Seclusions and Restraints
	<i>P</i> (<i>n</i>)	<i>P</i> (<i>n</i>)
Restraint	46.3 (2,898)	21.4 (320)
Seclusion	37.0 (2,314)	61.3 (914)
Seclusion and Restraint	16.6 (1,041)	17.3 (258)
Total Reported	100.0 (6,253)	100.0 (1,492)
Missing	1.2 (75)	1.2 (18)

Regarding demographics for the unduplicated or unique consumers requiring a seclusion or restraint, 48.9% were female and 51.1% were male. Ethnic distribution is presented in Table 13.

Table 13

Ethnic Distribution of Consumers Requiring Seclusions and Restraints

Ethnicity	Unique Consumers	
	<i>P</i>	<i>n</i>
Caucasian	62.2	865
Hispanic	17.5	243
African American	16.8	234
Other	1.4	19
Asian/Pacific Islander	1.3	18
American Indian/Alaskan	0.8	11
Total Reported	100.0	1,390
Missing	7.9	120

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

Age Group	Unique Consumers	
	<i>P</i>	<i>n</i>

Under 18	22.9	341
Over 18	77.1	1,147
Total Reported	100.0	1,488
Missing	1.5	22

Table 15

Age Distribution of Consumers with Seclusion and Restraints

Age Group in Years	Unique Consumers	
	<i>P</i>	<i>n</i>
0-5	.5	7
6-11	4.2	62
12-17	18.3	272
18-59	73.2	1,089
60+	3.9	58
Total Reported	100.0	1,488
Missing	1.5	22

Involuntary Medications

What follows are data corresponding to involuntary psychiatric medication administrations. There were 3,239 entries in total (including individuals with multiple orders for involuntary medications) from 16 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 = 841) as well as the demographic composition of these consumers. Approximately 47% of these consumers received involuntary psychiatric medications on an emergency basis, and approximately 53% 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 6.2% to 35.6% 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
	<i>P (n)</i>	<i>P (n)</i>
Emergency	68.0 (2,100)	47.1 (337)
Court Ordered	32.0 (988)	52.9 (379)

Total Reported	100.0 (3,088)	100.0 (716)
Missing	6.2 (205)	14.9 (125)

Regarding demographics for the unduplicated or unique consumers requiring involuntary medication orders, 43.4% were female and 56.6% were male. Ethnic distribution is presented in Table 17.

Table 17

Ethnic Distribution of Consumers Requiring Involuntary Medication Orders

Ethnicity	Unique Consumers	
	<i>P</i>	<i>n</i>
Caucasian	60.5	328
African American	19.7	107
Hispanic	16.8	91
Asian/Pacific Islander	1.7	9
American Indian/Alaskan	.7	4
Other	.6	3
Total Reported	100.0	542
Missing	35.6	299

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

Age Group	Unique Consumers	
	<i>P</i>	<i>n</i>
Under 18	5.0	36
Over 18	95.0	677
Total Reported	100.0	713
Missing	15.2	128

Table 19

Age Distribution of Consumers with Involuntary Medication Orders

Age Group in Years	Unique Consumers	
	<i>P</i>	<i>n</i>
0-5	.3	2
6-11	.3	2

12-17	4.5	32
18-59	82.0	585
60+	12.9	92
Total Reported	100.0	713
Missing	15.2	128

Electroconvulsive Therapy (ECT)

Five facilities provided data on electroconvulsive therapy (ECT), including consumer demographics, and those data are presented below. Missing data ranged from 0.0% to 50.0%. Fortunately, the only missing data were the dates of the ECT administration. The last day of the fiscal year (June 30th, 2007) was an acceptable proxy for the missing data, leading to 0.0% missing data in the analyses.

Overall, 2,851 instances of ECT were reported to DBH for FY 2007; 316 individuals received the ECT. Regarding demographics for the unduplicated or unique consumers receiving ECT, 62.7% were female and 37.3% were male. Ethnic distribution is presented in Table 20.

Table 20

Ethnic Distribution of Consumers Undergoing ECT

Ethnicity	Unique Consumers	
	<i>P</i>	<i>n</i>
Caucasian	91.8	290
Other	3.5	11
Hispanic	2.5	8
African American	1.9	6
American Indian/Alaskan	.3	1
Asian/Pacific Islander	0.0	0
Total Reported	100.0	316
Missing	0.0	0

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)

Age Group	Unique Consumers*	
	<i>P</i>	<i>n</i>
Under 18	.6	2
Over 18	99.4	314

Total Reported	100.0	316
Missing	0.0	0

*Age was calculated using the last day of the Fiscal Year (June 30, 2007) due to the number of missing treatment dates in the database

Table 22

Age Distribution of Consumers Receiving Electroconvulsive Therapy (ECT)

Age Group in Years	Unique Consumers*	
	<i>P</i>	<i>n</i>
0-5	0.0	0
6-11	.3	1
12-17	.3	1
18-59	72.5	229
60+	26.9	85
Total Reported	100.0	316
Missing	0.0	0

*Age was calculated using the last day of the Fiscal Year (June 30, 2007) due to the percentage of missing treatment dates in the database

Court-Ordered Imposition of Disability or Deprivation of Rights

Data were provided from five facilities on court orders for imposition of legal disability or the deprivation of a right including consumer demographics (see Appendix B for definitions). Overall, 760 instances of these court orders were reported to DBH for FY 2007. The number of consumers who received these court orders totaled 324. Regarding demographics for the unduplicated or unique consumers being issued a court order, 43.2% were female and 56.8% were male. Ethnic distribution is presented in Table 23.

Table 23

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

Ethnicity	Unique Consumers	
	<i>P</i>	<i>n</i>
Caucasian	54.9	178
African American	22.5	73
Hispanic	18.2	59
Asian/Pacific Islander	2.8	9
Other	.9	3
American Indian/Alaskan	.6	2
Total Reported	100.0	324

Missing	0.0	0
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Information on the specific type of court order (imposition of disability or deprivation of a right) was requested from the facilities. However, this information is only provided for approximately 1 percent of consumers; therefore, this is not reported here. The facilities do provide information related to the age of the consumer at the time of the court order, which is presented below in Tables 24 and 25.

Table 24

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

Age Group	Unique Consumers	
	<i>P</i>	<i>n</i>
Under 18	.3	1
Over 18	99.7	323
Total Reported	100.0	324
Missing	0.0	0

Table 25

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

Age Group in Years	Unique Consumers	
	<i>P</i>	<i>n</i>
0-5	0.0	0
6-11	0.0	0
12-17	.3	1
18-59	83.3	270
60+	16.4	53
Total Reported	100.0	324
Missing	0.0	0

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-two facilities submitted data for 27-10 procedures during FY 2007. However, data from only 31 facilities were chosen 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 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 evaluated DBH conducted of rights-restricted services provided to individuals with mental illness in the State Fiscal Year 2007 (July 1, 2006-June 30, 2007) in 2008. This is the second 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 2007. 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, primarily the inconsistent use of the DBH-generated data collection tool, which led to a limited ability to analyze and interpret the submitted data. Twenty-six percent of facilities that submitted data are excluded from the data analyses because the departure of the data from the provided Excel spreadsheet is too great. Fortunately, a higher number of facilities submitted data in FY 2007 when compared to FY 2006. However, facilities continue to struggle with submitting complete data required by the 27-10 statutes. For some 27-10 procedures, half of the 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.

Even though the amount of submitted data increased from FY 2006 to FY 2007, 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 17,583 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 11,954 unique individuals who are placed on a hold or certification. There are 6,328 seclusions and restraints in the total data set (including consumers with multiple procedures). When duplicate cases are removed from the analyses, a total of 1,510 unique clients requiring a seclusion and restraint remain. The number of instances of consumers receiving involuntary psychiatric medications reported total 3,239 with 841 unique consumers receiving these medications one or several times. Regarding ECT, 2,941 episodes of treatment are noted for 316 individuals. In terms of facility-reported court orders for imposition of legal disability or deprivation of a right, 760 are issued to 324 individuals in this report.

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 consumers of mental health services in Colorado.

APPENDIX A: LEVELS OF PARTICIPATION BY 27-10 DESIGNATED FACILITY IN FY 2007 DATA COLLECTION

Facility	Data Submitted and Included in Analysis	Data Submitted-Not Included in Analysis	No Data Submitted
Adolescent and Family Institute of Colorado, Inc			X
Arapahoe/Douglas Mental Health Network		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		
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		
Denver Health and hospital authority	X		
Devereux Cleo Wallace Center			X
Exempla West Pines			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), HealthOne		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 Suburban Med Center, HealthOne		X	
North Valley 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; HealthOne		X	
PVHS/Mountain Crest		X	
Rose Medical Center, HealthOne		X	
San Luis Valley Comprehensive	X		
Savio House			X
Skyridge Med Center (SRMC), HealthOne		X	
Southeast Mental Health Services	X		
Southwest Colorado Mental Health Center			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. Joseph Hospital		X	
St. Mary-Corwin	X		
Swedish, HealthOne		X	
The Children's Hospital	X		
University of Colorado Hospital Inpatient Psych Services	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: 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 mentally 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.”