

Behavioral Therapies for Children Evaluation

Report to the Department of Health Care Policy and Financing

May 22, 2018
Final



4450 Arapahoe Avenue, Suite 100, Boulder, CO 80303

EPSDT—Behavioral Therapies Program Evaluation

Health First Colorado (Colorado’s Medicaid program) offers a behavioral therapy benefit through the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program. Previously, behavioral therapy was made available to children from birth through age five through the Children with Autism (CWA) waiver and other waivers such as the Children’s Extensive Support (CES), Supportive Living Services (SLS), Children’s Habilitation Residential Program (CHRP), and Development Disability (DD) waivers. Starting in 2016, behavioral therapy services became available to children and youth age 20 and younger through the EPSDT program. Funding and statutory authority of the evaluation of these services was moved from CWA to the EPSDT program via House Bill 16-1405 “FY 2016–17 Long Appropriation Bill,” Health Care Policy and Financing Footnote 11. This created programmatic changes, some of which substantially changed both program implementation and outcome goals. It also resulted in shifts in eligibility for services and, therefore, changes in the population being served.

The evaluation of these behavioral therapies is statutorily mandated under Section 25.5-6-806 (2) (c) (I), C.R.S. The statute mandates annual evaluation reporting of the following:¹

- The number of eligible children receiving services or who have received services under the EPSDT program;
- The average and median age of eligible children when they begin receiving services, and the average length of time that children receive services; and
- The average cost of services provided to an eligible child.

In addition, the statute requires an evaluation of program outcomes, particularly assessing the program’s success in the following areas:

- Serving the children most vulnerable to institutionalization without the services provided;
- Keeping children out of institutions;
- Demonstrating improvement in the child's expressive and receptive communication, adaptive skills (such as dressing and toileting), and a reduction in the severity of the child's maladaptive behavior, including self-injurious or aggressive behavior and tantrums, through the use of standardized and norm-referenced assessments.

An important context for understanding this evaluation effort is the recent move of the administration and funding of these behavioral therapy services from the CWA waiver to the EPSDT program. This change has implications for the descriptive analysis of program eligibility

¹ See Appendix A of this report for a full text of the statute.

and the overall character of the treatment population, which were discussed in last year's evaluation report. This report has used the information from the previous year's evaluation to improve on methodologies, including a more systematic and larger scale chart review process as well as an expanded parent survey and interview process. Both of these efforts have yielded more information on program outcomes than had been previously available.

The organization of this evaluation report is based on the format of the statutory reporting requirements, with each section corresponding to a subject from the two bulleted lists on page 1 of this report. Within each section, the methods for collecting and analyzing data are discussed briefly. A full description of this report's evaluation methodology is included in Appendix B.

Introduction

Prior to the 2016 programmatic change that shifted the Behavioral Therapies Program from the Children With Autism (CWA) waiver to the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program, children had to have an autism spectrum disorder diagnosis in order to be eligible for services. In the previous evaluation report, prior authorization requests for services were made for 464 individual children. This increased dramatically to 1,683 individual children and youth in the 2017 calendar year, reflecting a steadily increasing trend in the number of authorizations during 2017, with nearly 40% of all authorizations happening in the last quarter of the year.

As expected, moving behavioral therapies to the EPSDT program has expanded the range of diagnoses for which children and youth can receive services. Just over half (56%) of the children and youth for whom services were authorized had an autism spectrum disorder diagnosis. The remaining children and youth were diagnosed with other conditions for which behavioral therapies are indicated, including other intellectual or development disabilities (13% of children/youth), congenital or neuro-developmental disorders (7%), and other physical (12%) and behavioral (12%) health diagnoses. A substantial proportion (40%) of children and youth had multiple diagnoses in one or more of these areas. Table 1, below, shows the distribution of diagnoses across all children and youth who were eligible for services.

**Table 1: Children Eligible for Services, by Medical Diagnosis (n=1,683)
Based on Prior Authorization Requests**

Distribution of Diagnoses	Number of Children/Youth	Percent of Eligible Children/Youth
Number of Diagnoses		
Single Diagnosis	1,380	82%
Multiple Diagnoses	303	18%
Diagnoses of Eligible Children and Youth <i>Total exceeds number of children eligible because of multiple diagnoses per child.</i>		
Autism Spectrum Disorders (incl. Asperger's syndrome)	1,285	56%
Intellectual/Developmental Disabilities	293	13%
Congenital or Neuro-Developmental Disorders	171	7%
Other Behavior Health Diagnoses	280	12%
Other Physical Health Diagnoses	269	12%
Totals for Eligible Children and Youth	2,298	100%

A total of 398 children and youth with authorized services had no diagnosis of autism and would not have been eligible to receive services under the CWA waiver. Under EPSDT, this program has expanded to serve more children and youth, including those who are age 20 and younger and those who have medically necessary needs outside of an autism spectrum disorder diagnosis.

The table below shows the distribution of prior authorization requests (PARs), based on the type and status of the request.

Table 2: Distribution of Prior Authorization Requests

Authorization Requests	Number of Requests (% of all Requests)	Percent Approved ²	Percent Rejected	
			No Medical Necessity	Technical Denial ³
Request for Assessment (Codes H0031 and H0031/TS)	343	99%	0%	>1%
Mental Health Assessment by a Non-MD (Code T1024)	1,041	99%	0%	>1%
Subtotal Requests for Assessment	1,384 (61%)			
Adaptive Behavior Treatment by BCBA or Equivalent – (Code H0036 ⁴)	20	100%	0%	0%
Adaptive Behavior Treatment by a Technician (Code H2015)	425	100%	0%	0%
Comprehensive Community Support Treatment (Code H0046)	443	100%	0%	>1%
Subtotal Requests for Treatment	888 (39%)			
Total Requests	2,272			

New service authorizations for treatment are required every six months. Therefore, all children and youth served during 2017 would have had at least one authorization for services in the year. It is noteworthy that very few (less than 1%) of all requests were denied, all for technical reasons. None received a medical necessity denial.

The mental health assessment is a behavior identification assessment conducted during a face-

² Includes requests that were approved for fewer units of services than initially requested (partially denied).

³ Includes requests that were cancelled.

⁴ Specific descriptions of services are included later in this report in the discussion on services delivered.

to-face interaction with the child or youth and caregiver(s). The assessment includes the administration of standardized and non-standardized tests, a detailed behavioral history, observation of the child or youth, and caregiver interview. The clinician conducting the assessment provides an interpretation of test results, discusses findings and recommendations with the primary caregiver(s), and prepares a formal report.⁵

Adaptive Behavior Treatment includes treatment delivered by a therapist who has been certified by the Behavior Analyst Certification Board (BACB). Technicians who deliver Adaptive Behavior Treatment are supervised by a therapist. Most children and youth have claims for services from both a licensed therapist and a supervised technician. Specific services that are provided (social skill development, communication, physical skill development, and self-regulation, for example) vary depending on the needs of the individual child or youth.

Number of Eligible Children and Youth Receiving Services or Who Have Received Services under the EPSDT Program

It is notable that the number of individual children and youth with claims for services (n=529) is much lower than the number that received an authorization for service in the year (n=1,683). The lag time that exists between service delivery, billing, and payment is one factor for this disparity. In addition, there was a steep increase in authorizations during the last three months of the year. However, these two factors do not fully explain the discrepancy between authorizations and claims. The department should consider monitoring claims to determine if there is an issue with having enough providers or other barriers to accessing services that could also contribute to a greater number of authorizations than services delivered.

Average and Median Age of Eligible Children and Youth When They Begin Receiving Services and Average Length of Time that Children and Youth Receive Services

Characteristics of children and youth who are eligible for services, rather than those with a claim for services, are presented here.

As seen in the following table, the majority of children and youth who received behavioral therapy services were male (74%). The vast majority (82%) were under the age of 12, with half of those (39% of the total number served) between the ages of zero to five years and the other half between the ages of six to 11 years. The mean age of children served was 7.7 years.

⁵ Descriptions of assessment and services were summarized from content on the HCPF website: <https://www.colorado.gov/pacific/hcpf/pediatric-behavioral-therapies-information-providers>.

Table 3: Characteristics of Children Eligible for Services

Child Characteristics	Number	Percent
Total Number of Children Receiving Services	529	100%
Sex		
Male	391	74%
Female	138	26%
Age		
0 to 5 years	223	39%
6 to 11 years	235	41%
12 to 20 years	111	20%
Mean and Median Age		
Mean Age	7.7 years	
Median Age	7 years	

Average Cost of Services Provided to an Eligible Child or Youth in 2017

It is important to note that, at the time this report was produced, nearly all children and youth receiving services were doing so on an ongoing basis. Calculating average member costs for a population that is receiving ongoing services (as opposed to the more traditional method of only calculating costs once services have ended) is not precise. Further, there were significant variations in the extent of services any individual child or youth received during the year. For example, many of these children and youth received services for the entire year, while others may have had only a single assessment in 2017, or may have had therapy services for only part of the year.

Because of this, the average cost should be reviewed with caution and serves only as a general description of cost, based on the currently available claims data. The average cost per member (all behavioral therapies costs for the reporting period—calendar year 2017) was \$4,144. However, this average is skewed somewhat by some very high claims. Therefore, the median cost value is more accurate in terms of the “typical” child or youth served by the program. The median cost per member was \$973.

A total of 21 children and youth had total annual service costs above \$20,000. In all cases, these higher costs were driven by a larger number of delivered therapy units than the average. Additionally, in all cases, the number of units allowed and paid by Medicaid was equal to or less than the number of units authorized in the PAR system. These children and youth tended to have multiple diagnoses, possibly indicating more complex treatment needs.

As the program continues and more individual children and youth have a complete course of services, average costs for those who have completed services (either by finishing, aging out, meeting goals, or otherwise leaving treatment) will be more accurate in describing the average costs per child or youth served by this program. Current methodology cites costs just within a single year, which creates a significant amount of variation as some children and youth are served during the entire year, while others may end services early in the year or begin services late in the year, artificially deflating average costs.

Table 4: Average Cost of Services Provided

Description of Costs and Claims All behavioral therapies costs for the reporting period (Calendar Year 2017)	
Description of Claims	Number
Total Number of Children/Youth (Members) with Any Claim	529
Total Number of Claims	1,421
Cost Ranges and Averages	Cost
Lowest Member Cost ⁶	\$35
Highest Member Cost	\$62,904
Mean Cost per Member (all costs for period)	\$4,144
Median Cost per Member (all costs for period)	\$973

As might be expected, some children/youth with multiple diagnoses and complex treatment needs had a very high number of units of service authorized. On average, each individual had 3,140 units authorized. In this case, a unit equals either one assessment or 15 minutes of therapy.

Table 5: Average Units of Services Authorized and Paid (Allowed)

Average Number of Units Authorized Versus Paid (Calendar Year 2017)	
Description of Claims	Number
Total Number of Children/Youth (Members) with Any Claim	529

⁶ One member in the claims data set received only one unit of Community Supportive Treatment services. As most children and youth receive multiple units of service, as well as an assessment prior to completing services, this data point likely represents a child or youth for whom most claims occurred in another time period.

Average Number of Units Authorized Versus Paid (Calendar Year 2017)	
Total Number of Claims	1,421
Unit Ranges and Average per Child	Cost
Average Number of Authorized Units	3,140
Average Number of Allowed Units (paid service units)	279

The difference between authorized and “allowed” (paid) units is likely explain by the difference between authorization and billing procedures. For example, a single prior authorization request (PAR) is made once every six months, so units of service are authorized for up to six months at a time. However, billing occurs on a monthly basis. For many individuals, only one or two months of services may have been billed, even though six months had been authorized.

Evaluation of Program Outcomes

Serving the children most vulnerable to institutionalization without the services provided.

An original goal of the Behavioral Therapies Program, when provided under the CWA waiver, was to specifically target children most vulnerable to institutionalization. Outcomes for this goal are articulated in the legislation in two broad areas: keeping children out of institutions and demonstrating improvements in communication and behavior.

Keeping children out of institutions.

These reporting requirements are less relevant to this evaluation because they are specific to the goals and features of the CWA waiver. While this may still apply to the services accessed through EPSDT, the current program and evaluation structure makes this difficult to measure.

Demonstrating improvement in the child's expressive and receptive communication, adaptive skills (such as dressing and toileting), and a reduction in the severity of the child's maladaptive behavior, including self-injurious or aggressive behavior and tantrums, through the use of standardized and norm-referenced assessments.

When this requirement was written, it was based on the approved ages for the CWA waiver (birth through age five). The EPSDT program has expanded services to children ages 20 and younger. Therefore, this specific evaluation outcome may be narrower in scope than it needs to be in order to fully capture program outcomes. Under EPSDT, a new set of program outcomes will need to be established that may include other outcome measures, in addition to the specific measures in this requirement, in order to determine whether or not the behavioral therapies being funded are effective in serving this new population of children and youth,

based on the general goals of adaptive behavioral treatments.

Children and youth with either an autism spectrum disorder or other significant developmental, behavioral, or medical diagnoses often have difficulties with both social and physical skills, communication, and self-regulation and/or external interactions. Many of the behavioral therapies being provided focus on basic communication skills—verbal communication, being comfortable interacting with others, listening to/observing warning commands (“stop,” “don’t”). Sometimes therapy also incorporates work on physical skills, such as fine motor skills (picking up an object, using a spoon to eat) and bathroom training.

This report examines two potential methods for determining individual child or youth outcomes, based on data that is currently available: 1) a review of a random sample of prior authorization request records, focusing on information contained in follow-up requests for authorization; and 2) interviews and surveys of parents/caregivers of children and youth who received services.

Review of Prior Authorization Request (PAR) Records

The Department of Health Care Policy and Financing contracted with Infinite Frontier Consulting to conduct a review of the information reported in the PAR process for behavioral health therapies. The goal of this review was to determine if clients who received behavioral health therapies made measurable progress, and if this progress was documented in semi-annual PARs.

A total of 150 client charts were selected for review. All clients in this sample had a follow-up PAR in fiscal year (FY) 2016–17. Clients with multiple PARs were selected so that progress after receiving behavioral health therapies could be assessed. Prior reviews could have occurred in prior fiscal years. For the vast majority of clients (95.3%), the PAR that occurred in FY 2016–17 was either their second or third review.

The primary aim of reviewing clients’ charts was to determine if outcomes for these individuals are improving. To measure this, reviewers counted the number of goals documented in the follow-up PAR conducted in FY 2016–17 as well as the number of goals on which improvement was indicated. Goals were reported in a variety of different ways that ranged from simple lists to behavioral reports and treatment plans. Goals also varied widely based on the treatment needs of the client. For instance, a 13-year-old girl had the goal of reducing screaming behavior, using offensive language, and making statements about hurting herself or others. This goal was considered mastered when she was able to have zero occurrences of these behaviors for five consecutive sessions. In comparison, an eight-year-old boy had the goal of tolerating the diversion of attention from a preferred adult in his presence to another adult without engaging in target behaviors. Progress on this goal was measured by tolerating the diversion in 30 second

intervals, increasing to a period of 10 minutes. One hundred and forty-eight (148) out of the 150 clients (98.6%) had goals documented. Reviewers also counted progress toward a goal if there was any indication in the chart that progress was occurring. One hundred and thirty-one (131; 87.3%) clients had documentation of goal progress.

Table 5: Goal Progress

Goal Progress	Total	Mean per Client
Goals Reported	2,088	14.0
Goals with Progress	1,549	10.4
Percent of Goals with Progress Reported	69.8%	N/A

Additionally, reviewers were asked to rate their overall impression of client progress based on all the documentation in the chart, not just the reported goals. These findings are summarized in the following table.

Table 6: Reviewer Ratings of Progress

Goal Progress	Number of Clients	Percent
Significant Progress	110	73.3%
Little Progress	20	13.3%
Insufficient Documentation to Determine	20	13.3%

The reviewers' overall impression was that the children and youth who received services were making significant progress and that agencies did a good job with documentation. Most agencies provided enough information to indicate that at least some progress was being made in treatment. There was, however, a wide variation in the quality and comprehensiveness of documentation. Some agencies had documentation of goals with baseline data, current data, and next steps as well as data from assessments that were completed. Some agencies provided documentation that indicated progress but made it difficult to determine the level of progress. There was also a wide variance in the assessments that were used as well as the documentation that was provided for completed assessments.

Parent/Caregiver Perspectives of Services

Another possible indicator of whether the program is achieving its outcomes is the perspective of parents or other caregivers of the children and youth who receive services. These individuals are in the best position to observe the day-to-day progress of their child(ren) and to assess whether any improvement is evident.

A combination of interviews and online surveys were completed with 68 parents and caregivers, randomly selected based on PARs submitted for 2017. This sample included four interviews conducted in Spanish. All of the remaining respondents spoke English as their primary language.

Parent satisfaction with Medicaid behavioral therapy services (current provider or most recent Medicaid provider) was measured on a scale of one to five (1–5), with 1 indicating “Does not meet expectations” and 5 indicating “Exceeds expectations.” The following table provides a summary of parent satisfaction.

Table 7: Satisfaction with Services

Rating Scale	Number	Percent
Total Interviews with Valid Response⁷	67	
1 – Does/did not meet expectations/Very unsatisfied	2	3%
2 – Somewhat meets expectations/Unsatisfied	3	5%
3 – Neither satisfied or unsatisfied	5	8%
4 – Met/meets expectations/Satisfied	18	29%
5 – Exceeds expectations/Very satisfied	39	56%

Parents, overall, reported being satisfied with behavioral therapy services. Most (85%) reported that services at least mostly met their expectations. Additionally, the majority (77%) reported that their child was benefitting from the services provided. It is noteworthy that all four of the Spanish-speaking respondents reported that they were very satisfied with the services being received and that services exceeded their expectations.

Parents tended to report high levels of satisfaction with their child(ren)’s individual therapists, as well as an overall positive view of the organizations providing services. The most common positive comments were about providers working with a child or youth in the best environment (at home or community, as opposed to the therapist’s office) or having a generally positive relationship with the child or youth.

Most parents spoke of specific positive gains their children had made as a result of services, including increased communication, confidence, and motor skills. Some parents also noted marked decreases in tantrums and violent outburst as well as increased functioning at home and in the community.

⁷ One respondent declined to answer the question.

Most frustrations expressed by parents centered around either system navigation, including long wait times for referrals and appointments, or conflicts with specific therapists.

A few (4) parents believed that access to more providers is needed, with too few being available, particularly in the more rural areas of the state. For one parent in particular, having their child see multiple therapists, instead of the same therapist, was a challenge, and two others mentioned that having to change therapists was very disruptive. Two of the four (50%) Spanish-speaking respondents expressed a desire to have more Spanish-speaking therapists available.

“Behavioral services improved my child’s emotional health, behavioral efforts and accomplishments, and ensured her medications are effective and appropriate. These successes allow her to participate more fully in the community and allow her to function as a contributing member of the community. These services are utterly necessary and vital.”

—Parent, March 2018

While the most often cited suggestion for program change was to increase the number of available providers, three respondents did suggest improving the overall system so that it would be easier for parents to navigate it. One suggested that an important component of this would be better training for case managers.

A few parents also suggested more training for in-home providers and identified a need to centralize a care plan across all providers. Two parents specifically mentioned that it would be helpful to offer some kind of care plan “app” that could allow parents to track their child’s appointments and progress.

“Streamline the referral process to reduce unnecessary delays. Many children receive care from multiple providers, but there is a disconnect in treatment and a lack of communication between providers, which causes a significant discrepancy in treatment due to each provider creating their own treatment plan. Instead, I would suggest an initial meeting between all of a child’s providers and their parents for the purpose of creating a singular treatment plan for that child.”

—Parent March 2018

Summary and Recommendations

Under EPSDT, the Behavioral Therapies Program appears to continue to be implemented as planned. It has expanded services so that more children—including those with non-autism spectrum disorder diagnoses and children and youth of all ages—can receive services.

A review of a sample of prior authorization request (PAR) records indicated that the children

and youth who were receiving services were making significant progress. In addition, most agencies were doing a good job with documentation, which appeared to be markedly improved this year. However, there was considerable variation in the quality of documentation on progress toward goals. Further work toward standardizing documentation can help to improve quality. Also, most providers are using some form of the Vineland assessment in the initial PARs; continuing use of that assessment consistently at six-month follow-up intervals would allow for a more objective discussion of improvements experienced by children receiving behavioral therapy services.

Parents were generally satisfied with the services their children are receiving, while some had suggestions for improvement, as described above. These suggestions largely focused on better access to information (either faster personal response or improved website information) or on addressing the issue of provider turnover. The latter suggestion, in particular, may be difficult for the Department of Health Care Policy and Financing to achieve, but still presents an opportunity for program improvement.

Appendix A: Behavioral Therapies Evaluation Statute

(1) As provided in subsection (2) of this section, the state department shall submit written program evaluations to the health and environment committee of the house of representatives, or any successor committee, and to the health and human services committee of the senate, or any successor committee, concerning home- and community-based services provided to children with autism pursuant to this part 8. The state department shall determine the appropriate process and procedures for conducting the evaluation, including procedures to protect a program participant's individually identifying information.

(2)(a) On or before June 1, 2013, the state department's evaluation shall include, at a minimum, information concerning:

(I) The number of eligible children receiving services or who have received services under the waiver program;

(II) The average and median age of eligible children when they begin receiving services and the average length of time that children receive services; and

(III) The average cost of services provided to an eligible child.

(b) On or before June 1, 2014, the state department's evaluation shall include, at a minimum, information concerning the design and implementation of the ongoing evaluation process pursuant to section 25.5-6-804(8).

(c)(I) On or before June 1, 2015, and every June 1 thereafter, the state department's evaluation shall include an evaluation of eligible children's care plans and evaluations conducted at the beginning and ending of services, as well as ongoing evaluations during the course of services, to determine whether home- and community-based services provided pursuant to this part 8 are effective in meeting the goals of the waiver program, which goals include, but are not limited to:

(A) Serving the children most vulnerable to institutionalization without the services provided pursuant to this part 8;

(B) Keeping children out of institutions; and

(C) Demonstrating improvement in the child's expressive and receptive communication, adaptive skills, such as dressing and toileting, and a reduction in the severity of the child's maladaptive behavior, including self-injurious or aggressive behavior and tantrums, through the

use of standardized and norm-referenced assessments.

(II) The state department may contract with an independent program evaluator with expertise in reviewing treatment progress reports, individual evaluations, and medical records for purposes of conducting the evaluation pursuant to this paragraph (c) concerning the effectiveness of the home- and community-based services provided pursuant to this part 8.

Appendix B: Evaluation Plan / Methodology

This report is statutorily mandated under Section 25.5-6-806 (2) (c) (I), C.R.S. The statute mandates annual evaluation reporting of the following:⁸

- The number of eligible children receiving services or who have received services under the EPSDT program;
- The average and median age of eligible children when they begin receiving services and the average length of time that children receive services; and
- The average cost of services provided to an eligible child.

In addition, the statute requires an evaluation of program outcomes, particularly assessing the program's success in the following areas:

- Serving the children most vulnerable to institutionalization without the services provided;
- Keeping children out of institutions;
- Demonstrating improvement in the child's expressive and receptive communication, adaptive skills, such as dressing and toileting, and a reduction in the severity of the child's maladaptive behavior, including self-injurious or aggressive behavior and tantrums, through the use of standardized and norm-referenced assessments.

An important context for understanding this evaluation effort is the recent move of the administration and funding of these behavioral therapy services from the Children with Autism (CWA) program to the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program. This change has implications for program eligibility and the overall character of the treatment population. This means that some of the original program goals and evaluation metrics might require updating.

The evaluation utilized a mixed-method design, including both quantitative and qualitative data analysis. However, because of the type of specific data available, the design relied heavily on qualitative methods (interviews, chart reviews) to examine program efficacy. Quantitative data was used to provide a descriptive analysis of children served, services provided, and program costs.

Data Sources

The report drew from three primary sources of data:

⁸ See Appendix A of this report for the full text of the statute.

Prior Authorization Request (PAR) Data

Before a provider can begin treatment, a request must be submitted through the Department of Health Care Policy and Financing's third party online utilization management system, eQsuite. In order to continue treatment, a new authorization is required every six months. Each authorization requires:

- a. A standardized assessment tool,
- b. A letter of medical necessity, and
- c. A patient Plan of Care that outlines services requested.

PAR data was analyzed to compile a description of the number of unique clients for whom a service was authorized, including the types of services requested and the diagnosis and demographic characteristics of children and youth for whom services were requested. In addition, PAR records were reviewed by another vendor partner to determine the degree to which the data contained in the requests could be used to assess improvement in child and youth behavioral outcomes (increases in communication and expressive and adaptive behaviors, and decreases in maladaptive behavior).

Health First Colorado (Colorado's Medicaid Program) Claims Data

This data set was analyzed to provide a description of children and youth receiving services, the types and duration of services received, and service costs per child or youth.

The number of eligible children receiving services or who have received services under the EPSDT program was defined as the unique count of "Member ID" numbers identified in the claims data between January 1, 2017, and December 15, 2017.⁹ This number was contrasted with the number of children who had a PAR request for the same time period.

The average and median age of eligible children when they began receiving services was calculated based on the difference between the child's date of birth and the start date for the first PAR record in the time period. Both the statistical mean (the mathematical average of all values) and the median (the middle value in an ordered list of all values) were reported.

A PAR record review was conducted to determine the degree to which pre-post data was available in the eQsuite system. The review targeted records that included a six-month follow-up PAR, meaning it only included records for clients served during the first half of 2017.

A total of 150 client charts were selected for review. All clients in this sample had a follow-up PAR in fiscal year (FY) 2016–17. Clients with multiple PARs were selected so that progress after

⁹ Medicaid claims data was pulled just prior to the end of the calendar year.

receiving behavioral health therapies could be assessed. Prior reviews could have occurred in prior fiscal years. For the vast majority of clients (95.3%), the PAR that occurred in FY 2016–17 was either their second or third review.

For the purposes of this report, **the average length of time that children received services** was calculated by using claims data start and end dates. However, service end dates reflect the “expiration” date for the approval and do not actually reflect the actual last date services were provided. For example, for some children or youth for whom a PAR was approved in August 2016, the end date would be the date of the PAR expiration, well beyond the end of the calendar year and at a point in time after the data was extracted for this report. As a result, to adequately calculate the number of days of service during this reporting period, any service dates beyond December 31, 2016, were automatically changed to the last day of the year before calculating the length of time that the child received services.

Average length of time was calculated by counting the number of days between the first start date and the last end date (or December 31, 2016) of all claims records for that child. It is important to note that multiple services were often received during the same time periods. These days were not aggregated to calculate average length of time. For example, if a child had three different claims records for three different services, all of which started on January 1, 2017 and ended on January 5, 2017, then that child’s length of time was five days, *not* 15 days (3 services X 5 days). But if another child had two different claims, one that started January 1, 2017 and ended January 5, 2017 and another that started January 6, 2017 and ended January 10, 2017, then that child’s length of time was 10 days.

The average cost of services provided to an eligible child. This report includes actual costs per member, independent of length of service, that were paid during 2017.

Parent Surveys and Interviews

We used two methods for conducting parent surveys. We sent a link to a web-based self-administered survey to all parents for whom a valid email address was available in the Medicaid file. In addition, a random sample of parents was selected to participate in the same survey via a telephone interview. This latter sample included parents for whom the primary language spoken in the home is Spanish (n=18); Spanish language interviews were conducted with those parents. The primary purpose for conducting parent interviews was to add parents’ perspectives regarding the efficacy of and their satisfaction with services provided to their children.

A total of 68 interviews were completed, including four with parents whose primary language is Spanish.