Department of Health and Human Services
Office of Inspector General
Office of Audit Services

February 2026 | A-09-24-02004

Colorado Made at Least $77.8 Million in Improper Fee-for-Service Medicaid Payments for Applied Behavior Analysis Provided to Children

REPORT HIGHLIGHTS

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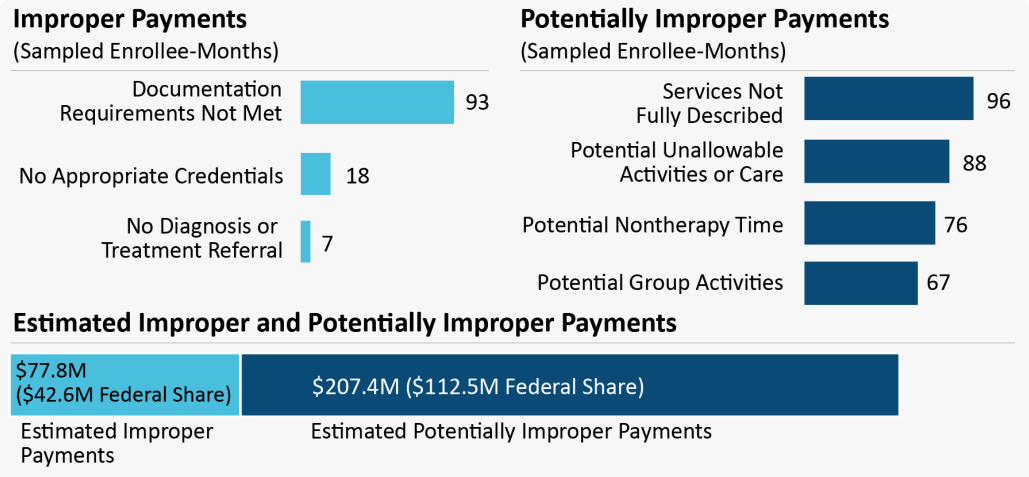
Colorado Made at Least $77.8 Million in Improper Fee-for-Service Medicaid Payments for Applied Behavior Analysis Provided to Children

Why OIG Did This Audit

- Applied Behavior Analysis (ABA) is a therapeutic approach for managing the symptoms of autism and other developmental disabilities, usually centered on improving social and communication skills.
- In the past several years, Federal and State agencies have identified questionable billing patterns by some ABA providers and payments to providers for unallowable ABA services.
- Colorado's fee-for-service (FFS) Medicaid payments for ABA in 2019 were $60.1 million, and by 2023 these payments had increased to $163.5 million.
- This audit examined whether Colorado's FFS Medicaid payments for ABA for 2022 and 2023 complied with Federal and State requirements.

What OIG Found

Colorado's payments for ABA did not fully comply with Federal and State requirements. All 100 sampled enrollee-months included payments for 1 or more claim lines that were improper or potentially improper.



What OIG Recommends

We made five recommendations, including that Colorado refund $42.6 million to the Federal Government, provide additional guidance to ABA facilities for documenting and billing ABA, and periodically perform a statewide postpayment review of Medicaid ABA payments to educate providers on requirements. The full recommendations are in the report.

Colorado disagreed with one recommendation. Colorado agreed with three recommendations, partially agreed with one recommendation, and detailed steps it has taken and plans to take in response to our recommendations.

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INTRODUCTION

WHY WE DID THIS AUDIT

Applied Behavior Analysis (ABA) is a therapeutic approach for managing the symptoms of autism spectrum disorder (autism) and other developmental disabilities, usually centered on improving social and communication skills.[1] In some States, Medicaid covers ABA only for children diagnosed with autism. However, in Colorado, Medicaid covers ABA for children with any diagnosis for which ABA is medically necessary. Most children who receive ABA in Colorado have an autism diagnosis.

In July 2014, the Centers for Medicare & Medicaid Services (CMS) issued a bulletin to clarify that State Medicaid programs must cover diagnosis and treatment, which may include ABA, for children with autism.[2] In the past several years, Federal and State agencies have identified questionable billing patterns (e.g., billing for excessive units of service) by some ABA providers as well as Federal and State payments to providers for unallowable services.[3] Colorado's fee-for-service (FFS) Medicaid payments for ABA in calendar year (CY) 2019 were $60.1 million, and by CY 2023 these payments had more than doubled to $163.5 million.[4] Therefore, we conducted this audit of the Colorado Department of Health Care Policy and Financing's (State agency's) FFS Medicaid payments for ABA for CYs 2022 and 2023.

This audit is part of a series of Office of Inspector General (OIG) audits of States' Medicaid payments for ABA.[5]

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[1] Autism is a condition related to brain development that is characterized by some degree of difficulty with social interaction and communication, as well as by limited and repetitive patterns of behavior.

[2] CMS, Center for Medicaid and CHIP Services Informational Bulletin, "Clarification of Medicaid Coverage of Services to Children with Autism," July 7, 2014. Accessed on June 9, 2025.

[3] See, for example, the Department of Defense (DOD), Office of Inspector General (OIG), *The Defense Health Agency Improperly Paid for Autism-Related Services to Selected Companies in the TRICARE South Region* (DODIG-2017-064), March 10, 2017. Accessed on June 9, 2025. DOD-OIG, *TRICARE North Region Payments for Applied Behavior Analysis Services for the Treatment of Autism Spectrum Disorder* (DODIG-2018-084), March 14, 2018. Accessed on June 9, 2025. State of Nevada Performance Audit, *Delivery of Treatment Services for Children With Autism, 2020* (LA22-04), January 6, 2021. Accessed on June 9, 2025.

[4] In CY 2024, FFS payments had increased to $230.3 million.

[5] OIG, *Indiana Made at Least $56 Million in Improper Fee-for-Service Medicaid Payments for Applied Behavior Analysis Provided to Children Diagnosed With Autism* (A-09-22-02002), Dec. 16, 2024; *Wisconsin Made at Least $18.5 Million in Improper Fee-For-Service Medicaid Payments for Applied Behavior Analysis Provided to Children Diagnosed With Autism* (A-06-23-01002), July 10, 2025; *Maine Made at Least $45.6 Million in Improper Fee-for-Service Medicaid Payments for Rehabilitative and Community Support Services Provided to Children Diagnosed With Autism* (A-01-24-00006), Jan. 16, 2026.

OBJECTIVE

Our objective was to determine whether the State agency's FFS Medicaid payments for ABA provided to children complied with Federal and State requirements.

BACKGROUND

Medicaid Program

The Medicaid program provides medical assistance to certain low-income individuals and individuals with disabilities (Title XIX of the Social Security Act [the Act]). The Federal and State governments jointly fund and administer the Medicaid program. At the Federal level, CMS administers the program. Each State administers its Medicaid program in accordance with a CMS-approved State plan. Although the State has considerable flexibility in designing and operating its Medicaid program, it must comply with applicable Federal requirements.

The Federal Government pays its share of a State's medical assistance expenditures (called Federal financial participation or the Federal share) based on the Federal medical assistance percentage (FMAP), which varies depending on the State. (During our audit period, Colorado's FMAP generally ranged from 50 percent to 56.2 percent.) To claim the Federal share, States report their Medicaid expenditures on the Quarterly Medicaid Statement of Expenditures for the Medical Assistance Program (Form CMS-64).

Colorado's Medicaid Program

In Colorado, the State agency administers Health First Colorado, Colorado's Medicaid program. Health First Colorado covers medically necessary health care services for enrollees 20 years of age and younger through the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit. Pediatric behavioral therapies, including ABA, are covered under EPSDT and are primarily administered through the FFS delivery system.

Applied Behavior Analysis

ABA is a therapeutic approach for managing the symptoms of autism and other developmental disabilities, usually centered on improving social and communication skills. ABA can be provided individually to one child or in a group setting. ABA is often provided at a facility but can be provided in a child's home or school or in the community. Examples of ABA techniques are shown in the box to the right.

Examples of ABA Techniques

Mand Training
Uses prompting and reinforcement to help a child communicate

Discrete Trial Training
Breaks skills into small units to teach one by one

Natural Environment Training
Targets skill development in a less structured environment

Modeling
Presents an example of a desired behavior for the child to imitate

Colorado's Medicaid Coverage of Applied Behavior Analysis

The State agency covers ABA provided to enrollees 20 years of age or younger who were diagnosed with a condition for which behavioral therapies are recognized as therapeutically appropriate. In Colorado, ABA is one type of pediatric behavioral therapy.[6] The coverage of ABA falls under the EPSDT benefit that is outlined in the Code of Colorado Regulations (CCR). The State agency began covering ABA under EPSDT on September 14, 2015. In addition, the State agency issued guidance to ABA providers, which included the *Pediatric Behavioral Therapies Billing Manual* (Billing Manual), *Pediatric Behavioral Therapies Information for Providers* and *Colorado Medicaid Criteria for Behavioral Therapies*.[7] According to the requirements of the CCR, providers must comply with State agency guidance (e.g., provider billing manuals). The following sections provide detailed coverage requirements.

Diagnostic Evaluation, Referral, and Prior Authorization Requirements

For an enrollee to receive ABA, the State agency requires documentation of a signed comprehensive diagnostic evaluation or screening performed within the previous 12 months by a qualified health care professional, such as the enrollee's physician, nurse practitioner, or psychologist who prescribes or recommends (i.e., makes a referral for) behavioral therapy services.[8] In addition, to receive Medicaid payments for ABA, an ABA provider must submit to

[6] There are other types of pediatric behavioral therapies, such as early social interaction and play therapy.

[7] The *Pediatric Behavioral Therapies Information for Providers* is a webpage that provides general information regarding how to enroll as a pediatric behavioral therapy provider, the prior authorization process, and the Current Procedural Terminology billing codes.

[8] *Colorado Medicaid Criteria for Behavioral Therapies*, October 2017, page 1. *Health First Colorado Criteria for Behavioral Therapies*, issued in February 2023, removed "or screening" from the required documentation.

the State agency a prior authorization request (Billing Manual, July 2021 and January 2023) along with supporting documentation (e.g., the diagnostic evaluation and treatment referral).[9] The supporting documentation must also include an individual treatment plan (ITP).[10] Prior authorizations for ABA generally cover a 6-month period (*Pediatric Behavioral Therapies Information for Providers*). The State agency contracts with an outside health care technology organization (prior authorization contractor) to review requests for prior authorizations.

Credentialing Requirements for Providers

Colorado's Department of Regulatory Agencies manages licensing and registration for multiple professions (e.g., physical therapists) but does not license ABA providers.[11, 12] According to the State agency, for certain qualified health care professionals, the State agency generally relies on nationally recognized credentialing organizations, such as the Behavior Analyst Certification Board and the Qualified Applied Behavior Analysis Credentialing Board (the Boards). The Boards each certify three levels of equivalent providers: (1) registered behavior technicians (RBTs) or ABA technicians; (2) Board certified assistant behavior analysts (BCaBAs, which we refer to as "assistant behavior analysts") or qualified autism service practitioner-supervisors; and (3) Board certified behavior

Requirements for Board Certified ABA Provider Types

1 Registered Behavior Technician (RBT) or ABA Technician*
- Background check
- 18 years of age or older
- High school diploma or equivalent
- 40 hours of training
- Competency assessment or 15 hours of supervised experience
- Pass Board-specific exam

2 Board Certified Assistant Behavior Analyst (BCaBA) or Qualified Autism Service Practitioner-Supervisor
- Bachelor-level degree in an ABA-related field OR
- Bachelor-level degree in any field and at least 180 hours of behavior analysis coursework
- 1,000–1,300 hours of supervised experience
- Pass Board-specific exam

3 Board Certified Behavior Analyst (BCBA) or Qualified Behavior Analyst
- Graduate-level degree in an ABA-related field OR
- Graduate-level degree in any field and at least 315 hours of behavior analysis coursework
- 1,500–2,000 hours of supervised experience
- Pass Board-specific exam

* Behavior technicians in Colorado are not required to be an RBT or an ABA Technician to provide ABA to children enrolled in Medicaid.

Note: Background checks are required for all Qualified Applied Behavior Analysis Credentialing Board provider types

[9] *Colorado Medicaid Criteria for Behavioral Therapies*, October 2017, page 1; *Health First Colorado Criteria for Behavioral Therapies*, February 2023, page 1.

[10] See footnote 8.

[11] Colorado Department of Regulatory Agencies, "What We Do" and "What We Regulate." Accessed on January 20, 2026.

[12] Under Colorado insurance laws, all providers who provide ABA to children with an autism diagnosis paid for by commercial health insurance must be licensed, certified, or registered by the applicable State licensing board or a nationally recognized organization (Colorado Revised Statutes, Title 10-16-104). The State agency's Medicaid requirements and guidance do not incorporate the Colorado Revised Statutes.

analysts (BCBAs) or qualified behavior analysts.[13] Requirements for these ABA provider types are shown in the box on page 4.[14]

Technicians that are not credentialed by one of the Boards are referred to generically as "behavior technicians" (i.e., noncredentialed providers). The State agency does not have a minimum qualification requirement for behavior technicians.

Co-Treatment of Applied Behavior Analysis

The State agency allows co-treatment of ABA with other therapies (e.g., speech therapy) or for cases in which two providers work with the same child at the same time for reasons of safety or medical necessity. Co-treatment is allowed when included in the ITP and approved through the prior authorization process.[15]

Electronic Visit Verification Requirements for Applied Behavior Analysis Provided in the Home or Community

Colorado requires ABA providers to submit electronic visit verification (EVV) records to the State agency for all ABA provided in a child's home or in the community. EVV is the use of technology to verify certain pieces of data that describe a provided service. The EVV record is required to include the Medicaid identification number of the enrollee, information to identify the staff providing ABA, the time ABA begins and ends, the date that ABA was provided, and the location where the ABA was provided.[16]

Providers' Use of Procedure Codes for Billing Applied Behavior Analysis

Effective January 1, 2019, the State agency directed providers to use Current Procedural Terminology (CPT®) codes to bill for ABA assessment and treatment services (Billing Manual, July 2021 and January 2023). Each of these CPT codes is billed in 15-minute increments

[13] RBTs, ABA technicians, assistant behavior analysts, and qualified autism service practitioner-supervisors may practice only under ongoing supervision requirements ("Supervision, Assessment, Training, and Oversight" [Behavior Analyst Certification Board], "[Applied Behavior Analysis Technician] Supervision Requirements" [Qualified Applied Behavior Analysis Credentialing Board], and "[Qualified Autism Service Practitioner-Supervisor] Supervision Requirements" [Qualified Applied Behavior Analysis Credentialing Board]). Accessed on June 23, 2025. The Behavior Analyst Certification Board certifies two levels of BCBAs: a master's degree level and a doctorate degree level. The doctorate degree level is differentiated by a "D" (i.e., BCBA-D) ("Board Certified Behavior Analyst" [Behavior Analyst Certification Board]). Accessed on June 23, 2025. In this report, we refer to both levels as "BCBAs."

[14] Requirements obtained from the "Behavior Analyst Certification Board" and the "Qualified Applied Behavior Analysis Credentialing Board." Accessed on June 23, 2025.

[15] Billing Manual, July 2021 and January 2023; Provider Bulletin, Reference B2200476, March 2022.

[16] The State agency's EVV requirements are outlined in 10 CCR 2505-10 § 8.001.

(i.e., 1 unit) of service provided to an enrollee, except for CPT code 97151.[17, 18] CPT code 97151 is billed for an ABA assessment. The State agency limits billing of this code to once every 12 months and pays a flat rate per encounter. For an ABA reassessment, CPT code 97151 is billed with modifier TJ. The State agency limits billing of CPT code 97151 with modifier TJ to 2 units every 6 months (*Pediatric Behavioral Therapies Information for Providers*).

CPT code 97153 is the most commonly billed code for ABA in Colorado, accounting for 77 percent of ABA payments covered by our audit. This code is generally billed by an ABA facility for a behavior technician's time providing one-to-one treatment typically performed with an individual child, unless co-treatment is approved. CPT code 97155 is the second most commonly billed code for ABA in Colorado, accounting for 23 percent of ABA payments covered by our audit. This code is generally billed by an ABA facility for a BCBA's time providing one-to-one treatment that includes a protocol modification (i.e., a BCBA resolving one or more problems with the treatment protocol while the child is present).

According to the State agency, it permits CPT codes 97153 and 97155 to be billed concurrently during the same period for treatment that a behavior technician provides and for treatment that a BCBA provides to modify the treatment protocol. For example, if a behavior technician provides ABA from 8:00 a.m. to 12:00 p.m. and a BCBA comes to work with the technician to administer a protocol modification from 9:00 a.m. to 11:00 a.m., the facility may bill 16 units (i.e., 4 hours) of CPT code 97153 for the behavior technician's time and 8 units (i.e., 2 hours) of CPT code 97155 for the BCBA's time. The State agency does not permit ABA facilities to bill under CPT code 97156, which is typically used in other States to bill for guidance provided to parents to implement treatment protocols.[19]

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[19] Billing Manual, July 2021 and January 2023.

Figure 1 shows the CPT codes for ABA in Colorado, the minimum credential required for the type of provider performing each service, a description of the service, and the average payment amount per unit of ABA (for CYs 2022 and 2023).[20]

Figure 1: Current Procedural Terminology Codes for Applied Behavior Analysis in Colorado

CPT Code & Modifier	Provider*	Service Description	Average Payment per Unit (CYs 2022–2023)
97151†	BCBA	Behavior identification assessment (limited to once in 12 months)	$322.14
97151 TJ	BCBA	Behavior identification reassessment (with TJ modifier, limited to 2 units each 6 months)	$37.80
97153	None	Adaptive behavior treatment by protocol	$14.01
97154	None	Group adaptive behavior treatment by protocol	$7.02
97155	BCBA	Adaptive behavior treatment with protocol modification	$21.86
97158	BCBA	Group adaptive behavior treatment with protocol modification	$10.92

*Minimum credential required for service in Colorado.

†CPT Code 97151 is paid a flat rate per encounter.

Note: CPT Code 97156 (Family adaptive behavior treatment guidance) is not covered in Colorado.

HOW WE CONDUCTED THIS AUDIT

Our audit covered the State agency's FFS Medicaid payments of $289.5 million ($158.2 million Federal share) for 1,057,164 claim lines for ABA, which we grouped into 60,131 enrollee-months with dates of service from January 1, 2022, through December 31, 2023 (audit period).[21] Our audit included only enrollee-months with payments totaling greater than or

[20] The minimum credential required for service is based on the CPT code definitions for each of the services. CPT codes 97151 (with or without the modifier), 97155 and 97158 are administered by a physician or other qualified health care professional. Qualified health care professionals are individuals qualified by education and training to independently perform a professional service within their scope of practice (e.g., BCBA). CPT codes 97153 and 97154 are administered by a technician under the direction of a physician or other qualified health care professional (i.e., BCBA).

[21] An enrollee-month consisted of all FFS Medicaid claim lines for ABA for an individual enrollee for which the end date of each claim line fell within the month. A claim line consisted of a specific ABA service (e.g., a service billed with CPT code 97153) for a specific date or dates of service. Each claim line was paid individually. An enrollee-month could have had allowable and unallowable claim lines.

equal to $1,000.[22] We selected a stratified random sample of 100 enrollee-months, with ABA payments totaling $610,933 ($332,019 Federal share).[23]

The 100 enrollee-months in our sample consisted of 47 unique ABA facilities and 96 unique enrollees. Total payments for each sampled enrollee-month ranged from $1,206 to $15,470. We requested the following supporting medical record documentation from the State agency or the ABA facilities for each sampled enrollee-month: (1) the approved prior authorization, (2) the diagnostic evaluation and treatment referral for ABA, (3) the ITP, and (4) the ABA session notes supporting the units of ABA paid.

We reviewed the documentation to determine whether: (1) the prior authorization was approved and covered the sampled enrollee-month; (2) there was a required diagnostic evaluation and treatment referral for ABA; (3) the ITP included a request for co-treatment of ABA; and (4) the session notes included the type, frequency, and duration of ABA provided and supported the units of ABA paid.

We did not conduct a medical review to determine whether ABA was medically necessary. We shared our findings for some of the sampled enrollee-months with the State agency and asked the State agency to provide input on whether the documentation supported that ABA payments were made in accordance with Federal and State requirements and guidance.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix A describes our audit scope and methodology, Appendix B describes our statistical sampling methodology, Appendix C contains our sample results and estimates, and Appendix D shows our audit results by sampled enrollee-month.

FINDINGS

The State agency's FFS Medicaid payments for ABA provided to children did not fully comply with Federal and State requirements. Specifically, all 100 sampled enrollee-months included payments for 1 or more claim lines that were improper or potentially improper.[24]

[22] Enrollee-months with payments totaling less than $1,000 accounted for 3 percent of total ABA payments.

[23] There were 795 claims and 1,919 claim lines associated with the 100 sampled enrollee-months.

[24] Each sampled enrollee-month had claim lines that we determined to be allowable, unallowable, or potentially unallowable. When a claim line could be considered unallowable for one reason and potentially unallowable for a different reason, we considered the claim line unallowable to avoid double-counting.

For 9 of 100 sampled enrollee-months, the State agency made payments of $862 for 1 claim line in each enrollee-month that complied with the requirements.[25] However, for 93 of the 100 sampled enrollee-months, the State agency made payments of $189,608 for at least 1 claim line that did not comply with the requirements. Specifically, we found the following deficiencies:[26]

- Session notes describing the ABA provided or EVV records for ABA provided in the home or community did not meet documentation requirements (e.g., session notes did not support the CPT codes paid) (93 sampled enrollee-months).[27]

- ABA was provided by staff who did not have the appropriate credentials (18 sampled enrollee-months).

- ABA was provided to children without documentation of a comprehensive diagnostic evaluation or treatment referral for ABA (7 sampled enrollee-months).

On the basis of our sample results, we estimated that the State agency made improper payments of at least $77.8 million ($42.6 million Federal share).[28, 29]

In addition, for all 100 sampled enrollee-months, the State agency made potentially improper ABA payments.[30] Specifically, for most claim lines, we could not determine whether the session

[25] These 9 sampled enrollee-months had one claim line in each enrollee-month for either an assessment or a reassessment that we determined to be allowable. The total payment amount per sampled enrollee-month that complied with requirements ranged from $38 to $331.

[26] The number of deficiencies is greater than 93 because 23 sampled enrollee-months had more than 1 deficiency.

[27] For 2 sampled enrollee-months from two ABA facilities, the enrollees had other insurance that should have paid for all or a portion of the ABA provided during the sampled enrollee-months. One ABA facility stated that it billed Medicaid for the entire sampled enrollee-month in error; therefore, we did not review the supporting documentation and considered all of the ABA payments in the sampled enrollee-month improper. The second ABA facility identified a certain number of units that should have been billed to the other insurance; therefore, we considered payments for those units of service billed to Medicaid to be improper.

[28] We estimated that the State agency improperly paid at least $77,877,293 ($42,649,438 Federal share).

[29] To be conservative, we recommend recovery of improper payments at the lower limit of a two-sided 90-percent confidence interval. Lower limits calculated in this manner are designed to be less than the actual improper payment total 95 percent of the time.

[30] We did not review the session notes for 4 of the 100 sampled enrollee-months: 1 of the enrollee-months was billed to Medicaid in error (see footnote 27), and for the remaining 3 sampled enrollee-months, the ABA facility could not provide session notes. Although we did not review the session notes, we still consider the payments for these 4 sampled enrollee-months potentially improper.

notes satisfied State agency documentation requirements, or the documentation was unreliable:[31]

- Session notes did not fully describe the services provided (e.g., the ABA techniques used) (96 sampled enrollee-months).

- Session notes referred to recreational activities, academic activities, day care, or custodial care that may not have been allowable ABA activities (88 sampled enrollee-months).

- Session notes included potential nontherapy time (e.g., for meals, breaks, and naps) (76 sampled enrollee-months).

- Session notes referred to potential group activities, but payments were made for individual ABA (67 sampled enrollee-months).

We set aside $420,463 of potentially improper payments for 79 sampled enrollee-months for the State agency to determine whether these payments complied with Federal and State requirements.[32] On the basis of our sample results, we estimated that the State agency made $207.4 million ($112.5 million Federal share) of potentially improper ABA payments.[33]

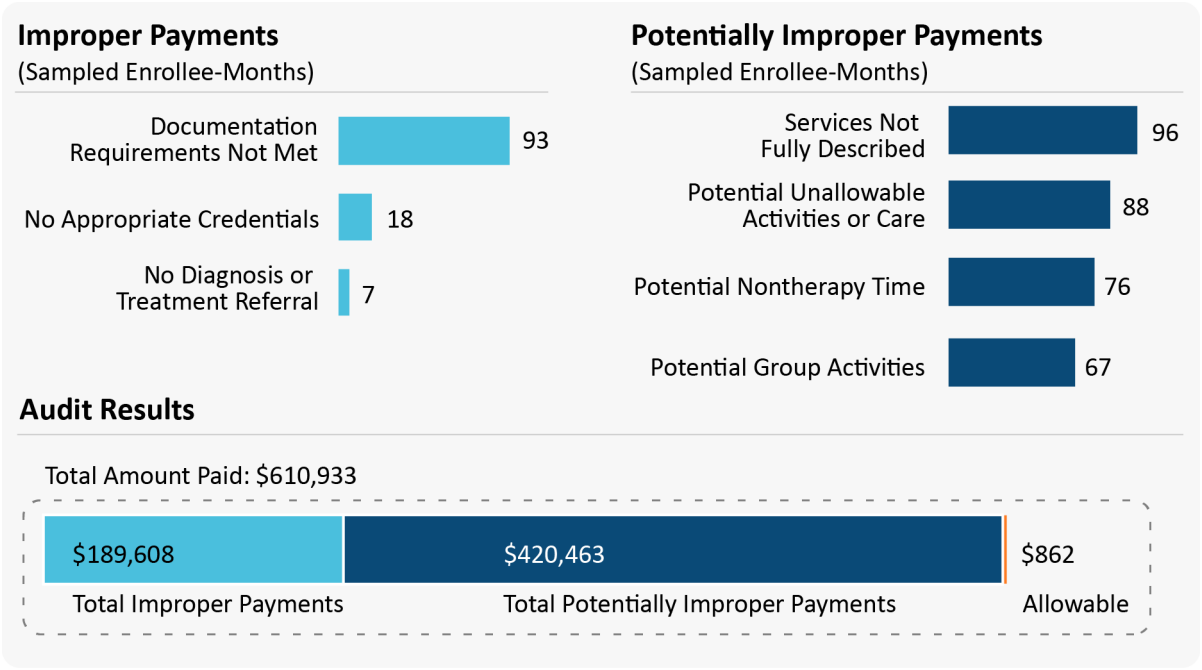
Figure 2 (on the next page) shows a summary of our findings.

[31] The number of deficiencies is greater than 100 because 91 sampled enrollee-months had more than 1 deficiency.

[32] All 100 sampled enrollee-months had payments that were potentially improper. For 21 of the 100 enrollee-months, we determined all of the payments were improper. For estimation purposes, we only included the payment error amounts in the improper category to avoid double counting for claim lines that were both improper and potentially improper.

[33] We estimated that the State agency made potentially improper payments of $207,361,571 ($112,542,978 Federal share).

Figure 2: Summary of Our Findings



The State agency made improper and potentially improper payments because it did not provide effective oversight of FFS Medicaid ABA payments. Specifically, the State agency had not performed a statewide postpayment review of payments to ABA facilities to verify that facilities complied with Federal and State requirements related to documentation and provider credentialing. Performing periodic postpayment reviews and sharing the results with providers as part of ongoing education might have prevented the State agency from making improper or potentially improper payments. In addition, the State agency did not provide sufficient guidance to ABA facilities on documentation, billing, and credentialing requirements for ABA. Furthermore, the State agency did not review its prior authorization contractor's procedures for verifying ABA facilities' compliance with State diagnostic evaluation and treatment referral requirements.

THE STATE AGENCY MADE IMPROPER PAYMENTS FOR APPLIED BEHAVIOR ANALYSIS

For 93 of 100 sampled enrollee-months, the State agency made FFS Medicaid payments for ABA: (1) for which session notes or EVV records did not meet documentation requirements, (2) provided by staff who did not have the appropriate credentials, and (3) provided to children without documentation of a comprehensive diagnostic evaluation or treatment referral for ABA. In total, the State agency improperly paid $189,608 for the sampled enrollee-months (Appendix D). These improper payments occurred because, among other issues: (1) the State agency did not perform a postpayment review of payments to ABA facilities to verify that facilities complied with Federal and State requirements and (2) the State agency's oversight of its prior authorization contractor was not sufficient to ensure that prior authorizations for ABA

were approved only for children with documentation of the required diagnostic evaluations and treatment referrals for ABA.

Federal and State Requirements

States are required to have agreements with providers to keep such records as are necessary to fully disclose the extent of the services provided (the Act § 1902(a)(27)). Expenditures are allowable only to the extent that, when a claim is filed, there is adequate supporting documentation in readily reviewable form to assure that all applicable Federal requirements have been met (*State Medicaid Manual* § 2497.1). Federal financial participation is available for covered services furnished only by certified providers (*State Medicaid Manual* § 2497.1).

Providers must maintain legible, complete, and accurate records necessary to establish that conditions of payment for medical assistance program covered goods and services have been met, and to fully disclose the basis for the type, frequency, extent, duration, and delivery of goods and services provided to medical assistance program members (10 CCR 2505-10 § 8.130.2(A)(1)). The records must be created at the time the goods or services are provided. (10 CCR 2505-10 § 8.130.2(A)(2)). These records must fully substantiate or verify claims submitted for payment (*General Provider Information Manual*).[34] Providers must comply with all Federal and State statutes, rules, regulations and guidance. Guidance includes but is not limited to State agency billing manuals, bulletins, and memos, and the CPT code set (10 CCR 2505-10 § 8.130.70). The State agency limits billing of CPT code 97151 for an ABA assessment to once every 12 months. It also limits billing of CPT code 97151 with modifier TJ for an ABA reassessment to 2 units every 6 months (*Pediatric Behavioral Therapies Information for Providers*).

Each entry in a medical record must be signed and dated by the individual providing the medical service or good. Providers utilizing electronic record-keeping may apply computerized signatures and dates to a medical record if their record-keeping systems guarantee certain security measures, including that printed or displayed electronic records must note that signatures and dates have been applied electronically (10 CCR 2505-10 §§ 8.130.2(F) and (G)). The provider must ensure that all required signatures are obtained before any claims are submitted to the State agency (*Provider Participation Agreement* § 4.3, March 2023).[35]

Providers of pediatric behavioral therapies under EPSDT (e.g., ABA) must use EVV when services are provided in a child's home or in the community (10 CCR 2505-10 § 8.001.2.A). According to the CCR, providers were required to comply with EVV requirements beginning on August 3, 2020 (10 CCR 2505-10 § 8.001.3.E.1.). However, in its Operational Memo dated

[34] The *General Provider Information Manual* is an online manual that provides general information about Health First Colorado to assist enrolled providers with submitting claims for services provided to Health First Colorado enrollees.

[35] The *Provider Participation Agreement* contains terms and conditions for providers' participation in programs administered by the State agency.

November 16, 2021, the State agency notified providers that it would begin to deny claims for missing or incomplete EVV records on February 1, 2022 (*Operational Memo HCPF OM 21-075*, November 2021).

Certain ABA services (such as those billed using CPT codes 97151 and 97155) must be performed by, at a minimum, a BCBA.[36] As a condition of participation in the medical assistance program, any provider with employees who provide services must ensure that, at the time services are provided, the employee possesses the license, certification, or credential that is required in the State of Colorado to provide such services (10 CCR 2505-10 § 8.130.40).

The State agency requires documentation of a signed comprehensive diagnostic evaluation or screening performed within the previous 12 months by a qualified health care professional, such as the child's physician, nurse practitioner, or psychologist who prescribes or recommends behavioral therapy services (*Colorado Medicaid Criteria for Behavioral Therapies*, October 2017, page 1).[37, 38] All outpatient therapy services must have a written order, prescription, or referral by any of the following: physician (M.D. or D.O.), physician assistant, or nurse practitioner (Billing Manual, January 2023).

Overpayments are subject to recovery by the State agency (10 CCR 2505-10 § 8.076.3.A).[39]

Session Notes or Electronic Visit Verification Records Did Not Meet Documentation Requirements

For 93 sampled enrollee-months from 46 ABA facilities, the State agency paid for ABA for which session notes or EVV records did not meet Federal and State documentation requirements. Specifically, the session notes that the facilities provided did not: (1) support the CPT codes paid (72 sampled enrollee-months), (2) support the number of units of ABA paid (63 sampled enrollee-months), or (3) include valid signatures of providers that furnished ABA (22 sampled enrollee-months). In addition, session notes were missing for 26 sampled enrollee-months.[40]

[36] See footnote 20.

[37] *Health First Colorado Criteria for Behavioral Therapies*, issued in February 2023, removed "or screening" from the required documentation.

[38] Through a CMS 1135 waiver, the State agency temporarily suspended its prior authorization requirements during the public health emergency (PHE), which started on March 1, 2020, and ended on May 11, 2023. In addition, during the PHE, the State agency instructed the prior authorization contractor not to deny cases if the prior authorization request did not contain the diagnosis and screening noted in the criteria.

[39] Any claims submitted for which documentation is not received within the time limits specified in this section (for external audits, within the time frame the external auditors request) must be considered an overpayment subject to recovery regardless of whether goods or services have been provided (10 CCR 2505-10 § 8.076.2.G).

[40] The number of deficiencies is greater than 93 because 66 sampled enrollee-months had more than 1 deficiency.

Furthermore, for 1 sampled enrollee-month, EVV records were missing for ABA provided in the home or community.[41]

Session Notes Did Not Support the Current Procedural Terminology Codes Paid

For 72 sampled enrollee-months from 38 ABA facilities, the State agency paid for ABA billed with CPT code 97155 for which the session notes did not support that the facilities furnished ABA as described in the CPT code, which is billed for implementing a treatment protocol modification (i.e., a BCBA resolving one or more problems with the treatment protocol while the child is present) (AMA's *2022 CPT Codebook*). For example, for 4 sampled enrollee-months from one ABA facility, the session notes documented that no protocol modification was made, stating: "Maintain current protocol without modification."

Furthermore, some ABA facilities billed CPT code 97155 when they provided parent training, which was not a covered service in the State.[42] For example, for 1 sampled enrollee-month, the facility billed for five sessions using CPT code 97155. Four of those sessions had the following statement: "BCBA met with the patient's parents for a meeting to discuss patient goals and progress." In addition, for two of these four sessions, the session notes duplicated the notes from the prior session.

In addition, some ABA facilities billed CPT code 97155 when they provided ABA reassessments.[43] For example, for 1 sampled enrollee-month, the facility billed CPT code 97155 for 2 consecutive days for a total of 5.5 hours; however, the session notes showed that the BCBA performed a standard assessment, analyzed data, and prepared a report. All of these tasks fell within the description of CPT code 97151. The ABA facility had already billed the maximum number of units for CPT code 97151 with the TJ modifier for the ABA reassessment.

Session Notes Did Not Support the Number of Units of Applied Behavior Analysis Paid

For 63 sampled enrollee-months from 30 ABA facilities, the State agency paid for units of ABA that were not supported by the session notes. Specifically, one or more of the following deficiencies occurred at each facility: (1) units of ABA that were paid exceeded the overall time shown in the session notes; (2) documented nap time was included in the units of ABA paid; (3) ABA was paid for the same time that a facility documented other services for a child (e.g., speech therapy), or ABA was paid for services that two behavior technicians provided to the same enrollee during the same timeframe and there was no approval for a co-treatment

[41] Of the 100 sampled enrollee-months, 23 sampled enrollee-months included ABA that was provided in the enrollee's home (place of service code 12) or in the community (place of service code 99).

[42] AMA's *2022 CPT Codebook* describes CPT code 97156 as guidance administered by a physician or other qualified health care professional to parents to implement treatment protocols.

[43] AMA's 2022 CPT Codebook describes CPT code 97151 as administering assessments, analyzing past data, scoring or interpreting assessments, and preparing the report or treatment plan.

request; or (4) electronic notes were signed off before the end of an ABA session, for example, by as much as 1 hour and 44 minutes. When electronic session notes are signed before the end of a session, it calls into question whether the complete session occurred.

For example, for 1 sampled enrollee-month, the ABA facility billed and was paid for 799 units of CPT code 97153 (adaptive behavior treatment by protocol), but the number of the units shown in the session notes totaled only 195. The facility billed for 604 excessive units, or 151 hours, of ABA. In another example, for 1 sampled enrollee-month from a different ABA facility, the session notes had no information to support the number of units billed for CPT code 97155 (adaptive behavior treatment with protocol modification). Specifically, there were no start and end times or numbers of units in the session notes. The facility billed 64 units, or 16 hours, of CPT code 97155.

Session Notes Did Not Include Valid Signatures of Providers That Furnished Applied Behavior Analysis

For 22 sampled enrollee-months from 17 ABA facilities, the State agency paid for ABA for which the session notes did not include valid signatures of the providers that furnished the services. Specifically, some session notes had no signature, and some session notes were signed by someone other than the provider who furnished the service or electronic signatures did not meet electronic signature requirements. If there was not a valid provider signature at the time services were furnished, it raises questions about who authored the session notes and whether the services were provided as documented.

For example, one ABA facility submitted its ABA session notes to us in a spreadsheet format with no provider signatures for any of the ABA that the facility provided. Another ABA facility stated that its electronic medical record system does not have the capability to capture staff signatures. Instead, according to the facility, billing staff keep a scanned or digital copy of the signature of each staff member and apply the image to the session notes before submitting a claim. Furthermore, for several ABA facilities, signatures appeared as though they were typed with a different font, but officials from the ABA facilities stated that the signatures were applied electronically. However, the printed electronic session notes did not specify that signatures and dates had been applied electronically, as required.

Session Notes Were Missing

For 26 sampled enrollee-months from 17 ABA facilities, the State agency paid for ABA provided on 1 or more dates of service for which the facilities were unable to provide session notes. For example, for 3 sampled enrollee-months from two ABA facilities, we received no session notes or any other documentation. One of the facilities did not respond to our requests for documentation. The other ABA facility was purchased by a nationwide ABA company that subsequently closed all of its ABA facilities in Colorado. We asked for assistance from the State agency to obtain session notes and other documentation from the two ABA facilities, but the State agency was not successful in obtaining the documentation.

Electronic Visit Verification Records Were Missing for Applied Behavior Analysis Provided in the Home or Community

For 1 sampled enrollee-month in June 2023, an EVV record was missing for one or more dates of service.[44] Specifically, the State agency was missing EVV records for ABA provided in the home or community for 10 different ABA sessions on 8 dates of service for 4 different providers. For those sessions without an EVV record, the ABA facility billed and was paid for a total of 113 units, or 28.25 hours.

The State Agency Did Not Perform a Statewide Postpayment Review of Applied Behavior Analysis Payments and Did Not Provide Sufficient Guidance to Providers

The State agency had not performed a statewide postpayment review of payments to ABA facilities to verify that facilities complied with Federal and State documentation requirements. Performing periodic postpayment reviews and sharing the results with providers as part of ongoing education might have prevented the State agency from making improper payments.

The State agency's guidance on ABA CPT codes (posted on its website) listed only allowable CPT codes and their definitions, and the State agency did not provide any additional guidance on the use of CPT code 97155 (adaptive behavior treatment with protocol modification). In addition, a coalition of industry representatives issued guidance that may have led to provider confusion.[45] That guidance stated that CPT code 97155 may be billed when a BCBA observes a technician delivering treatment to determine whether the treatment protocol is effective, without necessarily implementing a protocol modification as defined by the CPT code description.[46]

Furthermore, the State agency did not provide sufficient guidance to ABA facilities on State signature requirements for session notes. Although the CCR outlines signature requirements, the requirements are not specific to ABA, and some providers were unaware of the requirements.

[44] Of the 100 sampled enrollee-months we reviewed, 23 sampled enrollee-months (from 17 ABA facilities) included ABA that was provided in the home or the community and required the submission of an EVV record to the State agency.

[45] "Supplemental Guidance on Interpreting and Applying the 2019 CPT Codes for Adaptive Behavior Services," issued in January 2019 by The Steering Committee for the ABA Services Workgroup, with representatives from the Association for Behavior Analysis International, the Association of Professional Behavior Analysts, Autism Speaks, and the Behavior Analyst Certification Board and its CPT consultant.

[46] Permitting CPT code 97155 to be billed for observation or direction of a behavior technician without a protocol modification could result in duplicate billing because CPT code 97153 requires the technician to be "under the direction of" a BCBA.

Applied Behavior Analysis Was Provided by Staff Who Did Not Have Appropriate Credentials

For 18 sampled enrollee-months from 11 ABA facilities, the State agency paid for ABA provided by staff who did not have the appropriate credentials. Specifically, the ABA facilities permitted ABA that should have been provided by a BCBA to be provided by an assistant behavior analyst (or equivalent), an RBT, or a noncredentialed behavior technician.

For example, for 4 sampled enrollee-months from one ABA facility, the facility permitted staff who were not BCBAs to provide ABA billed with CPT code 97155 (adaptive behavior treatment with protocol modification). In total, for the 4 sampled enrollee-months, the facility billed 581 units of CPT code 97155. Of the 581 units, 378 units were provided by staff that were not BCBAs.

ABA facilities billed for services provided by staff who did not have appropriate credentials because the State agency had not performed a statewide postpayment review of ABA payments to verify that only appropriately credentialed staff provided ABA. Performing periodic postpayment reviews and sharing the results with providers as part of ongoing education might have prevented the State agency from making improper payments.

In addition, 30 ABA facilities permitted behavior technicians, who were not credentialed RBTs, to provide CPT code 97153 to children diagnosed with autism (51 sampled enrollee-months). Although the State agency told us throughout the course of our audit that an RBT (or equivalent) was required to provide ABA to Medicaid enrollees (as is required for ABA paid by commercial insurance), that requirement is not documented in State agency requirements or guidance. As such, we did not consider CPT code 97153 provided by a behavioral technician as improper.

Allowing staff who did not have appropriate credentials to provide ABA, specifically for CPT code 97155, may have affected the quality of care that children received. In addition, the fact that the State agency does not require a technician to be an RBT to provide ABA, specifically for CPT code 97153, as is the case when it is paid by commercial health insurance, may have affected the quality of care for these children.

Applied Behavior Analysis Was Provided to Children Without Documentation of the Required Diagnostic Evaluations or Treatment Referrals

For 7 sampled enrollee-months from seven ABA facilities, the State agency paid for ABA when there was no documentation for a comprehensive diagnostic evaluation or treatment referral

for ABA.[47, 48] The State agency's prior authorization contractor approved prior authorization requests even though there was no documentation of a comprehensive diagnostic evaluation or treatment referral.

For example, for 1 sampled enrollee-month from one ABA facility, although the ITP stated that the child was diagnosed with autism in December of 2017, neither the State agency's prior authorization contractor nor the ABA facility provided documentation of the required diagnostic evaluation. The prior authorization contractor provided only a treatment referral by the child's physician from August 2022.[49]

For 1 sampled enrollee-month from another ABA facility, when we requested documentation of the required diagnostic evaluation and treatment referral, the facility stated that "[n]o diagnosis or referral [was] available."[50, 51]

The deficiencies we identified for the 7 sampled enrollee-months occurred because the State agency's oversight of its prior authorization contractor was not sufficient to ensure that prior authorizations for ABA were approved only for children with documentation of the required diagnostic evaluations and treatment referrals for ABA. Specifically, the State agency never reviewed its contractor's procedures to verify that the contractor was approving prior authorizations in accordance with State diagnostic evaluation and treatment referral requirements for ABA. The State agency relied on its contractor to follow the State agency's general prior authorization guidelines that the State agency documented in the contract. In some instances, the State agency provided to us documentation that the contractor erroneously identified as a diagnostic evaluation; however, the documentation was the ITP from the ABA facility. Some facilities believed that their documentation met the requirements because the prior authorizations were approved.

[47] See footnote 38.

[48] According to State agency officials, the State agency waived the requirement for a comprehensive diagnostic evaluation during the PHE, but a treatment referral for ABA was still required. Although there were additional sampled enrollee-months without documentation of the required diagnostic evaluations, we considered payments for those sampled enrollee-months to be unallowable for lacking that documentation only if a child started ABA at the facility before the beginning of the PHE (March 1, 2020) or after the end of the PHE (May 11, 2023).

[49] There were other findings for this sampled enrollee-month; for example, the facility was unable to provide session notes for several dates of service.

[50] Although the ABA facility could not provide the diagnostic evaluation, we determined that the child started ABA at the facility during the PHE, so we considered the diagnostic evaluation requirement waived.

[51] There were other findings for this sampled enrollee-month; for example, ABA was provided by noncredentialed staff.

THE STATE AGENCY MADE POTENTIALLY IMPROPER PAYMENTS FOR APPLIED BEHAVIOR ANALYSIS

For all 100 sampled enrollee-months, the State agency made potentially improper FFS Medicaid payments for ABA for which documentation may not have fully disclosed the extent of services provided or was unreliable. Specifically, session notes: (1) did not fully describe the services provided; (2) referred to potentially unallowable recreational or academic activities, day care, or custodial care; (3) included potential nontherapy time; or (4) referred to group activities rather than to ABA provided to one patient. The State agency paid $420,463 for 79 sampled enrollee-months for which the lack of a detailed statement or specific issues such as the inclusion of nontherapy time made the payments potentially improper (Appendix D). Because we determined that session notes either lacked details or were unreliable, we set aside the $420,463 of potentially improper payments for the State agency to determine whether these payments complied with the Federal and State requirements.

The State made potentially improper payments because the State agency had not performed a statewide postpayment review of ABA payments. Performing periodic postpayment reviews and providing ongoing provider education might have prevented the State agency from making potentially improper payments. Additionally, the State agency did not provide sufficient guidance to ABA facilities for documenting ABA and did not issue guidance to ABA facilities on what it considered billable ABA time.

Federal and State Requirements and Guidance

Medicaid records must fully disclose the extent of services provided to individuals receiving Medicaid assistance (the Act § 1902(a)(27)). Records must be legible, complete, and accurate, and fully disclose the basis for the type, frequency, extent, duration, and delivery of goods and services provided to medical assistance program members (10 CCR 2505-10 § 8.130.2(A)(1)). In addition, the records must be created at the time the goods or services are provided (10 CCR 2505-10 § 8.130.2(A)(2)). These records must fully substantiate or verify claims submitted for payment (*General Provider Information Manual*). Overpayments are subject to recovery by the State agency (10 CCR 2505-10 § 8.076.3.A).

The State agency excludes coverage for pediatric behavioral therapies (i.e., ABA) that are considered custodial care and care provided primarily to assist in the activities of daily living, such as bathing, dressing, eating, and maintaining personal hygiene and safety. In addition, the State agency does not cover services that are primarily day care or educational in nature,

services that are duplicative of services covered under an Individualized Education Program (IEP), recreational therapy, or social skills training.[52, 53]

CMS issued guidance related to cloning of session notes (i.e., notes that appear to be identical for different visits).[54] The guidance advised providers to watch for cloned notes because the notes may not reflect the uniqueness of an encounter.

Co-treatment is allowed when requested and approved through the prior authorization process. For co-treatment of ABA with other therapies, ABA facilities should bill only for the time a provider is interacting with and treating the child, not the total time that the provider is present observing the session. The intent of the State agency is not to reimburse twice for the same increments of time.[55]

Session Notes Did Not Fully Describe the Services Provided

For 96 sampled enrollee-months from 44 ABA facilities, session notes did not fully describe the services provided.[56] Session notes were potentially not complete or accurate or did not fully disclose the type, frequency, or duration of the specific ABA techniques used. The session notes also did not provide a clear picture of how those techniques were used. Because the State agency's requirements do not specify how detailed session notes should be, we could not determine whether the notes satisfied State agency documentation requirements.

Most session notes had only a brief summary of the session along with data collected during the session.[57] In some cases, the summaries describing 32 units, or 8 hours, of ABA listed only data related to the goals that were worked on, with no additional narrative. Some session notes included only a chart indicating the total time or units and provider initials, with no indication of what ABA was provided, or the location where ABA was provided. Also, even

[52] An IEP is an individualized plan for a child with a disability to receive special education services through the public school system. A child's IEP describes the educational program that has been designed to meet that child's unique needs.

[53] *Colorado Medicaid Criteria for Behavioral Therapies*, October 2017, pages 3–4; *Health First Colorado Criteria for Behavioral Therapies,* February 2023, pages 3–4.

[54] CMS, Documentation Matters Fact Sheet, *Medicaid Documentation for Behavioral Health Practitioners*, December 1, 2015. Accessed on June 9, 2025.

[55] Billing Manual, July 2021 and January 2023; Provider Bulletin, Reference B2200476, March 2022.

[56] For the remaining 4 sampled enrollee-months, we did not review the session notes because the provider: (1) stated that it had billed Medicaid in error (see footnote 27) and (2) did not submit any session notes for the entire sampled enrollee-month.

[57] ABA data collection is the process of recording information on behaviors, including behaviors that ABA is intended to decrease (e.g., aggression, screaming, tantrums, pinching, and self-injury) or to increase (e.g., staying focused on a task, making or responding to requests appropriately, and identifying similar or dissimilar items).

when co-treatments were requested and approved during the prior authorization process, most session notes did not document any interaction with or treatment of the child by the behavior technician during the co-treatment session.

Furthermore, some session notes did not document the duration of the specific ABA services provided. For example, most session notes or data collected did not indicate when the specific services were furnished and showed only the start and end times of a child's day or a child's morning and afternoon sessions, or the start and end times for the individual provider who furnished ABA services. (See the section "Session Notes Included Potential Nontherapy Time.")

In addition to the session notes not fully disclosing the extent of ABA furnished, many sampled enrollee-months included session notes with text that appeared to be from a template or appeared to be cloned (i.e., copied from other ABA session notes). Furthermore, for some sampled enrollee-months, the session notes showed the wrong child's name, the wrong therapist's name, or incorrect dates and times.

For example, for 1 sampled enrollee-month from one ABA facility, the BCBA's session notes for CPT code 97155 were unreliable because they contained incorrect information that was cloned from the session notes of a prior day. The session notes for the 2 days were identical. Furthermore, although the facility was paid for dates of service in April 2022, both session notes referred to the date of service as February 28, 2022. In addition, for 1 sampled enrollee-month from another ABA facility, the BCBA routinely documented that the child engaged with peers even when ABA was provided in the child's home, and no peers were documented as being present.

The session notes were not reliable or detailed enough to support which services children received, or whether the behavior technicians providing ABA were properly supervised.

Session Notes Referred to Potentially Unallowable Recreational or Academic Activities, Day Care, or Custodial Care

For 88 sampled enrollee-months from 40 ABA facilities, session notes referred to potentially unallowable recreational or academic activities, day care, or custodial care without providing details on the ABA techniques used or their duration. Without those details, the session notes may not have supported that the sessions included only allowable activities.

For example, for 1 sampled enrollee-month, for a 10-year-old child, the session notes documented that the child had performed academic activities, such as identifying "sight

words."[58] In addition to identifying "sight words," the session notes showed that the child worked on tracing letters and shapes, and counting numbers.[59]

In another example, for 1 sampled enrolled-month, for an 8-year-old child, the session notes for a 5-hour session showed that it took place at a recreational center. The notes documented the child having a snack of chips and cookies, participating in story time, coloring a picture with colored pencils, swimming, playing in the water, going down a water slide, having pizza and chips for lunch, and playing in the gym with peers. Besides the overall start and end times of the session, there were no times associated with any of the ABA activities described. The only ABA-related techniques mentioned were the RBT's prompting of the child. For example, the RBT prompted the child to clean up after his snack and to pay attention to the stories being read.

Furthermore, for some sampled enrollee-months, for those children who attended public school and received special education, some ITPs referenced that the children had IEPs. However, the ITPs and session notes did not specify which services the children received as part of those IEPs. Without those details, we could not determine whether the State agency paid for duplicative ABA.

Session Notes Included Potential Nontherapy Time

For 76 sampled enrollee-months from 38 ABA facilities, session notes included potential nontherapy time. Specifically, ABA was billed continuously for several hours, or the session notes referred to nontherapy time (e.g., naps) that was included in the time billed. Most session notes or data collected included either the start and end times of the child's day (e.g., 8:00 a.m. to 4:00 p.m.), the start and end times of the child's morning and afternoon sessions (e.g., 8:00 a.m. to 12:00 p.m. and 12:00 p.m. to 4:00 p.m.), or the start and end times for each individual behavior technician who furnished services (e.g., 8:00 a.m. to 9:00 a.m., 9:00 a.m. to 11:00 a.m., and 11:00 a.m. to 12:00 p.m.). Even when multiple technicians furnished services consecutively, the majority of session notes for the sampled enrollee-months documented that ABA time was billed continuously, for as long as 8 hours or more, without any adjustment to the units of service for potential nontherapy time, such as meals, breaks, or naps.

For example, for 1 sampled enrollee-month, for a 3-year-old child, the documents we obtained included records of a doctor visit in March 2023 that showed the child's mother stating that the child "naps most days." However, for our sampled enrollee-month (September 2023), the

[58] Sight words are words that a child memorizes to help learn to read and write. Sight words fall into two categories: frequently used words and nonphonetic words.

[59] The State agency's prior authorization contractor initially denied the prior authorization request for the period that included our sampled enrollee-month because the ITP contained goals for academic activities, such as coloring in lines and tracing letters, numbers, and shapes, which are not allowable ABA activities. When the ABA facility resubmitted the ITP with reworded goals, the prior authorization contractor approved the request.

session notes did not mention naps. The facility billed ABA continuously from 7.5 to 8 hours each day for most dates of service.

For another sampled enrollee-month (from a different ABA facility), for a 6-year-old child, session notes on most dates of service indicated the child took a nap. For one date of service, the nap duration was listed as 1 hour and 30 minutes. On that day, ABA was billed continuously from 8:00 a.m. to 3:00 p.m. by five different ABA facility staff. Each staff member reported the exact same nap duration for the day with no additional summary. There was no documentation of the time the nap started or ended.

Session Notes Referred to Potential Group Activities Rather Than Applied Behavior Analysis Provided to One Patient

For 67 sampled enrollee-months from 34 ABA facilities, session notes referred to potential group activities, but time was billed and paid as "face-to-face with one patient" (i.e., individual therapy).[60] The notes did not specify whether the behavior technician was working face-to-face with one child for the entirety of the services billed or whether a portion of this time was group therapy, which should be billed using a different CPT code.

For example, for 1 sampled enrollee-month, for a 4-year-old child, the session notes included data that referenced potential group activities. Specifically, on several dates of service, the session notes showed "[r]aises hand in group" or "[r]esponds to group instruction." There was no information in the session notes to distinguish between one-on-one therapy and group therapy or to identify which ABA techniques were used. For another sampled enrollee-month, for a 4-year-old child, the session notes mentioned that the child followed group instructions, sang during group time, and participated in a group science experiment. On one date of service, the BCBA stated that the child "was observed to stay in the group for over 30 minutes."

In addition, many session notes mentioned "circle time" but generally did not describe circle time activities, how long circle time lasted, or which ABA techniques were used during circle time. For example, for 7 sampled enrollee-months from one ABA facility, the session notes mentioned circle time. The full description of circle time included statements such as "[c]lient attended circle time appropriately" or "[c]lient transitioned to circle time with peers."

The State Agency Did Not Perform a Statewide Postpayment Review of Applied Behavior Analysis Payments and Did Not Provide Clear Guidance to Facilities

The State agency made potentially improper payments because it had not performed periodic postpayment reviews and had not shared the results with providers as part of ongoing education. Performing routine postpayment reviews might have prevented the State agency from making improper or potentially improper payments. In addition, the State agency did not

[60] The definition of CPT code 97153 is "[a]daptive behavior treatment by protocol, administered by a technician under the direction of a [BCBA], face-to-face with one patient, each 15 minutes."

provide guidance to ABA facilities clarifying State requirements that medical records (i.e., session notes) must be complete and accurate and fully disclose the basis for the type, frequency, and duration of the services provided. The State agency also did not provide guidance to ABA facilities on what the State agency considers billable ABA time (e.g., whether time billed should include recreational and academic activities, meals, and breaks).

CONCLUSION

The State agency's FFS Medicaid payments for ABA provided to children increased considerably in recent years. For our audit period, 93 sampled enrollee-months included ABA payments that did not comply with Federal and State requirements. In addition, 100 sampled enrollee-months included potentially improper ABA payments. The issues that led to potentially improper payments could have had a significant effect on the quality of care provided to children.

For 93 of 100 sampled enrollee-months, the State agency made improper payments for ABA: (1) for which session notes or EVV records did not meet documentation requirements, (2) provided by staff who did not have the appropriate credentials, and (3) provided to children without documentation of a comprehensive diagnostic evaluation or treatment referral for ABA. In addition, for all 100 sampled enrollee-months, the State agency made potentially improper ABA payments. Specifically, we could not determine whether the session notes satisfied State agency documentation requirements, or the documentation was unreliable. For example, session notes were not complete in describing the services provided; referred to recreational or academic activities, day care, or custodial care that may not have been allowable ABA activities; or included potential nontherapy time.

On the basis of our sample results, we estimated that the State agency paid at least $77.8 million ($42.6 million Federal share) for ABA that did not meet Federal and State requirements. Additionally, we estimated that the State agency made $207.4 million ($112.5 million Federal share) of potentially improper ABA payments. In addition, because ABA was provided by noncredentialed staff who may not have been properly supervised and session notes were cloned or otherwise unreliable, children may not have received the quality of ABA they needed.

The State agency made improper and potentially improper payments because it did not provide effective oversight of FFS Medicaid ABA payments. Specifically, the State agency did not provide sufficient guidance to ABA facilities for documenting ABA, including guidance on: (1) services that must be provided to support the use of certain CPT codes, (2) State signature requirements, (3) State credentialing requirements, (4) the detail in session notes needed to support ABA provided, and (5) what the State agency considered billable ABA time. In addition, the State agency had not performed a statewide postpayment review of payments to ABA facilities to verify that facilities complied with Federal and State requirements related to documentation and provider credentialing. Furthermore, the State agency's oversight of its prior authorization contractor was not sufficient to ensure that prior authorizations for ABA were approved only for children for which there was documentation of the required diagnostic evaluations and treatment referrals for ABA.

RECOMMENDATIONS

We recommend that the Colorado Department of Health Care Policy and Financing:

- refund $42,649,438 (Federal share) to the Federal Government for FFS Medicaid ABA payments that did not comply with Federal and State requirements;

- provide additional guidance to ABA facilities on: (1) documenting ABA, including services that must be provided to support the use of CPT code 97155, signature requirements, and the information needed in session notes to support ABA provided; (2) billing ABA, including what the State agency considers billable ABA time; and (3) credentialing requirements for ABA providers;

- periodically perform a statewide postpayment review of Medicaid ABA payments, including reviewing medical records, to educate providers on Federal and State requirements related to documentation and provider credentialing and to recover payments that did not comply with Federal and State requirements;

- periodically review its prior authorization contractor's procedures for verifying ABA facilities' compliance with requirements for State diagnostic evaluations and treatment referrals for ABA; and

- exercise reasonable diligence to review and determine whether any of the estimated $112,542,978 (Federal share) in potentially improper ABA payments complied with Federal and State requirements and refund the Federal share of any improper payment amount to the Federal Government.

STATE AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

In written comments on our draft report, the State agency did not agree with our first recommendation and partially agreed with our fifth recommendation. The State agency agreed with our second through fourth recommendations and described the actions it has taken or plans to take to address these recommendations.

Regarding our first recommendation, the State agency said it disagreed because: (1) it did not receive detailed claim line documentation to substantiate the recommended repayment amount, the criteria applied in classifying payments as improper, or the basis for assigning dollar amounts to each sampled enrollee-month; (2) it cannot validate the reliability of the sample or the extrapolated estimate; (3) OIG did not review all documentation; (4) it cannot assess whether certain determinations invalidate a payment; and (5) it does not require behavior technicians to be certified.

Regarding our second recommendation, the State agency agreed that additional guidance for ABA providers is needed. The State agency stated it is updating regulations, billing manuals,

and policy memos to give clearer direction on required documentation, including clarifying what counts as billable ABA time and outlining credentialing requirements for ABA providers.

Regarding our third recommendation, the State agency agreed to conduct periodic statewide postpayments reviews of ABA services, including the review of medical records.

Regarding our fourth recommendation, the State agency said that it will continue to use a quality improvement organization to evaluate whether its prior authorization contractor's procedures include verification of State requirements for diagnostic evaluations and treatment referrals for ABA. In addition, the State agency said a review was completed in June 2025 and another review is planned for October 2026.

Regarding our fifth recommendation, the State agency partially agreed and stated that it will exercise reasonable diligence to determine whether any ABA payments were improper and will refund the Federal share of any amounts confirmed to be improper based on complete and accurate documentation. The State agency reiterated its comments to our first recommendation.

The State agency's comments are included in their entirety as Appendix E.

We reviewed the entirety of the State agency's comments, and we agree that the State agency does not have a minimum qualification requirement for behavior technicians and have adjusted the report accordingly. In addition, for the reasons detailed below, we maintain that our findings and recommendations are valid. A summary of the State agency's comments and our responses follows.

THE STATE AGENCY DID NOT AGREE WITH OUR RECOMMENDATION THAT IT REFUND ESTIMATED OVERPAYMENTS

Detailed Claim Line Documentation

Regarding the State agency's comment that we did not provide the detailed claim-level documentation required to substantiate the recommended repayment amount, the criteria applied in classifying payments as improper, or the basis for assigning dollar amounts to each sampled enrollee-month, we electronically provided the State agency detailed claim level documentation. Specifically, on November 6, 2025, we provided claim line level documentation of all issues identified and the total improper and potentially improper payments related to each of the 1,919 claim lines that made up the sampled enrollee-months. In addition, on October 23, 2025, we provided the State agency all the documentation received from the ABA facilities that we used to support our findings. Furthermore, the criteria on which we based our findings was described in our draft report.

Reliability of Sample and Extrapolation

Regarding the State agency's comment that it cannot determine whether the sample includes members with atypical utilization that could affect representativeness and cannot validate the reliability of the sample or the extrapolated estimate, the State agency did not ask for the sampling files necessary to reproduce the sample and estimates, but we will provide them upon request. Federal courts have consistently upheld statistical sampling and extrapolation as a valid means to determine overpayment amounts in Medicare and Medicaid.[61]

The legal standard for use of sampling and extrapolation is that it must be based on a statistically valid methodology, not the most precise methodology.[62] We properly executed our statistical sampling methodology in that we defined our sampling frame and sample unit, randomly selected our sample, applied relevant criteria in evaluating the sample, and used statistical sampling software (i.e., RAT-STATS) to apply the correct formulas for the extrapolation.

Documentation Not Reviewed

Regarding the State agency's comment that we indicated that not all documentation for certain sampled enrollee-months was reviewed, yet those enrollee-months were classified as improper, we maintain that our treatment of those enrollee-months is correct. We classified payments as improper without reviewing session notes for four sampled enrollee-months because the ABA facility admitted that it billed ABA to Medicaid in error and should have billed other insurance (1 sampled enrollee-month), or after several attempts to obtain documentation from the ABA facilities, we received no supporting documentation (i.e., session notes) from the ABA facilities (3 sampled enrollee-months). See footnote 30. States are required to have agreements with providers to keep such records as are necessary to fully disclose the extent of the services provided (the Act § 1902(a)(27)). In addition, providers must maintain legible, complete, and accurate records necessary to establish that conditions of payment for medical assistance program covered goods and services have been met, and to

[61] See Yorktown Med. Lab., Inc. v. Perales, 948 F.2d 84 (2d Cir. 1991); Illinois Physicians Union v. Miller, 675 F.2d 151 (7th Cir. 1982); Momentum EMS, Inc. v. Sebelius, 2013 U.S. Dist. LEXIS 183591 at *26-28 (S.D. Tex. 2013), adopted by 2014 U.S. Dist. LEXIS 4474 (S.D. Tex. 2014); Anghel v. Sebelius, 912 F. Supp. 2d 4 (E.D.N.Y. 2012); Miniet v. Sebelius, 2012 U.S. Dist. LEXIS 99517 at *17 (S.D. Fla. 2012); Bend v. Sebelius, 2010 U.S. Dist. LEXIS 127673 (C.D. Cal. 2010).

[62] See John Balko & Assoc. v. Sebelius, 2012 U.S. Dist. LEXIS 183052 at *34-35 (W.D. Pa. 2012), aff'd 555 F. App'x 188 (3d Cir. 2014); Maxmed Healthcare, Inc. v. Burwell, 152 F. Supp. 3d 619, 634–37 (W.D. Tex. 2016), aff'd, 860 F.3d 335 (5th Cir. 2017); Anghel v. Sebelius, 912 F. Supp. 2d 4, 18 (E.D.N.Y. 2012); Miniet v. Sebelius, 2012 U.S. Dist. LEXIS 99517 at *17 (S.D. Fla. 2012); Transyd Enters., LLC v. Sebelius, 2012 U.S. Dist. LEXIS 42491 at *13 (S.D. Tex. 2012).

fully disclose the basis for the type, frequency, extent, duration, and delivery of goods and services provided to medical assistance program members (10 CCR 2505-10 § 8.130.2(A)(1)).

Documentation or Administrative Variances Versus Improper Payments

Regarding the State agency's comment that it cannot assess whether certain determinations reflect documentation or administrative variances that do not invalidate a payment, as opposed to true programmatic noncompliance that would render a payment inappropriate, we based our determinations on the Federal and State requirements that are described in this report. In addition, we provided the State agency claim line level documentation of all issues identified and the total improper and potentially improper payments related to each of the 1,919 claim lines that made up the sampled enrollee-months. Furthermore, we provided the State agency all the documentation received from the ABA facilities that we used to support our findings. If the State agency contends that the requirements do not make the payment inappropriate, the State agency can work with the Department of Health and Human Services' action official identified in the final report transmittal letter.

Noncredentialed Behavior Technicians

Regarding the State agency's comment that we partially based our findings on a State statute regulating commercial health insurance (Colorado Revised Statutes, Title 10-16-104) requiring certification of ABA technicians, which does not apply to Medicaid in Colorado, we have removed the improper payments associated with ABA provided by noncredentialed behavior technicians and adjusted the estimated overpayment accordingly. Although the State agency told us throughout the course of our audit that an RBT (or equivalent) was required to provide ABA to Medicaid enrollees (as is required for ABA paid by commercial insurance), that requirement is not documented in State agency requirements or guidance. Accordingly, we are not recommending a refund for services billed under CPT code 97153 provided by a behavioral technician.

OTHER MATTERS

We did not assess the effectiveness or the quality of ABA provided in Colorado; we assessed only whether the State agency's FFS Medicaid ABA payments complied with Federal and State requirements. However, while performing our audit, we identified the following issues that increase the risk of improper payments in Colorado's Medicaid ABA program and may affect the quality of care provided to children: (1) treatment referrals for ABA were outdated, and there was no independent evaluation for continued medical necessity; (2) Medicaid claims for ABA did not provide sufficient detail for utilization review; (3) the State agency did not require background checks of ABA facility staff; and (4) the State agency did not permit ABA facilities to bill for parent training.

TREATMENT REFERRALS FOR APPLIED BEHAVIOR ANALYSIS WERE OUTDATED, AND THERE WAS NO INDEPENDENT EVALUATION FOR CONTINUED MEDICAL NECESSITY

The State agency requires prior authorizations for ABA every 6 months (*Pediatric Behavioral Therapies Information for Providers*); however, there is no requirement for updated ABA referrals from an independent qualified provider. For some sampled enrollee-months, a child had a treatment referral for ABA several years before the sampled enrollee-month. However, an independent qualified provider did not subsequently evaluate the child to confirm the continued medical necessity of ABA. Instead, continuation of ABA was based solely on the ABA facility's recommendation, which was potentially a conflict of interest that could lead to enrollees not getting the services they need or receiving unnecessary services. Additionally, for some sampled enrollee-months, the ABA facility performed the diagnostic evaluation and referred the child for ABA, which indicates that the diagnostic evaluation and treatment referrals were not independent. Furthermore, some school-aged children who had been receiving ABA for many years do not appear to have gone to school but rather received ABA full-time (i.e., 6 or more hours per day) based on the initial independent referral for ABA. For example, for 1 sampled enrollee-month, the date of the child's autism diagnosis and treatment referral for ABA was in June 2009, when the child was 2 years old. We received no independent evaluation for continued medical necessity for ABA. During our sampled enrollee-month, the child was 16 years old and generally receiving ABA 5 days a week, for 6 to 6.75 hours each day. We determined that Medicaid FFS payments for ABA began for this child in July 2018. From CYs 2019 through 2024, Medicaid payments generally increased from year to year, from more than $16,000 in CY 2019 to more than $144,000 in CY 2024. Total FFS Medicaid payments for the period were $518,700.

MEDICAID CLAIMS FOR APPLIED BEHAVIOR ANALYSIS DID NOT PROVIDE SUFFICIENT DETAIL FOR UTILIZATION REVIEW

The State agency's Medicaid claims data included a field to identify the provider furnishing services. According to the Billing Manual, that field should identify "the individual who actually performed or rendered the billed service." In addition, the manual stated that the rendering provider number "cannot be assigned to a group or clinic." Because a behavior technician or an RBT is not eligible to be an enrolled Medicaid provider, the provider listed on the claim would generally be a BCBA. However, for several sampled enrollee-months, that field included the identifier of the ABA facility, not the BCBA. In addition, for services required to be performed by a BCBA, we also identified instances in which the BCBA listed on the claim was not the BCBA who furnished the service. Additionally, the majority of ABA billed was for CPT code 97153, which is a service generally provided by a behavior technician or RBT; however, there was no field that identified the technician who furnished the service. Because the provider did not always identify the correct BCBA and there was no field to identify the technician, the State agency's ability to analyze utilization of ABA was limited.

THE STATE AGENCY DID NOT REQUIRE BACKGROUND CHECKS OF APPLIED BEHAVIOR ANALYSIS FACILITY STAFF

The State agency did not require background checks of ABA facility staff (e.g., BCBAs and RBTs).[63] However, after reviewing background checks from those ABA facilities that completed them, we identified some ABA facility staff who had background checks with offenses that could have put children in danger.

For example, for 1 sampled enrollee-month, in which ABA was provided to an 11-year-old child with autism, three facility staff members had criminal convictions. One behavior technician (a noncredentialed provider) had a weapons-related felony offense 3 months before the sampled enrollee-month. The second staff member, an RBT, was convicted of: (1) a misdemeanor assault in the third degree and (2) misdemeanor harassment described as a strike, shove, or kick.[64] The assault occurred 2 years and 2 months before the sampled enrollee-month, and the harassment occurred 7 months before the sampled enrollee-month. The third staff member, a behavior technician, was convicted of a weapons-related aggravated misdemeanor.

For another sampled enrollee-month, in which ABA was provided to another 11-year-old child with autism from the same ABA facility, a behavior technician had two driving-related convictions: (1) driving while ability was impaired that occurred 3 years and 2 months before the sampled enrollee-month and (2) driving under the influence that occurred 2 years and 6 months before the sampled enrollee-month. On two dates of service, the session notes showed that the child was transported in a van with the technician, but it was unclear whether the technician drove the van.

THE STATE AGENCY DID NOT PERMIT APPLIED BEHAVIOR ANALYSIS FACILITIES TO BILL FOR PARENT TRAINING

Most ITPs for ABA mentioned the importance of parent training to a child's progress; however, in Colorado, the State agency does not permit ABA facilities to bill for parent training. When we requested information about parent training from the ABA facilities in our sample, some facilities stated that they provide parent training even though the State agency does not permit billing for it. In addition, some facilities stated that they bill parent training under CPT code 97155, adaptive behavior treatment with protocol modification (see the finding "Session Notes Did Not Support the Current Procedural Terminology Codes Paid"). In the ITP for 1 sampled enrollee-month, the ABA facility stated that it provided no parent training because it would not be reimbursed.

[63] Although the Boards may require background checks for initial licensure, there is no additional requirement for subsequent background checks for initial or continued employment at ABA facilities.

[64] The RBT provided ABA during 2 different sampled enrollee-months from the same ABA facility.

APPENDIX A: AUDIT SCOPE AND METHODOLOGY

SCOPE

Our audit covered the State agency's FFS Medicaid payments of $289,484,532 ($158,230,057 Federal share) for 1,057,164 claim lines for ABA, which we grouped into 60,131 enrollee-months with dates of service from January 1, 2022, through December 31, 2023 (audit period).[65] Our audit included only enrollee-months with payments totaling greater than or equal to $1,000.[66] We selected a stratified random sample of 100 enrollee-months, with ABA payments totaling $610,933 ($332,019 Federal share).[67]

The 100 enrollee-months in our sample consisted of 47 unique ABA facilities and 96 unique enrollees. Total payments for each sampled enrollee-month ranged from $1,206 to $15,470. We requested the following supporting medical record documentation from the State agency or the ABA facilities for each sampled enrollee-month: (1) the approved prior authorization, (2) the diagnostic evaluation and treatment referral for ABA, (3) the ITP, and (4) the ABA session notes supporting the units of ABA paid.

We did not conduct a medical review to determine whether ABA was medically necessary. However, we shared our findings for some of the sampled enrollee-months with the State agency and asked the State agency to provide input on whether the documentation supported that ABA payments were made in accordance with Federal and State requirements and guidance.

We did not assess the State agency's overall internal control structure. Rather, we limited our review of internal controls to those applicable to our objective. Specifically, we reviewed the State agency's policies and procedures related to ABA payments and the State agency's oversight of its prior authorization contractor and the ABA facilities.

Our audit allowed us to establish reasonable assurance of the authenticity and accuracy of the Medicaid Management Information System (MMIS) FFS claim data that the State agency provided for our audit period. We also established reasonable assurance of the completeness of the claim data by tracing a nonstatistical sample of aggregate claim data amounts to supporting documentation used to report amounts on the State agency's Form CMS-64.

We conducted our audit from September 2023 to October 2025.

[65] An enrollee-month consisted of all FFS Medicaid claim lines for ABA for an individual enrollee for which the end date of each claim line fell within the month.

[66] Enrollee-months with payments totaling less than $1,000 accounted for 3 percent of total ABA payments.

[67] There were 795 claims and 1,919 claim lines associated with the 100 sampled enrollee-months.

METHODOLOGY

To accomplish our objective, we:

- reviewed applicable Federal and State laws, regulations, and guidance, as well as AMA's *2022 CPT Codebook*;

- interviewed State agency staff to gain an understanding of: (1) Medicaid ABA billing requirements, (2) the types of guidance (such as provider bulletins) that the State agency posted on its official State Medicaid website related to billing for ABA, and (3) the State agency's oversight activities related to its prior authorization contractor and ABA facilities and payments;

- obtained from the State agency the MMIS's Medicaid FFS data for ABA provided to children 20 years of age and younger with dates of service during our audit period;

- reconciled the MMIS's ABA data with the State agency's Form CMS-64;

- created a sampling frame that contained 60,131 enrollee-months, consisting of 1,057,164 claim lines for Medicaid ABA provided during our audit period, and selected a stratified random sample of 100 enrollee-months for review (Appendix B);

- requested supporting documentation from the State agency or the ABA facilities for each sampled enrollee-month and reviewed the documentation to determine whether: (1) the prior authorization was approved and covered the sampled enrollee-month, (2) there was documentation of the required diagnostic evaluation and treatment referral for ABA, (3) the ITP included a request for co-treatment of ABA, and (4) the session notes included the type, frequency, and duration of ABA provided and supported the units of ABA paid;

- interviewed providers to gain an understanding of what guidance the State agency provided and its understanding of billing for CPT code 97155 and what is covered and paid by Medicaid;

- shared our findings for some of the sampled enrollee-months with the State agency and asked the State agency to provide input on whether the documentation supported that ABA payments were made in accordance with Federal and State requirements and guidance;

- summarized our audit results for payments for each sampled enrollee-month into 3 categories: allowable payments, improper payments, and potentially improper payments (Appendix D);

- estimated the amounts of the improper and potentially improper ABA payments in the sampling frame (Appendix C);

- estimated the Federal shares of the improper and potentially improper payment amounts in the sampling frame (Appendix C); and

- discussed the results of our audit with State agency officials and, on November 6, 2025, provided State agency officials with claim line level documentation of all issues identified and the total improper and potentially improper payments related to each of the 1,919 claim lines that made up the sampled enrollee-months.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

APPENDIX B: STATISTICAL SAMPLING METHODOLOGY

SAMPLING FRAME

The sampling frame comprised 60,131 enrollee-months, consisting of 1,057,164 claim lines for ABA provided during our audit period, with total Medicaid payments of $289,484,532.[68] The sampling frame consisted of enrollee-months in which the total paid amount for each enrollee-month was greater than or equal to $1,000 for services furnished by providers that were not under investigation by the Office of Inspector General (OIG).[69]

SAMPLE UNIT

The sample unit was an enrollee-month.

SAMPLE DESIGN AND SAMPLE SIZE

We used a stratified random sample, consisting of two strata (Table 1).

Table 1: Strata for Our Sample

Stratum	Description	Frame Size	Value of Frame	Sample Size
1	Enrollee-months with payment amounts from $1,000.02 to $5,999.61	41,149	$123,452,553	50
2	Enrollee-months with payment amounts from $6,000.16 to $47,148.67	18,982	166,031,979	50
Total		**60,131**	**$289,484,532**	**100**

SOURCE OF RANDOM NUMBERS

We generated the random numbers with the OIG, Office of Audit Services (OAS) statistical software.

METHOD OF SELECTING SAMPLE ITEMS

We sorted in ascending order the items in each stratum by enrollee (the field "Member_Medicaid_ID"), year, and month, and then we consecutively numbered the items in

[68] An enrollee-month contained all ABA claim lines for an enrollee during a month in which the end service date of each claim line (the field "Line_Last_Service_Date") fell within the month. The date range of the claim line (from "Line_First_Service_Date" to "Line_Last_Service_Date") may have been longer than 1 day.

[69] Enrollee-months in which the total paid amount was less than $1,000 accounted for 3 percent of the value of the sampling frame.

each stratum in the sampling frame.[70] After generating random numbers according to our sample design, we selected the corresponding frame items for review.

ESTIMATION METHODOLOGY

We used the OIG-OAS statistical software to estimate the total dollar amount and Federal share of improper FFS Medicaid payments in the sampling frame for ABA provided to children. To be conservative, we recommend recovery of improper payments at the lower limit of a two-sided 90-percent confidence interval. Lower limits calculated in this manner are designed to be less than the actual improper payment total 95 percent of the time.

Furthermore, we used the OIG-OAS statistical software to calculate the point estimate for the total dollar amount and Federal share of potentially improper FFS Medicaid payments in the sampling frame for ABA provided to children. In addition, we calculated two-sided 90-percent confidence intervals for these estimates.

[70] Year and month were associated with the end service date (the field "Line_Last_Service_Date") on each claim line in the sample unit.

APPENDIX C: SAMPLE RESULTS AND ESTIMATES

Table 2: Sample Results for Enrollee-Months With Improper Applied Behavior Analysis Payments (Total Payments)

Stratum	Frame Size	Value of Frame	Sample Size	Value of Sample	Number of Enrollee-Months With Improper ABA Payments	Value of Enrollee-Months With Improper ABA Payments
1	41,149	$123,452,553	50	$165,639	45	$57,815
2	18,982	166,031,979	50	445,294	48	131,793
Total	**60,131**	**$289,484,532**	**100**	**$610,933**	**93**	**$189,608**

Table 3: Sample Results for Enrollee-Months With Improper Applied Behavior Analysis Payments (Federal Share)

Stratum	Frame Size	Value of Frame	Sample Size	Value of Sample	Number of Enrollee-Months With Improper ABA Payments	Value of Enrollee-Months With Improper ABA Payments
1	41,149	$67,678,242	50	$90,607	45	$31,938
2	18,982	90,551,815	50	241,412	48	71,593
Total	**60,131**	**$158,230,057**	**100**	**$332,019**	**93**	**$103,531**

Table 4: Estimated Values of Improper Payments in the Sampling Frame *(Limits Calculated at the 90-Percent Confidence Level)*

	Total	Federal Share
Point estimate	$97,614,185	$53,464,013
Lower limit	77,877,293	42,649,438
Upper limit	117,351,077	64,278,587

Table 5: Sample Results for Enrollee-Months With Potentially Improper Applied Behavior Analysis Payments (Total Payments)

Stratum	Frame Size	Value of Frame	Sample Size	Value of Sample	Number of Enrollee-Months With Potentially Improper ABA Payments	Value of Enrollee-Months With Potentially Improper ABA Payments
1	41,149	$123,452,553	50	$165,639	37	$107,675
2	18,982	166,031,979	50	445,294	42	312,788
Total	**60,131**	**$289,484,532**	**100**	**$610,933**	**79**	**$420,463**

Table 6: Sample Results for Enrollee-Months With Potentially Improper Applied Behavior Analysis Payments (Federal Share)

Stratum	Frame Size	Value of Frame	Sample Size	Value of Sample	Number of Enrollee-Months With Potentially Improper ABA Payments	Value of Enrollee-Months With Potentially Improper ABA Payments
1	41,149	$67,678,242	50	$90,607	37	$58,585
2	18,982	90,551,815	50	241,412	42	169,447
Total	**60,131**	**$158,230,057**	**100**	**$332,019**	**79**	**$228,032**

Table 7: Estimated Values of Potentially Improper Payments in the Sampling Frame *(Limits Calculated at the 90-Percent Confidence Level)*

	Total	Federal Share
Point estimate	$207,361,571	$112,542,978
Lower limit	184,830,887	100,267,176
Upper limit	229,892,256	124,818,779

APPENDIX D: AUDIT RESULTS BY SAMPLED ENROLLEE-MONTH

		Improper Payments			Potentially Improper Payments				Audit Results		
Sample Item Number	Total Amount Paid	Documentation Requirements Not Met	No Appropriate Credentials	No Diagnosis or Treatment Referral	Services Not Fully Described	Potential Unallowable Activities or Care	Potential Nontherapy Time	Potential Group Activities	Total Allowable Payments	Total Improper Payments	Total Potentially Improper Payments
1	$2,837	x		x						$2,837	
2	4,041				x	x	x	x			$4,041
3	4,993	x			x	x	x	x		450	4,543
4	1,493	x			x	x				486	1,007
5	3,393	x			x					3,393	
6	2,682	x	x		x	x		x		1,802	880
7	2,321	x	x		x	x		x		987	1,334
8	2,822	x			x	x	x	x		70	2,752
9	2,531	x			x	x		x		791	1,740
10	4,122	x			x	x	x	x		225	3,897
11	5,331	x			x		x			3,248	2,083
12	5,569	x			x	x	x	x		341	5,228
13	4,799	x			x	x	x	x		192	4,606
14	1,295	x		x	x		x			1,295	
15	5,131	x			x	x	x			271	4,860
16	5,632	x			x	x	x			466	5,166
17	2,881	x			x	x	x			1,010	1,870
18	1,796	x			x	x		x		14	1,782
19	2,763				x	x		x			2,763
20	2,445	x			x					2,445	
21	3,444	x			x	x	x			1,894	1,550
22	4,341	x	x		x	x	x	x		931	3,410
23	1,797	x	x		x	x		x		959	838
24	3,660	x			x	x	x	x		3,660	
25	5,415	x			x	x		x		712	4,703
26	5,741	x			x	x	x	x	$74	55	5,613

		Improper Payments			Potentially Improper Payments				Audit Results		
Sample Item Number	Total Amount Paid	Documentation Requirements Not Met	No Appropriate Credentials	No Diagnosis or Treatment Referral	Services Not Fully Described	Potential Unallowable Activities or Care	Potential Nontherapy Time	Potential Group Activities	Total Allowable Payments	Total Improper Payments	Total Potentially Improper Payments
27	3,627	x			x	x	x	x		404	3,223
28	2,001	x			x	x				450	1,551
29	3,393	x			x	x	x	x		1,352	2,041
30	3,036	x			x	x	x	x	75	196	2,764
31	4,692	x			x	x	x	x		59	4,632
32	3,562	x	x	x	x	x				3,562	
33	3,674	x								3,674	
34	1,206	x			x	x	x			187	1,019
35	2,716	x			x	x	x	x		2,716	
36	1,623				x	x	x	x			1,623
37	1,762	x								1,762	
38	3,762	x			x	x				56	3,706
39	2,536	x			x	x	x	x		385	2,151
40	1,368	x			x	x				1,368	
41	4,068	x			x					4,068	
42	1,726	x			x	x		x		567	1,160
43	3,240	x			x	x		x		123	3,117
44	5,390				x	x	x	x			5,390
45	5,198	x			x	x	x	x		640	4,558
46	1,485				x						1,485
47	1,974	x			x	x				111	1,863
48	2,907	x		x	x	x	x			2,907	
49	2,822	x			x	x	x	x		98	2,724
50	4,598	x								4,598	
51	7,451	x			x	x	x	x		690	6,761
52	6,234	x			x	x	x	x		1,266	4,968

		Improper Payments			Potentially Improper Payments				Audit Results		
Sample Item Number	Total Amount Paid	Documentation Requirements Not Met	No Appropriate Credentials	No Diagnosis or Treatment Referral	Services Not Fully Described	Potential Unallowable Activities or Care	Potential Nontherapy Time	Potential Group Activities	Total Allowable Payments	Total Improper Payments	Total Potentially Improper Payments
53	8,958	x	x		x	x	x	x		8,958	
54	10,154	x			x	x	x	x		337	9,817
55	7,593	x		x	x	x	x	x		7,593	
56	6,736				x	x	x				6,736
57	9,215	x			x	x	x	x		44	9,171
58	7,648	x			x	x	x	x		1,514	6,135
59	8,602				x	x	x	x			8,602
60	14,977	x			x					14,977	
61	7,375	x			x	x	x	x		1,243	6,133
62	10,747	x			x	x	x	x	77	2,065	8,605
63	9,800	x			x	x	x	x		723	9,077
64	11,157	x			x	x	x	x		971	10,186
65	12,018	x	x	x	x	x	x	x		12,018	
66	6,203	x			x	x	x		78	29	6,096
67	9,836	x			x	x	x	x		983	8,853
68	8,507	x			x	x	x	x		595	7,913
69	8,688	x	x		x	x	x	x		1,746	6,942
70	11,710	x	x		x	x	x	x	39	1,233	10,439
71	9,359	x			x	x	x	x		158	9,200
72	9,177	x	x		x	x	x			4,227	4,950
73	6,356	x			x		x			6,356	
74	7,408	x			x	x	x	x		471	6,936
75	6,245	x			x	x	x	x		647	5,598
76	6,958	x			x	x	x			6,958	
77	7,674	x			x	x	x	x		719	6,955
78	9,762	x			x	x	x			499	9,263

		Improper Payments			Potentially Improper Payments				Audit Results		
Sample Item Number	Total Amount Paid	Documentation Requirements Not Met	No Appropriate Credentials	No Diagnosis or Treatment Referral	Services Not Fully Described	Potential Unallowable Activities or Care	Potential Nontherapy Time	Potential Group Activities	Total Allowable Payments	Total Improper Payments	Total Potentially Improper Payments
79	9,341	x	x		x	x	x		75	3,667	5,598
80	7,443	x	x		x	x	x	x		1,255	6,188
81	7,179	x	x		x	x	x			3,869	3,311
82	9,954	x	x		x	x	x	x		2,703	7,251
83	8,065	x			x	x	x	x		973	7,092
84	8,842	x			x	x	x	x	331	1,417	7,094
85	9,758	x			x	x	x	x		977	8,781
86	8,848	x	x		x	x	x	x	75	1,340	7,432
87	8,662	x			x	x	x	x		661	8,001
88	6,400	x	x		x	x	x	x		1,482	4,917
89	10,615	x			x	x	x	x		3,887	6,729
90	15,470	x	x		x	x	x	x		2,757	12,713
91	9,989	x			x	x	x	x		1,286	8,703
92	6,270	x		x	x	x	x			6,270	
93	10,465	x			x	x	x	x	38	914	9,514
94	7,796	x			x	x	x	x		1,426	6,370
95	10,386	x	x		x	x	x	x		1,263	9,123
96	7,806	x			x	x	x	x		1,436	6,370
97	13,082	x			x	x	x	x		13,082	
98	8,255	x			x	x	x	x		710	7,544
99	7,546	x			x	x	x			3,100	4,446
100	6,571	x			x	x	x	x		298	6,273
*	**$610,933**	**93**	**18**	**7**	**96**	**88**	**76**	**67**	**$862**	**$189,608**	**$420,463**

* The differences between the payment totals and the sums of the payment amounts for the individual sample items are due to rounding.

APPENDIX E: STATE AGENCY COMMENTS

COLORADO
Department of Health Care Policy & Financing
303 E. 17th Avenue
Denver, CO 80261

December 19, 2025

Jessica Yun Kim
Regional Inspector General for Audit Services
Office of Audit Services, Region IX
90 – 7th Street, Suite 3-650
San Francisco, CA 94103

Re: Report Number A-09-24-02004

Dear Jessica Yun Kim:

Enclosed is the Department of Health Care Policy and Financing's response to the United States Department of Health and Human Services, Office of Inspector General draft report entitled *Colorado Made at Least $119.6 Million in Improper Fee-for-Service Medicaid Payments for Applied Behavior Analysis Provided to Children.*[71]

If you have any questions or need additional information, please contact Christine Bickers at ExternalAudits@state.co.us.

Sincerely,

/Christine Bickers/

Christine Bickers
External Audits Compliance Officer

Cc: [redacted], Senior Auditor

[71] OIG revised the title of the final report to *Colorado Made at Least $77.8 Million in Improper Fee-for-Service Medicaid Payments for Applied Behavior Analysis Provided to Children*.

COLORADO
Department of Health Care Policy & Financing

Colorado Department of Health Care Policy and Financing Response to the Department of Health and Human Services Office of Inspector General (OIG) Audit Report Titled *Colorado Made at Least $119.6 Million in Improper Fee-for-Service Medicaid Payments for Applied Behavior Analysis Provided to Children*

(A-09-24-02004)

We recommend that the Colorado Department of Health Care Policy and Financing:

1. ***refund $65,209,138 (Federal share) to the Federal Government for FFS Medicaid ABA payments that did not comply with Federal and State requirements.***[72]

Response: Disagree. The OIG has not provided the detailed claim-level documentation required to substantiate the recommended repayment amount. The finding relies on extrapolation from a limited sample without disclosure of the underlying claim determinations, the criteria applied in classifying payments as improper, or the basis for assigning dollar amounts to each sampled enrollee-month.

The Department cannot determine whether the sample includes members with atypical utilization patterns or other selection factors that could affect representativeness. Without this information, the Department cannot validate the reliability of either the sample or the extrapolated estimate.

Additionally, OIG footnotes indicate that not all documentation was reviewed for certain enrollee-months, yet those months were classified as improper. The Department also cannot assess whether OIG's criteria were applied appropriately or whether certain determinations reflect documentation or administrative variances that do not invalidate a payment as opposed to true programmatic noncompliance that would render a payment inappropriate. These issues directly affect both the classification of individual claims and the dollar amounts assigned to them.

Furthermore, OIG partially based its findings on a state statute regulating commercial health insurance (C.R.S. § 10-16-104) requiring certification of ABA technicians. This requirement does not apply to Colorado's Medicaid program; nor does such a requirement exist in Colorado Medicaid statutes, regulations, or the Medicaid State Plan. Any extrapolated repayment calculation based on this inapplicable statute is erroneous and should be rescinded.

The Department recently reached out to the Centers for Medicare and Medicaid Services (CMS) to ask for CMS's position on whether ABA technicians must be certified before the Colorado Medicaid program can pay for claims associated with services provided before a technician has achieved certification. While the state may require certification in future, CMS confirmed that no

[72] In the final report, OIG revised the refund amount for this recommendation to $42,649,438.

such mandates currently exist in Colorado Medicaid statutes, regulations, or the State Plan that make certification a prerequisite of payment. CMS also affirmatively stated that "Payments to providers delivering Pediatric Behavioral Therapy services are permitted for services rendered during the provider's certification period." In light of the Department's and CMS's disagreement with OIG's findings regarding ABA technician certification, and the lack of any Colorado Medicaid statute, regulation, or State Plan provision that supports OIG's findings, the Department requests that OIG remove this finding from its final report.

The Department cannot commit to repay any amounts until they can be validated through adequate claim-level evidence and appropriate application of extrapolation methodology, and until all findings related to ABA technician certification have been removed. Until such information is provided, the Department cannot agree with the recommended repayment as calculated.

2. ***provide additional guidance to ABA facilities on:***
    - ***Documenting ABA, including services that must be provided to support the use of CPT code 97155, signature requirements, and the information needed in session notes to support ABA provided***
    - ***Billing ABA, including what the State agency considers billable ABA time***
    - ***Credentialing requirements for ABA providers***

Response: Agree. The Department agrees that additional guidance for ABA providers is needed. The Department has robust existing Medicaid provider documentation regulations in place at 10 CCR 25-10, § 8.130.2. This guidance is an expectation of Medicaid enrolled providers as to the type of documentation required when billing for all Medicaid-covered services to fully describe the type and extent of services. However, the Department agrees that ABA providers appear to need extra assistance based on OIG's review of a sampling of documentation. The Department is updating regulations, billing manuals, and policy memos to give clearer direction on required documentation, including what must be included in session notes, clarifying signature expectations, and the information needed to support the use of CPT code 97155. The Department is also clarifying what counts as billable ABA time and outlining credentialing requirements for ABA providers. These updates are being released throughout 2025, with final regulations planned for February 2026.

3. *periodically perform a statewide postpayment review of Medicaid ABA payments, including reviewing medical records, to educate providers on Federal and State requirements related to documentation and provider credentialing and to recover payments that did not comply with Federal and State requirements;*

Response: Agree. The Department conducts a wide range of post-payment reviews of Medicaid benefits and services. However, the Department agrees to specifically conduct periodic statewide post-payment reviews of ABA services, including review of medical records. These reviews will be used to identify improper payments for recovery, assess documentation and credentialing issues, and provide targeted provider education on Federal and State requirements. ABA post-payment reviews will be incorporated into the Department's program integrity review plan beginning in December 2025, with scope and frequency aligned to identified areas of risk and available resources.

4. *periodically review its prior authorization contractor's procedures for verifying ABA facilities' compliance with requirements for State diagnostic evaluations and treatment referrals for ABA*

Response: Agree. The Department will continue to use the Health Services Advisory Group (HSAG) to conduct periodic independent reviews of the utilization management vendor's prior authorization processes. These reviews evaluate whether the contractor's procedures include verification of State requirements for diagnostic evaluations and treatment referrals for ABA services. HSAG completed a recent review of Pediatric Behavioral Therapies in June 2025, and the next review is scheduled for October 2026. These reviews provide ongoing oversight to ensure the contractor maintains compliance with State requirements.

COLORADO
Department of Health Care Policy & Financing

5. *Exercise reasonable diligence to review and determine whether any of the estimated $90,064,164 (Federal share) in potentially improper ABA payments complied with Federal and State requirements and refund the Federal share of any improper payment amount to the Federal Government.*[73]

Response: Partially Agree. The Department agrees that it will exercise reasonable diligence to determine whether any ABA payments were improper and will refund the Federal share of any amounts confirmed to be improper based on complete and accurate documentation. However, the Department cannot validate OIG's estimated improper payment amount because the OIG has not provided sufficient claim-level detail to assess the accuracy of its determinations or the associated dollar values.

The Department has no information regarding whether the sample includes members with atypical utilization patterns or other selection characteristics that could impact representativeness. Without access to the sampling universe, selection methodology, and the underlying claim-level evidence, the Department cannot independently evaluate the reliability of the extrapolated estimate.

OIG acknowledges in footnote 29 that not all documentation was reviewed for certain enrollee-months, yet those payments were still classified as improper. Similarly, the Department also cannot assess whether OIG's criteria were applied appropriately or whether certain determinations reflect documentation or administrative variances that do not invalidate a payment as opposed to true programmatic noncompliance that would render a payment inappropriate. These uncertainties directly affect the propriety of the classifications and the dollar amounts assigned to each sample item.

Furthermore, OIG partially based its findings on a state statute regulating commercial health insurance (C.R.S. § 10-16-104) requiring certification of ABA technicians. This requirement does not apply to Colorado's Medicaid program; nor does such a requirement exist in Colorado Medicaid statutes, regulations, or the Medicaid State Plan. Additionally, as detailed above, CMS agrees with the Department that no such ABA technician certification requirement exists as a prerequisite for payment. Any extrapolated repayment calculation based on this inapplicable statute is erroneous and should be rescinded.

The Department therefore preserves its right to challenge OIG's claim classifications, dollar attributions, and extrapolation assumptions once full claim-level documentation is provided. The Department can only commit to repay amounts that can be validated through adequate evidence and appropriate methodology. Until the necessary information is made available, the Department cannot agree with the estimated repayment amount as presented.

[73] In the final report, OIG revised the estimated potentially improper ABA payments for this recommendation to $112,542,978.

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