



**Medicaid CHIP Data  
Analytics Unit  
Annual Report of Activities  
State Fiscal Year 2023**

---

**As Required by 2022-23 General  
Appropriations Act, Senate Bill 1, 87th  
Legislature, Regular Session, 2021  
(Article II, HHSC, Rider 7) and by  
2024-25 General Appropriations Act,  
House Bill 1, 88th Legislature, Regular  
Session, 2023  
(Article II, HHSC, Rider 7)**

**Texas Health and Human Services  
Commission  
December 2023**



**TEXAS**  
Health and Human  
Services

# Table of Contents

<b>1. Executive Summary .....</b>	<b>1</b>
<b>2. Introduction.....</b>	<b>4</b>
<b>3. Routine Projects .....</b>	<b>5</b>
<b>4. Goals for Next Year .....</b>	<b>14</b>
Provider Network Adequacy.....	14
Analytical Data Store.....	14
Enhancing Data Infrastructure.....	14
Managed Care Contract Compliance .....	15
<b>List of Acronyms.....</b>	<b>16</b>

# 1. Executive Summary

The 2024-25 General Appropriations Act, Senate Bill (SB) 1, 88th Legislature, Regular Session, 2023 (Article II, HHSC, Rider 7), directs the Health and Human Services Commission (HHSC) to submit an annual report on activities and findings of the Data Analysis Unit established pursuant to Texas Government Code, Section 531.0082. In compliance with this rider, this report focuses on the annual activities, the status of major projects, and the findings of the Medicaid CHIP Data Analytics Unit (MCDA). This report also serves as MDCA's report for the fourth quarter of State Fiscal Year (SFY) 2023, as required by 2022-23 General Appropriations Act, Senate Bill 1, 87th Legislature, Regular Session, 2021 (Article II, HHSC, Rider 7) and Texas Government Code, Section 531.0082.

Highlights this year include:

- MCDA continued partnering with the Performance Management and Analytics System (PMAS) teams within the Office of Data, Analytics, and Performance (DAP) and HHSC Information Technology (IT), to integrate and automate the data systems required to monitor Provider Network Adequacy (PNA) in a more efficient and holistic manner. To date, MCDA has built and updated multiple proof-of-concept data tables in Microsoft SQL Server, which will be used to calculate predefined provider related key measures. MCDA has also coordinated with IT to integrate disparate datasets, validate and profile data, and design a data model to support efficient network adequacy monitoring analysis. MCDA continued to adapt and document geoprocessing workflows and consolidate spatial geodatabases to prepare for enterprise architecture and data synchronization within a cross-team environment. MCDA is also working with a new Geographic Information Systems (GIS) Administrator to set up cloud environments to support GIS product development for PNA.
- While progressing on the PNA PMAS initiative, MCDA continued to improve its processes to closely monitor and report on trends related to PNA.
  - ▶ In collaboration with Texas Medicaid & Healthcare Partnership (TMHP) and the Office of Inspector General (OIG), MCDA compared the accuracy of United States Postal Service (USPS) based geographic location services software (Informatica AddressDoctor) and GIS based location services software (ArcGIS StreetMap Premium) for cleaning Medicaid client and provider address data. The goal of the analysis was to ensure consistency and accuracy of Medicaid client and provider addresses across agency data sources and to assess costs and benefits of enhancing current processes.

- ▶ MCDA provided information on the network adequacy of Medicaid managed care enrolled audiologists for the Governor’s Committee on People with Disabilities, in preparation for their legislative report recommendations.
  - ▶ MCDA expanded the scope of the PNA report to track quarter-over-quarter patterns.
  - ▶ MCDA added a new deliverable to accompany the HHSC Medicaid and CHIP Services (MCS) 1115 Waiver Report that displays cumulative quarterly Managed Care Organization (MCO) compliance for all provider types to support long-term performance monitoring throughout the fiscal year.
  - ▶ MCDA began working with Medicaid/Children’s Health Insurance Program (CHIP) Quality Assurance and Managed Care Contracts & Oversight (MCCO) to provide detailed methodology and supporting information on the regular quarterly reporting process to the Institute for Child Health Policy at the University of Florida, Texas’ External Quality Review Organization (EQRO), who is required by the Centers for Medicare & Medicaid Services (CMS) to validate time and distance standards.
- In SFY23, 173 new anomalies related to the utilization rate per 1,000 members or the amount paid per client were detected in the Service Utilization Dashboard data. Each quarter, MCDA presented its highest priority anomaly findings to the Service Utilization Workgroup, a committee of subject matter experts from across MCS and other areas in HHSC, including Actuarial Analysis.
  - MCDA provided the legislature and executive leadership a variety of analyses on Medicaid and CHIP behavioral healthcare. For example, MCDA gave executive leadership an updated analysis comparing rates of mental health diagnoses, mental health services, and mental health medications of STAR Health youth to non-STAR Health Medicaid youth, with an emphasis on ages 13 to 17.
  - In an ongoing effort to assist MCCO with the contract monitoring process, MCDA added a new deliverable, the Service Coordination Report, to the Extract, Transform, and Load (ETL) process. MCDA is working with MCCO to develop a series of automated quality checks for the data submissions for this new deliverable. The quality checks will be used by MCCO to ensure MCO data quality. In addition, a new report using this data source is expected to be shared with MCS in SFY24.

- MCDA prepared bill analyses on dozens of Texas Senate and House bills that may impact the work MCDA performs to support MCS. MCDA provided fiscal estimates and data for various topics, including teleservices, STAR Health, genetic testing, mental health/substance use disorder, women’s health, provider networks, homelessness, managed care In Lieu of Other Services, autism, COVID-19, and others.

## 2. Introduction

The 2024-25 General Appropriations Act, House Bill (HB) 1, 88th Legislature, Regular Session, 2023 (Article II, HHSC, Rider 7), directs HHSC to “report to the Legislative Budget Board on an annual basis by December 1 of each year the activities and findings of the Data Analysis Unit” created by Government Code, §531.0082. The following report fulfills this requirement for State Fiscal Year 2023 (SFY23).

During SFY23, MCDA within DAP completed 143 projects supporting the direction of the Government Code to (1) improve contract management, (2) detect data trends, and (3) identify anomalies relating to service utilization, providers, payment methodologies, and compliance with requirements...” in the state's Medicaid and CHIP programs. The status of major projects and activities, along with findings, are described in Table 1, below, and include updates to projects related to three general categories: 1) Monitoring MCO Contract Compliance, 2) Tracking Service Utilization and Related Data, and 3) Enhancing Data Infrastructure.

MCDA collaborates closely with the MCS division. During the quarterly Service Utilization Workgroup meetings where MCDA presents its findings of service utilization trends and anomalies, an average of 35 participants attended from MCS and other areas within HHSC.

In addition, Rider 7 directs that “...any anomalies identified related to service utilization, providers, payment methodologies, and compliance with the requirements in Medicaid and the Children’s Health Insurance Program shall be reported to the Office of the Inspector General for further review.” MCDA and the OIG communicate monthly to exchange updates on respective analyses.

### 3. Routine Projects

**Table 1. State Fiscal Year 2023 Routine Project Updates**

Project Name	Project Overview	Frequency of Update	Project Update
Monitoring MCO Contract Compliance - Extract, Transform, and Load (ETL) Automation: Contract Deliverables	The goal of the MCO Contract Compliance ETL process is to redirect Managed Care Contracts and Oversight (MCCO) staff resources that would otherwise have been spent manually processing thousands of reports MCOs formerly submitted in Excel format. Per Uniform Managed Care Manual (UMCM) chapters 5.24.1 through 5.24.7, MCDA extracts MCO self-reported data referencing Member/Provider Complaints, Member Hotlines, Member Appeals, Claims Adjudication, and Out-of-network Utilization, Provider Terminations, and Network Adequacy.	Ongoing	Each quarter, MCDA provided MCCO staff with complete data extracts for quality review of two deliverables (network adequacy and provider termination) by pulling data directly from the TexConnect database. MCDA also extracted data for Member/Provider Complaints, Member Hotlines, Member Appeals, Claims Adjudication, and Out-of-network Utilization to prepare visualizations for use by MCCO. In SFY23, MCDA was requested to add two new deliverables to the ETL process: UMCM 5.24.10 – Service Coordination Report, and a revised 5.13.4 – MCO Quarterly Pharmacy Report. ETL were designed, tested, and moved to production for 5.24.10, while ETL for 5.13.4 is still being designed. This deliverable is delayed until SFY24 due to ongoing errors in MCO data submissions. MCDA is providing detailed data quality reports on MCO data to MCCO to facilitate the improvement in data quality.

Project Name	Project Overview	Frequency of Update	Project Update
Monitoring MCO Contract Compliance - ETL Automation: Personal Care Services (PCS) Authorization	In SFY2022 Q1, MCDA staff began assisting STAR+PLUS and STAR KIDS policy staff in automating report production for MCO self-reported data submitted per UMCM chapters 5.4.5.3 and 5.4.5.6. The deliverables referenced in these chapters collect information about number of members authorized to receive PCS and number of members who received those services, as well as the number of units authorized and received.	Ongoing	Each quarter, MCDA staff continued to work with STAR+PLUS and STAR KIDS policy staff in redesigning the deliverable to provide for quality review of the submissions and to improve data analysis between MCOs.
MCO Contract Compliance – Quality Performance Report (QPR) Dashboards	The goal of the MCDA compliance dashboards is to enhance contract oversight by trending MCOs’ compliance with standards required by MCO contracts and the UMCM, such as claims adjudication timeliness and hotline call pick-up rate standards.	Quarterly	The QPR compliance dashboards were updated quarterly and revised to include all new data points through SFY23 Q3.
MCO Contract Compliance - Complaints Dashboards	As a result of findings from the report required by Rider 61 of the 2018-19 General Appropriations Act, SB 1, 85th Legislature, Regular Session, 2017 (Article II, HHSC), on Medicaid Managed Care Oversight, MCS initiated a project to revise the managed care member complaints process to streamline intake and tracking, more effectively leverage complaints data to identify risks, and ultimately improve quality of services. HB 4533, 86th Legislature, Regular Session, added related requirements, including making aggregated data available to the legislature and the public.	Quarterly	Each quarter, MCDA compiled the complaints data (SFY22 Q3 – SFY23 Q2) and refreshed the dashboards for the <a href="#">reports published on the HHSC website</a> .



Project Name	Project Overview	Frequency of Update	Project Update
PNA - Time and Distance Reporting	HHSC requires MCO provider networks to comply with distance and travel time standards in accordance with managed care contracts. MCDA measures geodistance and travel time between clients and providers using geospatial mapping analysis and displays results in a Tableau dashboard, which presents data on compliance with HHSC distance performance standards by MCO, county, and provider type.	Quarterly	<p>In SFY23, Medicare-Medicaid Plans (MMPs) were added to the Time and Distance reporting.</p> <p>MCDA expanded the scope of the Time and Distance Report to track quarter-over-quarter patterns in compliance.</p> <p>MCDA worked with MCCO to research the use of taxonomy codes to make better predictions about which providers perform particular services to more accurately reflect the networks.</p> <p>MCDA began producing a supplementary deliverable for the Time and Distance report to assist MCCO in identifying issues underlying provider exclusion to time and distance reports. The first of these deliverables has been submitted and its production is now part of the regular quarterly reporting workflow.</p> <p>MCDA provided two additional reports to MCCO: Dental network analyses comprised of Dental Maintenance Organization comparisons and patient provider ratios, and a Nursing Facility accessibility analysis for Rural and Tribal Areas.</p> <p>MCDA began working with Medicaid/CHIP Quality Assurance and MCCO to provide detailed methodology and information on our regular quarterly reporting process to the EQRO, who is required by CMS to validate time and distance standards.</p>

Project Name	Project Overview	Frequency of Update	Project Update
PNA - PMAS	MCDA is partnering with the MCS and the PMAS teams within DAP and HHSC IT, to further integrate and automate the data systems required to monitor PNA in a more holistic manner.	Ongoing	<p>In SFY23, MCDA worked extensively with MCS, the PMAS Data Engineering Team, and other DAP teams on integrating disparate provider datasets, data validation and profiling, and designing a data model to support efficient network adequacy monitoring analysis.</p> <p>MCDA adapted and documented geoprocessing workflows and consolidating spatial databases to prepare for enterprise architecture and data synchronization within a cross-team environment.</p> <p>Members of MCDA are participating in user acceptance testing and data validation of ingested data.</p> <p>MCDA is also working with a new GIS Administrator to set up cloud environments to support GIS product development for PNA.</p>
Prior Authorization Data Collection	In SFY22 Q4, HHSC, in collaboration with TMHP, completed development of the project to finalize variables to include in the new Member-Level Data Warehouse. Managed Care Utilization Review (UR) staff have continued to work with the MCOs to assist them in successfully submitting test data to the TMHP Data Warehouse.	Ongoing	In SFY23, MCDA continues to consult with UR staff regarding prior authorization data quality, access and querying the data in Oracle, developing a reporting strategy, and development of an anomaly detection dashboard.

Project Name	Project Overview	Frequency of Update	Project Update
Service Utilization Dashboard	MCDA creates and maintains a comprehensive service utilization dashboard displaying healthcare utilization by multiple service types, broken out by Medicaid and CHIP programs, MCOs, Service Delivery Area (SDA), age groups, race/ethnicity, and gender. The dashboard features multiple measures, including amounts paid, utilization rates, and number of claims.	Quarterly	In SFY23, the Service Utilization Dashboard was updated each quarter to ultimately include finalized data through SFY22 Q4 and preliminary data through SFY23 Q2.
Ongoing Trend and Anomaly Detection	MCDA presents its highest priority anomaly findings from the Service Utilization Dashboard to the Service Utilization Workgroup, a committee of subject matter experts from across MCS and other areas in HHSC, including Actuarial Analysis. The MCDA team asks the workgroup members to offer ideas for what is driving the anomaly and to provide direction on next steps. Anomalies may continue to be monitored past the quarter in which they are identified and may be referred to MCS leadership or OIG for further review.	Quarterly	In SFY23, new anomalies related to the utilization rate per 1,000 members or the amount paid per client were detected in the Service Utilization Dashboard data and shared with the Service Utilization Workgroup on a quarterly basis. Observations about the impact of the public health emergency (PHE) on services since then were based on data that were finalized each quarter. In SFY23 Q4, data through SFY22 Q4 (August 2022) were finalized.
COVID-19 Dashboards and Studies	Beginning in January 2021, MCDA posted external dashboards displaying the numbers and rates of Medicaid and CHIP clients receiving COVID-19 tests or receiving a service with a diagnosis of COVID-19, including emergency department visits and inpatient stays.	Quarterly	Through SFY23 Q1, MCDA refreshed the external COVID-19 dashboards with data through May 2022.

Project Name	Project Overview	Frequency of Update	Project Update
COVID-19 Non-risk Payment Expenditures	MCDA conducted an analysis to estimate the non-risk payment expenditures for COVID-19 testing/diagnostic services as well as inpatient hospital treatment. MCDA has built a dashboard that identifies any abnormal billing practices for MCOs that are receiving non-risk payments for testing/diagnostic services.	Monthly	Through SFY23 Q3, MCDA updated this dashboard to include data up to the May 2023 reporting time period. MCDA also fulfilled a request by MCS Operations to calculate how much HHSC has paid out in non-risk payments for COVID-19 vaccinations, medical treatment, and testing/diagnostic services.
Physical, Occupational, and Speech Therapy Monitoring	MCDA continues to closely monitor physical, occupational, and speech therapy utilization rates in compliance with Senate Bill 1, 87th Legislature, Regular Session, 2021 (Article II, HHSC, Rider 10).	Biannual	In SFY23, MCDA completed analyses on client service utilization, PNA, and services provided to clients while on wait lists, for inclusion in the December 2022, June 2023, and December 2023 reports. The most recently published <a href="#">Biannual Therapy Access Monitoring Report is for June 2023.</a>
Behavioral Health - Psychotropic Medications for Children in Foster Care	Since 2004, HHSC has reported on the utilization of psychotropic medications among children in foster care, in the Use of Psychotropic Medications for Children in Texas Foster Care annual report.	Annual	In SFY23 Q3, the <a href="#">Update on the Use of Psychotropic Medications for Children in Texas Foster Care: State Fiscal Years 2002-2021 Data Report</a> was published and posted on the HHSC website.
Behavioral Health - Psychotropic Medications for Interstate Compact on the Placement of Children (ICPC)	MCDA provides a quarterly report to MCS Vendor Drug Program on psychotropic medications among ICPC). ICPC children are foster children from other states who are sent to Texas to live with a relative and are covered by Texas Medicaid per the ICPC agreement. The report examines similar topics of prescription usage as other MCDA psychotropic monitoring reports but on a quarterly, rather than annual timeframe.	Quarterly	In each quarter of SFY23, MCDA completed the Psychotropic Medications for ICPC report.

Project Name	Project Overview	Frequency of Update	Project Update
Autism Services	The Medicaid Autism Services Policy went live Feb. 1, 2022, in compliance with Rider 28 (SB 1, 87 <sup>th</sup> Legislature, Regular Session, 2021 (Article II, HHSC)). MCDA provides the Autism benefit work group and the MCOs a bi-weekly update on licensed behavior analysts (LBAs) that have applied for enrollment and preliminary assessments to assist with recruitment and outreach.	Bi-weekly	In each quarter of SFY23, MCDA provided analysis to MCS Medical Benefits Policy staff for Readiness Governance presentations.
Client Enrollment and Eligibility Reporting	MCDA developed the monthly Medicaid and CHIP Enrollment and Eligibility Report to help investigate variations in client eligibility and enrollment data. The data in this report alerts the team to fluctuations in enrollment or Medicaid program rollouts which might impact service utilization. Enrollment data also provides the denominators used in utilization rates, which normalizes the rates to aid in direct comparisons between, for example, MCOs. The one-page enrollment report is distributed widely to MCS and other HHSC staff.	Monthly	<p>The Medicaid CHIP Enrollment and Eligibility Report is updated each month, and the latest report released in SFY23 Q4 was compiled in August 2023 and included data as of January 2023.</p> <p>In addition to the static PDF report produced by MCDA, MCDA has designed and implemented a Tableau Dashboard version of the eligibility and enrollment report.</p> <p>MCS has requested the addition of enrollment numbers for waiver programs to this report. In SFY23 Q4, MCDA initiated design work for data collection, with the goal of implementing this change in SFY24 Q1.</p>

Project Name	Project Overview	Frequency of Update	Project Update
Enhancing Data Marts	The Analytical Data Store (ADS) is a 'Best Picture' view of the claims and encounter data, meaning that it contains only the most current version of a transaction. ADS offers a cohesive blend of managed care and fee-for-service medical and pharmacy data, allowing a holistic view of a provider or member at the time a service took place. The ADS has become the preferred source for blended claims/encounters data and is accessible to MCDA and other DAP teams via the Data Analytics Platform.	Ongoing	In SFY23, MDCA continued to work with TMHP to enhance ADS with additional variables which will improve the accuracy and consistency of analyses. TMHP began incorporating long-term care (LTC) claims into ADS.  In SFY23 Q1, the enhancements that were finalized and implemented include indicators for Healthy Texas Women (HTW) and HTW Plus pharmacy claims, as well as standardized addresses and enhanced geocoding of client and provider addresses.
Texas Medicaid and CHIP COVID-19 and Flu Utilization Data	MCDA prepares data for System Forecasting to estimate future expenditures of COVID-19 and possible cost offsets with lower flu diagnoses. MCDA also provides data on utilization and expenditures for COVID-19 and flu testing and diagnosis.	Quarterly	In SFY23, MCDA delivered the report with data updated on a quarterly basis. Beginning in SFY23 Q3, MCDA added additional breakouts for the HTW program. The latest report, delivered in SFY23 Q4, contained data through March 2023.
Quarterly 1115 Transformation Waiver Report	Section 1115 of the Social Security Act requires that federal regulations specify requirements for demonstration monitoring and evaluation. Title 42 CFR 431.424 outlines general evaluation requirements and evaluation design components such as hypotheses, data sources, and comparison strategies.	Quarterly	In SFY23, MCDA provided reports for enrollment, provider counts, provider terminations, Member/Provider Complaints, Member Hotlines, Member Appeals, Claims Adjudication and Out-of-network Utilization with data from SFY22 Q3 through SFY23 Q2.

Project Name	Project Overview	Frequency of Update	Project Update
88th Legislature, Regular Session, 2023	Every two years, the Texas Legislature convenes and hundreds of house and senate bills are proposed that could affect HHSC, if passed. MCDA analyzes, pulls data, and calculates fiscal impacts for some bills.	Biennial	MCDA has prepared bill analyses on dozens of Texas Senate and House bills that may impact the work MCDA performs to support MCS. MCDA provided fiscal estimates and data for various topics, including teleservices, STAR Health, genetic testing, mental health/substance use disorder, women’s health, provider networks, homelessness, managed care In Lieu of Other Services, autism, COVID-19, and others.
Service Coordination Report	In SFY23 Q4, MCDA staff began assisting MCS Office of Policy staff with the production of a report for MCO self-reported data submitted per UMCM chapter 5.24.10 – Service Coordination Report. This report replaced UMCM 5.4.6.1 MSHCN Report beginning SFY23 Q2.	Quarterly	In SFY23 Q4, MCDA delivered the Service Coordination Report with SFY23 Q2 data.

## 4. Goals for Next Year

In SFY24, MCDA will build on the work it is conducting on MCS key initiatives and other projects, including the following:

### Provider Network Adequacy

MCDA will continue its partnership with MCS and the PMAS teams to further integrate and automate the data systems required to monitor PNA in a more efficient and holistic manner, as approved by the HHSC Data Governance and Performance Management (DGPM) Executive Steering Committee and Council. MCDA will continue to participate in an Agile process with IT to continue to build a comprehensive data mart and document current processes and requirements for later use. To that end, MCDA will be adopting Data Stewardship roles and engage in data management strategies to increase data quality and accessibility for this new resource. MCDA has also started designing interactive web-based applications that will allow users to visualize the changes in MCO compliance over time and explore results at more granular geographic scales than are currently reported.

### Analytical Data Store

In SFY24, MCDA will continue its collaborative work on enhancements to the ADS. Upcoming upgrades include creating a best picture representation of LTC claims in ADS, adding other high value long-term care data elements to the data model, and developing a method which allows data analysts to easily report across ADS and LTC-ADS data models.

### Enhancing Data Infrastructure

Given the breadth of the MCDA dashboard library, it is a resource-intensive endeavor to continuously carry out the ongoing updates necessary to keep the data as current as possible. To increase the efficiency of this process and increase the staff resources available to instead conduct more in-depth analyses, MCDA is investigating the feasibility of using Tableau Python Server (TabPy) to automate these dataset refreshes. TabPy is an external server implementation which allows the execution of Python scripts on Tableau.



## **Managed Care Contract Compliance**

In SFY24, MCDA will create a new Quarterly Pharmacy Report dashboard that will include prescription related prior authorization and percentage of maximum allowable cost metrics. Because several of the MCOs had difficulty correctly submitting data on the revised deliverable, MCDA is continuing to perform data quality reviews on the MCO submissions to allow MCCO staff the opportunity to assist the MCOs with data quality.

# List of Acronyms

<b>Acronym</b>	<b>Full Name</b>
ADS	Analytical Data Store
CHIP	Children’s Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
DAP	Office of Data, Analytics, and Performance
DGPM	Data Governance and Performance Management
EQRO	External Quality Review Organization
ETL	Extract, Transform, and Load
GIS	Geographic Information System
HB	House Bill
HHSC	Health and Human Services Commission
HTW	Healthy Texas Women
ICPC	Interstate Compact on the Placement of Children
IT	Information Technology
LBA	Licensed Behavioral Analyst
LTC	Long-Term Care
MCCO	Managed Care Contracts and Oversight
MCDA	Medicaid CHIP Data Analytics
MCO	Managed Care Organization
MCS	Medicaid and CHIP Services
MMP	Medicare-Medicaid Plan
OIG	Office of Inspector General
PCS	Personal Care Services
PMAS	Performance Management and Analytics System
PNA	Provider Network Adequacy
QPR	Quality Performance Report
SDA	Service Delivery Area
SFY	State Fiscal Year
TabPy	Tableau Python Server
TMHP	Texas Medicaid & Healthcare Partnership
UMCM	Uniform Managed Care Manual
USPS	United States Postal Service