

**Medicaid CHIP Data
Analytics Unit
Quarterly Report of
Activities SFY20, Q1**

As Required by

**2020-21 General Appropriations
Act, House Bill 1, 86th Legislature,
Regular Session, 2019**

(Article II HHSC, Rider 10)

**Texas Health and Human Services
Commission**

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Table of Contents

Table of Contents	ii
1. Introduction	1
2. Monitoring MCO Contract Compliance.....	2
Extract, Transform, and Load Automation	2
Compliance Dashboards	2
Claims Administration Contract Oversight	3
Clinician Administered Drugs Monitoring	3
Provider Network Adequacy	4
Utilization Review	4
Prior Authorization and Denial Data Collection	5
3. Tracking Service Utilization and Related Data	6
Service Utilization Dashboards	6
Ongoing Trend and Anomaly Detection.....	6
Physical, Occupational, and Speech Therapy Monitoring	9
4. Enhancing Data Infrastructure	10
MCDA Platform.....	10
Data Marts.....	10
5. Goals for Next Quarter	11
Prior Authorization and Denial Data Collection	11
Compliance Dashboards and ETL	11
Trend and Anomaly Detection	11

Service Utilization Dashboards	11
Enhancing Data Infrastructure	12

1. Introduction

The 2020-21 General Appropriations Act, House Bill 1, 86th Legislature, Regular Session, 2019 (Article II, Health and Human Services Commission, Rider 10) directs the Health and Human Services Commission (HHSC) to “report to the Legislative Budget Board on a quarterly basis the activities and findings of the Data Analysis Unit” created by Government Code, §531.0082. The following report fulfills this requirement for the first quarter of State Fiscal Year 2020 (SFY20 Q1).

During SFY20 Q1, the Medicaid CHIP Data Analytics (MCDA) Unit within the Center for Analytics and Decision Support (CADS) completed 47 projects or milestones 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, is described in three sections of the report: 1) Monitoring MCO Contract Compliance, 2) Tracking Service Utilization and Related Data, and 3) Enhancing Data Infrastructure.

MCDA collaborates closely with many Medicaid and CHIP Services (MCS) divisions, including Policy and Program, Managed Care Compliance and Operations (MCCO), Medical Director’s Office, Operations Management, Quality Assurance, and Utilization Review (UR). Much coordination occurs through MCDA’s participation in committees for the following MCS SFY20 Initiatives: Network Adequacy and Access to Care Monitoring, Complaints Data Trending and Analysis, and Strengthening Clinical Oversight.

Beyond collaboration with MCS, Rider 10 directs that “...any anomalies identified related to service utilization, providers, payment methodologies, and compliance with the requirements in Medicaid and CHIP shall be reported to the Office of the Inspector General for further review.” MCDA and the Office of the Inspector General (OIG) communicate monthly to exchange updates on respective analyses. In addition, while no longer legislatively mandated, MCDA and Actuarial Analysis continue to meet monthly, collaborating to investigate anomalies in expenditure data and to ensure the soundness of data used for rate setting.

2. Monitoring MCO Contract Compliance

Extract, Transform, and Load Automation

MCDA is a key partner in HHSC's efforts to increase the data-driven efficiency of monitoring managed care organization (MCO) contract compliance. Due to the original Extract, Transform, and Load (ETL) automation developed by MCDA, MCS has saved staff time that would otherwise have been spent manually processing thousands of reports MCOs submit in Excel format. The ETL has also facilitated MCDA's handling of MCO deliverable data for purposes of responding to ad hoc data requests and creating data visualizations in the form of compliance dashboards.

While the quality of the data received from the MCOs has been improved by the ETL system, the legacy Data Tracking System (DTS) lacks the quality checks and feedback loops of the ETL because of its open file transfer protocol. In order to improve the quality of MCO transmitted data, HHSC has begun the process of implementing a newly developed portal ("TexConnect") for MCO submissions. TexConnect accepts deliverables in text file formats that are subject to front-end review for proper data format and layout.

At this time, both the Claims Summary Report and the Member Appeals deliverable have been transitioned from the legacy system to TexConnect. While maintaining the original ETL system for deliverables that have not yet transitioned, MCDA has also developed a second ETL system that utilizes Access to transform data received via Tex Connect and load it onto the MCDA Oracle data platform. MCO data received via the legacy system and MCO data received via TexConnect are combined in the production of MCDA's compliance dashboards. Working closely with MCS has ensured the continued timely reporting of MCO compliance measures.

Compliance 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 Medicaid Uniform Managed Care Manual, such as claims adjudication timeliness and hotline call pick-up rate standards. The dashboards provide HHSC staff with access to compliance data in a user-friendly, flexible, and efficient format. The compliance dashboards are used to facilitate data-driven decisions concerning the need for corrective actions, including the issuance of liquidated damages which, in turn, are being tracked in a dedicated dashboard of their own. As the dashboards contain confidential agency data, they are for internal use.

There are three compliance dashboards. These include: the Quarterly Performance Reports (QPR) dashboard, the executive compliance dashboard, and liquidated damages dashboard.

The QPR compliance dashboard has been updated and revised to include all new data points through SFY19 Q4. The dashboard includes compliance results at the detail level, with additional supporting details to enhance monitoring activities. Program staff use this dashboard as a tool to determine contract compliance of their assigned MCOs.

The executive compliance dashboard is used to inform Medicaid and CHIP Services staff and leadership at Managed Care Oversight Committee meetings and is published to an internal server. This dashboard conveys the overall health of each MCO, makes comparisons across programs and across the MCOs' performances within each program, and is updated on a quarterly basis.

The liquidated damages dashboard aggregates instances of non-compliance and associated damages. It allows contract management staff to easily identify trending non-compliance issues by subject, those MCOs receiving the most liquidated damages, and aggregated dollar amounts levied against said MCOs.

Claims Administration Contract Oversight

This quarter, MCDA provided ongoing technical consultation to MCS Claims Administration Contract Oversight (CACO) on aspects of the current Texas Medicaid & Healthcare Partnership (TMHP) contract with Accenture. MCDA participated in an ongoing series of meetings with Accenture in which CACO follows up on internal annual reviews of key contract requirements ("Key Measures"). In these meetings, MCDA serves as technical advisor to CACO as the Process and Calculation methodology documents (contract components) for Key Measures are reviewed with Accenture. Also this quarter, MCDA served in a similar consulting role as a final Key Measure was revised to incorporate expectations for Accenture's responsibilities regarding Electronic Visit Verification vendors and associated data.

Clinician Administered Drugs Monitoring

MCDA continues to produce several recurring reports to help MCS enhance MCO performance monitoring. One example is the quarterly Clinician Administered Drugs (CAD) report. Since January 2014, MCOs have been required to submit National Drug Codes for CADs along with associated Healthcare Common Procedure Coding. Non-compliance with this requirement impacts the state's ability to collect federal vendor drug rebates. On a quarterly basis, MCDA provides an analysis of CAD

encounter compliance by MCO, which allows contract staff to educate low performing health plans on proper coding. The percentage of invalid paid CAD encounters decreased from 16 percent in SFY16 Q4 to 1 percent in SFY19 Q1. MCCO and Vendor Drug use the report to assess liquidated damages for non-compliance.

Provider Network Adequacy

One of MCDA's high priority projects is serving as data experts on the Network Adequacy Steering Committee. The committee has worked intensively to identify the functional requirements of the forthcoming Business Intelligence (BI) Tool funded as part of an exceptional item put forward by HHSC during the 86th Texas Legislative Session. The purpose of the BI tool is twofold. It will consolidate data from multiple areas to create a holistic view of factors impacting Medicaid provider network adequacy. The BI tool will also automate manual monitoring and reporting processes to ensure MCO compliance with state and federal network adequacy standards.

Through Agile discovery sessions, the committee has identified potential "personas" (BI tool users) and their specific needs from the BI tool. These "user stories" will help inform the agency's Statement of Work. MCDA staff participation has been key in this development process since they can provide not only expert knowledge of the provider data sources, but also experience linking the disparate provider data sources to build internal dashboards for monitoring provider network adequacy. The team's experience has helped the committee determine challenges the BI tool will need to overcome to deliver solutions to meet the agency's business needs.

Utilization Review

MCDA continues to help the UR Team conduct their annual reviews of clients receiving services under the STAR+PLUS Home and Community Based Services (HCBS) Waiver and the Medically Dependent Children's Program (MDCP) waiver within the STAR Health and STAR Kids programs. The purpose of these legislatively mandated reviews is to monitor the appropriateness of care delivered by MCOs. MCDA provides sampling consultation to ensure the reviews adequately represent the targeted populations. In September, MCDA identified for UR the sample for the 2020 UR MDCP review. The sample was designed at the individual MCO level, rather than at the statewide level, in order to allow for comparisons to be made between MCOs. Subsequently, MCDA provided technical assistance to UR in responding to questions from MCOs regarding the methodology used for the MDCP sampling. Also this quarter, MCDA began collaborating with UR to design the sampling approach to be used for the 2020 UR HCBS review.

Prior Authorization and Denial Data Collection

In the summer of 2019, MCDA helped the Prior Authorization subcommittee of the MCS Improving Clinical Oversight initiative finalize a new data survey tool that will collect comprehensive aggregated data for all services requiring prior authorization (PA) from MCOs delivering managed care products on a monthly basis. Currently, MCO prior authorization data is not available to HHSC unless requested on an ad hoc basis. Obtaining the aggregated data will enhance contract oversight by allowing MCS and MCDA to track unusual trends over time and potential variations between MCO prior authorization processes. In the coming quarter MCDA will extract, clean, and analyze the data from the first submissions.

Simultaneously, the Prior Authorization subcommittee has been developing the Change Order Request (COR) for the 2nd phase of the project, the Prior Authorization Member-Level Data Warehousing Project. The more granular data will allow MCDA to connect client level prior authorizations to actual services delivered as reported in the encounters.

3. Tracking Service Utilization and Related Data

Service Utilization Dashboards

MCDA creates and maintains a library of dashboards displaying healthcare utilization by service type. These dashboards are designed to simplify detection of trends and variations in the data. Examination of the dashboards leads to the identification of anomalies, from billing issues to changes in service utilization levels or amounts paid for services. Currently, dashboards are maintained for internal agency use on the following services: telemedicine, emergency department visits; inpatient stays; physical, occupational, and speech therapies; private duty nursing; personal care services; dental services, and durable medical equipment. In addition, an aggregated master utilization dashboard is published combining all topics into one view. Behavioral health data was added to the master dashboard this quarter, as well, while more elaborate dashboards for both mental health and substance abuse are under development. Psychotropic medications and the Vendor Drug program have dedicated dashboards that are refreshed periodically, but that are not part of the master dashboard.

Service utilization dashboards were updated to include CHIP data this quarter. The upcoming cycle of updates to the MCDA dashboard library will be completed by the end of January 2020 and will extend to data from the second quarter of SFY19.

Ongoing Trend and Anomaly Detection

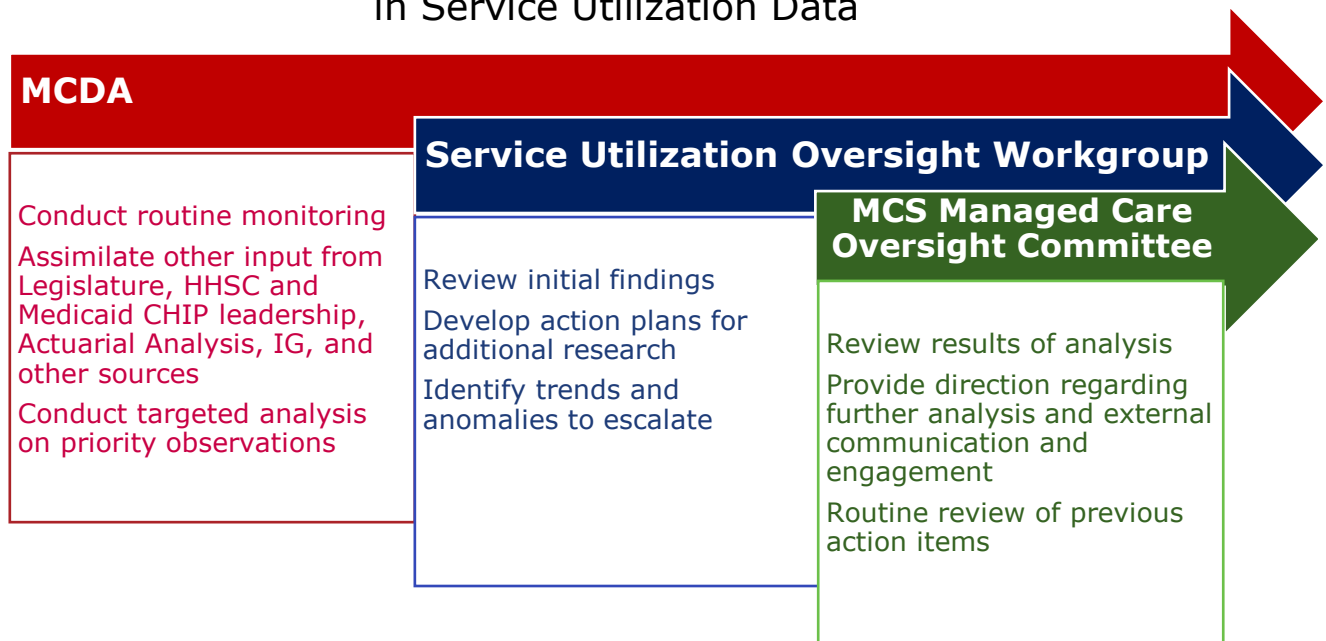
MCDA receives input from MCS leadership and program staff regarding the service types on which to focus within each managed care product. In particular, MCDA receives direction from the internal Service Utilization Workgroup under the Strengthening Clinical Oversight managed care initiative led by MCS. The workgroup provides a forum for a group of clinical, program, and policy experts to leverage Medicaid CHIP utilization data and guide MCDA in its charge to identify anomalies in service utilization and cost.

Once MCDA detects a potential anomaly, analysts take several steps to identify an explanation for the data variation. First, data quality is reviewed. Additionally, MCDA developed and updates a chronological dashboard that denotes when significant Medicaid and CHIP program and policy changes have been implemented. This dashboard helps determine whether observed irregularities in utilization data may be a result of such changes.

Another tool developed by MCDA to help investigate data variations is the Monthly Enrollment Report. The data in this report alerts the team to fluctuations in enrollment or Medicaid program roll-outs which might impact service utilization. Enrollment data also provides denominators used in utilization rates, normalizing 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. Its use has resulted in efficiencies by replacing ad hoc data requests historically managed by CADS and HHSC Forecasting with a self-service alternative. Since the report is vetted by Forecasting before its release, its use also improves consistency in reporting and may be shared to external stakeholders.

If, after further investigation, observed data variations are not explainable by data integrity issues, policy or program changes, or predictable patterns such as seasonality, MCDA presents its findings to the workgroup, which in turn provides further guidance on where to conduct deeper analysis. If findings have the potential to impact quality of care or cost to the state, leadership is briefed at a Managed Care Oversight Committee meeting. The following diagram shows the process flow for the review of service utilization data for trends and anomalies.

Process Flow for Trends and Anomalies in Service Utilization Data



In a continuous improvement initiative designed to maximize the potential to identify important data variations, MCDA has expanded its internal procedures for making quarterly updates to the key service utilization dashboards. Dedicated analysts have been assigned to acquire specific expertise in the various areas of service. The primary analyst assigned to an area leads the quarterly update, becoming highly familiar with the data. The analyst utilizes a control chart process to objectively identify signals of significant variations in the data.

In this quarter, the initial round of signal detection revealed 102 potential anomalies in the service utilization dashboard data. Of note, anomalies are counted at the managed care program and time period level to allow for unique explanations driving the anomalies. As a result, the number of anomalies is inflated considering what is likely the same explanation for multiple anomalies. An example would be seasonality that impacts many programs within a specific service. Since not all programs are impacted and even those that are impacted exhibit slightly different seasonal patterns, the anomalies would be counted and tracked separately.

MCDA staff convened to review the anomalies to identify data patterns that were explicable through such factors as policy changes and seasonality. Upon completion

of this preliminary review, 42 data signals remained unexplained. These 42 remaining signals appeared across the spectrum of Medicaid fee-for-service and managed care programs and were found among the behavioral health, durable medical equipment, therapy and inpatient services dashboards. In its December 2019 meeting, the Service Utilization Workgroup will review a collection of signal tracking summaries selected by MCDA that will illustrate the range of findings yielded by the control chart identification and review process. The workgroup will determine which findings, if any, will be brought before the Managed Care Steering Committee for further examination.

Physical, Occupational, and Speech Therapy Monitoring

MCDA continues to closely monitor physical, occupational, and speech therapy utilization rates in compliance with Rider 15, General Appropriations Act, Article II, 86th Texas Legislative Session (formerly Rider 57). A decrease was detected in active providers (i.e., providers with a billed encounter) beginning in May 2016. This date corresponds to implementation of therapy policy changes related to documentation and prior authorization. The number of active providers decreased steadily from 2,473 in April 2016 to 1,739 in December 2017. Other events that occurred during that time period which may or may not have had additional impacts include: the STAR Kids program implementation in November 2016, reimbursement rate changes in December 2016, and the deadline for provider reenrollment in February 2017. In the months following December 2017, the number of active providers per month appears to have stabilized. For more information, the reader is referred to <https://hhs.texas.gov/sites/default/files/documents/laws-regulations/reports-presentations/2019/quarterly-therapy-access-monitoring-sept-2019.pdf> for the Quarterly Therapy Access Monitoring Report – September 2019.

MCDA provided analyses on client service utilization, provider network adequacy, and services provided to clients while on wait lists for inclusion in the next Rider 15 report. The report is now under internal review and is scheduled for release in December.

The MCDA Director presented key findings on therapy utilization rates to the STAR Kids Stakeholder Workgroup in November. The workgroup includes representatives of MCOs, providers, and organizations representing members.

4. Enhancing Data Infrastructure

MCDA Platform

The work MCDA conducts depends on a robust, reliable, and flexible data system. In conjunction with TMHP, MCDA developed a platform that allows analysts to access data stored at TMHP more quickly than the original process of pulling the data over an internet connection. The platform contains two servers, numerous software applications used by MCDA staff to perform analysis and reporting, and a Tableau server used by MCDA staff to produce dashboards. The platform houses other data produced by MCDA staff, such as Medicaid and CHIP enrollment data, MCO self-reported quality measures, and professional licensure data. MCDA regularly tests system upgrades, performs quality control, and collaborates with TMHP staff to detect and correct errors and address any system performance issues.

Data Marts

MCDA's TMHP platform houses the Physical, Occupational, and Speech Therapy (PTOTST) and Behavioral Health (BH) Data Marts, designed to allow quick and detailed analysis of trends and variations. The PTOTST Data Mart contains the most recent five years of data on therapy encounters, forming the basis for analysis and visualization of such variables as cost and utilization measures by factors such as year, MCO, Service Delivery Area, and Managed Care program. The current BH Data Mart, updated annually, houses behavioral health related services and non-behavioral health data to allow analysis of co-morbidities. In anticipation of development of a third subject-specific Data Mart based on MCS-directed priorities, MCDA is working to create a new "building block" of core enrollment data that will become part of any future Data Mart, regardless of subject.

5. Goals for Next Quarter

In SFY20 Q2, MCDA will build on the work it is conducting on MCS' key initiatives and other projects, including the following:

Prior Authorization and Denial Data Collection

In the coming quarter MCDA will begin to extract, clean, analyze, and visualize in a dashboard the first MCO submission of aggregated PA data. This analysis will occur monthly until the system for collecting client level PA data is designed and implemented.

Compliance Dashboards and ETL

MCDA will leverage the work done during this quarter, as more deliverables are transitioned to the flat file/portal delivery system. The next two deliverables scheduled to be submitted by MCOs through TexConnect will be Provider Termination data from SFY2020 Q1 and MCO Hotlines (Member, Provider, BH, Nurse) data from November 2019, both due to HHSC on December 31, 2019.

Trend and Anomaly Detection

In December 2019, MCDA will redesign the multi-department Service Utilization Workgroup under the leadership of the MCDA Director. The Director will lead a presentation on MCDA's new quarterly, control chart driven approach to detection of data variation signals. Specific findings from last quarter's analysis will be discussed and decisions made regarding escalation of selected findings.

Service Utilization Dashboards

In the coming quarter, all service utilization dashboards will be updated with the most recently available data, covering the second quarter of SFY19, with a target date for completion by the end of January 2020. Also, MCDA will expand on the capabilities of the dashboards to detect anomalies. Initially, the tool was designed to detect data points outside the control limits and runs of seven or more consecutive data points on one side of the long term average. In the coming quarter, MCDA will add short run signals to its detection tool (i.e., three of four consecutive values closer to a control limit than to the average value).

Enhancing Data Infrastructure

To leverage the usefulness of the MCDA Data Platform, MCDA will continue to train CADS staff outside of the MCDA unit on its use. Further, during SFY20 Q2 MCDA will target completion of the core enrollment building block and begin construction of a core encounters building block. At the request of the State Medicaid Managed Care Advisory Committee, the MCDA Director will make a presentation to the committee on the Behavioral Health Data Mart in March. The presentation will include a description of the types of co-morbidity analyses enabled given that the data include both behavioral health and non-behavioral health services received by clients with a behavioral health diagnosis or service.