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Subject: Legislatively mandated report: Encounter Data Quality Assurance Protocol Review
Attachments: MN DHS Encounter Data Quality Assurance Protocols_Report FINAL.PDF

Good afternoon.

Attached is a report from Deloitte which is an assessment of the efficacy of DHS' (EDQU's) implementation of the Quality Assurance Protocols (QAPs) as mandated by the above mentioned statute. The report describes each of the ten protocols in detail, and looks at the implementation of each. It also attempts to gauge the effect of each QAP on the quality, completeness and/or timeliness of the data. Below is the statutory language calling for the report.

Statutory language mandating the report: 256B.69 subd. 9d.

(b) Each managed care plan and county-based purchasing plan providing services under this section shall provide to the commissioner biweekly encounter data and claims data for state public health care programs and shall participate in a quality assurance program that verifies the timeliness, completeness, accuracy, and consistency of the data provided. The commissioner shall develop written protocols for the quality assurance program and shall make the protocols publicly available. The commissioner shall contract for an independent third-party audit to evaluate the quality assurance protocols as to the capacity of the protocols to ensure complete and accurate data and to evaluate the commissioner's implementation of the protocols.

(c) Upon completion of the evaluation under paragraph (b), the commissioner shall provide copies of the report to the legislative auditor and the chairs and ranking minority members of the legislative committees with jurisdiction over health care policy and financing.

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Encounter Data Quality Assurance Protocol Review

Deloitte Consulting LLP
June 30, 2017

Table of Contents

TABLE OF CONTENTS	I
BACKGROUND AND PURPOSE	1
EXECUTIVE SUMMARY	2
Effectiveness of Quality Assurance Protocol Implementation	2
QUALITY ASSURANCE PROTOCOL REVIEW	6
Protocol 1 – Timeliness of Submissions	6
Protocol 2 – Resubmissions	10
Protocol 3 – MCO Quality Checks Against Benchmarks	13
Protocol 4 – Duplicate Encounter Records Submitted	36
Protocol 5 – Rejections and Denials by DHS	39
Protocol 6 – Control Reporting and Reconciliation	42
Protocol 7 – Claims Review	47
Protocol 8 – Remediation Plan	47
Protocol 9 – Data Quality Assurance Report	49
Protocol 10 – MCO Review of Provider Data	50
APPENDIX – SUPPLEMENTAL GRAPHS AND EXHIBITS	51
Protocol 3 – MCO Quality Checks Against Benchmarks	51
Protocol 5 – Rejections and Denials by DHS	62
Protocol 6 – Control Reporting and Reconciliation	68

Background and Purpose

The Minnesota Department of Human Services ("DHS"), through its Healthcare Research & Quality ("HRQ") Division, sought proposals from qualified Responders to evaluate DHS's implementation of the Quality Assurance Protocols ("QAPs") developed by DHS, and to evaluate whether the QAPs ensure timely, complete and accurate data is submitted to DHS by managed care organizations ("MCO") and county-based purchasing plans under Minnesota Health Care Programs ("MHCP"). The services requested were intended to satisfy the requirements of [Minnesota Statutes, section 256B.69, subdivision 9d\(b\)](#).

DHS is one of the largest payers of health care in Minnesota. DHS provides health care services to over 1,000,000 Minnesotans through a combination of federal and state health care programs, including Minnesota's Medicaid program, Medical Assistance ("MA"), and MinnesotaCare (a subsidized health care program for people who live in Minnesota and do not have access to health insurance). These combined health care programs are jointly referred to as MHCP.

Under Minnesota Statutes, section 256B.69 subdivision 9d(b), each MCO and county-based purchasing plan contracted with DHS must provide DHS biweekly encounter data and claims data, and must participate in a quality assurance program that verifies the timeliness, completeness, accuracy, and consistency of the data provided to DHS. To assure quality of this data, DHS, in collaboration with a private vendor, developed QAPs DHS could implement that the MCOs and county-based purchasing plans must follow. These protocols are publicly available at:

<https://edocs.dhs.state.mn.us/lfserver/Public/DHS-6761F-ENG>

Minnesota Statutes, section 256B.69 subdivision 9d(b), also requires DHS to contract with an independent third-party "to evaluate the quality assurance protocols as to the capacity of the protocols to ensure complete and accurate data and to evaluate [DHS'] implementation of the protocols." DHS contracted with Deloitte Consulting LLP ("Deloitte Consulting") to evaluate the DHS's implementation of the QAPs developed and to assess how effectively each protocol served to make managed care encounter claim data more accurate, timely and complete to support DHS's management and monitoring of the quality of data submitted by its MCOs.

After obtaining the data, documentation, and reports provided, we have reviewed and summarized any notable and/or reoccurring themes showing improvements in data accuracy, completeness, claim submission timeliness, and other patterns of improved data quality. We have facilitated meetings with DHS to solicit feedback on the efficacy of current data quality review tests, controls, and procedures.

The final deliverable Deloitte Consulting is providing to DHS is this evaluation report separately examining the implementation of each QAP and the effectiveness of the QAPs at improving MCO encounter data timeliness, accuracy, and completeness.

Executive Summary

Effectiveness of Quality Assurance Protocol Implementation

Approach

To evaluate the implementation of QAPs 1-5, Deloitte Consulting requested DHS staff provide high-level data summaries of the encounter data, broken out in various ways pertinent to each of these QAPs.

QAPs 6, 8, 9, and 10 each rely on various forms of reporting and documentation to help resolve issues with the data retroactively. To evaluate the efficacy of the implementation of these QAPs, Deloitte Consulting worked with DHS staff to obtain such reports or other information that DHS has compiled, including but not limited to the Control Reports (QAP 6), remediation plan form (QAP 8), MCO Data Quality Assurance Reports (QAP 9), and any information DHS could share pertaining to the MCO's review of encounter data received from its providers (QAP 10).

The evaluation of this data helped assess effectiveness of the implementation of the QAPs and resulting improvements in encounter data timeliness, completeness, quality, and accuracy, as well as determining if the MCOs were within expected and reasonable thresholds.

We reviewed each QAP individually.

Note: QAP 7, claims review, was not reviewed for this report as DHS had not implemented it and therefore did not include it within the scope of the RFP. DHS determined the QAP as originally outlined would not yield sufficiently useful findings relative to the other QAPs to justify anticipated excessive expense and resource strain for DHS, MCOs, and provider systems; and could more effectively be addressed through alternative audit mechanisms.

Findings

Overall the QAPs were implemented effectively and have contributed to improvement in the quality, completeness, accuracy, and timeliness of the encounter data submitted by the MCOs. This has been observed in each QAP through the metrics under evaluation improving over time whether that be error rate improvements, reduction in the number of days for submissions or resubmissions, or reduction in volatility against benchmarks/thresholds. This has also been observed through the expanded usability of the encounter data.

It is difficult to attribute the expanded usability of the encounter data solely to the implementation of the QAPs since the QAPs were implemented recently and many of the encounter data improvement milestones have been realized over a longer period. However, it appears the QAP implementation has contributed to the improvement of the data more recently.

As such, DHS has expanded the encounter data's usage in many avenues such as pricing, reporting, and analytics. Below is a list of areas where the encounter data is now being utilized due to the improved overall quality of the encounter data:

- MCO rate calculations: The managed care rate setting process utilizes managed care data for the final capitation rate calculations
- Integrated Health Partnership ("IHP") risk adjustment and cost of care targets
- Reconciliation of MCO financial reporting: Blocks of data problems identified and corrected by the control reporting reconciliation
- General analytics: Wide spread rising confidence in DHS in data elements such as MCO paid amounts for analytics
- Operational support for wide variety of programs (Certified Community Behavioral Health Clinics ("CCBHC"), Behavioral Health Homes ("BHH"), IHP, Inpatient rate setting, etc.)
- Monitoring case management by the MCOs
- Fraud and abuse
- Quality of care measurements
- Risk scoring

- As a source for academic research (University of Minnesota, Minnesota Department of Health, etc.)
- County support
- Legislative policy
- Pharmacy rebates

Although the encounter data has improved, continued improvement is still possible for individual MCOs and specific QAPs as specified in our high-level observations below and within each QAP section.

The following findings summarize our high-level observations from our review of the QAP implementation.

Protocol	Findings and Observations
QAP #1 – Timeliness of MCO Data Submission	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> • This QAP was effectively implemented except the development of explicit thresholds • All MCOs except one saw a decrease in their percentage of claims submitted greater than 30 days from MCO Received Date from January 2014 to April 2017; thus, improving the overall timeliness of encounter data submissions <p><u>Potential Improvement Areas or Enhancements</u></p> <ul style="list-style-type: none"> • There is still room for improvement in the timeliness of submissions and population of MCO received date; however, the results within this report are emerging since DHS has only been collecting this data element since September 1st, 2015 • DHS could develop an explicit numeric threshold to establish accountability for the MCO's to comply with DHS timing standards as noted in the QAP
QAP #2 – Resubmissions	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> • This QAP was effectively implemented except for the active monitoring of claims being submitted within 20 days and the development of explicit thresholds • In aggregate, the percentage of unsuccessful resubmissions reduced over time for 2016 • The Corrected Claim Penalty program was implemented to satisfy this QAP. The financial penalty put in place incents the MCOs to successfully resubmit the requested claims in a timely fashion. <p><u>Potential Improvement Areas or Enhancements</u></p> <ul style="list-style-type: none"> • The MCOs could still improve on their percentage of unsuccessful resubmissions suggesting this QAP still needs attention beyond occasional monitoring • DHS could consider evaluating whether the MCO resubmitted the claims within a specified time period, such as the 20 days noted in the QAP • DHS could develop an explicit numeric threshold as noted in the QAP to establish accountability for the MCO's to comply with DHS's resubmission standards

Protocol	Findings and Observations
QAP #3 – MCO Quality Checks against Benchmarks	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> • The utilization and dollars benchmark monitoring and error reporting were effectively implemented • For utilization and dollars benchmark monitoring, DHS implemented a methodology and process to identify if any outliers in the data exist that may require further investigation. The methodology does not identify data issues, but rather is an indicator for where data issues may be. • For error reporting, which monitors the frequency of specific claims edits, all plans saw improvement over time, particularly after June 2016 <p><u>Potential Improvement Areas or Enhancements</u></p> <ul style="list-style-type: none"> • The utilization and dollars against benchmarks analysis had several outliers noted throughout the QAP, which could be caused by a variety of reasons and does not necessarily indicate data issues. The overall volatility seen throughout implies this QAP still needs attention beyond monitoring • Continued refinement and examination of the risk adjusted benchmarks is needed to ensure they are reflective of the population.
QAP #4 – Duplicate Encounter Records Submitted	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> • DHS effectively implemented this QAP as it was originally intended • Overall, the percentage of duplicates has decreased over time and been below DHS specified thresholds since June 2016 for all MCOs except three in the month of December 2016 <p><u>Potential Improvement Areas or Enhancements</u></p> <ul style="list-style-type: none"> • DHS could consider adding these edits to the Corrected Claims Penalty Program
QAP #5 – Rejections and Denials by DHS	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> • DHS effectively implemented this QAP as it was originally intended • In aggregate, after the implementation of the financial penalty starting in February 2016, all MCOs saw a noticeable reduction in rejections and denials. Specifically, starting in Q2 2016, all MCOs had at most one quarter above the 2.5% threshold. <p><u>Potential Improvement Areas or Enhancements</u></p> <ul style="list-style-type: none"> • DHS could consider adding new MMIS edits that check for MCO data quality issues in MMIS
QAP #6 – Control Reporting and Reconciliation	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> • The total percentage difference comparing dollars from MCO financials to the DHS warehouse for all MCOs decreased over time from 2012 to 2015

Protocol	Findings and Observations
	<ul style="list-style-type: none"> • DHS effectively implemented this protocol as it was originally intended • DHS effectively implemented the infrastructure for the reporting and internal processes for the control aggregate and detail for ongoing reconciliation. This has been a highly effective method for identifying and correcting problems on a large scale. <p><u>Potential Improvement Areas or Enhancements</u></p> <ul style="list-style-type: none"> • Although there has been improvement, the MCOs could continue to reduce the variance in the aggregate control reports • DHS could develop a more formal process for reporting and performance against goals to enforce the 1% threshold
QAP #7 – Claims Review	<ul style="list-style-type: none"> • N/A - This QAP was not implemented as DHS did not include it within the scope of the RFP • DHS determined the QAP as originally outlined would not yield sufficiently useful findings relative to the other QAPs to justify anticipated excessive expense and resource strain for DHS, MCOs, and provider systems; and could more effectively be addressed through alternative audit mechanisms.
QAP #8 – Remediation Plans	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> • DHS effectively implemented this QAP as it was originally intended • To date, DHS has not needed to leverage the formalized remediation plan process and instead works with the MCO informally to correct deficiencies • The existence of this QAP has indirectly improved transparency, communication and collaboration with the MCOs and has led to the resolution of a variety of data issues
QAP #9 – Data Quality Assurance Report	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> • DHS effectively implemented this QAP • Reports submitted by MCOs provided transparency on the MCOs' processes and quality checks • Ten best practices from these reports have been shared with the MCOs • A survey tool is being developed by DHS to summarize information more easily for a second round of Quality Assurance Reports <p><u>Potential Improvement Areas or Enhancements</u></p> <ul style="list-style-type: none"> • DHS could continue to communicate with the MCOs to understand if their processes are evolving based on either the best practices provided or the summarized information from the second round of Quality Assurance Reports

Protocol	Findings and Observations
QAP #10 – MCO Review of Provider Data	<p><u>Overall Findings</u></p> <ul style="list-style-type: none"> The DHS contract managers for each MCO currently receive a certification of encounter data, a certification of the provider data, and a certification for the reports data from each MCO. The submitters also acknowledge and certify the number of files, number of claims, claim types, and dates. This QAP was redundant due to work already being completed by the contract management area within DHS and thus indirectly implemented

Quality Assurance Protocol Review

Protocol 1 – Timeliness of Submissions

Protocol Definition

A standard for the timeliness of encounter submissions which measures the percentage of encounters not submitted within the 30 calendar day time standard set by DHS. Performance will be tracked for each MCO and must be below a specified threshold, as determined by DHS.

Measurement

The following standard is used to assess compliance with the timeliness of submissions protocol:

$$\bullet \quad \frac{\text{Total number of encounter records submitted to DHS after 30 calendar days from MCO received date}}{\text{Total encounter records submitted to DHS}} < x\%$$

Note: A value for this threshold has not yet been defined

Current State

DHS prior to early 2015 only had date of service, MCO paid date, MCO submission date, and Julian date from the TCN to measure timeliness of MCOs' submitted encounter data. The MCO received date was introduced to the plans at the MCO quarterly February 2015 meeting and was meant to be submitted on all encounter claims received by DHS after September 1st, 2015. The standard for assessing timeliness of data submissions will use the MCO received date and the DHS submission date to determine timeliness of claims submissions by each MCO.

DHS calculates the data submission timeliness metrics annually. The timeliness data doesn't lend itself to more frequent assessment.

Data and Approach

Overview: The percentage of claims received by DHS after 30 days from MCO received date was evaluated to determine if it was decreasing over time. This was done by comparing the number of claims received by DHS after 30 days from MCO received date relative to total claims submitted. The time period evaluated was from January 2014 through April 2017.

Data received: The number of claims by MCO, by year of service, and by claim type (i.e. inpatient, outpatient, professional, pharmacy, and dental) showing the number of days between different points in time along the claim submission process was received. Data was received over the time period from January 1st, 2013 through May 2, 2017. Data in May 2017 was not included in the analysis since there was not a full month of data available. Data was received in two different tables.

Table for Claims with MCO Received Date: This table broke out the number of days between date of service and MCO received date, the number of days between MCO received date and MCO paid date, the number of days between MCO paid date and DHS received date, and the number of days between DHS received date and DHS warrant date. This table contained data only for claims where the MCO received date was populated, the MCO received date was greater than the date of service, and the MCO paid date was greater than the MCO received date.

Table for Claims without MCO Received Date: This table contained all claims that did not have a populated MCO received date. This table broke out the number of days between the date of service and the MCO paid date, the number of days between the MCO paid date and the DHS received date, and the number of days between DHS received date and DHS warrant date.

Note that DHS began requiring MCO received date with claims submitted (or resubmitted) on or after September 1st, 2015. The MCOs were allowed to submit MCO received date before September 1st, 2015 if they chose to do so.

Also, note that MCO 5 does not have any data included in our analysis for 2017.

Method of evaluation: The percentage of claims received by DHS after 30 days of the MCO received date was calculated and the results were graphed for each MCO. This evaluation was done starting January 2014 through April 2017 to assess if there was improvement over time.

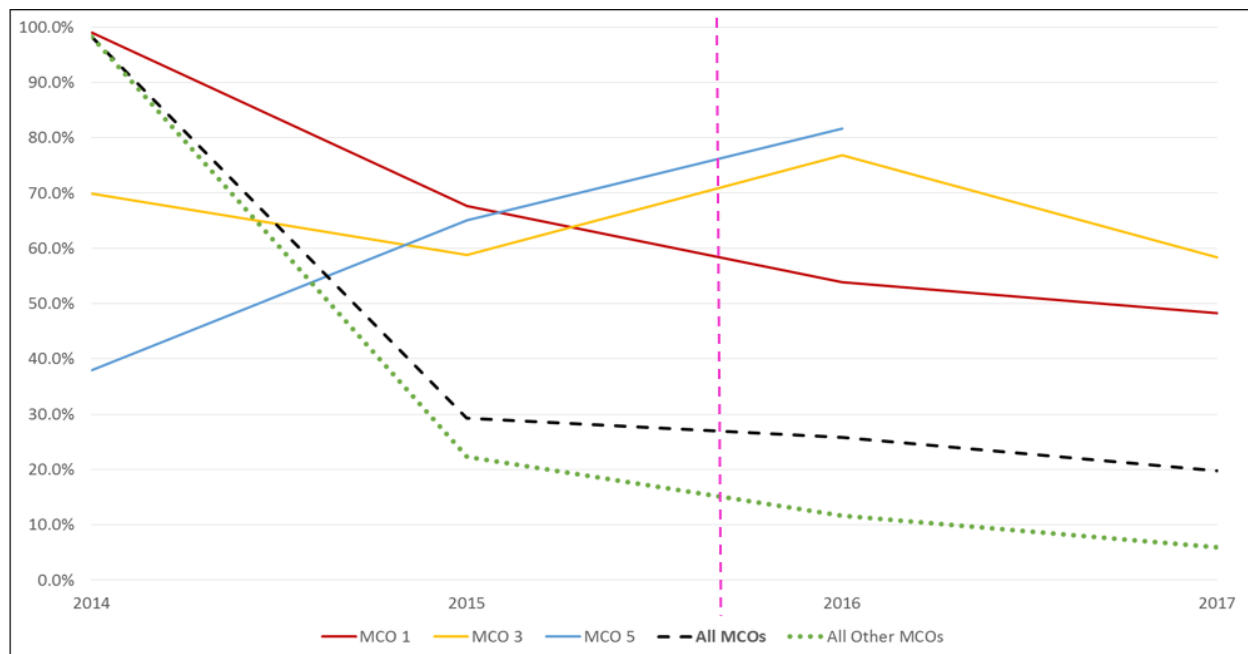
For the table for claims with MCO received date, the number of claims submitted to DHS after 30 days of MCO received date was evaluated based on adding the number of days between the MCO received date and MCO paid date and the number of days between MCO paid date and DHS submission date. The data from this table was deemed credible and reliable enough to assess the timeliness of the claims submissions for the purposes of reviewing the QAP. Additionally, 2013 data was excluded from the results as not enough plans submitted claims with MCO received date during that time period.

The table for claims without MCO received date was only provided to assess the implementation of the QAP in case there was not enough information in the table for claims with MCO received date. Since the table for claims with MCO received date was deemed credible enough to assess the timeliness of the claims submissions since the implementation of this QAP, the table for claims without MCO received date was not analyzed.

Findings and Observations

The graph below shows the percentage by year of claims submitted to DHS after 30 days from MCO received date for each MCO from January 2014 to April 2017. Data used in the graph below is from the data table for claims with MCO received date only as that data was deemed sufficiently reliable and credible for the analysis. The "All Other MCOs" line is an aggregation of those MCOs which were not broken out separately as their results were near the average for all MCOs. Please see the footnote below the graph for the MCOs that are included in the "All Other MCOs" line.

Graph 1.1: Percentage of Claims Submitted after 30 Days – Data from Table for Claims with MCO Received Date



* - - MCO received date is required on all encounter claims to DHS after September 1st, 2015

**All Other MCOs include MCO 2, MCO 4, MCO 6, MCO 7, MCO 8, and MCO 9. MCO 1, MCO 3, and MCO 5 shown separately since they were outliers with a consistently high percentage of claims after 30 days.

*** MCO 5 does not have any data included in our analysis in 2017

****Claims evaluated may include some resubmissions

*****Each data point represents the year in its entirety and lines are used to connect data points

The table below shows the number of claims submitted to DHS after 30 days from MCO received date, the number of total claims, and the percentage of claims submitted to DHS after 30 days from MCO received date for each MCO from January 2014 to April 2017. Once again, the results are only using the table for claims with MCO received date.

Table 1.1: Percentage of Claims Submitted after 30 Days – Data from Table for Claims with MCO Received Date

MCO	2014 Claims After 30 Days	2014 Total Claims	2014 %	2015 Claims After 30 Days	2015 Total Claims	2015 %	2016 Claims After 30 Days	2016 Total Claims	2016 %	2017 Claims After 30 Days	2017 Total Claims	2017 %
MCO 1	151,126	152,587	99.0%	827,604	1,223,891	67.6%	3,274,777	6,079,830	53.9%	637,387	1,319,815	48.3%
MCO 2	1,706	3,525	48.4%	9,082	573,415	1.6%	59,556	1,644,019	3.6%	3,352	422,752	0.8%
MCO 3	160	229	69.9%	87,442	148,741	58.8%	150,852	196,310	76.8%	39,488	67,718	58.3%
MCO 4	3	143	2.1%	15,865	86,320	18.4%	13,806	199,413	6.9%	593	49,778	1.2%
MCO 5	178	469	38.0%	52,758	81,114	65.0%	88,178	107,996	81.6%	N/A	N/A	N/A
MCO 6	58,304	59,850	97.4%	243,222	1,614,151	15.1%	855,762	6,625,533	12.9%	47,824	1,308,755	3.7%
MCO 7	1,304	1,590	82.0%	37,334	340,320	11.0%	43,863	824,640	5.3%	1,727	220,283	0.8%
MCO 8	5,456	7,215	75.6%	66,536	411,003	16.2%	57,359	729,503	7.9%	7,475	171,531	4.4%
MCO 9	745,638	754,844	98.8%	1,351,791	4,701,226	28.8%	496,237	3,152,083	15.7%	112,268	741,908	15.1%
All MCOs	963,875	980,452	98.3%	2,691,634	9,180,181	29.3%	5,040,390	19,559,327	25.8%	850,114	4,302,540	19.8%
All Other MCOs	812,411	827,167	98.2%	1,723,830	7,726,435	22.3%	1,526,583	13,175,191	11.6%	173,239	2,915,007	5.9%

*All Other MCOs include: MCO 2, MCO 4, MCO 6, MCO 7, MCO 8, and MCO 9

**MCO 5 does not have any data included in our analysis in 2017

***Claims evaluated may include some resubmissions

For 2014, only a small portion of total claims was evaluated (i.e. only 1 million total claims are available for analysis compared to 20 million in 2016). This was because plans were not required to submit claims with a MCO received date prior to September 1st, 2015. This means that most of the data that was captured in 2014 was from resubmissions. Additionally, only a portion of total claims was evaluated in 2017 (i.e. only 4 million total claims are available for analysis compared to 20 million in 2016) due to a partial year of data available at the time the analysis was conducted. Finally, there was still a fairly large share of claims in 2016 and 2017 that do not have the MCO received date populated.

Over the evaluation period of January 2014 to April 2017, there were continuous improvements in the timeliness of claims submissions for the aggregate claims of all MCOs combined. Specifically, the average percentage of claims received by DHS after 30 days from MCO received date was 29.3% in 2015, 25.8% in 2016, and 19.8% in 2017. In general, this downward trend indicates the QAP has been effective at encouraging increased timeliness amongst all MCOs for submitting claims to DHS. However, with nearly 20% of claims submitted after the 30 day period there is still room for improvement. All MCOs except MCO 5 improved their percentage of claims submitted to DHS after 30 days from MCO received date.

Regarding individual MCOs, from January 2015 to April 2017, six of the nine MCOs were below the all MCO average percentage of claims submitted to DHS after 30 days from MCO received date. Three MCOs, consistently showed larger percentages (near 50% or greater in 2016 and 2017 if applicable) of claims received by DHS after 30 days from MCO received date.

Key Highlights

Overall Findings

All MCO's percentage of encounter records submitted to DHS after 30 days from MCO received date, except for one MCO, improved over time, thus improving the overall timeliness of encounter data submissions over the evaluation period of January 2014 to April 2017.

DHS effectively implemented this QAP except for the development of explicit thresholds.

Potential Improvement Areas or Enhancement

A potential area to improve the effectiveness of this protocol is the development of explicit thresholds as noted in the QAP to measure MCOs against their total percentage of claims submitted to DHS greater than 30 days from MCO received date. An explicit threshold not only gives the MCOs a clear goal to target for the timeliness of their claims, but also allows DHS to evaluate MCOs against a strict threshold for implementing

this protocol. A clear and explicit threshold would allow both DHS and the MCOs to know exactly where they stand for the timeliness of claims submission.

There was still a considerable amount of claims submitted without an MCO received date. Another potential area of improvement for this QAP would be to enforce the submission of MCO received dates from the MCOs. This would improve the metrics, leading to better monitoring and control of submissions timeliness.

Further, with nearly 20% of claims submitted after the 30 day period, there is still room for improvement, especially with three MCOs near 50% or greater in 2016 and 2017.

Protocol 2 – Resubmissions

Protocol Definition

A standard for encounter resubmissions which measures the percentage of encounters requiring resubmission that are not resubmitted or are not resubmitted within the 20 calendar day time standard set by DHS. Performance will be tracked for each MCO and must be below specified thresholds, as determined by DHS.

Measurement

The following standard is used to assess compliance with the timeliness of resubmissions protocol:

- $\frac{\text{Total number of encounter records resubmitted}}{\text{Total encounter records requiring resubmission}} > x\%$
- $\frac{\text{Total number of encounter records not resubmitted within 20 calendar days}}{\text{Total encounter records DHS requiring resubmission}} < y\%$

Note: Values for these thresholds has not yet been defined

Current State

DHS implemented a penalty program starting February 1st, 2016 that financially penalizes the MCOs for errors that go uncorrected for specified periods following the initial submission of the encounter claim. Additionally, DHS requested a tracking internal claim number ("ICN") which the MCOs will include on their correction claims as a way to identify resubmissions of original claims. The tracking ICN and the penalty program have been completely implemented.

DHS reports timeliness metrics to the MCOs every quarter in the form of the Corrected Claims penalty reporting.

Data and Approach

Overview: The percentage of unsuccessful resubmissions was evaluated over the time period of Q1 2016 to Q4 2016. This was done by comparing the number of unsuccessful resubmitted claims to the number of total claims eligible for resubmission. Based on the data received, the number of claims submitted within the 20 day timeframe was not able to be assessed.

Data received: Claim count data by MCO, by quarter, and by resubmission status was received. The resubmission statuses included "not corrected", "correction successful", "successfully contested", "removal by DHS decision", "correction attempt failed", "declared exemption", and "unsuccessfully contested". The data also included types of penalty denial errors, but these errors were not included as part of our method of evaluation as they were too granular for the purpose of this analysis.

A limited amount of data was available to assess the success of this QAP because building the measurements for resubmissions has been challenging for DHS and has taken them a longer time to implement. The primary reason for the difficulty was that, until the implementation of new tracking

mechanisms, it was nearly impossible to match a corrected claim to the original claim where the data error occurred. This difficulty had three components:

1. Prior to the Tracking ICN, several of the MCOs did not use the same claim number on the corrected claim as the one on the original claim, so the claim number couldn't be used to tie them together and monitor successful resubmissions.
2. Other means of matching are far from perfect in that the fields used to match (recipient ID, date of service, procedure code, provider NPI, etc.) might be the data issue being corrected. Thus, matching on those variables was often not successful.
3. Until February 1st, 2016, DHS offered the MCOs two options for correcting erroneous encounter claim data. The first option was submitting only full replacement claims and the second option was submitting voided and resubmitted claims. Submitting only full replacement claims made it impossible to group a string of iterations of the same data together. This in turn made it difficult to tie the corrected claim to the erroneous claim.

The tracking ICN, no longer allowing MCOs to submit full replacement claims (instead only allowing voids and resubmissions), and a financial penalty for uncorrected errors were all implemented on or before February 1st, 2016. However, because of the time and effort required to implement these three major changes to the processes of encounter claim data submissions, data provided for review of this QAP was limited to 2016 and 2017. Claims submitted in 2017 were not included in the analysis since there has not been sufficient time for DHS to request resubmission of the claims, or enough time for the MCOs to resubmit the claims.

Note, the percentage of claims not resubmitted within the 20 day time period was unable to be assessed as that data was unavailable.

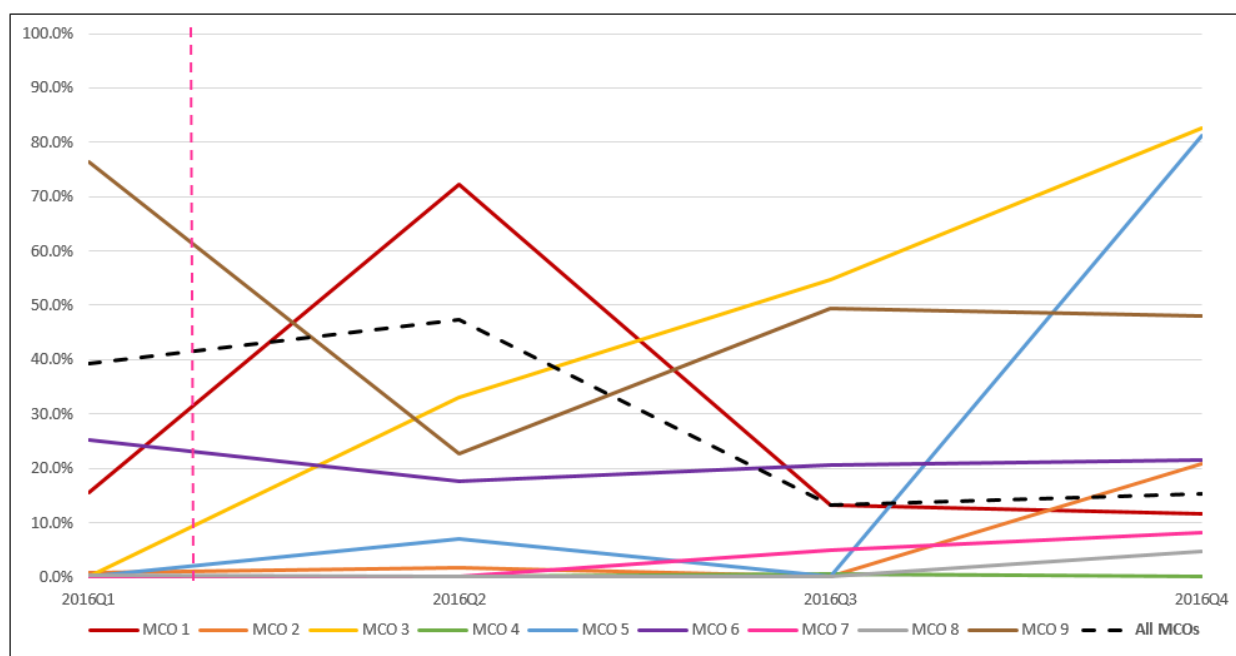
Method of evaluation: The percentage of claims that were unsuccessfully resubmitted was calculated and the results were graphed for each MCO over time. This evaluation was performed by quarter through 2016 to see if there was improvement over time.

The number of unsuccessful claims included the following resubmission statuses: "not corrected", "correction attempt failed", and "unsuccessfully contested". The number claims eligible for resubmission included the following resubmission statuses: "correction successful", "not corrected", "correction attempt failed", and "unsuccessfully contested". The ratio of unsuccessful claims to the number of claims eligible for resubmission was evaluated as specified above.

Findings and Observations

The below graph shows the percentage of unsuccessful resubmissions, based on all claims with eligible resubmission statuses, graphed over time by quarter for 2016.

Graph 2.1: Percentage of Unsuccessful Resubmissions



*Unsuccessful resubmissions (numerator): Not Corrected, Correction Attempt Failed, Unsuccessfully Contested

**Eligible resubmission statuses (denominator): Correction Successful, Not Corrected, Correction Attempt Failed, Unsuccessfully Contested

***MCO 5 had no eligible claims for Q1 2016

****- - (vertical line) = Financial penalty implemented on February 1st, 2016

*****Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the total claims with eligible resubmission statuses and the percentage of unsuccessful resubmissions. The information is the same as the above graph but gives a relative sense of the size of both the health plan and the number of claims requested by DHS to be resubmitted.

Table 2.1: Percentage of Unsuccessful Resubmissions

MCO	2016 – Q1		2016 – Q2		2016 – Q3		2016 – Q4	
	Total Eligible Resubmitted Claims	% Unsuccessful	Total Eligible Resubmitted Claims	% Unsuccessful	Total Eligible Resubmitted Claims	% Unsuccessful	Total Eligible Resubmitted Claims	% Unsuccessful
MCO 1	3,224	15.48%	18,534	72.25%	52,359	13.29%	88,895	11.68%
MCO 2	2,771	0.87%	1,512	1.65%	236	0.00%	418	20.81%
MCO 3	2,238	0.00%	921	33.01%	84	54.76%	241	82.57%
MCO 4	2	0.00%	8	0.00%	371	0.54%	2	0.00%
MCO 5	-	N/A	385	7.01%	26	0.00%	300	81.33%
MCO 6	1,355	25.31%	4,596	17.54%	5,290	20.59%	44,265	21.49%
MCO 7	19	0.00%	76	0.00%	40	5.00%	145	8.28%
MCO 8	474	0.42%	4,378	0.18%	4,855	0.04%	172	4.65%
MCO 9	8,289	76.32%	660	22.73%	575	49.39%	642	47.98%
All MCOs	18,372	39.16%	31,070	47.34%	63,836	13.14%	135,080	15.36%
All Other MCOs	3,266	0.80%	5,974	0.55%	5,502	0.11%	1,037	33.85%

*Unsuccessful resubmissions (numerator): Not Corrected, Correction Attempt Failed, Unsuccessfully Contested

**Eligible resubmission statuses (denominator): Correction Successful, Not Corrected, Correction Attempt Failed, Unsuccessfully Contested

Over the evaluation period from Q1 2016 through Q4 2016, there was a fair amount of volatility across many MCOs regarding their percentage of unsuccessful resubmissions. However, in total for all MCOs, the percentage of resubmissions improved significantly from the first half of 2016 to the second half of 2016. The percentage of unsuccessful resubmissions started to increase slightly in Q4 2016. However, we do not believe this quarter was fully reliable since it had limited time for MCOs to successfully resubmit claims and the results will likely improve as additional run out data is collected.

As for individual MCOs, four of the nine MCOs did a relatively good job with their claim resubmissions in 2016. Note the four MCOs had a relatively smaller number of total claims eligible for resubmissions than some of the other MCOs.

The MCOs could still reduce their percentage of unsuccessful resubmissions suggesting this QAP still needs attention beyond monitoring.

Key Highlights

Overall Findings:

DHS effectively implemented this QAP except for the active monitoring of resubmissions within the 20 day time period and the development of explicit thresholds noted below.

The Corrected Claim Penalty program was implemented to satisfy this QAP. The financial penalty put in place incents the MCOs to successfully resubmit the requested claims in a timely fashion. DHS reports timeliness metrics to the MCOs every quarter in the form of the Corrected Claims penalty reporting.

Overall, the quality of resubmission data improved throughout 2016, and there is reason to believe this trend will continue. Since the data for this QAP is still fairly new, the results will be more meaningful after another year of data.

Potential Areas of Improvement or Enhancements:

DHS has not yet defined explicit thresholds to compare against the MCO timeliness of resubmissions and the 20 day resubmission period was not actively monitored.

DHS could consider the development of an explicit threshold as noted in the QAP to measure against the total percentage of unsuccessfully resubmitted claims. An explicit threshold not only would give the MCOs a clear goal to keep in mind when resubmitting claims, but also would allow DHS to evaluate MCOs against a strict threshold for implementing this protocol. Each MCO's resubmission process is actively monitored, since voids and resubmissions are the only methods that MCOs are allowed to use to correct claims and errors.

As this QAP evolves, DHS could consider not only evaluating whether the MCO successfully resubmitted claims but whether they resubmitted the claims within a specified time period.

In general, this QAP was successful at improving the percentage of claims successfully resubmitted over time when looking at all MCOs in aggregate; however, the MCOs still have a fair amount of room for improvement.

Protocol 3 – MCO Quality Checks Against Benchmarks

Protocol Definition

This QAP assesses the completeness and accuracy of managed care data submissions by using benchmarks to identify data submissions which may be outliers. The benchmarks are a set of DHS-created measures that assess MCO data within particular data fields or a specified set of medical service categories.

There are two types of benchmarks:

- Error rates for key data fields
- Utilization and dollar PMPM benchmarks

These assessments look for error rates above specified percentages or deviations from normal claim and volume PMPM. Using enrollee months allows for each measure to control for changes in enrollment.

Measurement

The following standard is used to assess compliance with the MCO quality checks against benchmarks protocol:

- Metrics from MCO encounter submissions are tracked against the thresholds/ranges in the benchmark report at least annually, but not more than semi-annually

Current State

DHS developed reports that look at deviations within the data that is received in two different ways.

- Error Rates
 - Looking at error rates for various data fields to identify if the data is not well populated or if there are data issues
 - Data fields include Enrollee ID, Provider ID, Treating Provider ID, and National Drug Code ("NDC")
 - A threshold of 1% is used to assess the frequency of errors and determine if the error rate was improving
- Utilization and Dollars Against Benchmarks
 - Looking for significant deviations in actual PMPM data compared to risk-adjusted expected PMPM benchmarks
 - Deviations in terms of average MCO paid amounts PMPM, looking for both high and low outliers
 - Deviations in terms of average units PMPM in order to identify pockets of missing data
 - Actual utilization and dollars PMPM were measured against risk adjusted expected PMPM amounts for the following service categories:
 - Evaluation & Management (office) services
 - Personal Care Attendant ("PCA") services
 - Dental services
 - Physician administered drugs
 - Emergency services
 - Imaging services
 - The purpose of this analysis was to identify utilization or dollar PMPM outliers as an indicator that there may be an issue with the data. An outlier requires additional investigation but does not necessarily mean there was an issue.
 - DHS flags cells where actual data deviates from expected by more than 25%

DHS provides quarterly reporting to the MCOs via the web portal environment.

Data and Approach

Overview: The error rate reporting for particular data fields was evaluated to determine if it was improving over time. The variance when comparing actual MCO utilization and dollar PMPM metrics against expected PMPM benchmarks also was assessed whether it was decreasing over time, or if there were notable outliers in these variances potentially requiring additional investigation.

Data Received: To evaluate the error rate reporting, the number of edits (i.e. errors) and number of total claims by MCO as well as biweekly and quarterly time periods for three different edits were received. The three benchmark edits evaluated were D152 (NDC Code Missing), D250 (Recipient ID not on DHS recipient file), and D300 (Pay-to provider ID not on DHS provider file). Data for edit D412 (Treating provider ID not on DHS provider file) was provided but it was not used in the analysis due to significant changes in methodology for how the edit worked. The data was from January 1st, 2014 to May 2nd, 2017. Data in May 2017 was excluded from analysis since a full month of data was not received.

To evaluate MCO utilization and dollars against benchmarks, data by MCO, by service type (office visits, imaging services, emergency room visits, dental services, PCA services, and physician administered drugs), and by quarter was received. The time period for this data was from Q1 2013 to Q4 2016. Three distinct types of data were given: historic, study ("actual") period, and expected.

- **Historic:** Information for all MCOs in total from the four prior quarters. Information given for the historic period included historic units, historic dollars, and historic member months. Historic units rates and historic dollars rates were also given. These represent PMPM metrics and were developed by taking either the historic units or historic dollars divided by the historic member months.
- **Actual:** Information gathered by quarter for each MCO. This included actual period units, actual period dollars, and actual period member months. Actual units rates and actual dollars rates were also given. These represent PMPM metrics and were developed by taking either the actual units or actual dollars divided by the actual member months. These are the actual rates for a given time period.
- **Expected:** Information that was expected using ACG risk adjustment software by quarter for each MCO. Information included expected units and expected dollars. Expected units rate and expected dollars rate were also given. These represent PMPM metrics and were developed by taking either the expected units or expected dollars divided by the actual member months. DHS continues to work on creating meaningful expected benchmarks.

MCO denied and DHS denied claims were excluded from the analysis. Once these claims are resubmitted, it's possible the results of the analysis could be impacted.

Methods of evaluation: For the error rate reporting, the number of claims with edits (i.e. errors) and the percentage of total claims with edits for each MCO for all edits in aggregate and by each edit individually (i.e. NDC Code Missing, Recipient ID not on DHS recipient file, and Pay-to provider ID not on DHS provider file) were evaluated. The time period used for evaluation was from January 2014 through April 2017.

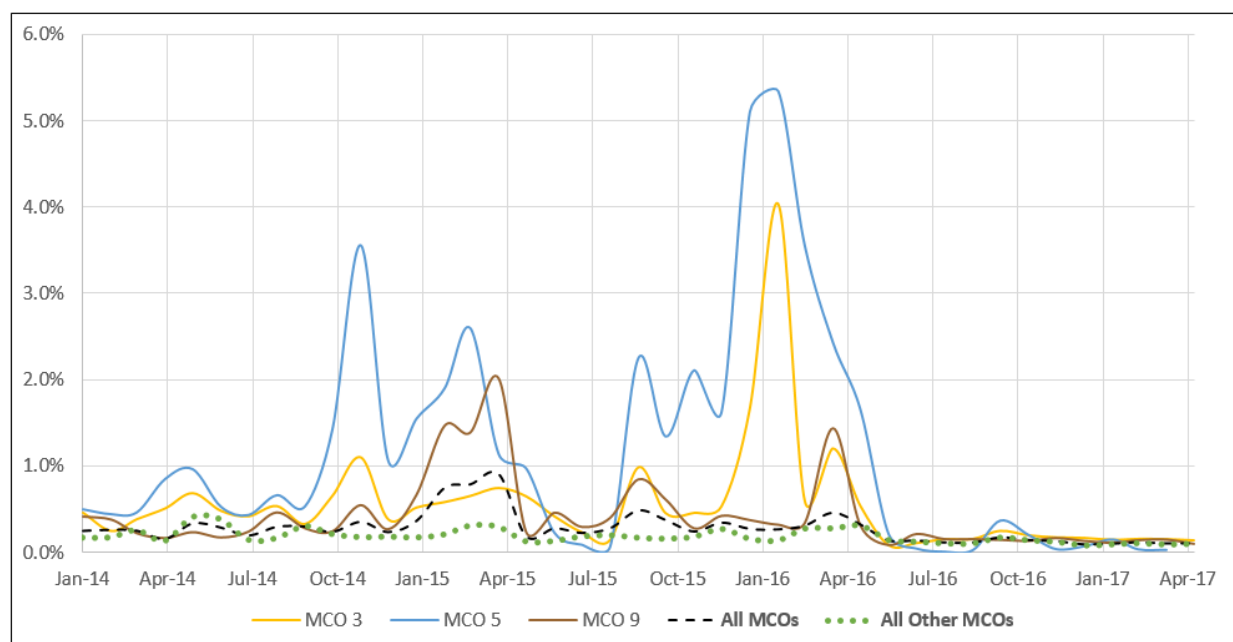
For MCO utilization and dollars against benchmarks, the actual utilization PMPM rate and actual dollars PMPM rate for each quarter compared to a MCO specific, historic risk adjusted expected PMPM rates were evaluated. This analysis was done by MCO, and service type with data from Q1 2013 to Q4 2016. The difference between the actual rate and the expected rate for both utilization and dollars were graphed over time and the variation over time was assessed.

Findings and Observations

Error Rates

The graph below shows the percentage of benchmark edits over time for select MCOs and for all MCOs in total.

Graph 3.1: Percentage of Total Edits



*-- All MCO Average = (total edits provided for QAP 3) / (total claims provided for QAP 3)

**All Other MCOs include MCO 1, MCO 2, MCO 4, MCO 6, MCO 7, and MCO 8. MCO 3, MCO 5, and MCO 9 shown separately since these were outliers with several spikes in the percentage of total edits.

***Edits included: D152 (NDC Code Missing), D250 (Recipient ID not on DHS recipient file), and D300 (Pay-To provider ID not on DHS provider file)

The table below shows the percentage of benchmark edits over time for select MCOs and for all MCOs in total.

Table 3.1: Percentage of Total Edits

MCO	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2
MCO 3	0.36%	0.56%	0.42%	0.66%	0.58%	0.61%	0.65%	0.48%	1.43%	0.53%	0.13%	0.20%	0.15%	0.14%
MCO 5	0.47%	0.81%	0.52%	1.93%	1.94%	0.83%	1.29%	1.68%	4.69%	1.19%	0.03%	0.21%	0.09%	0.03%
MCO 9	0.34%	0.20%	0.31%	0.35%	1.20%	0.86%	0.52%	0.44%	0.34%	0.63%	0.17%	0.14%	0.13%	0.13%
All MCOs Difference	0.25%	0.27%	0.25%	0.27%	0.63%	0.47%	0.33%	0.32%	0.28%	0.29%	0.12%	0.15%	0.10%	0.10%
All Other MCOs Difference	0.19%	0.30%	0.20%	0.19%	0.23%	0.19%	0.18%	0.22%	0.20%	0.23%	0.11%	0.14%	0.10%	0.10%

*All Other MCOs include MCO 1, MCO 2, MCO 4, MCO 6, MCO 7, and MCO 8. MCO 3, MCO 5, and MCO 9

**Edits included: D152 (NDC Code Missing), D250 (Recipient ID not on DHS recipient file), and D300 (Pay-To provider ID not on DHS provider file)

Across all error reporting, all plans saw improvement over time. Significant improvement was seen starting in June 2016, and this continued through present day. Three of the nine MCOs, showed larger fluctuations in total errors prior to June 2016. Specific edits that drove the aggregate volatility were D152 (NDC code missing) and D300 (pay-to-provider ID not on DHS provider file).

For edit D152 (NDC code missing), starting in mid-2015 all MCOs saw improvement in the percentage of errors over time. While the total percentage of edits for all MCOs was near 0.2% on average over time, One MCO, was consistently high through April 2017 and regularly showed large spikes (i.e. up to 13%). Prior to May 2015, two other MCOs, were frequently above the all MCO average for this edit (i.e. spikes of 4% and 11%), but both showed improvement over time after May 2015 (i.e. consistently near 0%). See graph 3.A.1: Percentage of Edits for Edit D152 - NDC Code Missing in the appendix.

For edit D250 (recipient ID not on DHS recipient file), all but two MCOs for this edit were consistently near 0.0% over time. One MCO had spikes in May 2014 as well as March 2015 and another MCO saw an increase in this edit starting in June 2016 and consistently through April 2017. Note the percentage of claims with this edit was very small so this volatility was not significant. The all MCO average percentage of edits was very small across all MCOs (nearly 0.5% at its peak). See graph 3.A.2: Percentage of Edits for Edit D250 – Recipient ID not on DHS recipient file in the appendix.

For edit D300 (pay-to provider ID not on DHS provider file), two MCOs, showed a noticeable amount of edits up until June 2016 ranging up to 8% and 12%. After June 2016, these two MCOs significantly improved and all MCOs remained steadily near a 0.0% error rate through April 2017. See graph 3.A.3: Percentage of Edits for Edit D300 – Pay-to provider ID not on DHS provider file in the appendix.

Overall the error rates have decreased over time and have been below the 1.0% target threshold since June 2016.

Utilization and Dollars Against Benchmarks

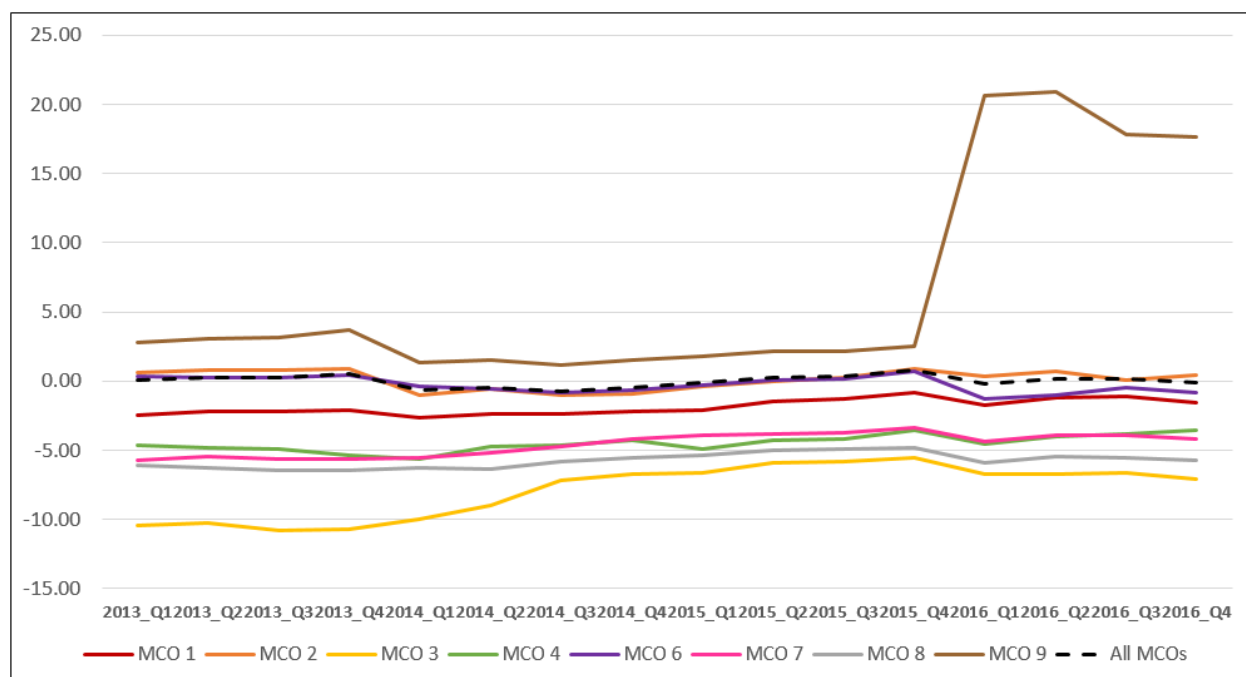
The tables and graphs to follow can be used to observe if the actual rate was close to the expected (risk adjusted benchmark) rate. All rates are on a PMPM basis. The data is presented by taking the difference between the actual and expected PMPM rates. A positive difference indicates the actual rate is higher than the expected rate, and vice versa.

If the difference when comparing the actual rate to the expected rate is significant or not consistent with the historical differences, further investigation is needed to determine if the difference can be explained or if it is an indication that there is an issue in the data. A significant or inconsistent difference between the actual rate and expected rate does not necessarily mean there is a data quality issue. Another potential driver for significant differences between the actual rate and expected rate could be that the risk adjusted benchmarks are not reflective of the actual risk of the population. Again, further investigation into the population and risk scores would be needed to further evaluate. As noted in the Data Received section above, DHS continues to work on creating meaningful expected benchmarks and to look for better ways of developing expected benchmarks. Lastly, as noted in the Data Received section above, denied claims were excluded from the analysis. If a plan has a higher portion of rejections/denials, the results could be impacted and their data could look lower.

PCA Services

The graph below shows the difference in the actual units PMPM rate and expected units PMPM rate across each MCO and all MCOs in aggregate for PCA Services.

Graph 3.2: Difference in Actual Units Rate vs Expected Units Rate for PCA Services



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**MCO 5 did not have any units for PCA Services

***Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected units PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found tables 3.A.4 and 3.A.5 in the appendix. Differences in the all MCO average in comparison to the actual rate minus the expected rate are due to rounding.

Table 3.2: Difference in Actual Units Rate vs Expected Units Rate for PCA Services

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	-2.41	-2.18	-2.20	-2.13	-2.61	-2.37	-2.41	-2.19	-2.09	-1.43	-1.31	-0.85	-1.74	-1.16	-1.08	-1.56
MCO 2	0.63	0.81	0.79	0.91	-0.99	-0.60	-1.01	-0.96	-0.40	-0.02	0.22	0.88	0.32	0.75	0.12	0.42
MCO 3	-10.41	-10.27	-10.83	-10.74	-9.96	-8.96	-7.20	-6.73	-6.66	-5.88	-5.83	-5.56	-6.72	-6.73	-6.61	-7.09
MCO 4	-4.59	-4.77	-4.87	-5.33	-5.66	-4.75	-4.61	-4.23	-4.86	-4.31	-4.14	-3.54	-4.56	-3.96	-3.84	-3.51
MCO 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MCO 6	0.35	0.30	0.30	0.48	-0.38	-0.55	-0.87	-0.64	-0.32	0.12	0.19	0.74	-1.26	-0.98	-0.47	-0.80
MCO 7	-5.73	-5.45	-5.61	-5.60	-5.55	-5.21	-4.72	-4.19	-3.92	-3.85	-3.75	-3.37	-4.40	-3.95	-3.94	-4.16
MCO 8	-6.11	-6.27	-6.41	-6.43	-6.30	-6.36	-5.82	-5.56	-5.38	-5.02	-4.90	-4.80	-5.86	-5.45	-5.58	-5.74
MCO 9	2.80	3.06	3.16	3.70	1.38	1.55	1.19	1.49	1.78	2.15	2.14	2.54	20.60	20.90	17.83	17.62
All MCOs Actual Rate	7.76	7.93	8.23	8.70	7.10	7.00	6.35	6.24	6.29	6.56	6.53	6.87	6.85	6.70	6.63	6.47
All MCOs Exp. Rate	7.72	7.72	7.97	8.16	7.74	7.48	7.06	6.70	6.42	6.26	6.17	6.06	7.08	6.58	6.48	6.61
All MCOs Difference	0.04	0.22	0.26	0.54	-0.64	-0.48	-0.71	-0.46	-0.12	0.29	0.36	0.82	-0.23	0.13	0.15	-0.14

*MCO 5 did not have any units for PCA Services

**Differences in the "All MCOs" average are due to rounding

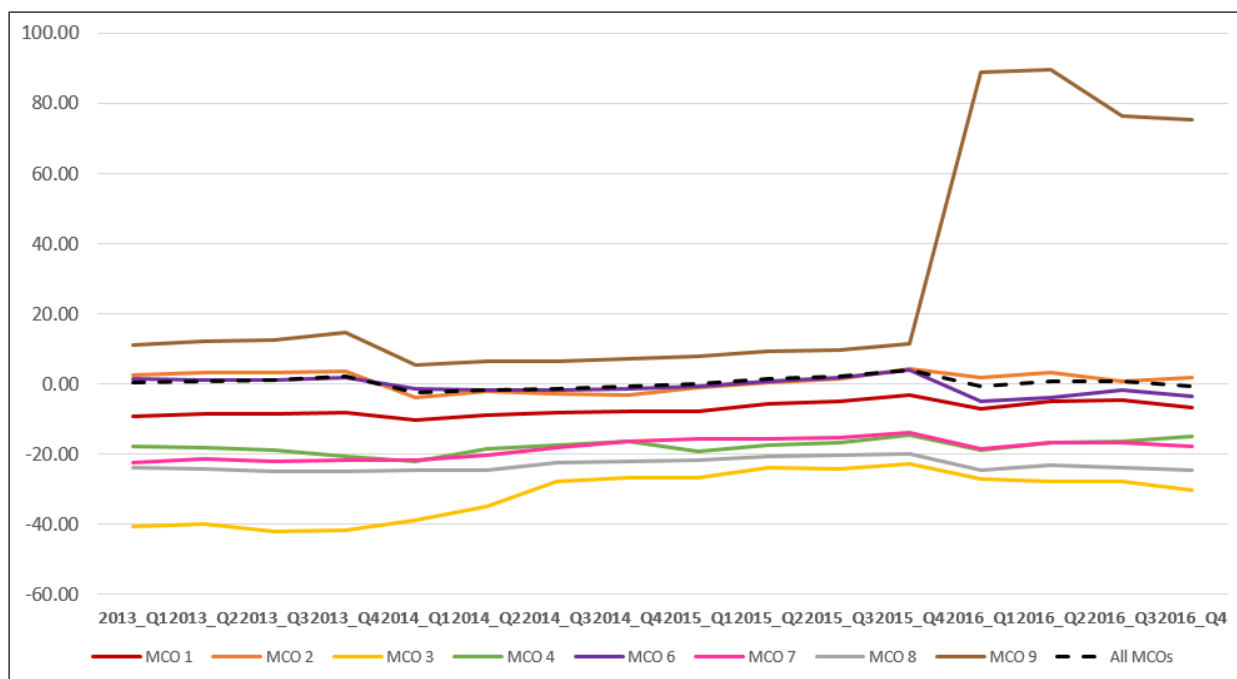
For PCA Services, there was a wide range amongst each MCO when comparing the rate of actual to expected units with a difference range of -11 to +21 units PMPM. Overall, the graph indicates a consistent pattern over time for all MCOs except two MCOs. This indicates the plans are submitting a consistent amount of PCA

claims relative to the risk of their population over time. The majority of the MCOs, excluding these two, showed differences ranging from -7 to +1 units PMPM when comparing the actual to expected units rates.

The difference between MCO 3's actual and expected rates from Q1 2013 through Q2 2014 consistently showed a difference between -11 and -9 units PMPM. This difference was driven by their higher expected units PMPM as seen in Table 3.A.4. Conversely, MCO 9 consistently had higher actual units than expected units. These suggest there is an opportunity for DHS to explore whether the risk adjusted benchmarks are reflective of the underlying population or if there was an underlying data issue. Since the expected rates were calculated based on a lag in historical data, it is possible the expected amount may not yet have fully captured changes in risk.

The graph below shows the difference in the actual dollars PMPM rate and the expected dollars PMPM rate across each MCO and all MCOs in aggregate for PCA Services.

Graph 3.3: Difference in Actual Dollars Rate vs Expected Dollars Rate for PCA Services



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**MCO 5 did not have any dollars for PCA Services

***Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual dollars and expected dollars PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.6 and 3.A.7 in the appendix. Differences in the all MCO average in comparison to the actual rate minus the expected rate are due to rounding.

Table 3.3: Difference in Actual Dollars Rate vs Expected Dollars Rate for PCA Services

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	-9.39	-8.51	-8.53	-8.26	-10.14	-9.03	-8.29	-7.89	-7.97	-5.61	-4.90	-3.09	-7.10	-4.81	-4.58	-6.65
MCO 2	2.53	3.18	3.21	3.68	-3.80	-2.09	-2.89	-3.05	-1.06	0.23	1.54	4.19	1.70	3.35	0.59	1.86
MCO 3	-40.51	-40.02	-42.25	-41.90	-38.91	-34.98	-27.98	-26.63	-26.80	-24.04	-24.14	-22.84	-27.07	-27.84	-27.92	-30.24
MCO 4	-17.65	-18.28	-18.93	-20.72	-22.05	-18.42	-17.44	-16.39	-19.40	-17.49	-16.86	-14.49	-18.99	-16.66	-16.37	-14.95
MCO 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MCO 6	1.34	1.11	1.07	1.93	-1.48	-1.81	-1.66	-1.29	-0.51	0.90	1.66	3.81	-4.96	-3.97	-1.90	-3.38
MCO 7	-22.32	-21.33	-21.92	-21.91	-21.70	-20.32	-18.03	-16.31	-15.66	-15.74	-15.35	-13.90	-18.47	-16.74	-16.84	-17.79
MCO 8	-23.71	-24.40	-24.96	-25.03	-24.57	-24.76	-22.55	-21.97	-21.63	-20.53	-20.20	-20.08	-24.75	-23.10	-23.80	-24.54
MCO 9	11.05	12.05	12.51	14.59	5.49	6.46	6.31	7.18	8.02	9.22	9.72	11.29	88.76	89.60	76.44	75.46
All MCOs Actual Rate	30.27	30.95	32.17	34.02	27.79	27.67	26.29	25.88	26.12	27.22	27.80	29.28	29.23	28.58	28.33	27.64
All MCOs Exp. Rate	30.04	30.08	31.10	31.83	30.23	29.25	27.68	26.70	25.95	25.68	25.60	25.31	29.78	27.84	27.59	28.19
All MCOs Difference	0.22	0.87	1.07	2.19	-2.44	-1.58	-1.39	-0.82	0.17	1.54	2.20	3.97	-0.55	0.74	0.74	-0.54

*MCO 5 did not have any dollars for PCA Services

**Differences in the "All MCOs" average are due to rounding

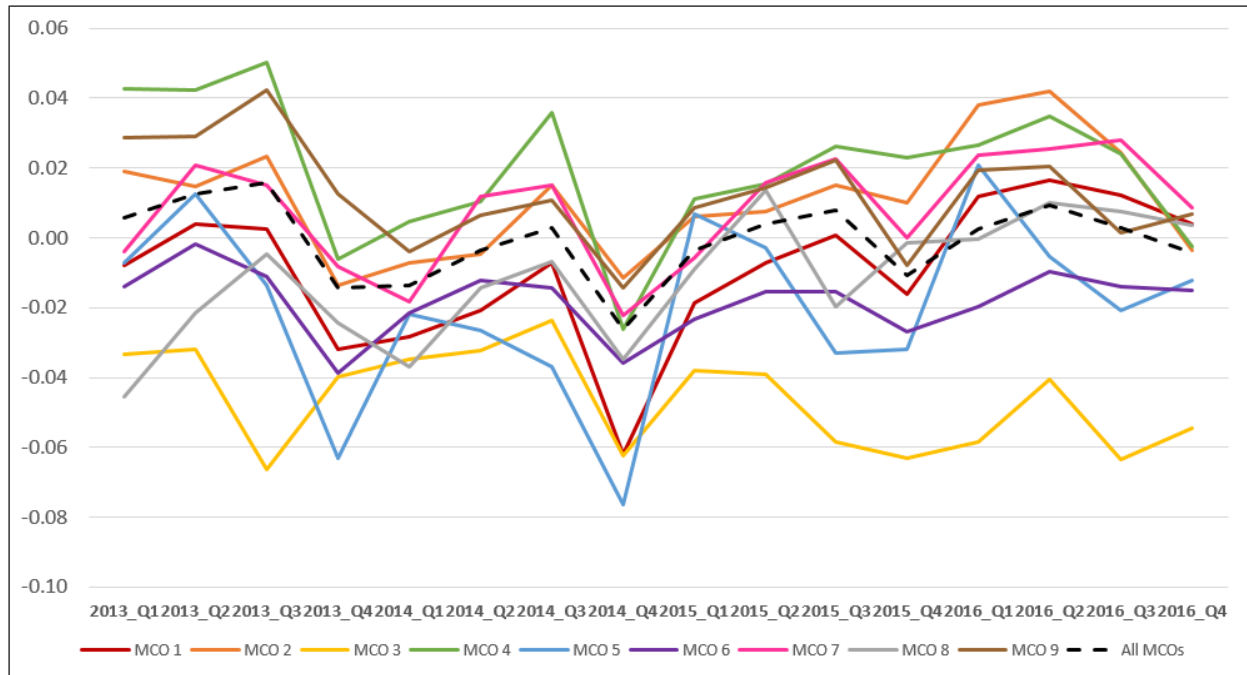
The dollars PMPM difference between the actual rate and expected rate for PCA services showed similar results to the utilization graph and table above except that the range was wider going from -42 to +90 dollars PMPM. Overall, the graph indicates a consistent pattern over time for all MCOs except two MCOs. This indicates the plans submitted a consistent amount of PCA dollars relative to the risk of their population over time.

All MCOs had results nearly identical to the PCA utilization graph and table above. Because of this, it appears utilization was driving the dollar PMPM difference rather than unit cost. Thus, the observations here were similar to those noted above.

Dental Services

The graph below shows the difference in the actual units PMPM rate and expected units PMPM rate across each MCO and all MCOs combined for Dental Services. Note that the scale of the graph made the differences appear more volatile than they really were.

Graph 3.4: Difference in Actual Units Rate vs Expected Units Rate for Dental Services



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected dollars PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.8 and 3.A.9 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.4: Difference in Actual Units Rate vs Expected Units Rate for Dental Services

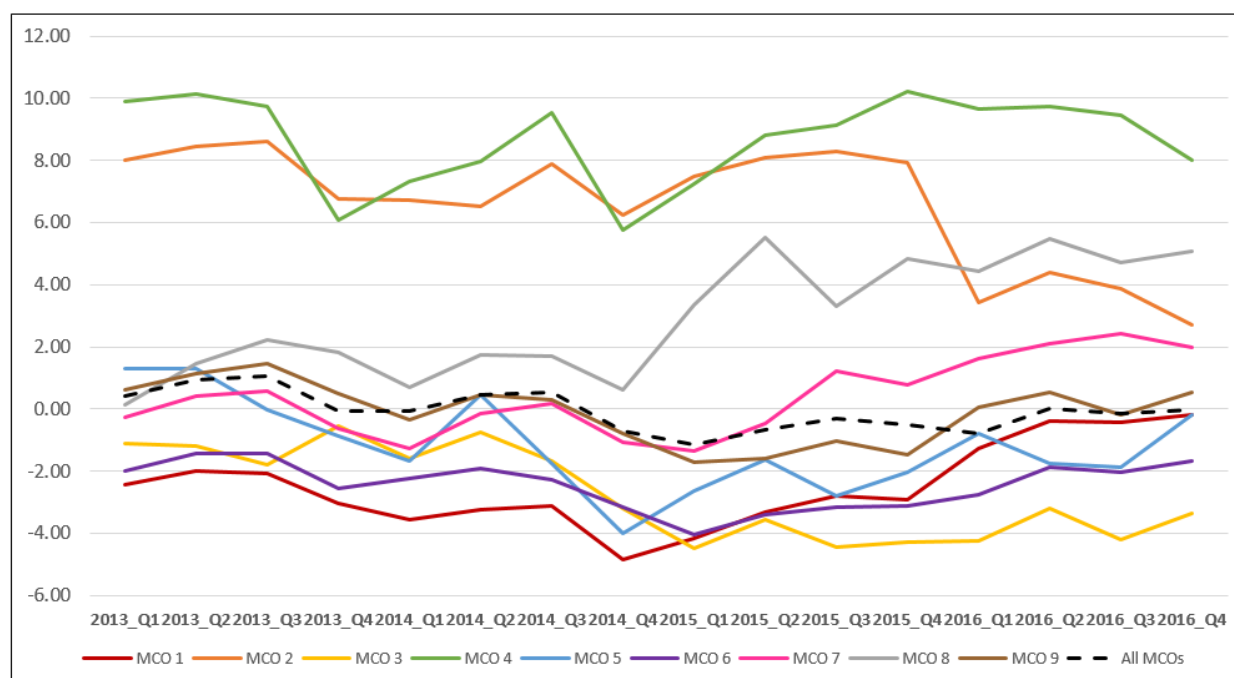
MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	-0.01	0.00	0.00	-0.03	-0.03	-0.02	-0.01	-0.06	-0.02	-0.01	0.00	-0.02	0.01	0.02	0.01	0.00
MCO 2	0.02	0.01	0.02	-0.01	-0.01	0.00	0.01	-0.01	0.01	0.01	0.01	0.01	0.04	0.04	0.02	0.00
MCO 3	-0.03	-0.03	-0.07	-0.04	-0.03	-0.03	-0.02	-0.06	-0.04	-0.04	-0.06	-0.06	-0.06	-0.04	-0.06	-0.05
MCO 4	0.04	0.04	0.05	-0.01	0.00	0.01	0.04	-0.03	0.01	0.02	0.03	0.02	0.03	0.03	0.02	0.00
MCO 5	-0.01	0.01	-0.01	-0.06	-0.02	-0.03	-0.04	-0.08	0.01	0.00	-0.03	-0.03	0.02	-0.01	-0.02	-0.01
MCO 6	-0.01	0.00	-0.01	-0.04	-0.02	-0.01	-0.01	-0.04	-0.02	-0.02	-0.02	-0.03	-0.02	-0.01	-0.01	-0.02
MCO 7	0.00	0.02	0.01	-0.01	-0.02	0.01	0.01	-0.02	-0.01	0.02	0.02	0.00	0.02	0.03	0.03	0.01
MCO 8	-0.05	-0.02	0.00	-0.02	-0.04	-0.01	-0.01	-0.03	-0.01	0.01	-0.02	0.00	0.00	0.01	0.01	0.00
MCO 9	0.03	0.03	0.04	0.01	0.00	0.01	0.01	-0.01	0.01	0.01	0.02	-0.01	0.02	0.02	0.00	0.01
All MCOs Actual Rate	0.27	0.27	0.28	0.25	0.25	0.25	0.25	0.22	0.23	0.24	0.24	0.22	0.24	0.24	0.23	0.23
All MCOs Exp. Rate	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23
All MCOs Difference	0.01	0.01	0.02	-0.01	-0.01	0.00	0.00	-0.03	0.00	0.00	0.01	-0.01	0.00	0.01	0.00	0.00

*Differences in the "All MCOs" average are due to rounding

For Dental Services, the graph showed a consistent pattern over time for all MCOs as the difference between the actual units rate and the expected units rate amongst each MCO ranged from about -0.08 to +0.05 units PMPM. The actual and expected units appear in the appendix in tables 3.A.8 and 3.A.9. Since any differences observed were on a very small scale a detailed analysis of the results was not performed.

The graph below shows the difference in the actual dollars PMPM rate and the expected dollars PMPM rate across each MCO and all MCOs in aggregate for Dental Services.

Graph 3.5: Difference in Actual Dollars Rate vs Expected Dollars Rate for Dental Services



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected dollars PMPM rates for all MCOs in total. Tables with the actual and

expected rates can be found in tables 3.A.10 and 3.A.11 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.5: Difference in Actual Dollars Rate vs Expected Dollars Rate for Dental Services

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	-2.43	-2.01	-2.06	-3.02	-3.57	-3.25	-3.12	-4.86	-4.15	-3.33	-2.81	-2.91	-1.28	-0.37	-0.42	-0.18
MCO 2	8.01	8.44	8.62	6.76	6.71	6.50	7.88	6.24	7.49	8.07	8.28	7.92	3.44	4.38	3.87	2.69
MCO 3	-1.11	-1.20	-1.78	-0.56	-1.60	-0.74	-1.68	-3.20	-4.48	-3.58	-4.46	-4.29	-4.26	-3.19	-4.22	-3.36
MCO 4	9.89	10.14	9.73	6.07	7.34	7.96	9.54	5.77	7.22	8.79	9.15	10.23	9.64	9.74	9.46	8.01
MCO 5	1.28	1.31	-0.04	-0.89	-1.66	0.47	-1.74	-4.01	-2.63	-1.61	-2.78	-2.02	-0.79	-1.77	-1.86	-0.20
MCO 6	-1.98	-1.41	-1.42	-2.57	-2.24	-1.92	-2.27	-3.17	-4.06	-3.41	-3.17	-3.13	-2.76	-1.88	-2.03	-1.68
MCO 7	-0.28	0.43	0.59	-0.65	-1.29	-0.13	0.17	-1.06	-1.34	-0.47	1.22	0.77	1.60	2.09	2.41	1.97
MCO 8	0.12	1.48	2.21	1.82	0.71	1.73	1.72	0.63	3.35	5.50	3.31	4.85	4.43	5.49	4.71	5.07
MCO 9	0.61	1.14	1.45	0.51	-0.36	0.46	0.31	-0.78	-1.70	-1.59	-1.02	-1.48	0.06	0.54	-0.17	0.55
All MCOs Actual Rate	11.20	11.78	12.01	11.12	11.30	11.84	11.72	10.49	9.95	10.05	10.00	9.47	9.17	9.64	9.32	9.32
All MCOs Exp. Rate	10.80	10.85	10.95	11.17	11.38	11.38	11.20	11.22	11.08	10.70	10.31	9.96	9.97	9.60	9.48	9.35
All MCOs Difference	0.41	0.93	1.06	-0.05	-0.08	0.47	0.53	-0.73	-1.14	-0.65	-0.30	-0.49	-0.79	0.03	-0.16	-0.04

*Differences in the "All MCOs" average are due to rounding

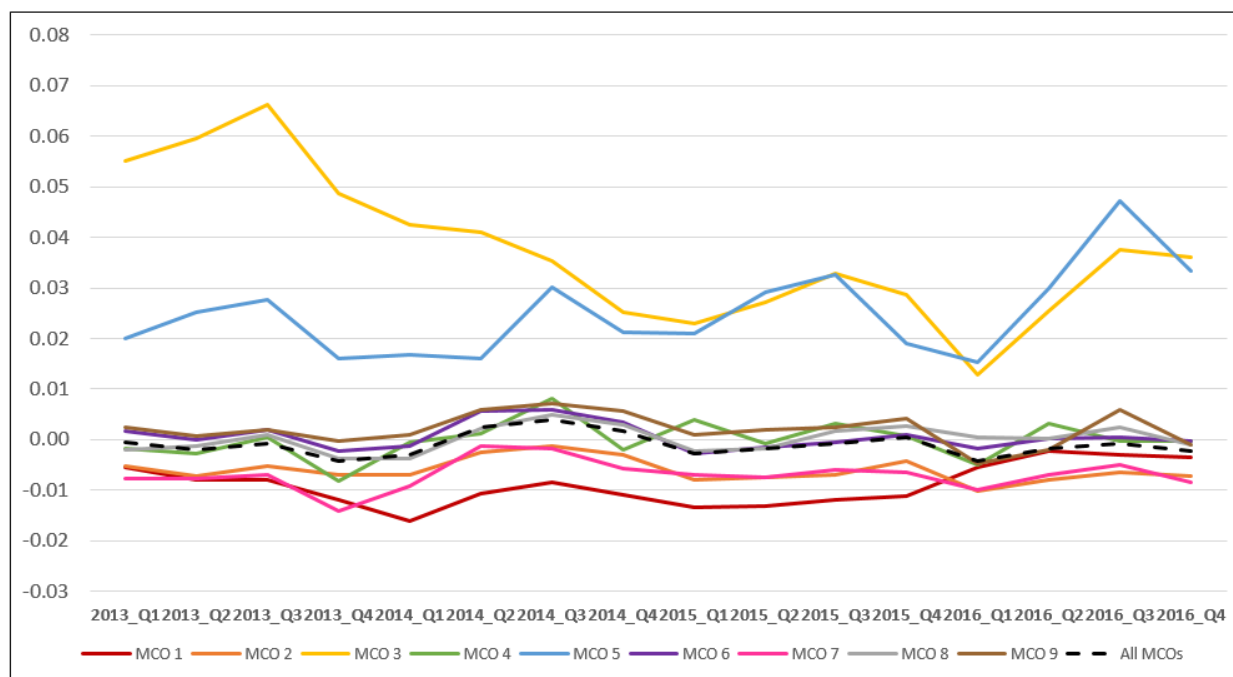
The range in the difference between the actual PMPM rate and expected PMPM rate was wider and more volatile when analyzing dollars compared to utilization for Dental Services. The difference amongst the MCOs ranged between -5 to +10 dollars PMPM. Overall the graph indicates a consistent pattern over time for all MCOs except two.

MCO 2's difference between the actual dollars rate and expected dollars rate ranged between +6 and +9 dollars PMPM from 2013 to 2015 and then dropped to +3 to +4 dollars PMPM in 2016, driven by a corresponding decrease in the actual rate. Since utilization did not see a similar decrease, this likely indicates that unit cost was driving the decrease in the actual PMPM dollars. MCO 4 had fairly consistent actual and expected rates, and the large difference seen in the graph could be driven by higher unit costs as well as higher utilization. MCO 8 had an increase in the difference between actual and expected, driven by an increase in actual rates. Further investigation is needed to understand if there is a reasonable explanation for these differences and changes, or whether there is a potential data issue.

Emergency Visits

The graph below shows the difference in the actual units PMPM rate and the expected units PMPM rate across each MCO and all MCOs in aggregate for Emergency Visits. Note that the scale of the graph made the differences appear more volatile than they actually are.

Graph 3.6: Difference in Actual Units Rate vs Expected Units Rate for Emergency Visits



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected units PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.12 and 3.A.13 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.6: Difference in Actual Units Rate vs Expected Units Rate for Emergency Visits

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	-0.01	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00
MCO 2	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00	-0.01	-0.01	-0.01	-0.01
MCO 3	0.06	0.06	0.07	0.05	0.04	0.04	0.04	0.03	0.02	0.03	0.03	0.03	0.01	0.03	0.04	0.04
MCO 4	0.00	0.00	0.00	-0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00
MCO 5	0.02	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.05	0.03
MCO 6	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MCO 7	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	-0.01
MCO 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MCO 9	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
All MCOs Actual Rate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.06	0.05	0.05	0.05
All MCOs Exp. Rate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.05	0.05
All MCOs Difference	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

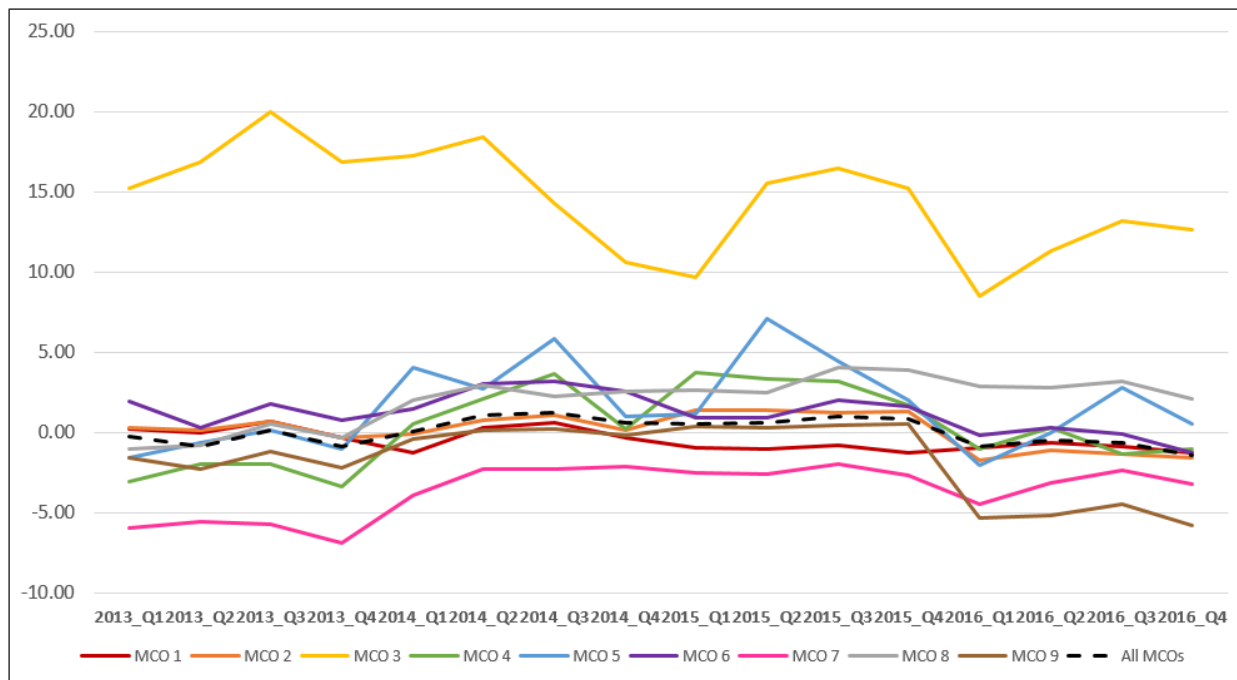
*Differences in the "All MCOs" average are due to rounding

For Emergency Visits, the graph showed a consistent pattern over time for a majority of the MCOs except two. All MCOs except these two had a difference between the actual unit rate and the expected unit rate ranging from -0.02 to +0.01 units PMPM. The differences for these two MCOs ranged from +0.01 to +0.07 units PMPM. Even though the differences between the PMPM unit rates are small, the percentage differences are sizable. These differences were driven by the actual rates being higher than the expected rates.

Therefore, for these two MCOs, the risk adjusted expected rates may not appropriately reflect the illness burden of the population, particularly since there was a year lag in the expected rates.

The graph below shows the difference in the actual dollars PMPM rate and the expected dollars PMPM rate across each MCO and all MCOs in aggregate for Emergency Visits.

Graph 3.7: Difference in Actual Dollars Rate vs Expected Dollars Rate for Emergency Visits



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected dollars PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.14 and 3.A.15 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.7: Difference in Actual Dollars Rate vs Expected Dollars Rate for Emergency Visits

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.23	0.00	0.69	-0.30	-1.30	0.26	0.62	-0.37	-0.99	-1.04	-0.83	-1.28	-0.96	-0.68	-0.87	-1.30
MCO 2	0.31	0.14	0.66	-0.34	-0.10	0.77	1.09	0.14	1.39	1.36	1.19	1.34	-1.77	-1.13	-1.35	-1.58
MCO 3	15.24	16.86	19.98	16.86	17.26	18.39	14.29	10.60	9.69	15.55	16.47	15.17	8.48	11.31	13.16	12.63
MCO 4	-3.09	-1.95	-1.95	-3.40	0.53	2.05	3.62	0.17	3.72	3.37	3.15	1.69	-1.07	0.32	-1.33	-1.04
MCO 5	-1.62	-0.68	0.12	-1.02	4.01	2.67	5.83	0.97	1.16	7.09	4.43	2.00	-2.09	-0.02	2.79	0.54
MCO 6	1.94	0.26	1.75	0.77	1.47	3.01	3.17	2.52	0.95	0.88	2.04	1.59	-0.16	0.28	-0.07	-1.28
MCO 7	-5.93	-5.58	-5.70	-6.90	-3.91	-2.28	-2.25	-2.11	-2.51	-2.57	-2.00	-2.68	-4.46	-3.15	-2.38	-3.21
MCO 8	-1.07	-0.80	0.53	-0.34	1.99	2.94	2.26	2.53	2.59	2.47	4.06	3.89	2.84	2.76	3.18	2.06
MCO 9	-1.62	-2.31	-1.22	-2.24	-0.41	0.12	0.19	-0.18	0.36	0.31	0.44	0.54	-5.30	-5.20	-4.49	-5.77
All MCOs Actual Rate	17.27	16.61	17.44	16.28	16.64	17.52	16.97	16.47	16.86	17.02	17.33	16.66	17.84	17.06	16.47	15.71
All MCOs Exp. Rate	17.49	17.46	17.30	17.16	16.60	16.49	15.78	15.90	16.30	16.42	16.32	15.84	18.74	17.54	17.10	17.12
All MCOs Difference	-0.22	-0.85	0.14	-0.89	0.04	1.03	1.19	0.57	0.56	0.59	1.01	0.83	-0.91	-0.48	-0.63	-1.42

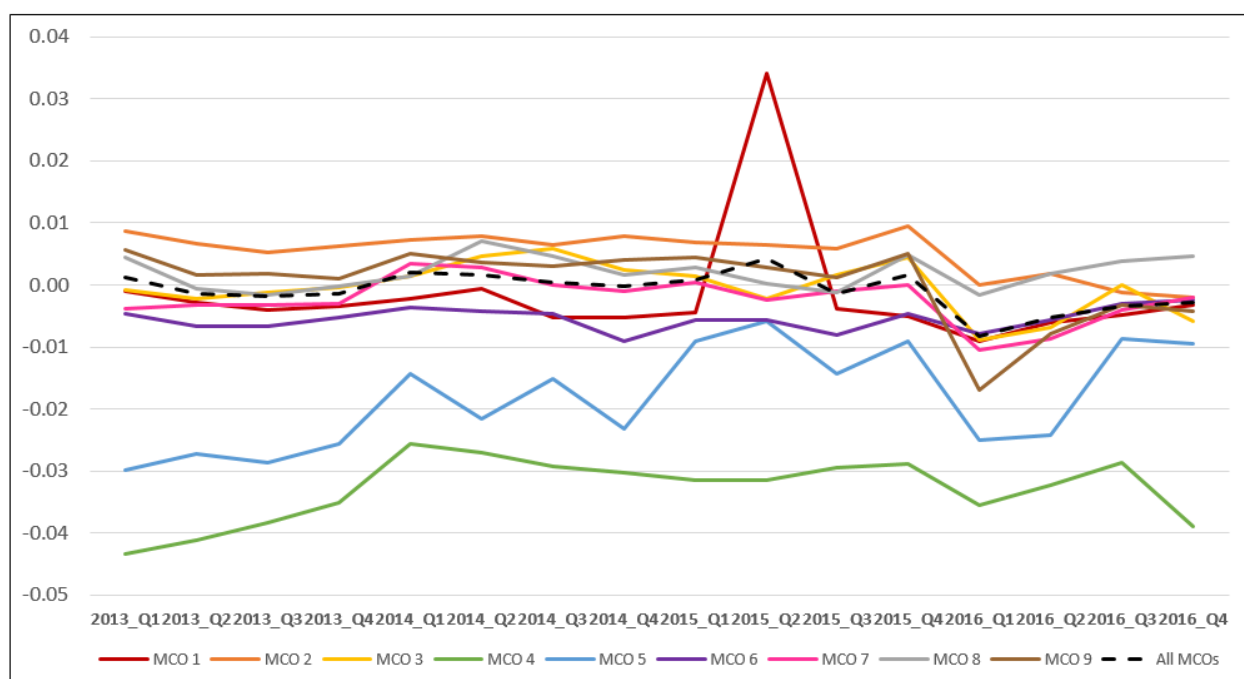
*Differences in the "All MCOs" average are due to rounding

The range in the difference between the actual rate and expected rate was wider when comparing dollars to utilization for Emergency Visits. The difference of actual to expected dollars PMPM amongst the MCOs ranged between -7 to +20 dollars PMPM. Overall the graph indicates a consistent pattern over time for most MCOs with one MCO, having a notably higher difference ranging between +8 to +20 dollars PMPM. For this MCO utilization was likely part of the driver for this as the actual utilization was notably higher than the expected utilization. The unit cost could also be a driver of the higher actual dollars PMPM rate. This is an opportunity for DHS to investigate whether the risk adjusted benchmarks are reflective of the illness burden of the population. Otherwise, potentially there is a data issue driving the large differences. More investigation is needed to understand the reasons driving the results.

Imaging Services

The graph below shows the difference in the actual units PMPM rate and the expected units PMPM rate across each MCO and all MCOs in aggregate for Imaging Services.

Graph 3.8: Difference in Actual Units Rate vs Expected Units Rate for Imaging Services



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected dollars PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.16 and 3.A.17 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.8: Difference in Actual Units Rate vs Expected Units Rate for Imaging Services

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	0.03	0.00	0.00	-0.01	-0.01	0.00	0.00
MCO 2	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
MCO 3	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	-0.01
MCO 4	-0.04	-0.04	-0.04	-0.04	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.04	-0.03	-0.03	-0.04
MCO 5	-0.03	-0.03	-0.03	-0.03	-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.03	-0.02	-0.01	-0.01
MCO 6	0.00	-0.01	-0.01	-0.01	0.00	0.00	0.00	-0.01	-0.01	-0.01	-0.01	0.00	-0.01	-0.01	0.00	0.00
MCO 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	0.00
MCO 8	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MCO 9	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	-0.02	-0.01	0.00	0.00
All MCOs Actual Rate	0.07	0.07	0.06	0.06	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
All MCOs Exp. Rate	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.06
All MCOs Difference	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	0.00	0.00

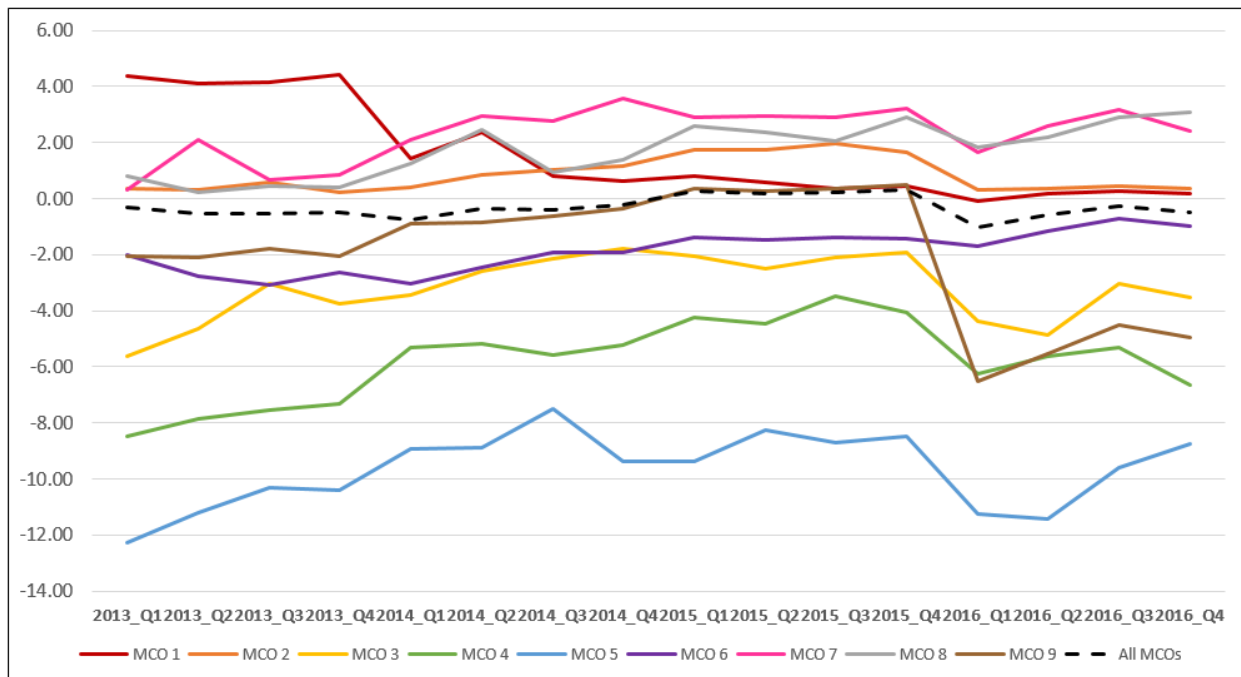
*Differences in the "All MCOs" average are due to rounding

For Imaging Services, the graph showed a consistent pattern over time for a majority of the MCOs except three. Two of these MCOs had consistent patterns over time but they were outliers with notably lower expected units compared to actual with differences ranging from -0.04 to -0.01 units PMPM. Even though these values are small, they are larger on a percentage basis. For both these MCOs, their expected rates as seen in tables 3.A.16 and 3.A.17 in the appendix were consistent over time but were slightly higher than the

actual rates which are also consistent over time. This is an opportunity for DHS to investigate whether the risk adjusted benchmarks are reflective of the illness burden of the population. Otherwise, potentially there is a data issue driving the large differences. More investigation is needed to understand the reasons driving the results.

The graph below shows the difference in the actual dollars PMPM rate and the expected dollars PMPM rate across each MCO and all MCOs in aggregate for Imaging Services.

Graph 3.9: Difference in Actual Dollars Rate vs Expected Dollars Rate for Imaging Services



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected dollars PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.18 and 3.A.19 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.9: Difference in Actual Dollars Rate vs Expected Dollars Rate for Imaging Services

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	4.37	4.08	4.15	4.41	1.41	2.36	0.81	0.62	0.78	0.59	0.37	0.46	-0.08	0.18	0.26	0.16
MCO 2	0.36	0.31	0.59	0.24	0.42	0.83	1.04	1.14	1.75	1.72	1.97	1.64	0.33	0.36	0.43	0.34
MCO 3	-5.60	-4.66	-3.05	-3.75	-3.45	-2.57	-2.13	-1.78	-2.04	-2.52	-2.11	-1.91	-4.35	-4.88	-3.02	-3.51
MCO 4	-8.50	-7.86	-7.55	-7.33	-5.32	-5.16	-5.60	-5.22	-4.25	-4.46	-3.47	-4.04	-6.24	-5.62	-5.30	-6.64
MCO 5	-12.26	-11.18	-10.30	-10.38	-8.94	-8.89	-7.51	-9.35	-9.38	-8.27	-8.71	-8.48	-11.24	-11.42	-9.58	-8.77
MCO 6	-2.01	-2.75	-3.06	-2.63	-3.01	-2.47	-1.94	-1.90	-1.40	-1.49	-1.40	-1.44	-1.69	-1.14	-0.70	-1.00
MCO 7	0.31	2.10	0.69	0.84	2.09	2.95	2.79	3.55	2.89	2.94	2.90	3.22	1.64	2.60	3.17	2.41
MCO 8	0.78	0.22	0.44	0.40	1.24	2.47	0.94	1.36	2.57	2.38	2.04	2.89	1.83	2.17	2.90	3.09
MCO 9	-2.05	-2.09	-1.80	-2.04	-0.89	-0.83	-0.61	-0.34	0.34	0.28	0.37	0.50	-6.51	-5.54	-4.51	-4.95
All MCOs Actual Rate	11.41	10.84	10.71	10.52	9.88	9.87	9.03	8.88	9.24	9.12	9.05	8.81	8.91	8.47	8.40	8.16
All MCOs Exp. Rate	11.74	11.38	11.23	11.02	10.63	10.21	9.41	9.11	8.96	8.93	8.81	8.49	9.96	9.06	8.66	8.65
All MCOs Difference	-0.33	-0.54	-0.52	-0.49	-0.75	-0.34	-0.38	-0.22	0.28	0.19	0.24	0.32	-1.05	-0.59	-0.26	-0.49

*Differences in the "All MCOs" average are due to rounding

The range in the difference between the actual rate and expected rate was wider when analyzing dollars compared to utilization for Imaging Services. The difference amongst the MCOs ranged between -12 to +4 dollars PMPM.

MCO 9 and MCO 1 were outliers driven by a noticeable change in their difference between the actual and expected dollars PMPM rates over time. MCO 9's difference was driven by an increase in the expected rate. MCO 1's difference was driven by a decrease in the actual rate.

MCO 5 and MCO 4 both had a consistent pattern over time with their actual dollars PMPM rates being significantly lower than their expected dollars PMPM rates. Both MCOs had actual utilization that was less than expected so it is likely utilization was at least a partial driver of the difference in the dollars PMPM rate. Unit costs could also impact the difference but this would need to be investigated further.

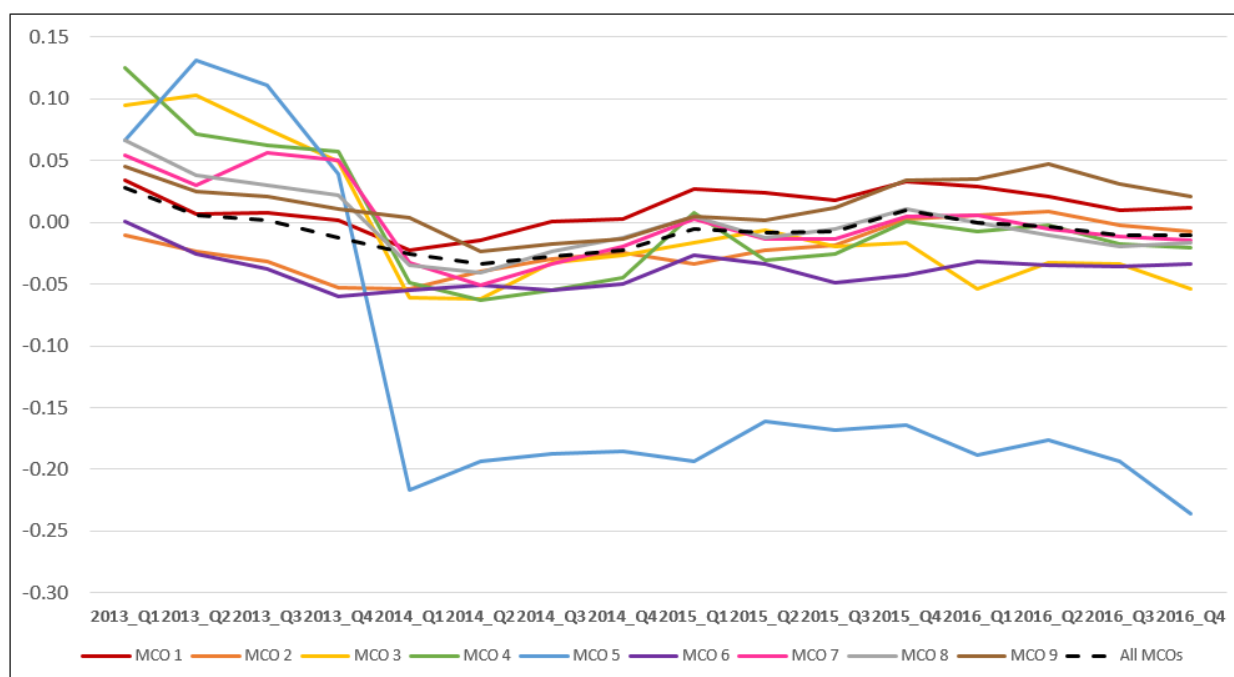
As noted earlier in the report, it is possible some of these differences are caused by the risk adjusted benchmarks not appropriately reflecting the risk of the population. These differences would need to be studied further to understand if any data was missing, if there was a change in how data was submitted, or if there was a reason for the changes.

Based on these observations it is possible the risk adjustment process does not perfectly derive expected rates for some populations.

Office Visits

The graph below shows the difference in the actual units PMPM rate and the expected units PMPM rate across each MCO and all MCOs in aggregate for Office Visits.

Graph 3.10: Difference in Actual Units Rate vs Expected Units Rate for Office Visits



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected units PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.20 and 3.A.21 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.10: Difference in Actual Units Rate vs Expected Units Rate for Office Visits

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.03	0.01	0.01	0.00	-0.02	-0.01	0.00	0.00	0.03	0.02	0.02	0.03	0.03	0.02	0.01	0.01
MCO 2	-0.01	-0.02	-0.03	-0.05	-0.05	-0.04	-0.03	-0.02	-0.03	-0.02	-0.02	0.00	0.01	0.01	0.00	-0.01
MCO 3	0.09	0.10	0.08	0.05	-0.06	-0.06	-0.03	-0.03	-0.02	-0.01	-0.02	-0.02	-0.05	-0.03	-0.03	-0.05
MCO 4	0.13	0.07	0.06	0.06	-0.05	-0.06	-0.05	-0.05	0.01	-0.03	-0.03	0.00	-0.01	0.00	-0.02	-0.02
MCO 5	0.07	0.13	0.11	0.04	-0.22	-0.19	-0.19	-0.19	-0.19	-0.16	-0.17	-0.16	-0.19	-0.18	-0.19	-0.24
MCO 6	0.00	-0.03	-0.04	-0.06	-0.06	-0.05	-0.06	-0.05	-0.03	-0.03	-0.05	-0.04	-0.03	-0.03	-0.04	-0.03
MCO 7	0.05	0.03	0.06	0.05	-0.03	-0.05	-0.03	-0.02	0.00	-0.01	-0.01	0.00	0.01	-0.01	-0.01	-0.02
MCO 8	0.07	0.04	0.03	0.02	-0.03	-0.04	-0.02	-0.01	0.01	-0.01	-0.01	0.01	0.00	-0.01	-0.02	-0.02
MCO 9	0.05	0.02	0.02	0.01	0.00	-0.02	-0.02	-0.01	0.00	0.00	0.01	0.03	0.04	0.05	0.03	0.02
All MCOs Actual Rate	0.42	0.40	0.40	0.39	0.38	0.36	0.33	0.32	0.33	0.32	0.31	0.32	0.34	0.32	0.31	0.32
All MCOs Exp. Rate	0.39	0.40	0.40	0.41	0.40	0.39	0.36	0.35	0.34	0.33	0.32	0.31	0.34	0.33	0.32	0.33
All MCOs Difference	0.03	0.01	0.00	-0.01	-0.03	-0.03	-0.03	-0.02	-0.01	-0.01	-0.01	0.01	0.00	0.00	-0.01	-0.01

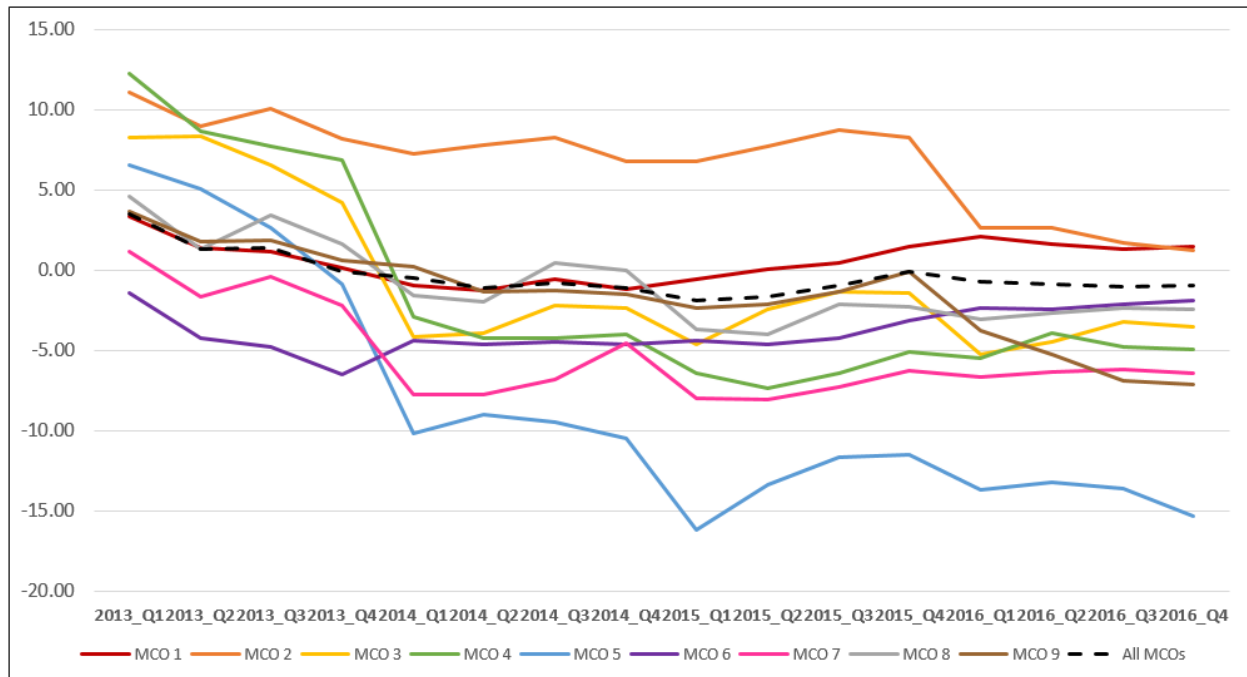
*Differences in the "All MCOs" average are due to rounding

For Office Visits, the most notable outlier was MCO 5. All other MCOs had a difference between the actual unit rate and the expected unit rate ranging from -0.06 to +0.13 units PMPM. MCO 5's difference ranged from -0.24 to +0.13 units PMPM. While this variance was on a small scale, it was considerably outside the range of the other MCO's. Also, even though the values of the variance are small, they are much larger on a percentage basis. MCO 5's variance starting in Q1 2014 was driven by a decrease in the actual rate from

+0.63 in Q4 2013 to +0.38 in Q1 2014. From Q1 2014 on, the actual rate range was relatively consistent between +0.26 and +0.39 units PMPM. Further investigation would be needed to understand this decrease in the actual rate to determine if there was a reason for this decrease or if it was the beginning of some sort of data issue.

The graph below shows the difference in the actual dollars PMPM rate and the expected dollars PMPM rate across each MCO and all MCOs in aggregate for Office Visits.

Graph 3.11: Difference in Actual Dollars Rate vs Expected Dollars Rate for Office Visits



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected dollars PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.22 and 3.A.23 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.11: Difference in Actual Dollars Rate vs Expected Dollars Rate for Office Visits

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	3.33	1.36	1.14	0.09	-0.96	-1.27	-0.61	-1.20	-0.60	0.07	0.42	1.49	2.04	1.60	1.31	1.48
MCO 2	11.03	8.96	10.03	8.19	7.23	7.76	8.24	6.79	6.76	7.72	8.72	8.22	2.59	2.59	1.72	1.20
MCO 3	8.24	8.34	6.53	4.17	-4.20	-3.97	-2.25	-2.36	-4.61	-2.47	-1.32	-1.42	-5.24	-4.50	-3.20	-3.58
MCO 4	12.21	8.64	7.72	6.87	-2.89	-4.22	-4.23	-4.02	-6.45	-7.40	-6.42	-5.07	-5.48	-3.91	-4.83	-4.94
MCO 5	6.50	5.05	2.63	-0.85	-10.14	-9.05	-9.44	-10.52	-16.19	-13.40	-11.65	-11.47	-13.72	-13.23	-13.63	-15.30
MCO 6	-1.41	-4.22	-4.81	-6.52	-4.42	-4.60	-4.52	-4.61	-4.43	-4.65	-4.26	-3.14	-2.37	-2.45	-2.13	-1.88
MCO 7	1.15	-1.67	-0.44	-2.18	-7.75	-7.77	-6.81	-4.57	-7.99	-8.10	-7.26	-6.30	-6.65	-6.34	-6.18	-6.46
MCO 8	4.56	1.29	3.44	1.61	-1.61	-1.98	0.41	-0.07	-3.70	-3.99	-2.16	-2.27	-3.05	-2.65	-2.33	-2.44
MCO 9	3.65	1.78	1.84	0.56	0.20	-1.34	-1.26	-1.53	-2.40	-2.15	-1.36	-0.14	-3.80	-5.27	-6.93	-7.13
All MCOs Actual Rate	27.41	25.96	26.70	26.01	25.83	24.80	23.56	22.76	21.61	20.87	20.71	20.48	21.75	20.39	19.77	19.81
All MCOs Exp. Rate	23.90	24.68	25.36	26.12	26.29	25.92	24.36	23.90	23.55	22.58	21.68	20.57	22.52	21.31	20.83	20.81
All MCOs Difference	3.51	1.28	1.34	-0.11	-0.46	-1.12	-0.79	-1.14	-1.94	-1.70	-0.98	-0.09	-0.77	-0.92	-1.06	-1.00

*Differences in the "All MCOs" average are due to rounding

The range in the difference between the actual dollars PMPM rate and expected dollars PMPM rate was wider when analyzing dollars compared to utilization for Office Visits. The difference amongst each MCO ranged between -16 to +12 dollars PMPM. Most MCOs were relatively close to the all MCO average except MCO 2 and MCO 5.

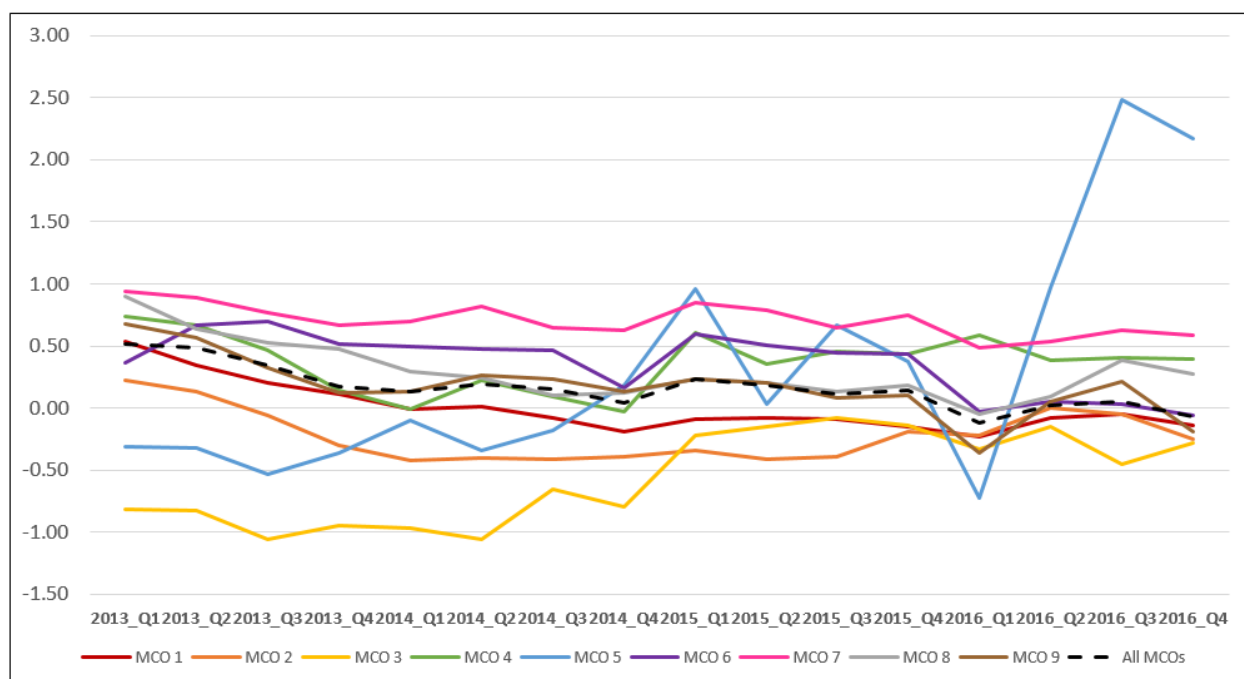
MCO 2 was consistently higher than the other MCOs in their difference between the actual and expected rate. However, there was a noteworthy decrease of about +6 dollars PMPM in Q1 2016. This decrease was driven by an approximate +4 dollar PMPM decrease in the actual rate in Q1 2016. Since utilization did not see a similar decrease, this likely indicates that unit cost was driving the decrease in the actual PMPM dollars. Further investigation is needed to understand if there is a reasonable explanation for this decrease or if there is a potential data issue.

MCO 5 saw a steady decline between their actual and expected dollar PMPM rates. This is an opportunity for DHS to investigate whether the risk adjusted benchmarks are reflective of the illness burden of the population.

Physician Administered Drugs

The graph below shows the difference in the actual units PMPM rate and the expected units PMPM rate across each MCO and all MCOs in aggregate for Physician Administered Drugs.

Graph 3.12: Difference in Actual Units Rate vs Expected Units Rate for Physician Administered Drugs



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected units PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.24 and 3.A.25 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.12: Difference in Actual Units Rate vs Expected Units Rate for Physician Administered Drugs

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.53	0.35	0.21	0.11	-0.01	0.01	-0.08	-0.19	-0.09	-0.08	-0.09	-0.15	-0.23	-0.08	-0.05	-0.14
MCO 2	0.22	0.13	-0.06	-0.30	-0.42	-0.40	-0.41	-0.39	-0.34	-0.41	-0.39	-0.19	-0.22	0.00	-0.05	-0.25
MCO 3	-0.82	-0.83	-1.06	-0.94	-0.97	-1.06	-0.66	-0.79	-0.22	-0.14	-0.08	-0.14	-0.33	-0.15	-0.45	-0.28
MCO 4	0.74	0.67	0.47	0.14	-0.01	0.22	0.09	-0.03	0.61	0.35	0.46	0.43	0.58	0.39	0.41	0.39
MCO 5	-0.31	-0.32	-0.53	-0.36	-0.10	-0.34	-0.18	0.19	0.96	0.04	0.67	0.37	-0.72	0.97	2.48	2.17
MCO 6	0.36	0.67	0.69	0.51	0.49	0.48	0.47	0.17	0.59	0.50	0.45	0.44	-0.03	0.05	0.04	-0.06
MCO 7	0.94	0.89	0.77	0.67	0.70	0.81	0.65	0.63	0.85	0.79	0.65	0.74	0.49	0.54	0.63	0.59
MCO 8	0.90	0.63	0.53	0.47	0.30	0.25	0.11	0.13	0.24	0.20	0.14	0.18	-0.05	0.09	0.38	0.27
MCO 9	0.68	0.57	0.32	0.13	0.14	0.27	0.23	0.13	0.24	0.20	0.08	0.10	-0.36	0.05	0.22	-0.19
All MCOs Actual Rate	1.22	1.33	1.35	1.33	1.40	1.50	1.44	1.36	1.59	1.60	1.56	1.57	1.63	1.61	1.59	1.52
All MCOs Exp. Rate	0.52	0.49	0.34	0.17	0.13	0.19	0.16	0.04	0.23	0.18	0.12	0.14	-0.12	0.03	0.05	-0.06
All MCOs Difference	0.70	0.84	1.01	1.16	1.27	1.31	1.29	1.32	1.35	1.42	1.45	1.42	1.75	1.58	1.54	1.59

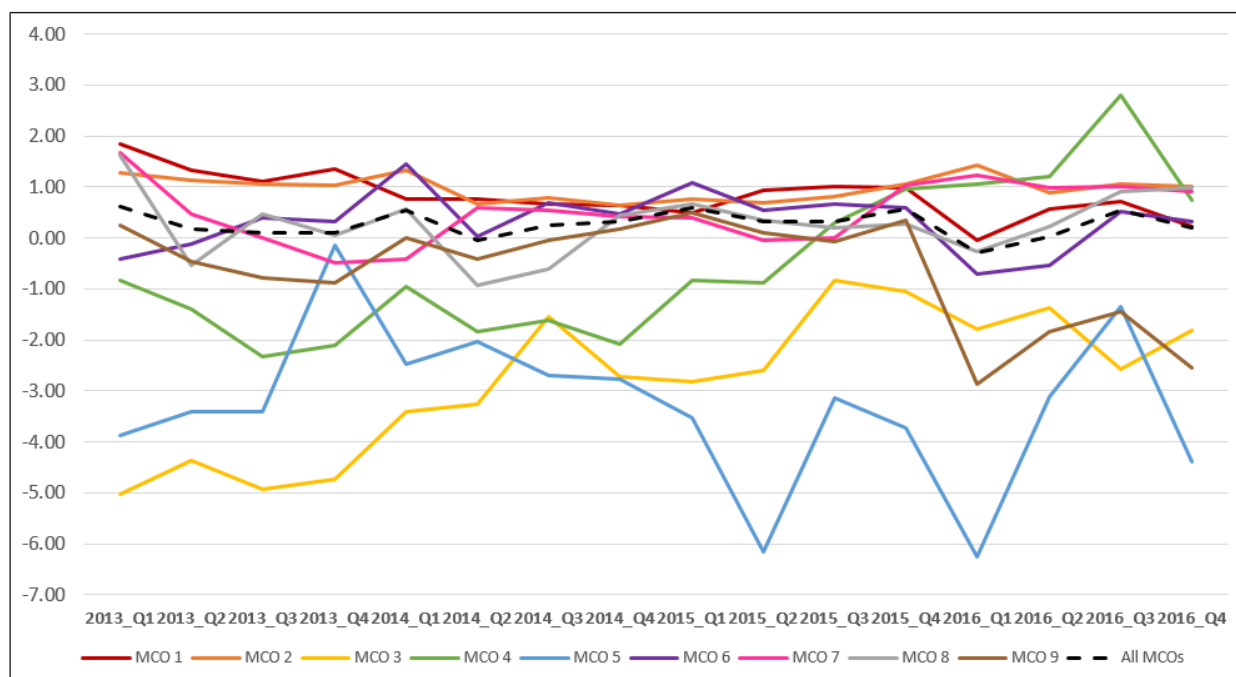
*Differences in the "All MCOs" average are due to rounding

The graph showed a fairly consistent pattern over time for a majority of the MCOs except two. MCO 5's difference jumped significantly from Q1 2016 to Q3 2016. This was significant given the scale, but due to the smaller size of this service category this volatility was not necessarily surprising. This jump was driven by an increase in the actual units PMPM rate. Further investigation would be required to determine if there was a reason for this or if there is a potential data issue.

MCO 3 saw a gradual shift in the actual rate increasing to be closer to the expected rate. MCO 3 saw a corresponding gradual increase in the expected rate, which jumped in Q1 2016 by +0.45 units PMPM. The actual rate although increasing over time, jumped in Q1 2015 by +0.70 units PMPM (which caused the actual rate to be closer to the expected rate) and in Q1 2016 by +0.30 units PMPM (which was less than the expected rate increase). Further investigation would be required to determine if there was a change in data quality or completeness or a justifiable reason for this increase.

The graph below shows the difference in the actual dollars PMPM rate and the expected dollars PMPM rate across each MCO and all MCOs in aggregate for Physician Administered Drugs.

Graph 3.13: Difference in Actual Dollars Rate vs Expected Dollars Rate for Physician Administered Drugs



*All MCOs = average quarterly difference between actual rate and expected rate across all nine MCOs

**Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format. The table also illustrates the actual and expected dollars PMPM rates for all MCOs in total. Tables with the actual and expected rates can be found in tables 3.A.26 and 3.A.27 in the appendix. Differences in the all MCO average in comparison to the actual rate and expected rate are due to rounding.

Table 3.13: Difference in Actual Dollars Rate vs Expected Dollars Rate for Physician Administered Drugs

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	1.85	1.34	1.09	1.35	0.75	0.76	0.66	0.64	0.48	0.94	1.01	0.98	-0.04	0.57	0.71	0.23
MCO 2	1.28	1.12	1.07	1.04	1.32	0.66	0.78	0.65	0.76	0.70	0.81	1.06	1.43	0.88	1.05	1.01
MCO 3	-5.04	-4.36	-4.94	-4.73	-3.42	-3.27	-1.56	-2.72	-2.82	-2.59	-0.84	-1.06	-1.79	-1.37	-2.59	-1.81
MCO 4	-0.84	-1.40	-2.33	-2.11	-0.94	-1.85	-1.61	-2.08	-0.82	-0.88	0.29	0.97	1.07	1.21	2.79	0.73
MCO 5	-3.86	-3.40	-3.41	-0.14	-2.48	-2.04	-2.69	-2.78	-3.52	-6.17	-3.15	-3.74	-6.25	-3.11	-1.35	-4.39
MCO 6	-0.41	-0.11	0.39	0.31	1.46	0.02	0.68	0.47	1.09	0.54	0.67	0.59	-0.72	-0.53	0.53	0.31
MCO 7	1.68	0.46	0.00	-0.48	-0.41	0.58	0.53	0.43	0.41	-0.05	0.01	1.03	1.24	0.99	1.00	0.92
MCO 8	1.62	-0.53	0.48	0.04	0.57	-0.94	-0.61	0.45	0.68	0.34	0.19	0.26	-0.26	0.22	0.92	0.99
MCO 9	0.25	-0.47	-0.78	-0.88	0.00	-0.41	-0.06	0.18	0.50	0.10	-0.08	0.35	-2.88	-1.83	-1.45	-2.56
All MCOs Actual Rate	6.20	5.92	5.98	6.07	6.46	5.97	5.92	5.94	6.38	6.25	6.29	6.39	6.71	6.47	6.85	6.78
All MCOs Exp. Rate	5.60	5.76	5.87	5.97	5.93	6.03	5.67	5.63	5.78	5.94	5.98	5.83	7.00	6.45	6.30	6.58
All MCOs Difference	0.60	0.17	0.11	0.10	0.53	-0.05	0.26	0.32	0.60	0.31	0.31	0.56	-0.30	0.02	0.55	0.20

*Differences in the "All MCOs" average are due to rounding

The range in the difference between the actual dollars PMPM rate and expected dollars PMPM rate was wider when analyzing dollars compared to utilization for Physician Administered Drugs. The difference across the MCOs ranged from -6 to +3 dollars PMPM. Notable outliers were MCOs 3, 5, and 9.

MCO 5's expected rates as seen in tables 3.A.26 and 3.A.27 in the appendix were significantly higher than the other MCOs and were higher than MCO 5's actual rates. In 2015 Q2 and 2016 Q1 MCO 5 had clear outliers driven by large decreases in actual rates. In 2016, MCO 5 had a large increase in the utilization difference where the actual was above the expected. This aligned with the fact the actual dollars PMPM was still significantly below expected, suggests the unit costs dropped in 2016. Further investigation would be needed to understand if this was the case, if there was a reason for these changes, or if it was caused by a data issue.

MCO 3 also had an actual rate consistently lower than expected by a larger amount than most other MCOs. The utilization difference was similar, suggesting the difference in the dollars PMPM rate was utilization driven. Further investigation would be needed to determine if there is missing data.

MCO 9's absolute difference between actual and expected had a large increase in 2016 Q1. Both the actual rate and expected rate had a large increase but the actual rate did not increase as much as the expected rate. Again, the change in the difference suggests the risk adjustment may not a perfect predictor or expected rates, but more investigation is needed.

Key Highlights

Overall Findings

The error reporting and utilization and dollars benchmark monitoring was effectively implemented.

For error reporting, overall the error rates decreased over time and thus the data quality has improved. Since June 2016, the error rates have also been below the 1.0% target threshold.

For utilization and dollars benchmark monitoring, DHS implemented a methodology and process to identify if any outliers in the data exist that may require further investigation.

Potential Improvement Areas and Enhancements

The utilization and dollars against benchmarks analysis had some consistent patterns observed. There were several outliers noted throughout this QAP which could be caused by a variety of reasons. These reasons range from a data issue that needs to be fixed; risk adjusted benchmarks weren't reflective of the population; utilization and/or unit cost changed from a previously observed pattern; the size of the plan

caused general volatility, etc. Further investigation is needed in all cases. The overall volatility seen throughout implies this QAP still needs attention beyond monitoring. Continued refinement and examination of the risk adjusted benchmarks is needed to ensure they are reflective of the population.

DHS could create these error rate and benchmark reports more frequently such as at least annually but not more than semi-annually to increase overall monitoring of the data and identifying data issues as they occur.

Protocol 4 – Duplicate Encounter Records Submitted

Protocol Definition

A standard for duplicate encounters which measures the percentage of duplicates as a percentage of all encounters. Performance will be tracked for each MCO and must be below a specified threshold as determined by DHS.

Measurement

The following standard is used to assess compliance with the duplicate encounter record protocol:

- $$\frac{\text{Total number of duplicate encounter records}}{\text{Total number of encounter records submitted}} < x\%$$

Note: Threshold was 4.0% prior to October 2016 and was reduced to 2.5% after that time period

Current State

This QAP is tracked biweekly using an MCO report on a MCO specific web-based portal. Each MCO will see their ranking compared to other de-identified MCOs. Reporting is done for both edit D101 (837 duplicates) & D448 (pharmacy duplicates). If an MCO is above the specified threshold, the web portal reporting highlights the results and the MCOs are contacted.

Data and Approach

Overview: The percentage of duplicates by MCO was evaluated on whether it reduced over time for non-pharmacy and pharmacy claims.

Data Received: Data for non-pharmacy duplicates identified in the claims system by edit "D101" and pharmacy duplicates identified in the claims system by edit "D448" were received. Information given for each of these edits included the number of duplicate claims (represented by number of claim edits), the number of claims, and the percentage of duplicates split by MCO and biweekly period from January 1st, 2014 through May 2nd, 2017. Data for May 2017 was excluded from the analysis since a full month of data was not received.

The original data provided by DHS included some duplicates due to DHS actions. While these claims were counted in the duplicate data, they were not considered MCO errors. As such, the following duplicates that were caused by DHS were removed:

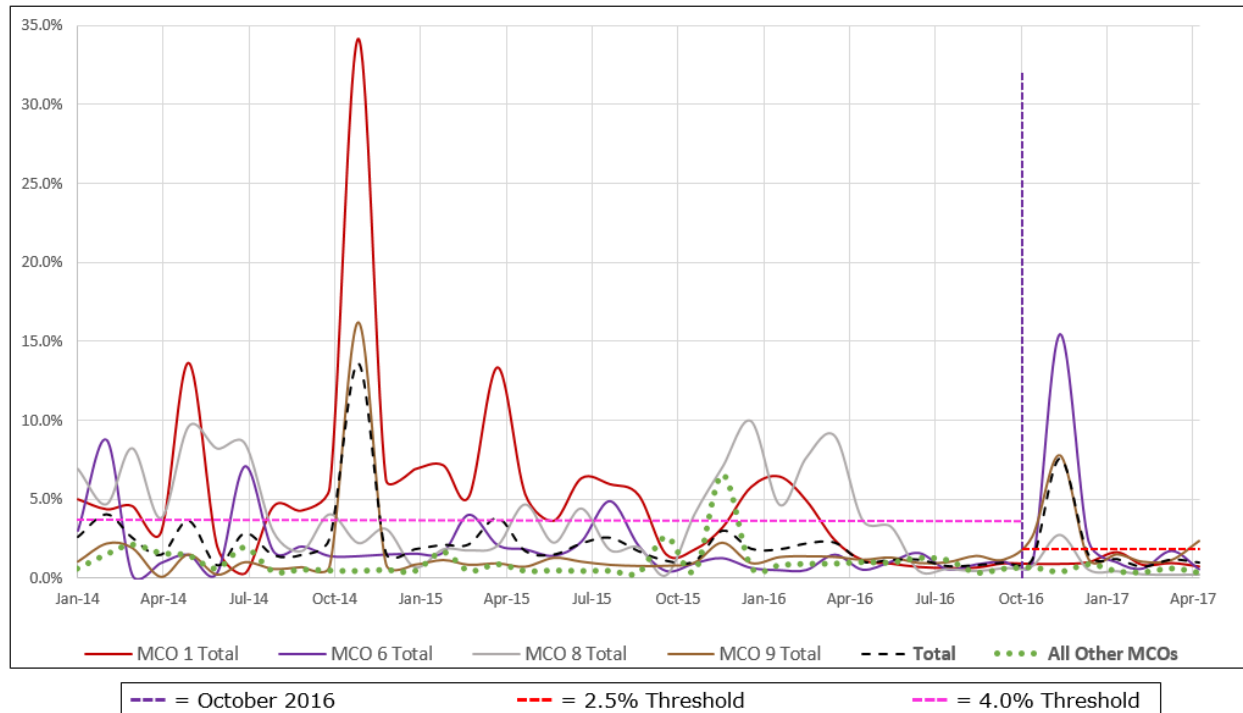
- 06-30-2015 warrant: MCO 6, removed 70,030 448s
- 10-06-2015 warrant: All MCOs, removed all D101s
- 10-06-2015 warrant: MCO 2, removed all D448s
- 10-06-2015 warrant: MCO 4, removed all D448s
- 10-06-2015 warrant: MCO 7, removed all D448s
- 08-09-2016 warrant: MCO 1, removed all D448s
- 09-20-2016 warrant: MCO 2, removed all D101s
- 10-18-2016 warrant: MCO 1, removed all D448s
- 03-21-2017 warrant: MCO 6, removed 5,000 D448s

Method of evaluation: The number of duplicates, the number of claims, and the percentage of duplicates for each MCO were analyzed. This analysis was performed for non-Rx, Rx, and total claims. The results by MCO were compared against the 4% DHS threshold prior to October 2016 and the 2.5% DHS threshold after October 2016.

Findings and Observations

Below is a graph showing the percentage of total (non-pharmacy and pharmacy combined) duplicates for all MCOs relative to the specified threshold indicator. The thresholds are represented with dotted horizontal lines in the graph.

Graph 4.1: Total Percentage of Duplicates for each MCO



*All Other MCOs include: MCO 2, MCO 3, MCO 4, MCO 5, and MCO 7. MCO 1, MCO 6, MCO 8 and MCO 9 shown separately since they were outliers with several spikes in the percentage of total duplicates.

The table below shows the percentage of non-pharmacy, pharmacy, and total duplicate claims before and after October 2016, when the threshold changed from 4.0% to 2.5%. The values boxed in red are above the DHS threshold during the stated time period.

Table 4.1: Non-Rx, Rx, and Total Percentage of Duplicates for each MCO Before and After 10/2016

MCO	Non-Rx	Rx	Total	Non-Rx	Rx	Total
Plan Name	% of Duplicates 01/2014 - 10/2016			% of Duplicates 10/2016 - 04/2017		
MCO 1	2.82%	10.48%	5.28%	1.25%	0.30%	1.02%
MCO 2	1.19%	2.21%	1.42%	1.02%	0.45%	0.88%
MCO 3	0.77%	0.29%	0.66%	0.57%	0.00%	0.44%
MCO 4	0.99%	0.00%	0.71%	0.14%	0.00%	0.10%
MCO 5	1.31%	0.02%	1.04%	1.09%	0.00%	0.94%
MCO 6	1.89%	1.29%	1.75%	1.34%	9.45%	3.26%
MCO 7	0.86%	0.30%	0.72%	0.19%	0.01%	0.14%
MCO 8	4.72%	3.55%	4.39%	0.67%	0.89%	0.73%
MCO 9	1.83%	0.86%	1.66%	2.69%	1.32%	2.43%
All MCOs	1.98%	3.52%	2.33%	1.42%	3.61%	1.93%
<i>All Other MCOs</i>	<i>1.08%</i>	<i>1.35%</i>	<i>1.14%</i>	<i>0.71%</i>	<i>0.26%</i>	<i>0.60%</i>

*Prior to 10/2016 the percentage of duplicates threshold was 4% and after 10/2016 the percentage of duplicates threshold was lowered to 2.5%

**All Other MCOs include: MCO 2, MCO 3, MCO 4, MCO 5, and MCO 7

The graph shows all MCOs were below the DHS specified thresholds after June 2016 except for three instances observed in December 2016. These have all improved and have been below the threshold since then.

The table shows that after the threshold decreased to 2.5% in October 2016, the total percentage of duplicates was below the DHS threshold for all MCOs over the time period of October 2016 to April 2017 except one. All MCOs except one improved their Non-Rx percentage of duplicates after the DHS threshold decreased to 2.5%. For Rx and total duplicates, all MCOs except two showed improvements after the threshold changed. Note that although some MCOs were above the DHS thresholds for non-Rx, Rx, or in total over the time period October 2016 to April 2017, much of the results were driven by the outliers seen in December 2016. The total results for all other months were below the 2.5% threshold

Key Highlights

Overall Findings

DHS effectively implemented this QAP as it was originally intended. The number of duplicate encounter records submitted to DHS decreased over time for all MCOs combined. Since October 2016 the number of duplicates were noticeably reduced compared to the level of duplicates seen in 2014 through early 2016, with the exception of December 2016.

Potential Improvement Areas and Enhancements

DHS could consider adding the duplicate edits to the Corrected Claims Penalty Program.

Protocol 5 – Rejections and Denials by DHS

Protocol Definition

A standard for rejections and denials which measures the percentage of rejected and denied encounters. Performance will be tracked for each MCO and must be below a specified threshold (currently 2.5%), as determined by DHS.

Measurement

The following standards are used to assess compliance with the rejections and denials protocol:

- $$\frac{\text{Total number of rejected and denied encounter records}}{\text{Total number of encounter records submitted}} < x\%$$
- The above percentage will be tracked every quarter for each MCO

Note: Threshold includes $x = 2.5\%$

Current State

All encounter claims are received at DHS via the MMIS claim system where editing is performed on the data. The encounter data quality unit at DHS implemented extensive detailed error reporting as feedback to the MCOs of all errors and warnings that occur when managed care encounter claim data is submitted to DHS. This feedback to the MCOs is communicated biweekly by way of MCO specific web-based reporting as well as remittance advice and control reporting detail data. Furthermore, DHS regularly communicates with the MCOs by way of conference calls, emails and phone calls when substantial anomalies are seen in the reporting. The current rejection/denial threshold is set at 2.5% and a financial penalty was implemented in February 2016 that penalizes the MCOs for not correcting errors found during this editing process.

Data and Approach

Overview: The percentage of rejections by MCO was evaluated on if it improved over the time period studied. This was measured in total, by analyzing claims with at least one edit, as well as for specific edits.

Data Received: Aggregated data counting the number of claims with at least one edit and the number of total claims by MCO and biweekly period was received.

Additionally, DHS provided the counts of rejections and denials for twenty different edits by MCO and biweekly period. The number of edits (errors) and claims was provided from January 1st, 2014 to May 2nd, 2017. Data for May 2017 was excluded from analysis since a full month of data was not received.

All edits analyzed in the analysis are documented in table 5.A.1 in the appendix.

Method of evaluation: The percentage of claims with at least one edit from January 2014 to April 2017 was analyzed to determine if there was improvement over time by MCO and for all MCOs combined. Due to the volatility of the results, data was aggregated into quarters in order to smooth out the results of the analysis.

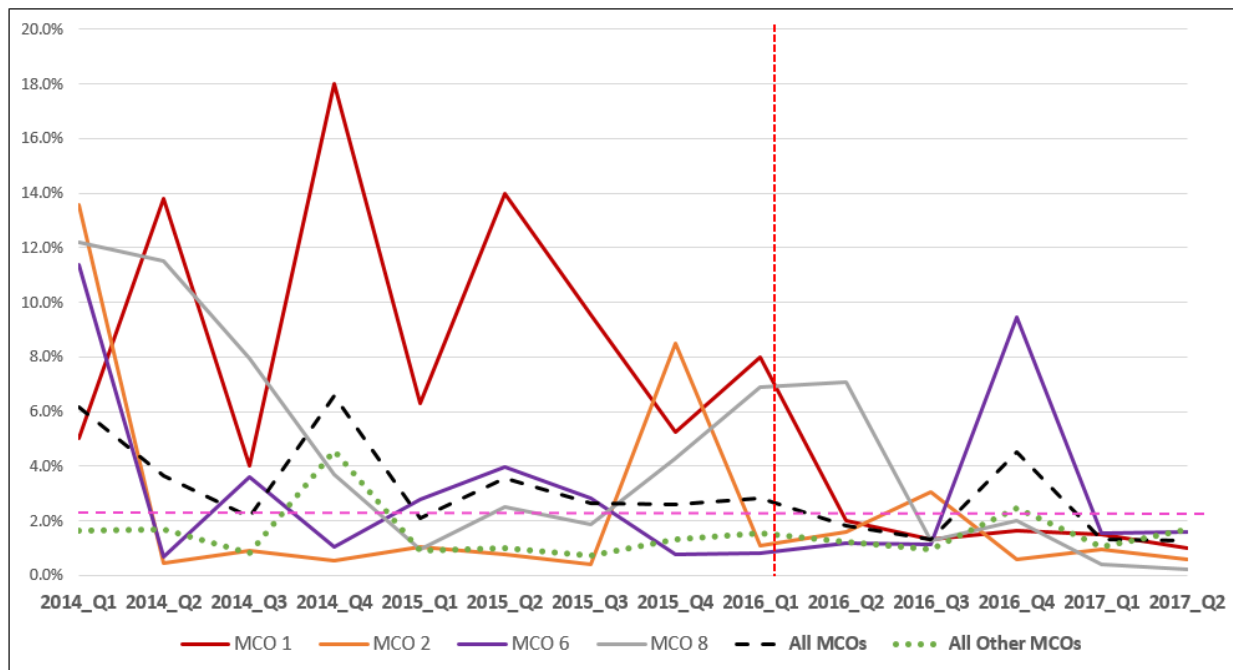
Additionally, the percentage of rejections and denials for each edit across each MCO every bi-weekly period from January 2014 to April 2017 was analyzed. This analysis was performed across twenty different edits and measured against a 2.5% threshold.

Data was analyzed for trends both before and after February 2016, the period when a financial penalty was implemented for the MCOs.

Findings and Observations

The graph below shows the number of claims with at least one edit as a percentage of total claims for each MCO. 'All Other MCOs' are those MCOs which had minimal fluctuation in the percentage of edits compared to the all MCO average. The MCOs included within the 'All Other MCOs' category for this protocol include MCO 3, MCO 4, MCO 5, MCO 7, and MCO 9.

Graph 5.1: Percentage of Claims with At Least One Edit



--- = February 2016, date financial penalty was implemented

--- = 2.5% Threshold

*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**All Other MCOs include: MCO 3, MCO 4, MCO 5, MCO 7, and MCO 9. MCO 1, MCO 2, MCO 6, and MCO 8 shown separately since they were outliers with several spikes in the percentage of claims with at least one edit.

***Each data point represents the quarter in its entirety and lines are used to connect data points

The table below shows the same information as that in the graph above but in tabular format.

Table 5.1: Percentage of Claims with At Least One Edit

MCO	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2
MCO 1	5.00%	13.82%	4.02%	18.00%	6.28%	13.99%	9.53%	5.24%	8.01%	2.01%	1.31%	1.61%	1.48%	1.00%
MCO 2	13.57%	0.43%	0.89%	0.53%	1.04%	0.74%	0.41%	8.48%	1.10%	1.58%	3.04%	0.59%	0.97%	0.57%
MCO 3	0.79%	0.29%	0.44%	0.49%	0.39%	1.43%	0.45%	0.76%	2.83%	0.67%	0.64%	0.56%	0.41%	0.35%
MCO 4	0.64%	0.13%	0.67%	0.42%	0.32%	0.46%	0.27%	4.15%	0.29%	0.29%	0.21%	0.22%	0.05%	0.04%
MCO 5	1.09%	0.41%	0.73%	0.90%	1.12%	1.15%	0.33%	0.66%	0.73%	0.48%	0.75%	0.61%	1.52%	1.46%
MCO 6	11.39%	0.69%	3.62%	1.04%	2.78%	3.95%	2.84%	0.77%	0.81%	1.19%	1.12%	9.46%	1.52%	1.60%
MCO 7	0.97%	0.61%	0.73%	0.52%	0.38%	0.43%	0.61%	1.51%	0.45%	0.33%	0.38%	0.27%	0.16%	0.15%
MCO 8	12.20%	11.50%	7.95%	3.69%	0.93%	2.52%	1.86%	4.29%	6.91%	7.09%	1.29%	1.99%	0.42%	0.20%
MCO 9	1.81%	1.87%	0.82%	5.29%	0.98%	1.03%	0.78%	1.26%	1.67%	1.62%	1.21%	3.44%	1.42%	2.38%
All MCOs	6.17%	3.65%	2.12%	6.59%	2.09%	3.55%	2.63%	2.59%	2.84%	1.84%	1.32%	4.53%	1.30%	1.27%
All Other MCOs	1.62%	1.68%	0.80%	4.55%	0.90%	0.98%	0.73%	1.31%	1.55%	1.21%	0.95%	2.44%	1.02%	1.67%

*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**All Other MCOs include: MCO 3, MCO 4, MCO 5, MCO 7, and MCO 9

***Financial penalty implemented on February 1, 2016; immediately following 2015 Q4

There were substantial fluctuation across many of the MCOs when evaluating claims with at least one edit. Prior to February 2016, the date of implementation of the financial penalty, the All MCO average was above the 2.5% threshold for six of the eight quarters. Further, only three of the nine MCOs did not have a quarter above the 2.5% threshold during this time period. There was a high amount of variation prior to January 2016. After the implementation of the financial penalty starting in February 2016, noticeable improvement was seen overall. There were significantly less plans with spikes above the 2.5% threshold, and the all MCO average stayed below the 2.5% threshold for four of the six quarters.

Four of the nine MCOs showed greater volatility in claims with at least one edit and are shown separately in the graph above. Much of this volatility occurred prior to the implementation of the financial penalty in February 2016. After this time period, three of these four MCOs only had one of the last six quarters above the 2.5% threshold. The fourth MCO had two of the last six quarters above the 2.5% threshold but none of those quarters were within the last year.

Of the twenty different edits, many showed very small percentage of errors out of total claims across the nine MCOs. Specific edits showing more activity were D228 ("drug quantity missing or zero"), D248 ("DOB does not match DOB on DHS recipient file"), D360 ("NDC code does not follow FDA formatting"), D421 ("PCA treating provider type is a group practice or is not a PCA"), and D466 ("MCO paid date is invalid, in the future, missing, or after DOS"). For example, edit D421, five of the nine MCOs had at least one quarter above the 2.5% threshold before the February 2016 financial penalty implementation. However after the implementation, MCO 1 was the only plan that still was above the 2.5% threshold two of the last three quarters analyzed. The other four edits either always had all MCOs under the 2.5% threshold or had all MCOs below the 2.5% threshold after January 2016. The results for these five edits, are shown in graphs 5.A.1, 5.A.2, 5.A.3, 5.A.4, and 5.A.5 of the appendix of this report.

Key Highlights

Overall Findings

DHS effectively implemented this QAP as it was originally intended. Each MCO's percentage of rejections are actively monitored, communicated, and MCOs are held accountable with the financial penalties implemented. As a result, the overall accuracy and quality of the data improved.

Potential Improvement Areas and Enhancements

DHS could consider adding new MMIS edits that check for MCO data quality issues in MMIS.

Protocol 6 – Control Reporting and Reconciliation

Protocol Definition

Each MCO will be responsible for working with DHS to reconcile their financial reporting with both high-level aggregated managed care claim summaries and individual line-level encounter claim data (which is fed back to the MCOs at a granular level).

Current State

Per discussions with DHS, this has been a highly effective method for identifying and correcting problems on a large scale. All MCOs are complying with the Control Reporting and Reconciliation QAP, and this QAP will be ongoing with all MCOs, with varying amounts of activity based on issues identified. A piece of this project has been the implementation of a process to give line-level feedback to the MCOs on every row of data submitted to DHS. This has provided unprecedented transparency for the MCOs as a way for them to see the status of their claims data in DHS databases at the most granular levels. Furthermore, the MCOs will reconcile financial dollars that they report to DHS with the claims that DHS shows in its data warehouse. DHS has implemented a 1% threshold for all financial variances observed. Finally, control reports (aggregate and detail) are sent from DHS on a quarterly basis unless requested by the MCO more frequently.

Data and Approach

Overview: The total financial dollar variance between MCO and DHS data was evaluated to determine if it reduced over time. Additionally, the line-level detail control report process was understood and correspondence with DHS regarding its effectiveness was conducted.

Data Received: Aggregate control reports used in the reconciliation process showing total dollars for each MCO from their financial reports and total dollars within the DHS data warehouse were received. Yearly breakouts for this information span from 2012 to 2015, and were further summarized by service type and by plan type. Data for 2016 was not yet available.

The service types are:

- Inpatient
- Outpatient
- Professional
- Pharmacy

The MHCP program types are:

- Medical Assistance ("MA")
- MNCare
- Special Needs BasicCare ("SNBC")

Additionally, DHS provided notes specifying the uses of the report and any exclusions that applied such as members that were not eligible for services on the service dates the MCO submitted claims. In particular, the reports are used for the Integrated Health Partnerships ("IHP") process and rate setting.

Methods of evaluation: The percentage difference in control dollars from the MCO financial reports compared to the dollars received by DHS as managed care encounter claims data was analyzed year-over-year from 2012 to 2015. The results were evaluated by:

- All MCOs combined with all service types combined
- All MCOs combined by service type
- Individual MCOs with all service types combined
- Individual MCOs by service type

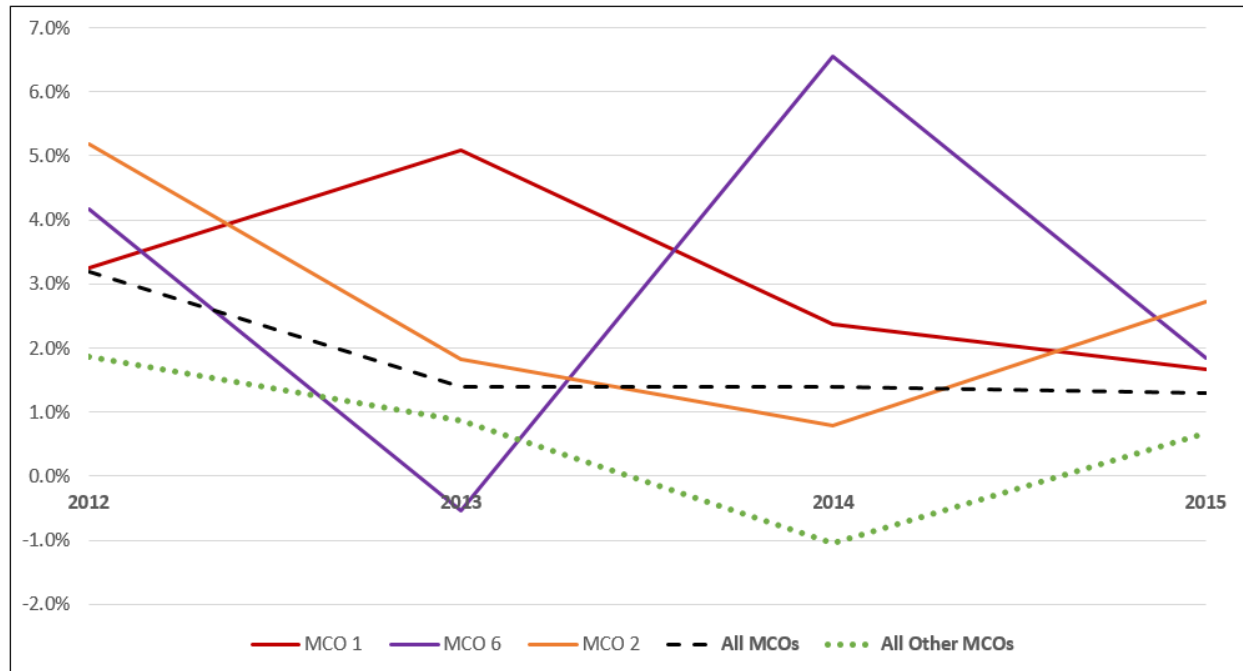
Additionally, Deloitte Consulting met with DHS to better understand their control detail reporting reconciliation process. The MCOs are provided complete line-by-line feedback for each claim submitted to DHS as managed care encounter claim data. This detail data is used for reconciliation of the differences in aggregate reporting.

Findings and Observations

Aggregate Dollar Control Reports:

The graph below shows the percentage difference in control dollars (i.e. MCO Financial Dollars versus DHS Data Warehouse Dollars) for each MCO with all service types combined. Results around 0% would indicate the data had little difference, and results higher than 0% would indicate the MCO financial dollars are higher than the DHS data warehouse (and vice versa). MCOs that were outliers in this comparison appear separately in the graph and MCOs with little volatility were grouped together within the 'all Other MCOs', which include MCO 3, MCO 4, MCO 5, MCO 7, MCO 8, and MCO 9.

Graph 6.1: Percent Difference in Total Control Dollars



*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Percentages which are positive indicate the MCOs have more control dollars than DHS

***All Others MCOs include: MCO 3, MCO 4, MCO 5, MCO 7, MCO 8, and MCO 9. MCO 1, MCO 2, and MCO 6 shown separately since they were outliers with more volatility in the percentage difference of total control dollars.

****Each data point represents the year in its entirety and lines are used to connect data points

The table below shows the same information as the graph above but in tabular format.

Table 6.1: Percentage and Dollar Difference in Total Control Dollars

MCO	2012 %	2012 Dollars Difference	2013 %	2013 Dollars Difference	2014 %	2014 Dollars Difference	2015 %	2015 Dollars Difference
MCO 8	2.59%	\$ 2,232,606	1.08%	\$ 918,974	0.25%	\$ 287,895	1.11%	\$ 1,513,839
MCO 1	3.24%	\$ 7,806,657	5.08%	\$ 26,724,995	2.37%	\$ 8,316,937	1.68%	\$ 6,903,232
MCO 4	2.13%	\$ 531,819	2.72%	\$ 696,843	0.27%	\$ 88,106	0.18%	\$ 70,220
MCO 7	0.76%	\$ 653,243	0.84%	\$ 759,856	0.27%	\$ 338,693	-0.34%	\$ (477,689)
MCO 6	4.17%	\$ 26,683,385	-0.55%	\$ (4,166,992)	6.56%	\$ 52,390,574	1.83%	\$ 18,862,902
MCO 9	1.90%	\$ 15,164,308	0.78%	\$ 7,288,318	-1.34%	\$ (19,034,419)	0.71%	\$ 12,468,718
MCO 2	5.18%	\$ 17,479,005	1.82%	\$ 6,620,361	0.78%	\$ 3,607,861	2.72%	\$ 12,136,021
MCO 3	N/A	N/A	N/A	N/A	N/A	N/A	0.72%	\$ 486,321
MCO 5	1.71%	\$ 330,807	1.27%	\$ 334,863	1.49%	\$ 418,372	1.74%	\$ 510,056
All MCOs	3.18%	\$ 80,881,830	1.39%	\$ 39,177,218	1.39%	\$ 46,414,019	1.29%	\$ 52,473,621
All Other MCOs	1.86%	\$ 18,912,783	0.86%	\$ 9,998,854	-1.04%	\$ (17,901,353)	0.67%	\$ 14,571,465

*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Difference in total dollars is (percent)*(DHS Total Dollars) for each individual year

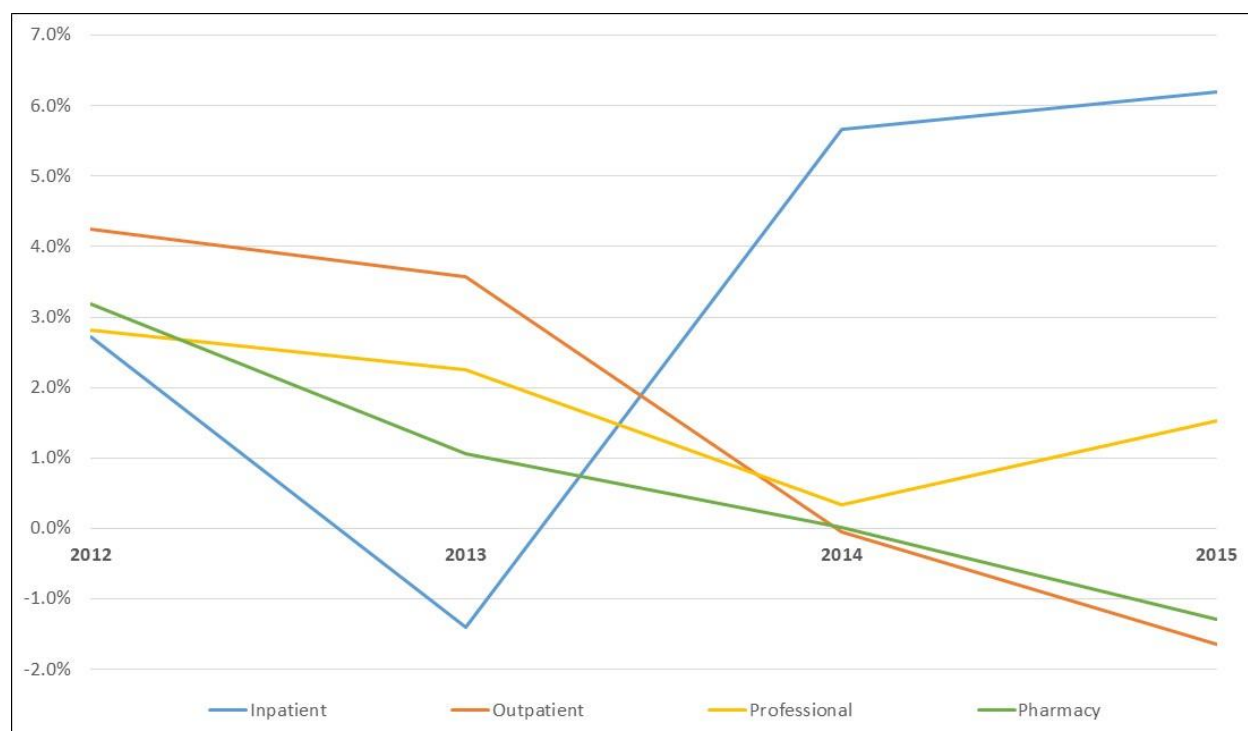
***All Others MCOs include: MCO 3, MCO 4, MCO 5, MCO 7, MCO 8, and MCO 9

For all MCOs combined, the total percentage difference between the MCO financials and the DHS data warehouse decreased from 2012 to 2015, most notably from 2012 to 2013. This indicates that the encounter data improved over time.

MCO 1, MCO 6, and MCO 9, while showing improvement from 2012 to 2015, still potentially had substantial dollars not included in the DHS data warehouse. One explanation for MCOs having more dollars on claims than DHS could be that MCOs were including claims that were not submitted to DHS, not successfully resubmitted to DHS, or rejected or denied by DHS.

Below shows the percentage difference in control dollars when comparing MCO financials to the DHS data warehouse across all MCOs combined for each service type. Similarly to the above graphs, positive differences indicate the MCOs have more financial dollars than appear in the DHS data warehouse (and vice versa).

Graph 6.2: Total Percent Difference in Control Dollars (All MCOs, By Service Type)



*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Each data point represents the year in its entirety and lines are used to connect data points

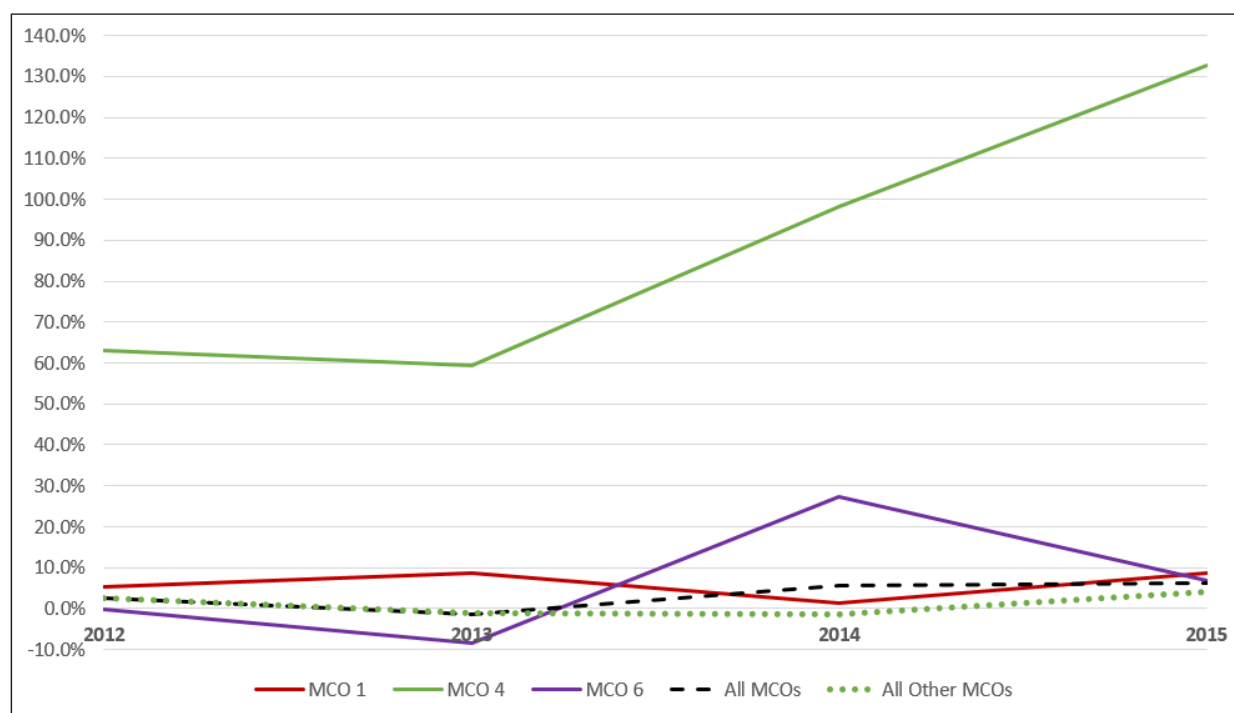
Table 6.2: Total Percent Difference in Control Dollars (All MCOs, By Service Type)

Service Type	2012 %	2012 Dollars Difference	2013 %	2013 Dollars Difference	2014 %	2014 Dollars Difference	2015 %	2015 Dollars Difference
Inpatient	2.72%	\$ 18,035,390	-1.39%	\$ (10,352,901)	5.67%	\$42,719,217	6.19%	\$ 57,331,477
Outpatient	4.25%	\$ 25,350,714	3.57%	\$ 22,949,214	-0.05%	\$ (411,883)	-1.65%	\$ (15,861,278)
Professional	2.81%	\$ 24,603,387	2.25%	\$ 21,754,595	0.34%	\$ 3,998,152	1.52%	\$ 21,140,510
Pharmacy	3.18%	\$ 12,892,339	1.06%	\$ 4,826,310	0.02%	\$ 108,533	-1.29%	\$ (10,137,088)

When reviewing the all MCO combined individual service types, from 2012 to 2014, outpatient, professional, and pharmacy all improved over time and in 2014 were close to 0%. However these three service types increased in 2015 to greater than 1% absolute difference. This may be due to the fact that MCOs may not have had sufficient time to resolve any issues observed. Alternatively, inpatient was much more volatile and substantially increased from 2013 to 5.7% in 2014 and 6.2% in 2015.

Due to the volatility of inpatient claims we wanted to better understand the driver behind this. The graph below shows the percentage difference in control dollars between the MCO financial data and the DHS data warehouse for each MCO limited to inpatient claims. MCOs that were outliers in this comparison appear separately in the graph and MCOs with little volatility are grouped together within the 'all Other MCOs', which includes MCO 3, MCO 2, MCO 5, MCO 7, MCO 8, and MCO 9.

Graph 6.3: Total Percent Difference in Control Dollars (All MCOs, Inpatient Claims Only)



*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Percentages which are positive indicate the MCOs have more control dollars than DHS

***All Others MCOs include: MCO 2, MCO 3, MCO 5, MCO 7, MCO 8, and MCO 9. MCO 1, MCO 4, and MCO 6 shown separately since they were outliers with more volatility in the percentage difference of inpatient control dollars.

****Each data point represents the year in its entirety and lines are used to connect data points

Table 6.3: Total Percent Difference in Control Dollars (All MCOs, Inpatient Claims Only)

Service Type	2012 %	2012 Dollars Difference	2013 %	2013 Dollars Difference	2014 %	2014 Dollars Difference	2015 %	2015 Dollars Difference
MCO 1	5.25%	\$ 6,842,993	8.62%	\$ 10,378,527	1.28%	\$ 1,003,271	8.81%	\$ 6,912,140
MCO 4	63.09%	\$ 2,976,194	59.51%	\$ 2,760,039	98.14%	\$ 5,445,763	132.62%	\$ 10,083,765
MCO 6	-0.25%	\$ (453,602)	-8.51%	\$ (18,965,766)	27.43%	\$ 43,347,881	6.77%	\$ 16,196,627
All MCOs	2.72%	\$ 18,035,390	-1.39%	\$ (10,352,901)	5.67%	\$ 42,719,217	6.19%	\$ 57,331,477
<i>All Other MCOs</i>	2.48%	\$ 8,669,805	-1.14%	\$ (4,525,701)	-1.38%	\$ (7,077,698)	4.02%	\$ 24,138,945

MCO 4's MCO financials were 60% greater than the DHS data warehouse in 2012 and grew to 132.6% greater than the DHS data warehouse in 2015. Although this was a substantial percentage difference, much of MCO 4's increases in inpatient variances were offset by decreases in outpatient variances indicating a potential issue with service type classification for inpatient and outpatient claims.

Detail Control Reports:

The other part of this protocol is the *detail control report* which is complete line by line encounter data detail DHS sends back to the MCOs quarterly or by request. In addition to feeding back the claims data itself, DHS provides the status of each claim line as it stands in the DHS data warehouse indicating if the data is usable or unusable. If a claim line is not usable, DHS carefully defines the reason(s) why. The MCOs are expected to perform data testing that compares these files to their internal data to look for discrepancies and work with DHS to resolve them.

Over the past few years, DHS spent several hundred hours with the MCOs helping them reconcile their data to the data DHS receives. Even though many hours were spent on the control detail reconciliation process, it provides valuable transparency between the MCOs and DHS. A large component of this transparency is that the MCOs are aware of the status of the data that resides within the DHS database. This allows for easier reconciliation of claim discrepancies between DHS and the MCOs, particularly with claims deemed unusable.

Key Highlights

Overall Findings

DHS effectively implemented this protocol as it was originally intended.

DHS implemented the infrastructure for the reporting and internal processes for the control aggregate and detail ongoing reconciliation. This has been a highly effective method for identifying and correcting problems on a large scale.

This QAP improved the completeness and accuracy of the encounter data.

Potential Improvement Areas or Enhancements

One consideration for an area of improvement for the aggregate control reports and the detail control reports is the enforcement of the 1% threshold.

Additionally, the aggregate control report reconciliations while done on a quarterly basis could increase the run out as the year unfolds. This could help identify some issues earlier instead of waiting for longer run out periods such as 12 months.

Protocol 7 – Claims Review

This protocol was not reviewed for this report as DHS had not implemented it and therefore did not include it within the scope of the RFP. DHS determined the QAP as originally outlined would not yield sufficiently useful findings relative to the other QAPs to justify anticipated excessive expense and resource strain for DHS, MCOs, and provider systems; and could more effectively be addressed through alternative audit mechanisms.

The CMS Managed Care Rules published in 2016 call for audits of the MCOs and their providers to be completed by 2019. DHS is making plans to comply with this audit and anticipates that compliance will partially satisfy this QAP.

Protocol 8 – Remediation Plan

Protocol Definition

At the discretion of DHS, an MCO will submit a remediation plan to DHS for review and approval to remedy identified deficiencies in the MCO's encounter data submission process.

Current State

DHS implemented a remediation form that includes the MCO name, the title of the issue, the date, contact person at both DHS and the MCO, and a description of the issue. MCOs have 30 days to respond to remediation forms, and 60 days to fix issues.

Data and Approach

Overview: DHS's process to remediate data issues with the MCOs was reviewed and the process for remediation was evaluated whether or not it was successful.

Data Received: The remediation form DHS developed was received. Additionally, a high level write-up describing the process to remediate data issues with the MCOs was received.

Method of Evaluation: Deloitte Consulting had discussions with DHS to understand their process to remediate data issues and their resolution. The process in place was then evaluated on whether it was successful at remediating issues timely and efficiently.

Findings and Observations

Upon implementation on July 1st, 2015, this protocol changed from Corrective Action Plan to Remediation Plan in order to create a more collaborative and less formalized process. DHS created a remediation form to which the MCOs have 30 days to respond and 60 days to correct any issues.

Since implementation, DHS has not utilized the remediation plan with any of the MCOs. When problems are discovered in the data, DHS does not complete the remediation form immediately, but rather tries to work out the issue with the MCO without it. This has been effective with many issues DHS encountered with the MCOs.

This less formal approach has opened the lines of communication between DHS and the MCO. DHS requests self-imposed deadlines from the MCO to fix identified deficiencies. If deadlines are deemed unreasonable, DHS will negotiate a different timeline. Through these informal communications, DHS tries to follow the 30 day response 60 day remediation guideline.

DHS found that having a remediation process in place incentivizes the MCOs to resolve issues without necessitating a more formal process. One example where a remediation plan was avoided related to requiring a valid treating provider on PCA claims. Upon claim submission, DHS has a check in place known as edit D421 that reviews all PCA claims to ensure they have a valid treating provider. One MCO in particular had an issue with this edit where every warrant, they had roughly 50,000 postings of this edit. To avoid a remediation plan, DHS and the MCO had several conference calls and shared documentation illustrating the issues. .

In another example, DHS identified an issue with one MCO's pharmacy paid amounts submitted on claims, and worked with them to void and resubmit claims with corrected paid amounts. No remediation plan was needed since the problem was resolved through informal communication.

In a third example, an MCO had material discrepancies when comparing dollars in MCO financials and DHS's data warehouse. The MCO waited for DHS to provide a new aggregate control report to identify whether the problem was resolved. If the discrepancies have not been resolved, a remediation plan may be necessitated after providing a new control report.

Key Highlights

Overall Findings

DHS successfully implemented this QAP as it was originally intended. The MCOs are participants in the process of making changes to correct issues and a formalized, actionable plan is available to correct deficiencies in MCO encounter data submissions if needed. To date, DHS has not needed to leverage the formalized process, and instead works with the MCO informally to correct deficiencies in the MCO encounter

data submission process. This has been an effective way to resolve data discrepancies and the encounter data quality has improved.

Protocol 9 – Data Quality Assurance Report

Protocol Definition

Each MCO will submit a report annually to DHS specifying its practices and processes used to ensure encounter data quality, completeness, and accuracy. DHS will review and either approve or request changes to the report and any related practices/processes.

Current State

All plans have submitted their Data Quality Assurance Report to the encounter data quality unit based on the questions established in 2014. The encounter data quality unit combined these reports and assessed for commonalities and disparities among the MCOs.

DHS is planning to submit a revised version of the Quality Assurance Report in October 2017.

Data and Approach

Overview: The Data Quality Assurance Report was evaluated on whether it helped provide transparency in the processes and quality checks the MCOs are using to ensure encounter data quality and if by way of the report, the encounter data quality, completeness, timeliness, and accuracy improved.

Data Received: The 2014 Quality Assurance Report and each MCO's submission were received. The summarized ten best practices identified by DHS based on the MCO submissions also were received. Lastly, the revised 2017 Quality Assurance Report was received.

Method of Evaluation: Deloitte Consulting held discussions with DHS on the effectiveness of the Data Quality Assurance Report process. Based on these discussions, it was evaluated whether the report helped improve the encounter data quality, completeness, timeliness, and accuracy.

Findings and Observations

DHS received responses to the 2014 Data Quality Assurance Report from each of the MCOs. Overall, DHS found that due to the variations in responses and MCO processes it was difficult to aggregate and summarize the information. Questions produced a wide range of responses from the MCOs in terms detail.

The encounter data quality unit created a list of ten best practices from the Quality Assurance Report submissions by the MCOs and shared these with the MCOs in June 2015. No internal follow-up was completed to see if any of the MCOs updated their practices based on the provided information. One consideration moving forward would be to discuss with the MCOs whether the best practices encouraged them to modify any of their processes to improve encounter data quality.

In 2016, DHS did not send out the Quality Assurance Report again as they did not feel useful information was received from the report sent out in 2015. DHS worked with their internal audit team to review the Quality Assurance Report. They gathered feedback to ensure the questions being sent to MCOs were insightful and improved the level of information received. In late 2016, DHS developed a new questionnaire based on the feedback from their audit team. This provides well-defined sections of questions that the MCOs must answer, with the questions having specific options to which the MCOs must reply. The Quality Assurance Report will be submitted via a survey tool. All of this will also allow for a meaningful categorization, summarization, and comparison of results. This next Quality Assurance Report will be submitted late in 2017.

Key Highlights

Overall Findings

The encounter data quality unit implemented this QAP as it was originally intended. In general, the purpose of this QAP was to provide transparency as well as review the MCOs' processes and quality checks in place to ensure quality encounter data was provided. The QAP led to increased transparency of the MCO process.

Potential Improvement Areas or Enhancements

In the future, DHS could continue to communicate with the MCOs to understand if their processes are evolving based on either the best practices provided or the summarized information from the Quality Assurance Reports. It is expected the next Quality Assurance Report will improve the data being gathered from the MCOs and allow easier analysis and comparison of the results.

Protocol 10 – MCO Review of Provider Data

Protocol Definition

MCOs are required to confirm that data received from providers is complete and accurate by performing checks and certifying to specified activities on a quarterly basis. The MCOs also are required to submit a quarterly report of control totals between the data received from providers to the data submitted to DHS.

Current State

DHS changed this QAP to make it less cumbersome and more meaningful. DHS implemented this QAP through the activities already performed for the contract management area within DHS. Thus, the MCOs do certify and check the data received from providers for completeness and accuracy.

Data and Approach

Overview: Deloitte Consulting met with DHS to discuss this QAP further and understand the current processes at DHS that overlap with this QAP.

Data Received: A write up with a high level description of DHS's understanding of this protocol and the current state of implementation was received. Additionally, three data certification forms were received. These certification forms were for encounter data, provider data, and report data.

Methods of Evaluation: Deloitte Consulting held discussions with DHS to understand the current state of this QAP and understand the current processes at DHS that overlap with this QAP.

Findings and Observations

When DHS began implementing this protocol, they discovered that the MCOs were already sending certification documents to the DHS contract managers. The contract managers for each MCO currently receive a certification of encounter data, a certification of the provider data, and a certification for the reports data from each MCO. The submitters also acknowledge and certify the number of files, number of claims, claim types, and dates. The CEO, CFO or a person who reports to the CEO or CFO who is authorized to sign for the CFO or CEO certifies that the data submitted is accurate, complete and truthful. Since the plans were already certifying for the contracting area, DHS did not feel the need to have the MCOs certify for the encounter data quality unit as well.

Key Highlights

Overall Findings

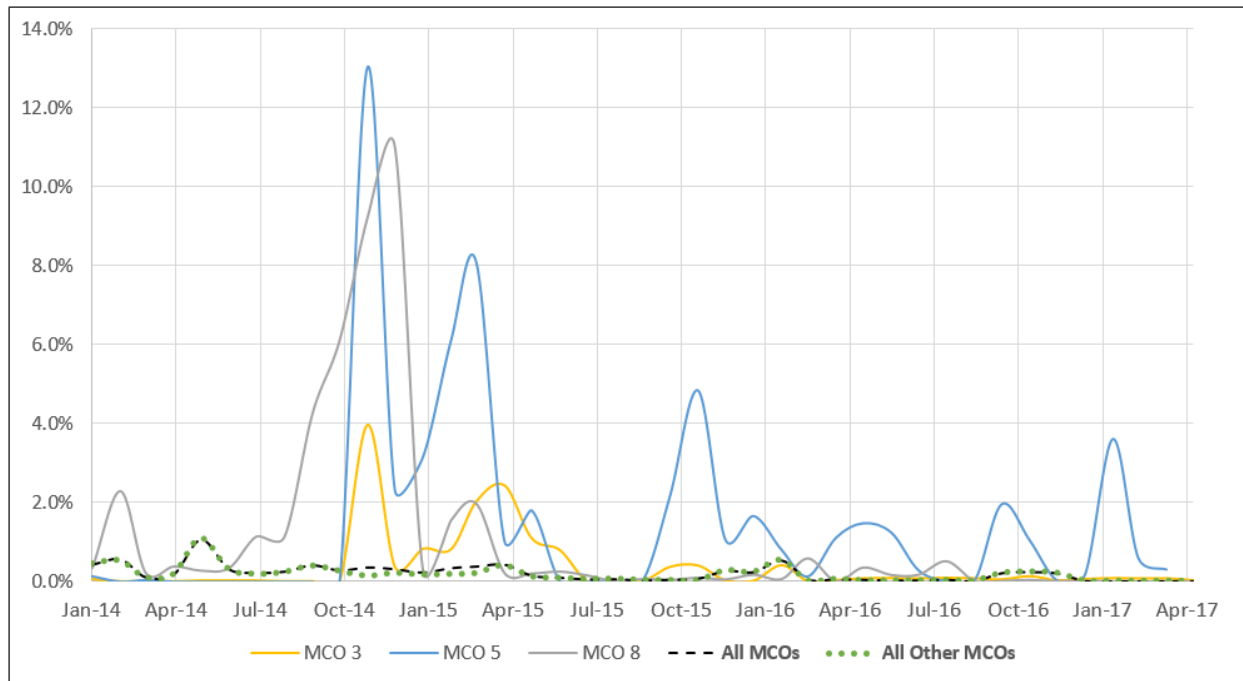
DHS implemented this QAP indirectly through the activities already performed for the contract management area within DHS. Thus, the MCOs do certify and check the data received from providers for completeness and accuracy.

Appendix – Supplemental Graphs and Exhibits

Protocol 3 – MCO Quality Checks Against Benchmarks

Error Rates

Graph 3.A.1: Percentage of Edits for Edit D152 - *NDC Code Missing*



*Edit D152 description: *NDC Code Missing*

**All Other MCOs: MCO 1, MCO 2, MCO 4, MCO 6, MCO 7, MCO 9. MCO 3, MCO 5, and MCO 8 shown separately since they were outliers with several spikes in the percentage of edits.

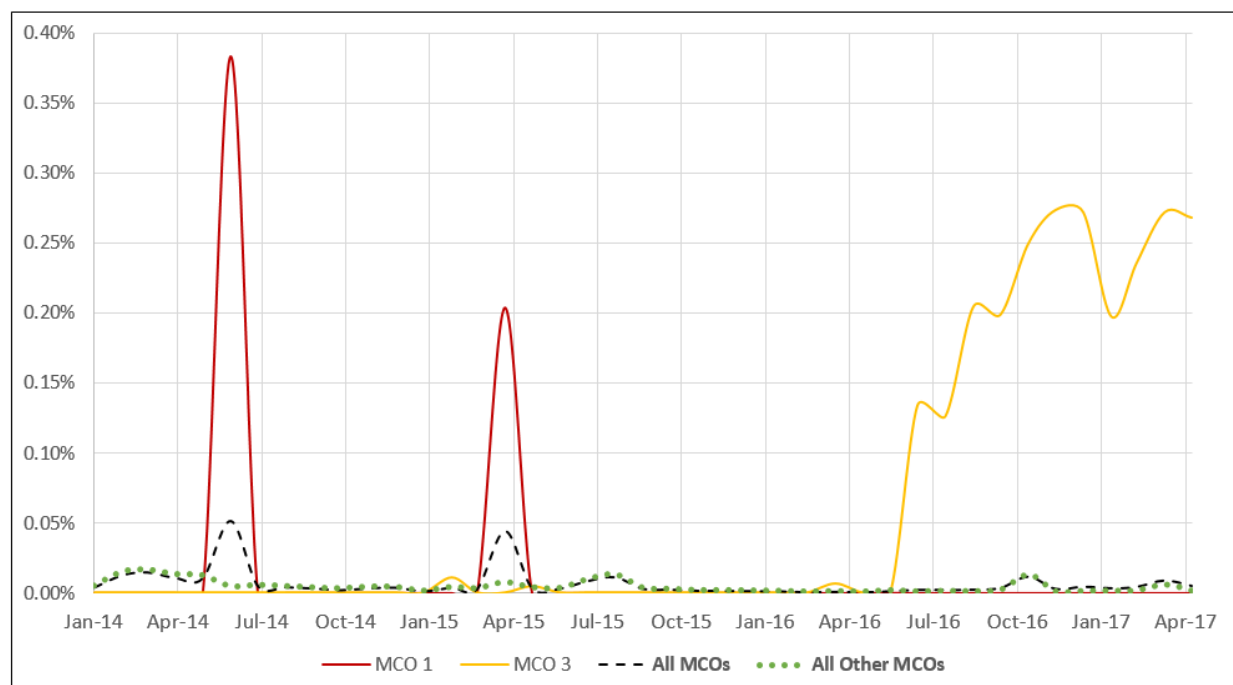
Table 3.A.1: Percentage of Edits for Edit D152 - *NDC Code Missing*

MCO	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2
MCO 3	0.02%	0.02%	0.01%	1.30%	1.23%	1.39%	0.00%	0.23%	0.02%	0.07%	0.08%	0.07%	0.07%	0.06%
MCO 5	0.06%	0.00%	0.00%	5.41%	5.75%	0.95%	0.01%	2.53%	0.74%	1.28%	0.13%	1.03%	0.59%	0.31%
MCO 8	0.52%	0.32%	1.33%	9.12%	0.65%	0.22%	0.08%	0.06%	0.32%	0.08%	0.21%	0.02%	0.01%	0.01%
All MCOs Difference	0.36%	0.59%	0.29%	0.32%	0.31%	0.23%	0.05%	0.16%	0.29%	0.05%	0.03%	0.22%	0.02%	0.01%
<i>All Other MCOs Difference</i>	<i>0.36%</i>	<i>0.61%</i>	<i>0.27%</i>	<i>0.21%</i>	<i>0.19%</i>	<i>0.21%</i>	<i>0.05%</i>	<i>0.14%</i>	<i>0.29%</i>	<i>0.04%</i>	<i>0.03%</i>	<i>0.23%</i>	<i>0.01%</i>	<i>0.01%</i>

*Edit D152 description: *NDC Code Missing*

**All Other MCOs: MCO 1, MCO 2, MCO 4, MCO 6, MCO 7, MCO 9. MCO 3, MCO 5, and MCO 8 shown separately since they were outliers with several spikes in the percentage of edits.

Graph 3.A.2: Percentage of Edits for Edit D250 – *Recipient ID not on DHS recipient file*



*Edit D250 description: *Recipient ID not on DHS recipient file*

**All Other MCOs: MCO 2, MCO 4, MCO 5, MCO 6, MCO 7, MCO 8, MCO 9. MCO 1 and MCO 3 shown separately since they were outliers with several spikes in the percentage of edits.

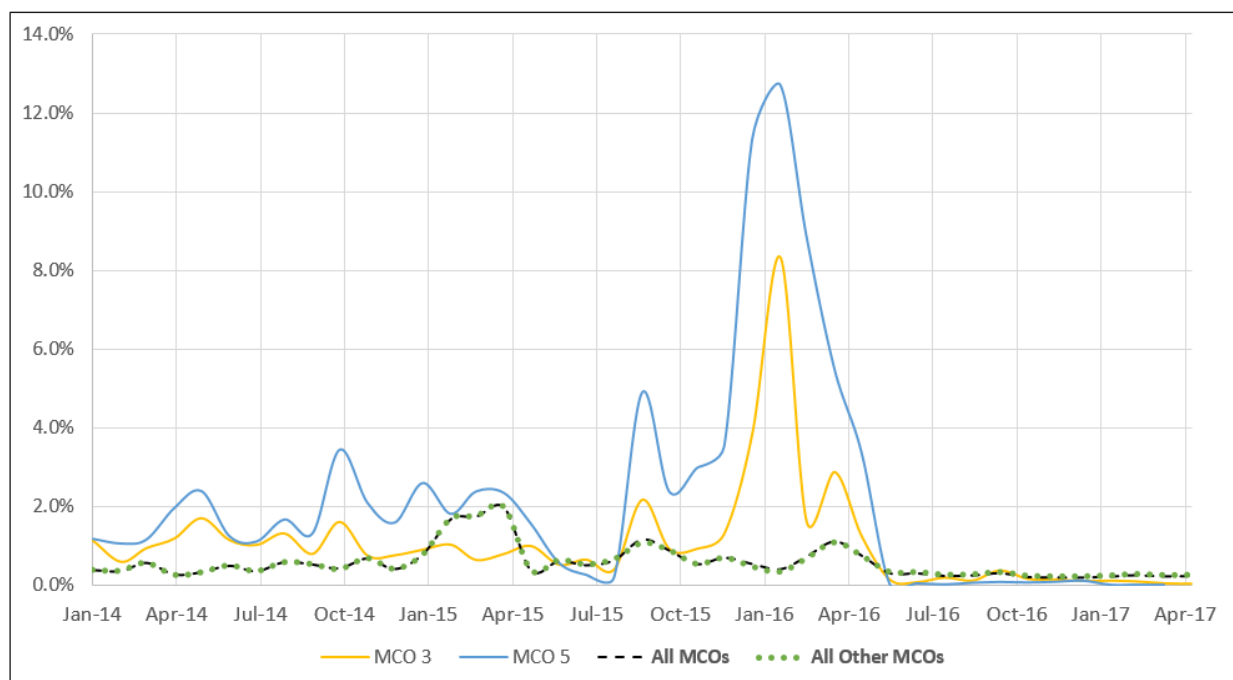
Table 3.A.2: Percentage of Edits for Edit D250 – *Recipient ID not on DHS recipient file*

MCO	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2
MCO 1	0.00%	0.09%	0.00%	0.00%	0.00%	0.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.15%	0.24%	0.23%	0.27%
All MCOs Difference	0.01%	0.02%	0.00%	0.00%	0.00%	0.02%	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%
<i>All Other MCOs Difference</i>	<i>0.01%</i>	<i>0.01%</i>	<i>0.00%</i>	<i>0.00%</i>	<i>0.00%</i>	<i>0.00%</i>	<i>0.01%</i>	<i>0.00%</i>	<i>0.00%</i>	<i>0.00%</i>	<i>0.00%</i>	<i>0.01%</i>	<i>0.00%</i>	<i>0.00%</i>

*Edit D250 description: *Recipient ID not on DHS recipient file*

**All Other MCOs: MCO 2, MCO 4, MCO 5, MCO 6, MCO 7, MCO 8, MCO 9. MCO 1 and MCO 3 shown separately since they were outliers with several spikes in the percentage of edits.

Graph 3.A.3: Percentage of Edits for Edit D300 - *Pay-to provider ID not on DHS provider file*



*Edit D300 description: *Pay-to provider ID not on DHS provider file*

**All Other MCOs: MCO 1, MCO 2, MCO 4, MCO 6, MCO 7, MCO 8, MCO 9. MCO 3 and MCO 5 shown separately since they were outliers with several spikes in the percentage of edits.

Table 3.A.3: Percentage of Edits for Edit D300 - *Pay-to provider ID not on DHS provider file*

MCO	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2
MCO 3	0.88%	1.37%	1.04%	1.01%	0.86%	0.76%	1.59%	1.07%	3.55%	1.25%	0.13%	0.22%	0.11%	0.04%
MCO 5	1.12%	1.91%	1.31%	2.28%	2.27%	1.60%	3.15%	2.99%	11.08%	2.35%	0.03%	0.07%	0.06%	0.00%
All MCOs Difference	0.43%	0.38%	0.49%	0.51%	1.40%	1.03%	0.78%	0.72%	0.55%	0.70%	0.28%	0.25%	0.24%	0.24%
All Other MCOs Difference	0.41%	0.35%	0.47%	0.49%	1.40%	1.02%	0.74%	0.69%	0.47%	0.69%	0.28%	0.25%	0.24%	0.25%

*Edit D300 description: *Pay-to provider ID not on DHS provider file*

**All Other MCOs: MCO 1, MCO 2, MCO 4, MCO 6, MCO 7, MCO 8, MCO 9. MCO 3 and MCO 5 shown separately since they were outliers with several spikes in the percentage of edits.

Utilization and Dollars Against Benchmarks

Table 3.A.4: Expected Units Rate across each MCO for PCA Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	7.65	7.50	7.79	8.00	8.70	8.37	7.85	7.41	7.02	6.84	6.76	6.58	5.75	5.32	5.24	5.32
MCO 2	6.03	6.00	6.19	6.37	6.10	5.86	5.58	5.33	5.31	5.16	5.14	5.00	6.03	5.60	5.97	6.12
MCO 3	11.55	11.44	11.71	11.81	11.35	10.71	8.58	7.97	7.78	7.31	7.10	7.13	8.69	9.28	9.34	9.12
MCO 4	7.55	7.44	7.77	8.36	8.08	7.78	7.36	6.86	6.85	6.76	6.65	6.47	7.49	7.10	6.88	6.94
MCO 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MCO 6	9.34	9.42	9.74	10.00	9.66	9.36	8.73	8.29	7.84	7.62	7.51	7.46	6.95	6.47	6.07	6.18
MCO 7	8.56	8.59	8.83	9.00	8.27	7.98	7.46	7.07	6.73	6.62	6.52	6.36	7.29	6.79	6.71	6.80
MCO 8	8.24	8.22	8.46	8.61	7.97	7.81	7.14	6.80	6.51	6.34	6.20	6.02	7.17	6.88	7.08	7.29
MCO 9	7.04	7.07	7.29	7.42	6.90	6.68	6.39	6.07	5.77	5.64	5.55	5.44	15.56	14.92	15.12	15.53
All MCOs Exp. Rate	7.72	7.72	7.97	8.16	7.74	7.48	7.06	6.70	6.42	6.26	6.17	6.06	7.08	6.58	6.48	6.61

*MCO 5 did not have any units for PCA Services

Table 3.A.5: Actual Units Rate across each MCO for PCA Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	5.23	5.32	5.58	5.87	6.09	5.99	5.44	5.22	4.93	5.41	5.45	5.73	4.01	4.16	4.16	3.75
MCO 2	6.66	6.81	6.98	7.28	5.11	5.26	4.57	4.38	4.91	5.14	5.36	5.88	6.35	6.35	6.10	6.54
MCO 3	1.14	1.17	0.88	1.08	1.38	1.75	1.38	1.24	1.12	1.43	1.26	1.58	1.97	2.54	2.72	2.03
MCO 4	2.95	2.67	2.90	3.04	2.42	3.03	2.75	2.64	1.99	2.45	2.51	2.94	2.93	3.14	3.05	3.43
MCO 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MCO 6	9.69	9.72	10.04	10.48	9.28	8.81	7.86	7.66	7.52	7.75	7.70	8.21	5.69	5.48	5.60	5.38
MCO 7	2.84	3.14	3.22	3.40	2.73	2.77	2.74	2.88	2.81	2.77	2.77	2.99	2.89	2.84	2.77	2.64
MCO 8	2.13	1.95	2.05	2.18	1.67	1.45	1.32	1.24	1.13	1.32	1.31	1.22	1.31	1.42	1.50	1.55
MCO 9	9.84	10.13	10.45	11.12	8.28	8.23	7.58	7.56	7.55	7.79	7.70	7.99	36.15	35.81	32.96	33.15
All MCOs Actual Rate	7.76	7.93	8.23	8.70	7.10	7.00	6.35	6.24	6.29	6.56	6.53	6.87	6.85	6.70	6.63	6.47

*MCO 5 did not have any units for PCA Services

Table 3.A.6: Expected Dollars Rate across each MCO for PCA Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	29.76	29.21	30.36	31.20	33.96	32.70	30.77	29.53	28.39	28.06	28.04	27.49	24.20	22.52	22.31	22.69
MCO 2	23.45	23.36	24.14	24.86	23.82	22.91	21.88	21.24	21.48	21.16	21.32	20.87	25.36	23.71	25.46	26.10
MCO 3	44.96	44.60	45.68	46.12	44.33	41.87	33.66	31.75	31.47	29.96	29.46	29.81	36.55	39.29	39.80	38.93
MCO 4	29.36	28.98	30.31	32.63	31.55	30.41	28.85	27.35	27.69	27.72	27.58	27.04	31.51	30.05	29.33	29.62
MCO 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MCO 6	36.36	36.73	38.00	39.02	37.73	36.57	34.25	33.05	31.71	31.26	31.17	31.19	29.22	27.37	25.86	26.38
MCO 7	33.32	33.47	34.43	35.12	32.31	31.20	29.26	28.16	27.22	27.13	27.07	26.56	30.66	28.74	28.61	29.01
MCO 8	32.06	32.02	33.00	33.60	31.11	30.51	28.02	27.08	26.32	26.01	25.74	25.13	30.15	29.11	30.19	31.09
MCO 9	27.40	27.55	28.42	28.94	26.92	26.12	25.04	24.20	23.32	23.13	23.03	22.75	65.46	63.18	64.49	66.28
All MCOs Actual Rate	30.27	30.95	32.17	34.02	27.79	27.67	26.29	25.88	26.12	27.22	27.80	29.28	29.23	28.58	28.33	27.64
All MCOs Exp. Rate	30.04	30.08	31.10	31.83	30.23	29.25	27.68	26.70	25.95	25.68	25.60	25.31	29.78	27.84	27.59	28.19

*MCO 5 did not have any dollars for PCA Services

Table 3.A.7: Actual Dollars Rate across each MCO for PCA Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	20.37	20.70	21.83	22.94	23.82	23.67	22.49	21.64	20.43	22.45	23.14	24.40	17.09	17.72	17.73	16.04
MCO 2	25.97	26.54	27.34	28.54	20.02	20.83	18.98	18.19	20.42	21.39	22.86	25.07	27.06	27.06	26.05	27.96
MCO 3	4.44	4.58	3.43	4.22	5.42	6.89	5.67	5.12	4.67	5.92	5.32	6.98	9.48	11.45	11.88	8.69
MCO 4	11.71	10.69	11.38	11.91	9.50	11.99	11.41	10.96	8.29	10.23	10.73	12.55	12.52	13.38	12.96	14.67
MCO 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MCO 6	37.70	37.84	39.07	40.95	36.25	34.76	32.59	31.76	31.20	32.16	32.83	35.00	24.26	23.41	23.96	22.99
MCO 7	10.99	12.14	12.51	13.21	10.62	10.88	11.23	11.85	11.56	11.39	11.71	12.66	12.19	12.00	11.77	11.22
MCO 8	8.35	7.61	8.04	8.57	6.54	5.74	5.47	5.11	4.70	5.48	5.53	5.05	5.39	6.01	6.39	6.55
MCO 9	38.46	39.60	40.93	43.53	32.41	32.58	31.35	31.38	31.33	32.35	32.75	34.03	154.22	152.78	140.92	141.74
All MCOs Actual Rate	30.27	30.95	32.17	34.02	27.79	27.67	26.29	25.88	26.12	27.22	27.80	29.28	29.23	28.58	28.33	27.64
All MCOs Exp. Rate	30.04	30.08	31.10	31.83	30.23	29.25	27.68	26.70	25.95	25.68	25.60	25.31	29.78	27.84	27.59	28.19

*MCO 5 did not have any dollars for PCA Services

Table 3.A.8: Expected Units Rate across each MCO for Dental Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.26	0.26	0.26	0.27	0.26	0.26	0.25	0.25	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23
MCO 2	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.25	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23
MCO 3	0.23	0.23	0.23	0.23	0.23	0.22	0.20	0.20	0.20	0.19	0.19	0.19	0.20	0.20	0.20	0.20
MCO 4	0.27	0.27	0.26	0.27	0.27	0.26	0.25	0.25	0.24	0.24	0.24	0.23	0.24	0.24	0.23	0.23
MCO 5	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.23	0.22	0.23	0.22	0.22	0.22
MCO 6	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23
MCO 7	0.26	0.26	0.26	0.26	0.27	0.26	0.25	0.25	0.24	0.24	0.23	0.23	0.24	0.23	0.23	0.23
MCO 8	0.26	0.26	0.26	0.26	0.27	0.26	0.25	0.25	0.24	0.23	0.23	0.23	0.24	0.23	0.24	0.24
MCO 9	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23
All MCOs Exp. Rate	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23

Table 3.A.9: Actual Units Rate across each MCO for Dental Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.25	0.27	0.27	0.23	0.23	0.24	0.24	0.19	0.22	0.23	0.23	0.21	0.25	0.25	0.24	0.24
MCO 2	0.28	0.28	0.28	0.25	0.26	0.25	0.27	0.23	0.24	0.24	0.25	0.24	0.27	0.27	0.25	0.23
MCO 3	0.20	0.20	0.16	0.19	0.19	0.19	0.18	0.14	0.16	0.15	0.13	0.13	0.14	0.16	0.14	0.15
MCO 4	0.31	0.31	0.31	0.26	0.27	0.27	0.29	0.22	0.25	0.25	0.26	0.26	0.27	0.27	0.26	0.23
MCO 5	0.23	0.25	0.23	0.18	0.22	0.21	0.20	0.16	0.24	0.23	0.19	0.19	0.25	0.22	0.20	0.21
MCO 6	0.25	0.26	0.25	0.22	0.24	0.25	0.23	0.21	0.21	0.22	0.21	0.20	0.21	0.22	0.21	0.21
MCO 7	0.26	0.28	0.28	0.25	0.25	0.27	0.27	0.23	0.23	0.25	0.26	0.23	0.26	0.26	0.26	0.24
MCO 8	0.22	0.24	0.26	0.24	0.23	0.25	0.24	0.21	0.23	0.25	0.21	0.23	0.24	0.24	0.24	0.24
MCO 9	0.29	0.29	0.30	0.27	0.26	0.26	0.26	0.23	0.24	0.25	0.25	0.22	0.25	0.25	0.23	0.23
All MCOs Actual Rate	0.27	0.27	0.28	0.25	0.25	0.25	0.25	0.22	0.23	0.24	0.24	0.22	0.24	0.24	0.23	0.23

Table 3.A.10: Expected Dollars Rate across each MCO for Dental Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	10.85	10.89	11.01	11.23	11.51	11.51	11.37	11.39	11.25	10.87	10.49	10.11	9.84	9.48	9.36	9.22
MCO 2	10.65	10.66	10.74	10.98	11.18	11.17	11.06	11.10	10.99	10.63	10.24	9.88	9.82	9.48	9.42	9.28
MCO 3	10.70	10.76	10.73	10.91	11.02	10.96	9.96	10.00	10.01	9.55	9.15	8.97	9.13	9.25	9.12	8.94
MCO 4	11.00	11.06	11.10	11.35	11.57	11.54	11.49	11.52	11.38	11.04	10.70	10.29	10.27	9.90	9.71	9.57
MCO 5	11.98	12.05	12.08	12.44	12.78	12.83	12.79	12.83	12.72	12.21	11.84	11.35	11.37	11.15	10.95	10.81
MCO 6	10.95	11.01	11.11	11.35	11.59	11.62	11.42	11.44	11.30	10.89	10.49	10.15	9.90	9.52	9.34	9.24
MCO 7	10.88	10.98	11.09	11.30	11.54	11.51	11.37	11.39	11.22	10.89	10.53	10.19	10.13	9.78	9.63	9.50
MCO 8	10.86	10.96	11.09	11.29	11.53	11.49	11.27	11.33	11.21	10.77	10.43	10.07	10.10	9.84	9.79	9.70
MCO 9	10.68	10.73	10.83	11.04	11.25	11.25	11.05	11.07	10.93	10.56	10.17	9.82	11.07	10.76	10.66	10.54
All MCOs Actual Rate	11.20	11.78	12.01	11.12	11.30	11.84	11.72	10.49	9.95	10.05	10.00	9.47	9.17	9.64	9.32	9.32
All MCOs Exp. Rate	10.80	10.85	10.95	11.17	11.38	11.38	11.20	11.22	11.08	10.70	10.31	9.96	9.97	9.60	9.48	9.35

Table 3.A.11: Actual Dollars Rate across each MCO for Dental Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	8.41	8.89	8.95	8.21	7.94	8.26	8.25	6.52	7.10	7.54	7.68	7.20	8.56	9.12	8.94	9.04
MCO 2	18.66	19.10	19.36	17.74	17.89	17.67	18.95	17.34	18.48	18.69	18.52	17.80	13.26	13.86	13.29	11.97
MCO 3	9.60	9.56	8.95	10.35	9.42	10.22	8.28	6.80	5.53	5.97	4.69	4.68	4.88	6.06	4.90	5.58
MCO 4	20.90	21.20	20.84	17.43	18.91	19.50	21.04	17.30	18.60	19.83	19.85	20.53	19.91	19.64	19.17	17.59
MCO 5	13.26	13.35	12.04	11.55	11.12	13.29	11.05	8.82	10.09	10.59	9.06	9.34	10.58	9.38	9.09	10.60
MCO 6	8.97	9.60	9.69	8.77	9.35	9.70	9.15	8.26	7.24	7.49	7.32	7.02	7.14	7.64	7.31	7.56
MCO 7	10.59	11.41	11.68	10.65	10.25	11.37	11.54	10.33	9.88	10.42	11.75	10.96	11.73	11.86	12.04	11.47
MCO 8	10.98	12.44	13.30	13.11	12.24	13.22	12.98	11.96	14.57	16.27	13.73	14.91	14.53	15.33	14.50	14.77
MCO 9	11.30	11.87	12.28	11.54	10.89	11.70	11.36	10.28	9.24	8.97	9.15	8.34	11.13	11.30	10.49	11.09
All MCOs Actual Rate	11.20	11.78	12.01	11.12	11.30	11.84	11.72	10.49	9.95	10.05	10.00	9.47	9.17	9.64	9.32	9.32
All MCOs Exp. Rate	10.80	10.85	10.95	11.17	11.38	11.38	11.20	11.22	11.08	10.70	10.31	9.96	9.97	9.60	9.48	9.35

Table 3.A.12: Expected Units Rate across each MCO for Emergency Visits.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.05	0.05	0.05
MCO 2	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MCO 3	0.07	0.07	0.07	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06
MCO 4	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.06
MCO 5	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.09	0.11	0.10	0.09	0.10
MCO 6	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
MCO 7	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.06
MCO 8	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.06
MCO 9	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.09	0.09	0.08	0.09
All MCOs Exp. Rate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.05	0.05

Table 3.A.13: Actual Units Rate across each MCO for Emergency Visits.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.05	0.05
MCO 2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
MCO 3	0.12	0.13	0.13	0.11	0.11	0.10	0.09	0.08	0.08	0.08	0.08	0.08	0.07	0.09	0.10	0.10
MCO 4	0.06	0.06	0.06	0.05	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
MCO 5	0.12	0.13	0.13	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.11	0.12	0.13	0.14	0.13
MCO 6	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
MCO 7	0.06	0.06	0.06	0.05	0.05	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MCO 8	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06	0.06
MCO 9	0.07	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.09	0.08	0.09	0.09
All MCOs Actual Rate	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.06	0.05	0.05	0.05

Table 3.A.14: Expected Dollars Rate across each MCO for Emergency Visits.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	16.67	16.52	16.34	16.20	16.94	16.79	16.08	16.28	16.58	16.63	16.61	16.05	17.32	16.23	15.88	15.79
MCO 2	15.52	15.46	15.22	15.13	14.62	14.48	13.85	14.03	14.52	14.60	14.58	14.03	16.58	15.43	15.57	15.67
MCO 3	18.51	18.68	18.45	18.37	17.45	17.18	14.50	14.52	15.41	15.10	15.26	15.39	19.17	19.72	19.49	19.06
MCO 4	17.69	17.46	17.28	17.05	16.59	16.43	16.25	16.19	16.94	17.25	17.19	16.58	19.02	18.16	17.58	17.42
MCO 5	28.44	28.19	27.69	27.70	27.34	27.61	28.59	29.69	30.33	29.55	29.72	29.22	32.79	31.39	30.03	30.27
MCO 6	19.20	19.28	19.16	18.99	18.55	18.44	17.51	17.63	17.92	18.05	17.92	17.54	18.81	17.59	16.76	16.77
MCO 7	18.93	18.81	18.64	18.55	17.08	16.93	16.24	16.39	16.84	17.16	17.17	16.52	19.31	18.11	17.78	17.76
MCO 8	18.19	18.02	17.70	17.71	16.38	16.36	15.56	15.76	16.28	16.47	16.10	15.51	18.46	17.53	17.47	17.66
MCO 9	17.16	17.15	16.99	16.86	15.99	15.92	15.27	15.36	15.74	15.87	15.76	15.27	28.49	27.10	27.01	27.42
All MCOs Actual Rate	17.27	16.61	17.44	16.28	16.64	17.52	16.97	16.47	16.86	17.02	17.33	16.66	17.84	17.06	16.47	15.71
All MCOs Exp. Rate	17.49	17.46	17.30	17.16	16.60	16.49	15.78	15.90	16.30	16.42	16.32	15.84	18.74	17.54	17.10	17.12

Table 3.A.15: Actual Dollars Rate across each MCO for Emergency Visits.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	16.90	16.51	17.03	15.90	15.63	17.05	16.70	15.91	15.60	15.58	15.77	14.77	16.36	15.55	15.01	14.50
MCO 2	15.83	15.59	15.88	14.79	14.52	15.25	14.95	14.17	15.91	15.96	15.77	15.37	14.81	14.30	14.21	14.10
MCO 3	33.74	35.54	38.42	35.22	34.71	35.57	28.79	25.12	25.09	30.65	31.73	30.55	27.65	31.03	32.65	31.69
MCO 4	14.60	15.51	15.33	13.65	17.11	18.48	19.86	16.36	20.66	20.62	20.33	18.27	17.94	18.48	16.25	16.38
MCO 5	26.82	27.52	27.82	26.68	31.35	30.28	34.42	30.65	31.49	36.64	34.15	31.22	30.70	31.37	32.82	30.81
MCO 6	21.13	19.53	20.91	19.76	20.02	21.45	20.68	20.15	18.87	18.94	19.96	19.12	18.65	17.87	16.69	15.49
MCO 7	13.00	13.23	12.95	11.65	13.17	14.66	13.99	14.28	14.33	14.59	15.17	13.84	14.85	14.96	15.41	14.55
MCO 8	17.13	17.22	18.23	17.37	18.37	19.30	17.82	18.29	18.88	18.94	20.16	19.40	21.30	20.30	20.65	19.72
MCO 9	15.54	14.83	15.77	14.62	15.57	16.04	15.46	15.18	16.10	16.18	16.20	15.81	23.19	21.90	22.51	21.65
All MCOs Actual Rate	17.27	16.61	17.44	16.28	16.64	17.52	16.97	16.47	16.86	17.02	17.33	16.66	17.84	17.06	16.47	15.71
All MCOs Exp. Rate	17.49	17.46	17.30	17.16	16.60	16.49	15.78	15.90	16.30	16.42	16.32	15.84	18.74	17.54	17.10	17.12

Table 3.A.16: Expected Units Rate across each MCO for Imaging Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
MCO 2	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05
MCO 3	0.08	0.08	0.08	0.08	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07
MCO 4	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.06
MCO 5	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.13	0.12	0.11	0.11
MCO 6	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06
MCO 7	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.06
MCO 8	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.06
MCO 9	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.11	0.11	0.10	0.10
All MCOs Exp. Rate	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.06

Table 3.A.17: Actual Units Rate across each MCO for Imaging Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.10	0.06	0.05	0.05	0.05	0.05	0.05
MCO 2	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
MCO 3	0.08	0.07	0.08	0.08	0.07	0.08	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.06
MCO 4	0.02	0.02	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02
MCO 5	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.10	0.11	0.10
MCO 6	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
MCO 7	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06
MCO 8	0.07	0.07	0.07	0.07	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
MCO 9	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.10	0.10	0.10	0.10
All MCOs Actual Rate	0.07	0.07	0.06	0.06	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05

Table 3.A.18: Expected Dollars Rate across each MCO for Imaging Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	11.04	10.58	10.44	10.27	11.07	10.56	9.71	9.41	9.21	9.15	9.06	8.67	8.75	7.95	7.63	7.57
MCO 2	9.95	9.58	9.40	9.25	8.88	8.52	7.85	7.65	7.69	7.67	7.62	7.27	8.66	7.83	7.87	7.91
MCO 3	14.68	14.34	13.99	13.72	12.83	12.11	9.80	9.36	9.63	9.22	9.11	9.04	11.23	11.39	11.08	10.62
MCO 4	11.64	11.21	11.10	10.98	10.57	10.14	9.60	9.14	9.20	9.32	9.19	8.76	10.09	9.39	8.90	8.79
MCO 5	24.58	23.51	22.73	22.54	22.15	21.58	21.21	20.88	20.43	19.55	19.36	18.82	20.89	19.71	18.61	18.50
MCO 6	13.33	13.02	12.90	12.61	12.38	11.89	10.86	10.48	10.22	10.18	10.03	9.76	9.92	9.05	8.38	8.36
MCO 7	12.90	12.48	12.27	12.12	10.97	10.49	9.66	9.37	9.18	9.25	9.17	8.77	10.14	9.28	8.91	8.86
MCO 8	12.38	11.95	11.66	11.50	10.47	10.14	9.21	8.98	8.89	8.91	8.63	8.22	9.82	9.08	8.95	9.03
MCO 9	11.30	10.97	10.82	10.62	9.98	9.62	8.93	8.65	8.48	8.45	8.33	8.03	17.90	16.68	16.34	16.46
All MCOs Actual Rate	11.41	10.84	10.71	10.52	9.88	9.87	9.03	8.88	9.24	9.12	9.05	8.81	8.91	8.47	8.40	8.16
All MCOs Exp. Rate	11.74	11.38	11.23	11.02	10.63	10.21	9.41	9.11	8.96	8.93	8.81	8.49	9.96	9.06	8.66	8.65

Table 3.A.19: Actual Dollars Rate across each MCO for Imaging Services.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	15.41	14.66	14.59	14.67	12.48	12.92	10.52	10.03	9.99	9.74	9.42	9.13	8.67	8.13	7.90	7.73
MCO 2	10.30	9.89	9.99	9.49	9.30	9.36	8.89	8.79	9.43	9.39	9.59	8.91	8.99	8.19	8.30	8.25
MCO 3	9.08	9.69	10.94	9.97	9.38	9.54	7.67	7.57	7.59	6.70	7.00	7.13	6.87	6.51	8.05	7.12
MCO 4	3.15	3.34	3.56	3.65	5.25	4.98	4.00	3.92	4.94	4.86	5.72	4.72	3.84	3.77	3.61	2.15
MCO 5	12.32	12.33	12.44	12.16	13.21	12.69	13.70	11.52	11.05	11.28	10.65	10.34	9.65	8.30	9.02	9.73
MCO 6	11.32	10.27	9.84	9.97	9.37	9.42	8.92	8.58	8.82	8.69	8.63	8.32	8.23	7.91	7.68	7.37
MCO 7	13.22	14.59	12.95	12.96	13.06	13.43	12.45	12.92	12.07	12.18	12.08	11.99	11.79	11.88	12.08	11.28
MCO 8	13.16	12.16	12.10	11.90	11.71	12.61	10.15	10.34	11.47	11.29	10.67	11.11	11.65	11.26	11.84	12.12
MCO 9	9.25	8.88	9.02	8.58	9.09	8.79	8.32	8.31	8.82	8.74	8.70	8.54	11.39	11.13	11.84	11.51
All MCOs Actual Rate	11.41	10.84	10.71	10.52	9.88	9.87	9.03	8.88	9.24	9.12	9.05	8.81	8.91	8.47	8.40	8.16
All MCOs Exp. Rate	11.74	11.38	11.23	11.02	10.63	10.21	9.41	9.11	8.96	8.93	8.81	8.49	9.96	9.06	8.66	8.65

Table 3.A.20: Expected Units Rate across each MCO for Office Visits.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.38	0.38	0.39	0.39	0.41	0.40	0.37	0.35	0.34	0.33	0.32	0.31	0.33	0.31	0.31	0.31
MCO 2	0.36	0.36	0.36	0.37	0.36	0.35	0.33	0.32	0.31	0.30	0.30	0.28	0.32	0.30	0.30	0.31
MCO 3	0.39	0.40	0.41	0.41	0.40	0.38	0.31	0.29	0.29	0.28	0.27	0.27	0.32	0.33	0.33	0.33
MCO 4	0.40	0.39	0.40	0.41	0.40	0.39	0.37	0.35	0.35	0.34	0.33	0.32	0.35	0.34	0.33	0.33
MCO 5	0.57	0.57	0.58	0.59	0.60	0.59	0.56	0.53	0.51	0.48	0.48	0.47	0.50	0.49	0.49	0.49
MCO 6	0.42	0.43	0.43	0.44	0.44	0.42	0.39	0.37	0.36	0.35	0.34	0.33	0.34	0.33	0.32	0.32
MCO 7	0.42	0.42	0.43	0.43	0.41	0.40	0.37	0.35	0.34	0.34	0.33	0.32	0.35	0.34	0.33	0.34
MCO 8	0.41	0.41	0.41	0.42	0.40	0.39	0.36	0.34	0.34	0.33	0.32	0.30	0.34	0.33	0.33	0.34
MCO 9	0.39	0.39	0.40	0.40	0.39	0.38	0.35	0.34	0.33	0.32	0.31	0.30	0.46	0.45	0.45	0.46
All MCOs Exp. Rate	0.39	0.40	0.40	0.41	0.40	0.39	0.36	0.35	0.34	0.33	0.32	0.31	0.34	0.33	0.32	0.33

Table 3.A.21: Actual Units Rate across each MCO for Office Visits.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.42	0.39	0.40	0.39	0.39	0.38	0.37	0.36	0.37	0.36	0.34	0.34	0.36	0.33	0.32	0.32
MCO 2	0.35	0.34	0.33	0.31	0.31	0.31	0.30	0.29	0.28	0.28	0.28	0.29	0.32	0.31	0.30	0.30
MCO 3	0.48	0.50	0.48	0.46	0.34	0.32	0.28	0.27	0.28	0.27	0.26	0.26	0.27	0.30	0.30	0.27
MCO 4	0.52	0.47	0.46	0.46	0.35	0.33	0.31	0.31	0.36	0.31	0.31	0.32	0.34	0.34	0.32	0.31
MCO 5	0.63	0.70	0.69	0.63	0.38	0.39	0.37	0.35	0.32	0.32	0.31	0.30	0.31	0.32	0.30	0.26
MCO 6	0.42	0.40	0.39	0.38	0.38	0.37	0.33	0.32	0.33	0.31	0.29	0.28	0.31	0.29	0.28	0.29
MCO 7	0.47	0.45	0.48	0.48	0.38	0.35	0.33	0.33	0.35	0.32	0.32	0.32	0.36	0.33	0.32	0.32
MCO 8	0.47	0.45	0.44	0.44	0.36	0.35	0.33	0.33	0.34	0.31	0.31	0.31	0.34	0.32	0.31	0.32
MCO 9	0.43	0.42	0.42	0.41	0.39	0.36	0.33	0.32	0.33	0.32	0.32	0.33	0.50	0.50	0.49	0.48
All MCOs Actual Rate	0.42	0.40	0.40	0.39	0.38	0.36	0.33	0.32	0.33	0.32	0.31	0.32	0.34	0.32	0.31	0.32

Table 3.A.22: Expected Dollars Rate across each MCO for Office Visits.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	23.25	23.86	24.52	25.23	26.94	26.51	24.93	24.52	24.04	22.99	22.14	20.96	21.41	20.27	19.83	19.71
MCO 2	21.81	22.55	23.06	23.81	23.97	23.64	22.30	22.04	21.87	20.89	20.15	18.97	20.81	19.56	19.58	19.64
MCO 3	23.54	24.62	25.44	26.41	25.94	25.19	20.94	20.29	20.68	19.51	18.94	18.48	21.23	21.99	21.66	21.05
MCO 4	24.10	24.57	25.31	26.15	26.44	25.86	24.98	24.50	24.50	23.79	22.78	21.51	23.07	22.07	21.41	21.15
MCO 5	34.41	35.09	36.03	37.51	38.39	38.02	37.28	36.56	35.98	33.99	33.13	31.93	33.58	32.74	31.94	31.91
MCO 6	25.48	26.44	27.22	28.03	28.43	28.00	26.13	25.56	25.06	24.03	23.08	22.04	22.48	21.23	20.41	20.42
MCO 7	25.44	26.18	26.83	27.70	26.85	26.37	24.91	24.45	24.11	23.31	22.51	21.22	23.08	21.84	21.50	21.40
MCO 8	24.76	25.36	25.97	26.85	26.14	25.93	24.16	23.85	23.59	22.64	21.56	20.33	22.42	21.53	21.41	21.52
MCO 9	23.60	24.37	25.05	25.77	25.59	25.29	23.83	23.37	23.01	22.07	21.16	20.06	30.73	29.66	29.66	29.82
All MCOs Actual Rate	27.41	25.96	26.70	26.01	25.83	24.80	23.56	22.76	21.61	20.87	20.71	20.48	21.75	20.39	19.77	19.81
All MCOs Exp. Rate	23.90	24.68	25.36	26.12	26.29	25.92	24.36	23.90	23.55	22.58	21.68	20.57	22.52	21.31	20.83	20.81

Table 3.A.23: Actual Dollars Rate across each MCO for Office Visits.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	26.58	25.21	25.66	25.33	25.98	25.23	24.32	23.32	23.44	23.06	22.56	22.45	23.45	21.87	21.14	21.20
MCO 2	32.83	31.50	33.09	32.00	31.20	31.40	30.54	28.83	28.63	28.60	28.87	27.19	23.40	22.16	21.30	20.83
MCO 3	31.78	32.96	31.97	30.58	21.74	21.22	18.69	17.93	16.07	17.04	17.62	17.07	15.98	17.49	18.46	17.48
MCO 4	36.31	33.21	33.04	33.02	23.54	21.64	20.75	20.48	18.05	16.38	16.36	16.44	17.60	18.17	16.58	16.21
MCO 5	40.91	40.14	38.66	36.65	28.25	28.98	27.84	26.05	19.78	20.60	21.47	20.46	19.86	19.52	18.31	16.61
MCO 6	24.06	22.22	22.40	21.51	24.01	23.40	21.61	20.95	20.63	19.38	18.82	18.90	20.10	18.78	18.28	18.54
MCO 7	26.59	24.52	26.39	25.52	19.10	18.60	18.09	19.88	16.11	15.21	15.25	14.92	16.43	15.50	15.33	14.94
MCO 8	29.32	26.65	29.40	28.47	24.53	23.95	24.57	23.78	19.90	18.65	19.40	18.06	19.37	18.88	19.08	19.08
MCO 9	27.25	26.16	26.90	26.33	25.78	23.95	22.57	21.84	20.61	19.92	19.81	19.92	26.93	24.39	22.73	22.69
All MCOs Actual Rate	27.41	25.96	26.70	26.01	25.83	24.80	23.56	22.76	21.61	20.87	20.71	20.48	21.75	20.39	19.77	19.81
All MCOs Exp. Rate	23.90	24.68	25.36	26.12	26.29	25.92	24.36	23.90	23.55	22.58	21.68	20.57	22.52	21.31	20.83	20.81

Table 3.A.24: Expected Units Rate across each MCO for Physician Administered Drugs.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	0.65	0.78	0.94	1.09	1.34	1.37	1.34	1.38	1.41	1.47	1.52	1.47	1.49	1.35	1.32	1.35
MCO 2	0.54	0.66	0.82	0.96	1.07	1.10	1.08	1.11	1.16	1.20	1.23	1.20	1.48	1.34	1.39	1.44
MCO 3	0.99	1.14	1.30	1.46	1.54	1.60	1.39	1.42	1.53	1.54	1.60	1.63	2.08	2.14	2.14	2.11
MCO 4	0.68	0.81	0.98	1.15	1.26	1.30	1.29	1.31	1.38	1.47	1.51	1.46	1.78	1.64	1.59	1.62
MCO 5	1.93	2.09	2.26	2.48	2.70	2.83	3.02	3.22	3.28	3.34	3.50	3.47	4.13	3.86	3.70	3.80
MCO 6	0.84	1.00	1.18	1.33	1.48	1.53	1.50	1.54	1.56	1.64	1.68	1.67	1.73	1.57	1.48	1.52
MCO 7	0.80	0.95	1.12	1.28	1.32	1.36	1.33	1.37	1.40	1.48	1.52	1.49	1.80	1.64	1.60	1.64
MCO 8	0.76	0.90	1.06	1.22	1.26	1.31	1.27	1.31	1.35	1.42	1.43	1.39	1.73	1.60	1.62	1.69
MCO 9	0.65	0.79	0.95	1.10	1.18	1.22	1.20	1.24	1.26	1.32	1.34	1.32	3.43	3.18	3.19	3.32
All MCOs Exp. Rate	0.70	0.84	1.01	1.16	1.27	1.31	1.29	1.32	1.35	1.42	1.45	1.42	1.75	1.58	1.54	1.59

Table 3.A.25: Actual Units Rate across each MCO for Physician Administered Drugs.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	1.18	1.13	1.14	1.20	1.33	1.39	1.26	1.20	1.32	1.40	1.42	1.32	1.26	1.27	1.27	1.21
MCO 2	0.76	0.80	0.76	0.66	0.65	0.70	0.67	0.71	0.82	0.79	0.84	1.01	1.26	1.34	1.34	1.19
MCO 3	0.17	0.32	0.25	0.51	0.57	0.54	0.73	0.62	1.31	1.40	1.52	1.49	1.75	1.99	1.69	1.83
MCO 4	1.42	1.48	1.44	1.29	1.26	1.52	1.39	1.28	1.99	1.82	1.96	1.90	2.36	2.03	2.00	2.01
MCO 5	1.61	1.77	1.73	2.11	2.61	2.49	2.84	3.41	4.24	3.38	4.16	3.84	3.41	4.82	6.19	5.97
MCO 6	1.21	1.67	1.87	1.85	1.97	2.01	1.97	1.70	2.15	2.14	2.12	2.11	1.70	1.62	1.51	1.46
MCO 7	1.73	1.84	1.89	1.95	2.02	2.17	1.98	2.00	2.24	2.26	2.17	2.23	2.28	2.18	2.23	2.23
MCO 8	1.65	1.53	1.59	1.69	1.56	1.56	1.38	1.44	1.58	1.62	1.57	1.57	1.68	1.69	2.00	1.96
MCO 9	1.33	1.35	1.27	1.22	1.32	1.49	1.44	1.37	1.50	1.52	1.42	1.42	3.07	3.23	3.40	3.13
All MCOs Actual Rate	1.22	1.33	1.35	1.33	1.40	1.50	1.44	1.36	1.59	1.60	1.56	1.57	1.63	1.61	1.59	1.52

Table 3.A.26: Expected Dollars Rate across each MCO for Physician Administered Drugs.

MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	5.25	5.32	5.44	5.58	6.30	6.32	5.94	5.96	6.05	6.16	6.26	6.07	6.02	5.52	5.38	5.56
MCO 2	4.60	4.75	4.80	4.87	4.83	4.95	4.65	4.62	4.86	4.98	5.06	4.89	5.94	5.46	5.66	5.95
MCO 3	7.07	7.23	7.41	7.66	7.39	7.30	6.09	6.06	6.51	6.39	6.58	6.72	8.41	8.78	8.86	8.89
MCO 4	5.51	5.80	5.74	5.96	5.92	5.91	5.74	5.63	5.94	6.18	6.26	6.06	7.18	6.73	6.49	6.68
MCO 5	12.60	12.65	12.74	13.12	13.43	13.49	13.66	14.06	14.03	13.94	14.30	14.12	16.38	15.59	15.37	16.02
MCO 6	6.48	6.71	6.88	6.95	7.07	7.16	6.64	6.58	6.68	6.87	6.90	6.80	6.93	6.41	6.02	6.28
MCO 7	6.26	6.47	6.56	6.69	6.21	6.34	5.93	5.86	5.98	6.19	6.28	6.09	7.24	6.73	6.56	6.79
MCO 8	5.98	6.09	6.16	6.32	5.86	6.00	5.53	5.58	5.75	5.91	5.91	5.71	6.91	6.52	6.58	6.98
MCO 9	5.33	5.48	5.59	5.67	5.45	5.59	5.30	5.26	5.40	5.57	5.58	5.43	13.55	12.82	13.13	13.92
All MCOs Actual Rate	6.20	5.92	5.98	6.07	6.46	5.97	5.92	5.94	6.38	6.25	6.29	6.39	6.71	6.47	6.85	6.78
All MCOs Exp. Rate	5.60	5.76	5.87	5.97	5.93	6.03	5.67	5.63	5.78	5.94	5.98	5.83	7.00	6.45	6.30	6.58

Table 3.A.27: Actual Dollars Rate across each MCO for Physician Administered Drugs.

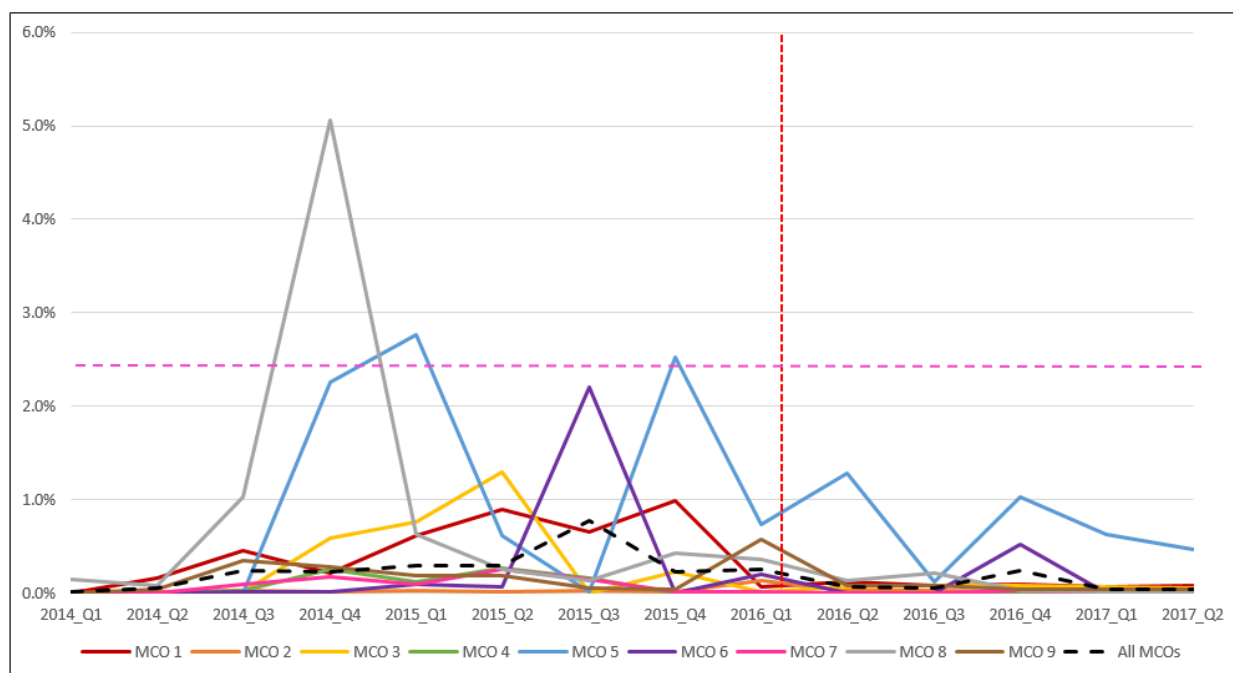
MCO	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4
MCO 1	7.10	6.66	6.53	6.94	7.05	7.08	6.59	6.60	6.53	7.10	7.26	7.04	5.98	6.09	6.10	5.79
MCO 2	5.88	5.87	5.87	5.91	6.15	5.61	5.42	5.27	5.62	5.68	5.88	5.95	7.37	6.34	6.71	6.96
MCO 3	2.03	2.87	2.47	2.93	3.97	4.03	4.53	3.34	3.69	3.80	5.75	5.66	6.62	7.41	6.27	7.08
MCO 4	4.67	4.40	3.41	3.85	4.98	4.06	4.13	3.55	5.11	5.31	6.54	7.03	8.24	7.94	9.29	7.42
MCO 5	8.74	9.24	9.33	12.98	10.95	11.45	10.96	11.27	10.50	7.77	11.15	10.38	10.13	12.48	14.01	11.63
MCO 6	6.07	6.60	7.27	7.26	8.53	7.18	7.32	7.05	7.76	7.41	7.57	7.39	6.22	5.87	6.54	6.59
MCO 7	7.94	6.92	6.56	6.21	5.79	6.92	6.46	6.29	6.38	6.15	6.29	7.12	8.48	7.72	7.57	7.71
MCO 8	7.59	5.56	6.63	6.37	6.43	5.06	4.92	6.03	6.42	6.25	6.10	5.97	6.65	6.74	7.50	7.97
MCO 9	5.58	5.02	4.80	4.79	5.45	5.18	5.24	5.43	5.90	5.68	5.50	5.78	10.67	10.99	11.68	11.37
All MCOs Actual Rate	6.20	5.92	5.98	6.07	6.46	5.97	5.92	5.94	6.38	6.25	6.29	6.39	6.71	6.47	6.85	6.78
All MCOs Exp. Rate	5.60	5.76	5.87	5.97	5.93	6.03	5.67	5.63	5.78	5.94	5.98	5.83	7.00	6.45	6.30	6.58

Protocol 5 – Rejections and Denials by DHS

Table 5.A.1: Edits analyzed in the QAP 5 Analysis

Edit	Description
D101	Duplicate or conflict for same provider
D124	First DOS missing, non-numeric, or invalid date
D126	First DOS after last DOS
D127	DOS after date processed by DHS
D152	NDC Code missing
D155	Last DOS missing, non-numeric, or invalid date
D163	Line DOS outside header DOS range
D228	Drug quantity missing or zero
D248	DOB does not match DOB on DHS recipient file
D360	NDC code does not follow FDA formatting
D395	PCA First DOS is not equal to Last DOS
D421	PCA treating provider type is a group practice or is not a PCA
D448	Pharmacy duplicate
D466	MCO paid date is invalid, in the future, missing, or after DOS
D467	MCO paid amount is missing or less than zero
D476	PCA services require professional claim format
D727	Encounter ICN is missing
D757	Pay-to or treating ID cannot be a contract, submitter, or pseudo ID
D760	MCO contract ID is invalid
D806	HM segment is missing

Graph 5.A.1: Percentage of Edits for D228 – *Drug quantity missing or zero*



*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**-- = February 2016, date financial penalty was implemented

***- = 2.5% Threshold

****Each data point represents the quarter in its entirety and lines are used to connect data points

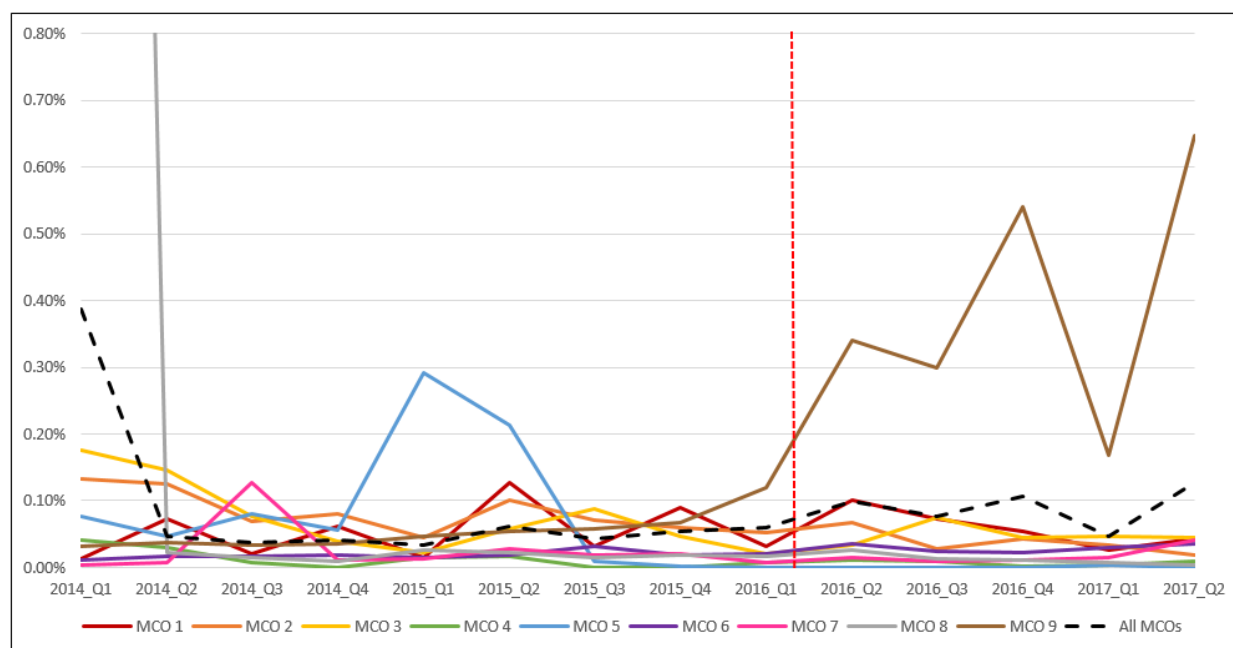
Table 5.A.2: Percentage of Edits for D228 – *Drug quantity missing or zero*

MCO	2014_Q1	2014_Q2	2014_Q3	2014_Q4	2015_Q1	2015_Q2	2015_Q3	2015_Q4	2016_Q1	2016_Q2	2016_Q3	2016_Q4	2017_Q1	2017_Q2
MCO 1	0.00%	0.16%	0.45%	0.22%	0.61%	0.89%	0.66%	0.98%	0.07%	0.11%	0.08%	0.09%	0.07%	0.08%
MCO 2	0.00%	0.01%	0.02%	0.02%	0.03%	0.01%	0.02%	0.01%	0.13%	0.03%	0.02%	0.02%	0.00%	0.01%
MCO 3	0.00%	0.00%	0.01%	0.58%	0.76%	1.29%	0.00%	0.23%	0.02%	0.07%	0.08%	0.07%	0.07%	0.06%
MCO 4	0.00%	0.00%	0.03%	0.25%	0.12%	0.26%	0.16%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 5	0.00%	0.00%	0.00%	2.25%	2.76%	0.61%	0.01%	2.53%	0.74%	1.28%	0.13%	1.03%	0.63%	0.47%
MCO 6	0.00%	0.00%	0.01%	0.01%	0.09%	0.06%	2.20%	0.00%	0.20%	0.00%	0.00%	0.52%	0.00%	0.01%
MCO 7	0.00%	0.00%	0.10%	0.18%	0.10%	0.25%	0.15%	0.01%	0.01%	0.00%	0.00%	0.03%	0.00%	0.00%
MCO 8	0.15%	0.08%	1.02%	5.07%	0.63%	0.25%	0.14%	0.43%	0.36%	0.13%	0.21%	0.02%	0.01%	0.01%
MCO 9	0.00%	0.04%	0.35%	0.29%	0.19%	0.19%	0.05%	0.04%	0.57%	0.08%	0.08%	0.04%	0.05%	0.04%
All MCOs	0.01%	0.05%	0.24%	0.22%	0.30%	0.30%	0.77%	0.23%	0.26%	0.07%	0.05%	0.24%	0.04%	0.03%

*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**February 2016, date financial penalty was implemented

Graph 5.A.2: Percentage of Edits for D248 – DOB does not match DOB on DHS recipient file



*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

** - - - = February 2016, date financial penalty was implemented

***Each data point represents the quarter in its entirety and lines are used to connect data points

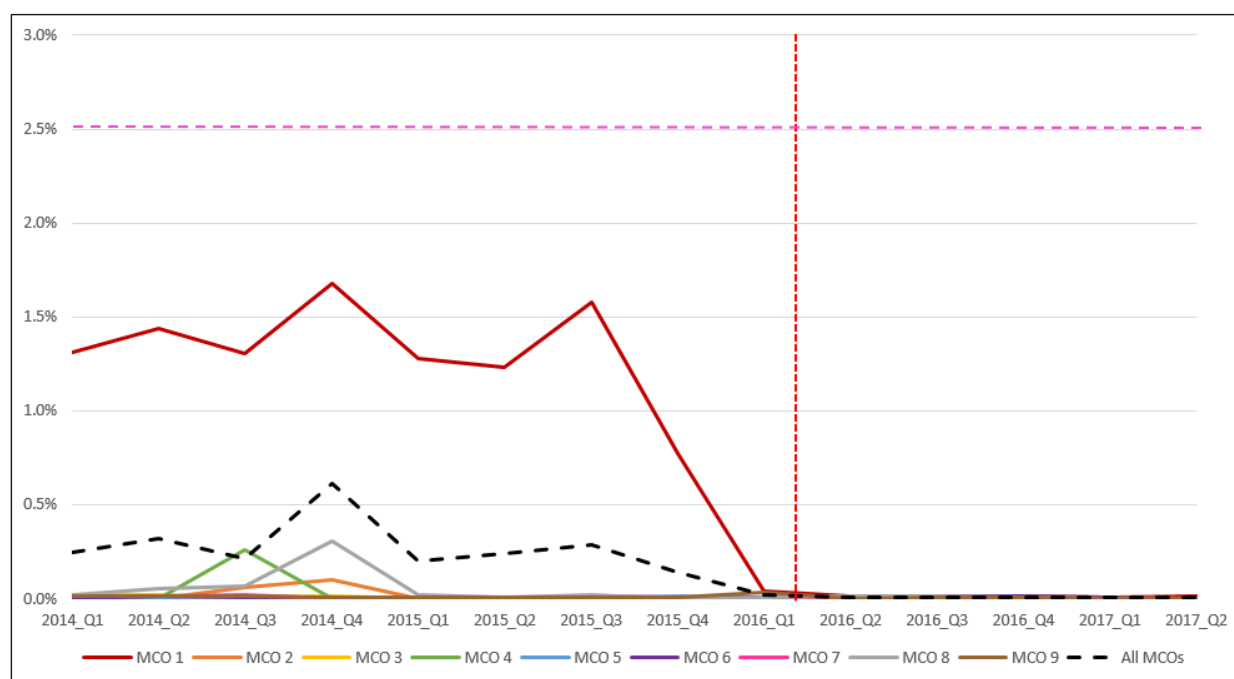
Table 5.A.3: Percentage of Edits for D248 – DOB does not match DOB on DHS recipient file

MCO	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2
MCO 1	0.01%	0.07%	0.02%	0.06%	0.01%	0.13%	0.03%	0.09%	0.03%	0.10%	0.07%	0.05%	0.03%	0.04%
MCO 2	0.13%	0.13%	0.07%	0.08%	0.05%	0.10%	0.07%	0.06%	0.05%	0.07%	0.03%	0.04%	0.03%	0.02%
MCO 3	0.18%	0.15%	0.08%	0.04%	0.02%	0.06%	0.09%	0.05%	0.02%	0.03%	0.07%	0.04%	0.05%	0.05%
MCO 4	0.04%	0.03%	0.01%	0.00%	0.01%	0.02%	0.00%	0.00%	0.01%	0.01%	0.01%	0.00%	0.00%	0.01%
MCO 5	0.08%	0.05%	0.08%	0.06%	0.29%	0.21%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 6	0.01%	0.02%	0.02%	0.02%	0.01%	0.02%	0.03%	0.02%	0.02%	0.04%	0.02%	0.02%	0.03%	0.04%
MCO 7	0.00%	0.01%	0.13%	0.01%	0.01%	0.03%	0.02%	0.02%	0.01%	0.01%	0.01%	0.01%	0.02%	0.04%
MCO 8	5.56%	0.02%	0.01%	0.01%	0.03%	0.02%	0.01%	0.02%	0.02%	0.03%	0.01%	0.01%	0.01%	0.00%
MCO 9	0.03%	0.04%	0.03%	0.04%	0.05%	0.05%	0.06%	0.07%	0.12%	0.34%	0.30%	0.54%	0.17%	0.65%
All MCOs	0.39%	0.05%	0.04%	0.04%	0.03%	0.06%	0.04%	0.05%	0.06%	0.10%	0.08%	0.11%	0.05%	0.13%

*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**February 2016, date financial penalty was implemented

Graph 5.A.3: Percentage of Edits for D360 – NDC code does not follow FDA formatting



*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

** - - - = February 2016, date financial penalty was implemented

*** - - - = 2.5% Threshold

***Each data point represents the quarter in its entirety and lines are used to connect data points

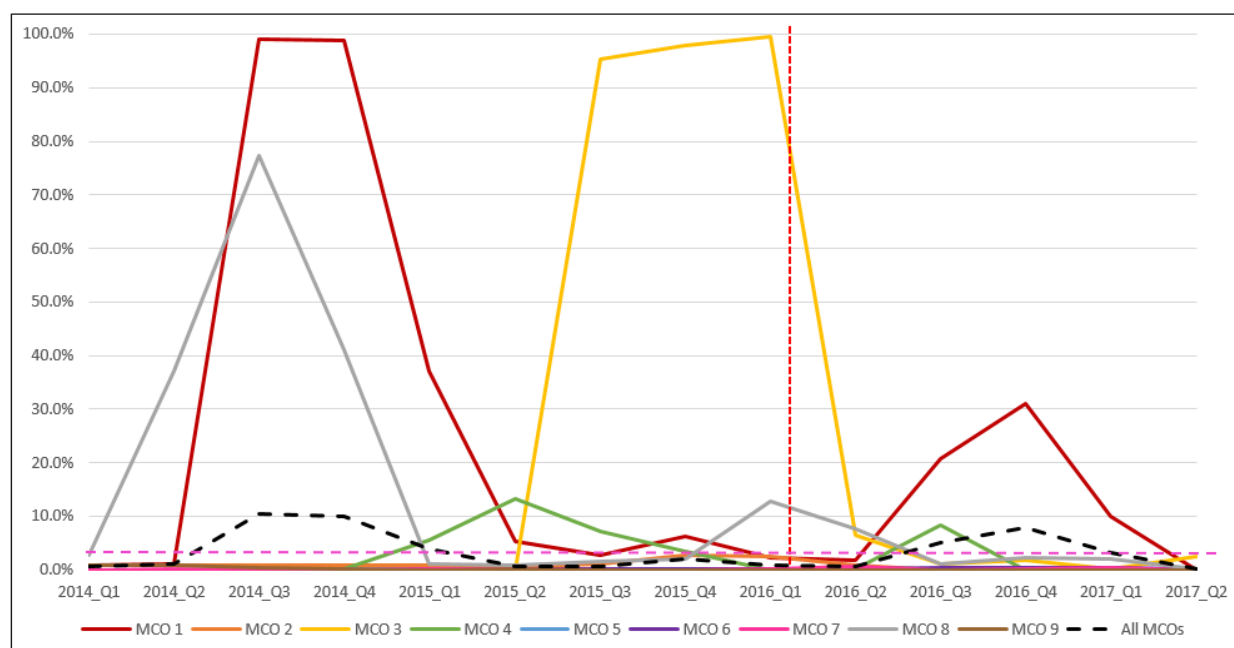
Table 5.A.4: Percentage of Edits for D360 – NDC code does not follow FDA formatting

MCO	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2
MCO 1	1.31%	1.44%	1.31%	1.68%	1.28%	1.23%	1.58%	0.77%	0.04%	0.01%	0.00%	0.01%	0.01%	0.01%
MCO 2	0.00%	0.00%	0.06%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 3	0.02%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.00%
MCO 4	0.00%	0.00%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 5	0.01%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%
MCO 6	0.00%	0.01%	0.01%	0.01%	0.00%	0.00%	0.01%	0.01%	0.01%	0.00%	0.01%	0.01%	0.00%	0.00%
MCO 7	0.02%	0.01%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 8	0.02%	0.05%	0.07%	0.30%	0.02%	0.01%	0.02%	0.00%	0.00%	0.01%	0.01%	0.01%	0.00%	0.00%
MCO 9	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.03%	0.00%	0.01%	0.01%	0.00%	0.00%
All MCOs	0.25%	0.32%	0.21%	0.61%	0.20%	0.24%	0.29%	0.14%	0.02%	0.01%	0.01%	0.01%	0.00%	0.00%

*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**February 2016, date financial penalty was implemented

Graph 5.A.4: Percentage of Edits for D421 – PCA treating provider type is a group practice or is not a PCA



*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**-- = February 2016, date financial penalty was implemented

***- - - = 2.5% Threshold

***Each data point represents the quarter in its entirety and lines are used to connect data points

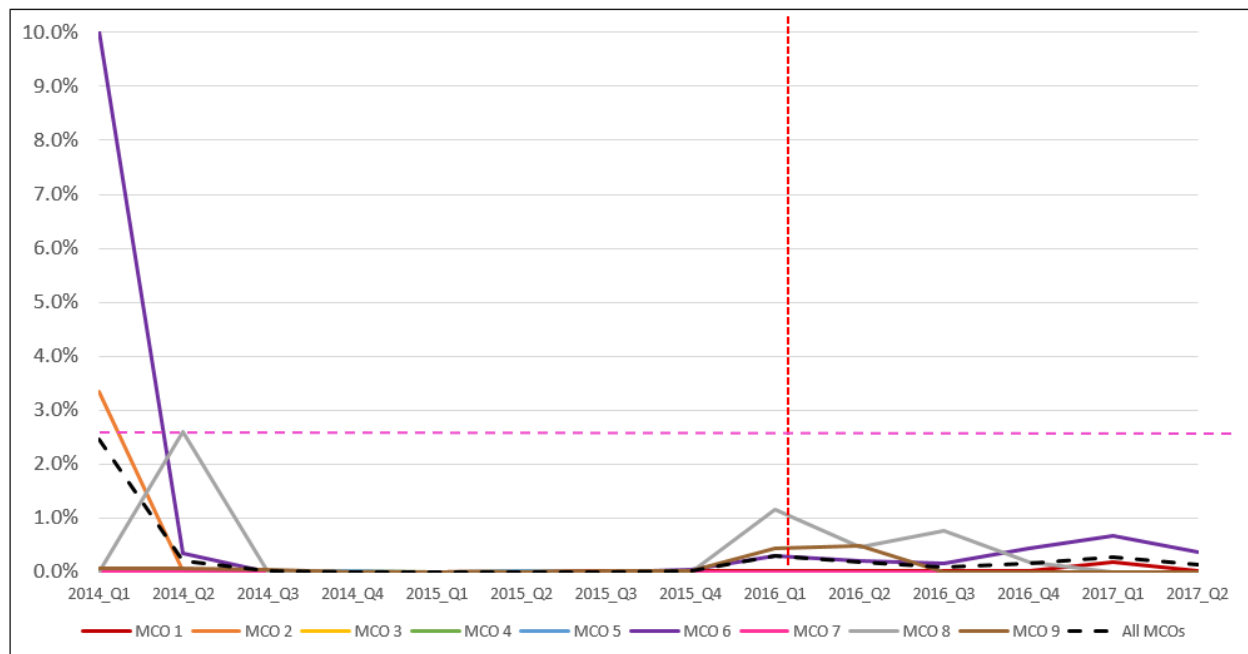
Table 5.A.5: Percentage of Edits for D421 – PCA treating provider type is a group practice or is not a PCA

MCO	2014_Q1	2014_Q2	2014_Q3	2014_Q4	2015_Q1	2015_Q2	2015_Q3	2015_Q4	2016_Q1	2016_Q2	2016_Q3	2016_Q4	2017_Q1	2017_Q2
MCO 1	0.85%	1.12%	99.05%	98.79%	37.20%	5.25%	2.65%	6.21%	2.38%	1.89%	20.66%	31.09%	9.91%	0.05%
MCO 2	0.87%	0.92%	0.89%	0.90%	0.94%	0.67%	1.10%	2.71%	2.49%	0.98%	0.05%	0.07%	0.00%	0.07%
MCO 3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	95.31%	97.89%	99.48%	6.59%	1.10%	1.75%	0.06%	2.48%
MCO 4	0.00%	0.04%	0.28%	0.11%	5.58%	13.34%	7.13%	3.47%	0.00%	0.14%	8.37%	0.00%	0.00%	0.00%
MCO 5	0.00%	0.00%	0.00%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 6	0.03%	0.01%	0.12%	0.05%	0.11%	0.10%	0.07%	0.09%	0.23%	0.28%	0.48%	0.36%	0.33%	0.23%
MCO 7	0.00%	0.09%	0.02%	0.00%	0.10%	0.06%	0.00%	0.00%	0.06%	0.63%	0.00%	0.08%	0.41%	0.00%
MCO 8	2.65%	37.12%	77.34%	41.11%	0.99%	0.97%	1.60%	2.00%	12.90%	7.55%	1.05%	2.16%	2.00%	0.17%
MCO 9	0.88%	0.98%	0.51%	0.14%	0.04%	0.06%	0.03%	0.02%	0.05%	0.04%	0.00%	0.04%	0.03%	0.00%
All MCOs	0.66%	1.16%	10.46%	9.94%	3.92%	0.61%	0.74%	2.10%	0.85%	0.72%	4.96%	7.90%	3.18%	0.09%

*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**February 2016, date financial penalty was implemented

Graph 5.A.5: Percentage of Edits for D466 – MCO paid date is invalid, in the future, missing, or after DOS



*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

** - - - = February 2016, date financial penalty was implemented

*** - - - = 2.5% Threshold

***Each data point represents the quarter in its entirety and lines are used to connect data points

Table 5.A.6: Percentage of Edits for D466 – MCO paid date is invalid, in the future, missing, or after

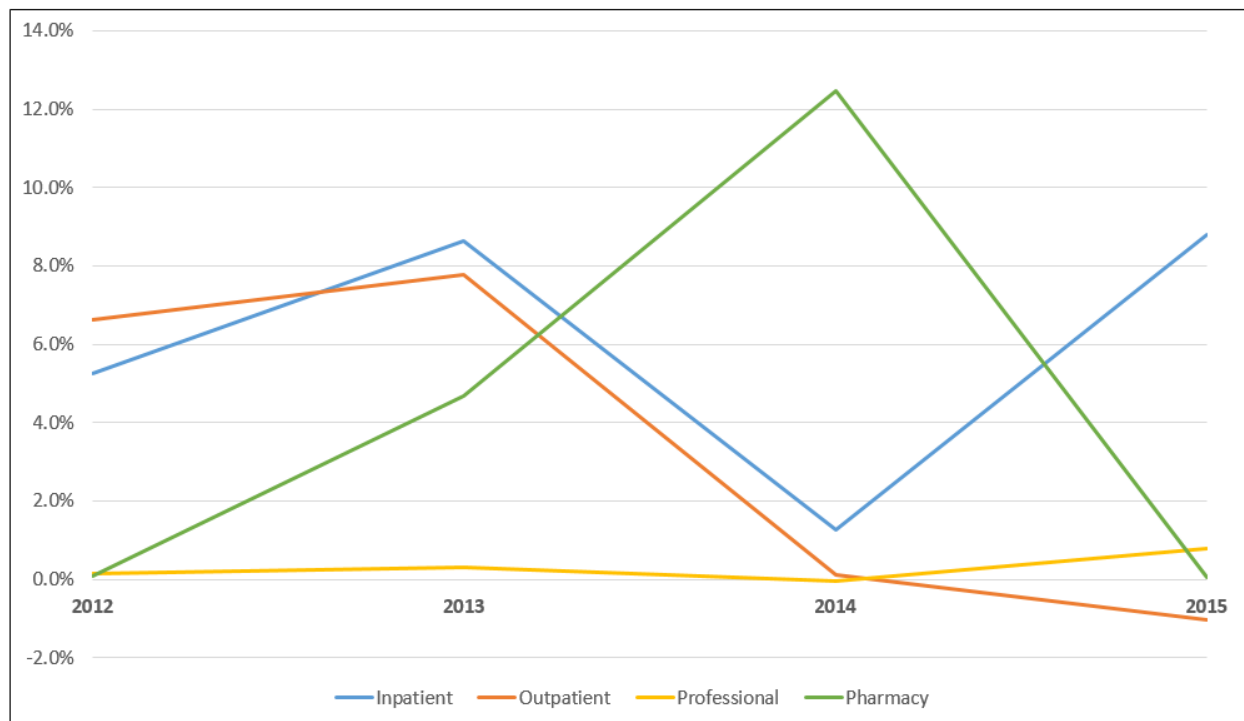
MCO	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2
MCO 1	0.00%	0.00%	0.01%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.18%	0.01%
MCO 2	3.35%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 3	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 4	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 5	0.00%	0.00%	0.00%	0.01%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 6	10.03%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.29%	0.20%	0.16%	0.44%	0.66%	0.37%
MCO 7	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MCO 8	0.00%	2.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.15%	0.47%	0.76%	0.18%	0.00%	0.00%
MCO 9	0.07%	0.07%	0.05%	0.00%	0.00%	0.00%	0.01%	0.01%	0.44%	0.49%	0.00%	0.00%	0.00%	0.00%
All MCOs	2.45%	0.19%	0.02%	0.00%	0.00%	0.00%	0.00%	0.02%	0.30%	0.17%	0.09%	0.17%	0.27%	0.13%

*Data for Q2 2017 is not a full quarter of data as it only includes data through April 2017

**February 2016, date financial penalty was implemented

Protocol 6 – Control Reporting and Reconciliation

Graph 6.A.1 - Percent Difference in Control Dollars (For MCO 1, By Service Type)



*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Percentages which are positive indicate the MCOs have more control dollars than DHS

***Each data point represents the year in its entirety and lines are used to connect data points

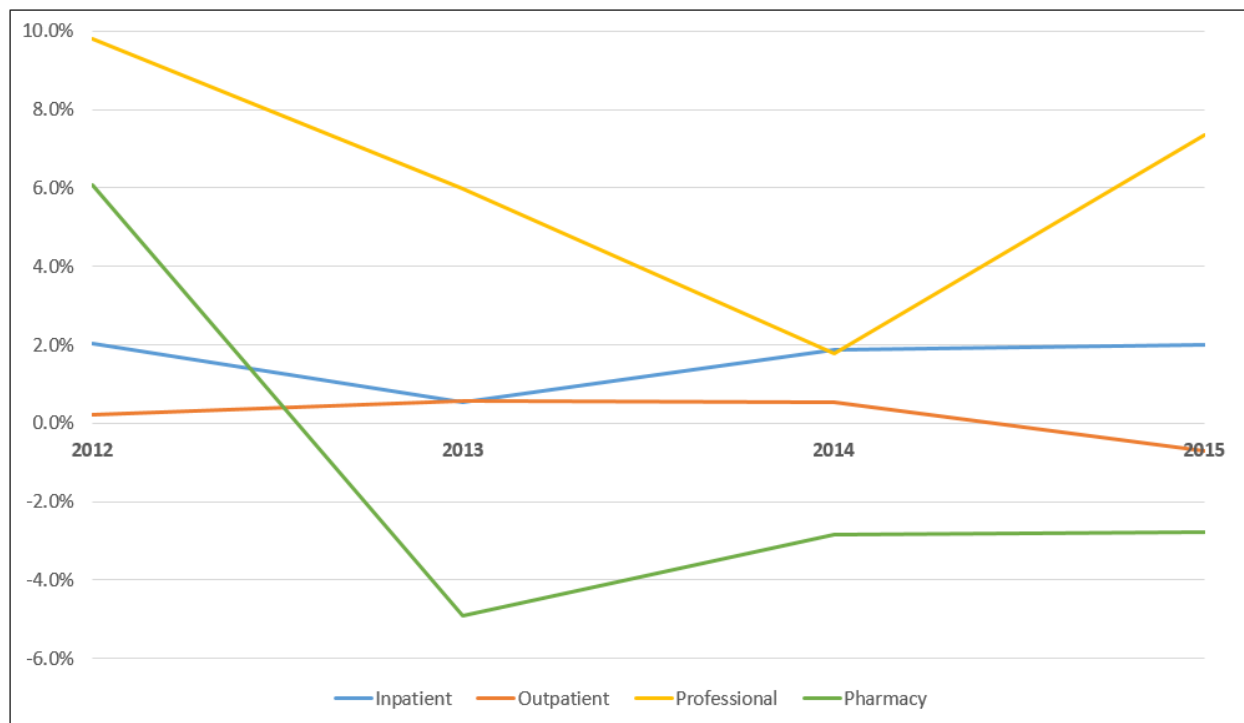
Table 6.A.1 - Percent Difference in Control Dollars (For MCO 1, By Service Type)

Service Type	2012 %	2012 Dollars Difference	2013 %	2013 Dollars Difference	2014 %	2014 Dollars Difference	2015 %	2015 Dollars Difference
Inpatient	5.25%	\$ 6,842,993	8.62%	\$ 10,378,527	1.28%	\$ 1,003,271	8.81%	\$ 6,912,140
Outpatient	6.61%	\$ 10,651,649	7.77%	\$ 12,158,572	0.13%	\$ 119,265	-1.04%	\$ (1,163,888)
Professional	0.14%	\$ 239,902	0.31%	\$ 524,186	-0.03%	\$ (39,837)	0.80%	\$ 1,117,554
Pharmacy	0.08%	\$ 72,113	4.67%	\$ 3,663,710	12.46%	\$ 7,234,238	0.05%	\$ 37,426

*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Percentages which are positive indicate the MCOs have more control dollars than DHS

Graph 6.A.2: Percent Difference in Control Dollars (For MCO 2, By Service Type)



*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Percentages which are positive indicate the MCOs have more control dollars than DHS

***Each data point represents the year in its entirety and lines are used to connect data points

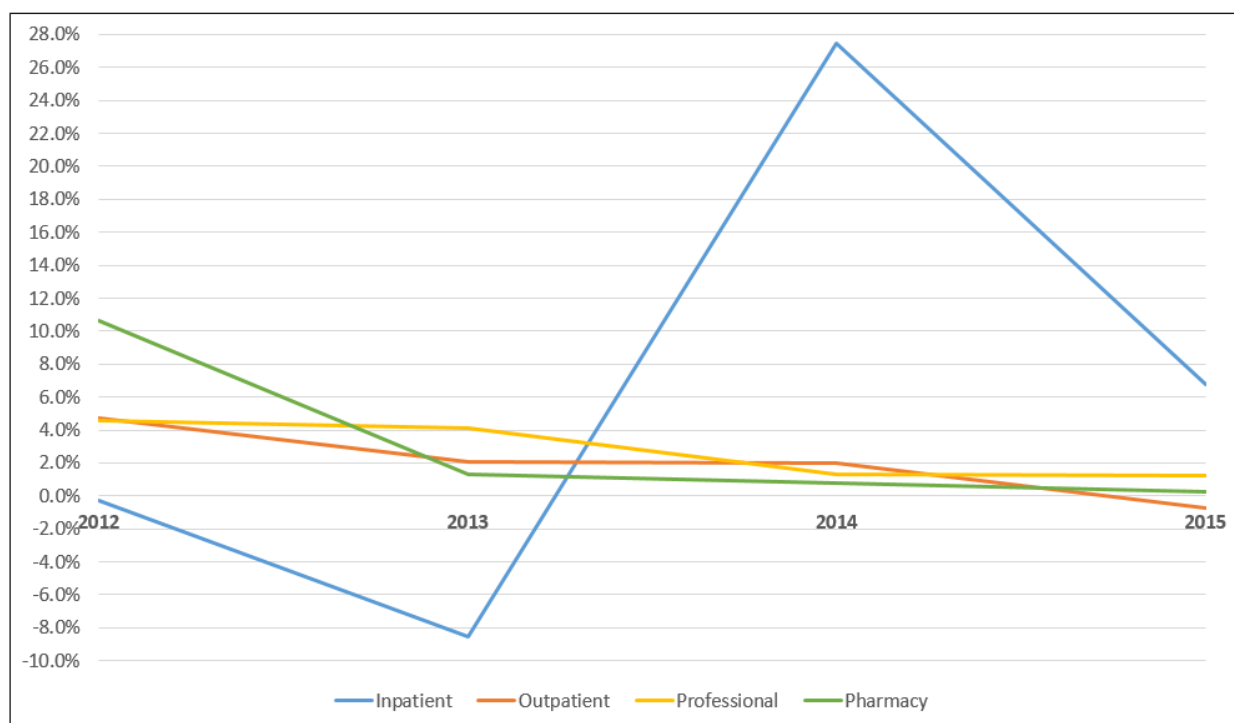
Table 6.A.2: Percent Difference in Control Dollars (For MCO 2, By Service Type)

Service Type	2012 %	2012 Dollars Difference	2013 %	2013 Dollars Difference	2014 %	2014 Dollars Difference	2015 %	2015 Dollars Difference
Inpatient	2.04%	\$ 1,831,643	0.55%	\$ 512,245	1.87%	\$ 1,996,766	2.00%	\$ 1,996,833
Outpatient	0.21%	\$ 151,942	0.57%	\$ 416,198	0.55%	\$ 534,560	-0.70%	\$ (643,513)
Professional	9.81%	\$ 12,613,239	6.00%	\$ 8,459,429	1.78%	\$ 3,236,120	7.34%	\$ 12,951,858
Pharmacy	6.06%	\$ 2,882,181	-4.90%	\$ (2,767,511)	-2.83%	\$ (2,159,585)	-2.77%	\$ (2,169,156)

*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Percentages which are positive indicate the MCOs have more control dollars than DHS

Graph 6.A.3: Percent Difference in Control Dollars (For MCO 6, By Service Type)



*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Percentages which are positive indicate the MCOs have more control dollars than DHS

***Each data point represents the year in its entirety and lines are used to connect data points

Table 6.A.3: Percent Difference in Control Dollars (For MCO 6, By Service Type)

Service Type	2012 %	2012 Dollars Difference	2013 %	2013 Dollars Difference	2014 %	2014 Dollars Difference	2015 %	2015 Dollars Difference
Inpatient	-0.25%	\$ (453,602)	-8.51%	\$ (18,965,766)	27.43%	\$ 43,347,881	6.77%	\$ 16,196,627
Outpatient	4.73%	\$ 8,003,862	2.05%	\$ 3,836,703	2.01%	\$ 4,322,170	-0.72%	\$ (1,898,442)
Professional	4.61%	\$ 9,039,225	4.14%	\$ 9,397,129	1.29%	\$ 3,489,870	1.22%	\$ 4,039,867
Pharmacy	10.60%	\$ 10,093,900	1.29%	\$ 1,564,942	0.80%	\$ 1,230,653	0.27%	\$ 524,851

*Comparison is MCO / DHS; therefore results around 0% would indicate the data had little differences

**Percentages which are positive indicate the MCOs have more control dollars than DHS