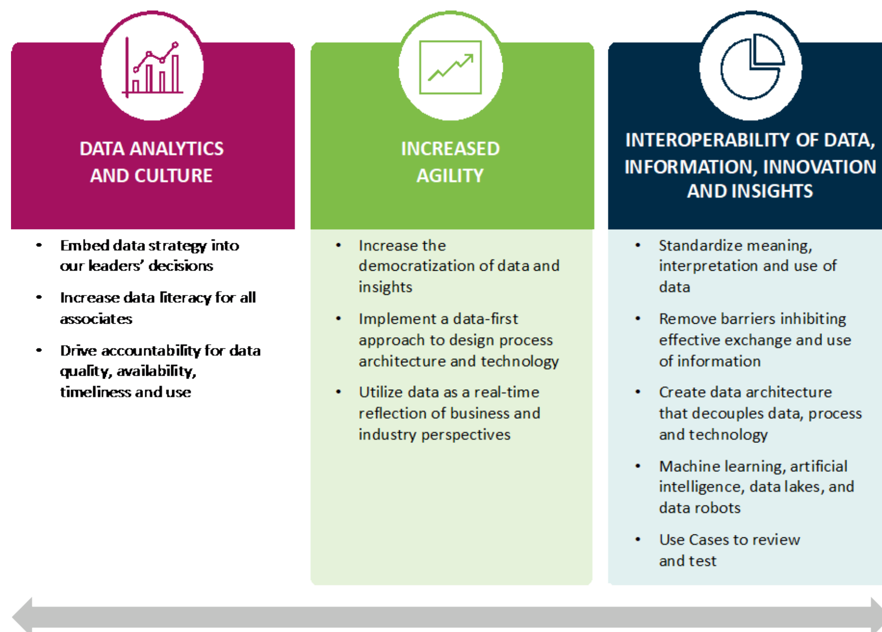
C.	**Technical Approach**
27.	**Contractor Reporting Requirements** (*Section 37.0 Contractor Reporting Requirement*)
a.	As indicated in RFP Attachment C **"Draft Medicaid Managed Care Contract and Appendices,"** the Department would like to leverage the contracted MCOs existing technologies and reporting capabilities to develop a comprehensive reporting package through a collaborative process. Understanding that ultimately the Department will define the reporting package, describe the Contractor's willingness to participate in such a collaboration, including a discussion of the following:

As a data-driven organization, Humana's information technology (IT) is the backbone of our core business functions. Data is the foundation of our thought leadership and idea generation. **Our goal is for data that is ubiquitous, flowing seamlessly, and with minimal limitations or barriers.** To support this goal, we have made strategic IT investments of more than $1 billion between 2014 and 2018 to support the collection and validation of data, enhance our reporting capabilities, and drive decision-making.

Humana's investment in an integrated IT platform differentiates us within the industry and enables us to access and analyze accurate and transparent data. Data is the foundation of knowledge and decision-making at Humana, we drive data literacy across all levels of the organization. Our significant investments to improve our data allow us to offer enhanced service delivery to our 18.52 million members in medical and pharmacy benefits plans and 2.9 million members in dental and vision specialty plans around the country.

Humana takes seriously our obligation to deliver accurate, timely, and actionable data to our state partners. We work to ensure we meet the requests of the Kentucky Department for Medicaid Services (DMS) while concurrently providing actionable insights from the healthcare system, helping ensure we improve Enrollees' health and drive positive change within the healthcare ecosystem and align these outcomes to state agency goals. Through collaboration with DMS and internal business partners, we aim to lead both DMS and Enrollees to more effectively navigate the healthcare system and improve lifelong well-being by enhancing data transparency and data-driven outcomes. Please refer to **Figure I.C.27-1 Data and Reporting Systems** to below.



Data Aggregation and Analysis

The integrated system and business process platform we use for the Kentucky Medicaid Managed Care program has been in place for more than two decades, continuously evolving as we invest to respond to the needs of the populations we serve and keep current with modern technologies. We have successfully deployed this platform in Florida, Virginia, and Illinois for Medicaid Temporary Assistance for Needy Families (TANF), Aged, Blind and Disabled (ABD), Long-Term Services and Supports (LTSS), and 24 states and Puerto Rico for Dual Eligible Special Needs Program (D-SNP). Moreover, our MIS supports us in serving more than four million Medicare Advantage (MA) members, including more than 675,000 Duals. Our applications have successfully enabled the workflows necessary to manage member and provider interactions and improve every aspect of our care, quality, and business processes. As of January 1, 2020, we have fully integrated the data, systems, and platforms used in the Kentucky Medicaid Managed Care program with Humana's Managed Information Systems (MIS). The high level of integration that existed previously enabled a smooth transition of data from CareSource, which allows Humana associates to monitor trends and do deep-dive analysis when measuring data and monitoring progress to goals and desired outcomes, across all facets of our operations.

We use a robust system that follow our core principles of data architecture: Ensuring data flows ubiquitously and seamlessly, bringing together data from all core operating systems (e.g., enrollment, claims, clinical, quality, etc.), and enabling deep, data-driven insights. Our Enterprise Data Warehouse (EDW) collects data and generate reports, including from our data lakes, that are accessible across the company via InfoMarket. InfoMarket is Humana's central location for gold standard reporting. The InfoMarket portal simplifies accessibility to reporting across the enterprise, providing answers to business questions more readily and reducing the administrative resources necessary to produce redundant reporting/analysis. It is a key component in our Data Governance process and promotes Humana's goal of reporting excellence. InfoMarket has transformed the data consumption experience by housing reports, the reports' metadata, documentation of attribution (i.e., source) to ensure accuracy and proper use of data for reporting.

A data lake is a storage repository for a large amount of data held in an unstructured, non-hierarchal way. It retains data from all sources and supports all data types in its rawest form, allowing for in-depth data analysis.

Our EDW includes a data mart that collects information from claims and Subcontractors as well as from external entities such as the Centers for Medicare and Medicaid Services (CMS). While our data shows us valuable information about our different programs (e.g., Medicaid, Medicare, Commercial, and TRICARE) and operational areas (e.g., quality, clinical, provider network, enrollment, authorization, claims, etc.), it is our unified approach for organizing and representing this information that allows us to understand who our Enrollees are across all data platforms and sources. Because of the amount of information we can collect, we have standardized processes developed by our Enterprise Data Governance Leadership Council (DGLC) to ensure that we transmit and report information accurately and our Enterprise Solution Point (ESP) tool, which systematically tracks state deliverables with integrated and automated escalations to ensure accurate and timely deliverables to state agencies.

Data Transparency and Quality Assurance

Humana's goal for data collection and the subsequent reporting is to show transparency, drive accuracy, and achieve results. Humana's Enterprise Data Governance Leadership Council (DGLC) champions and oversees the Data Governance and Management vision, strategies, and priorities. It ensures alignment across the enterprise between Data Governance policies and practices, corporate strategy, and Humana's obligations to comply with data-related regulations. The DGLC drives our data strategy, ensures that the appropriate mix of resources is in place across the enterprise, and that those resources are vested with the proper authority to bring data under governance and management.

Because Humana understands the importance of accurate and complete data, we have processes in place to ensure validity and completeness of the data we submit to DMS. We will comply with Section 37 Contractor Reporting Requirements, Draft Medicaid Contract, and all data certification requirements in accordance with 42 CFR 438.606 (Source, Content, and Timing of Certification). Specifically, we ensure that all data will be certified by Humana's Kentucky Medicaid Chief Executive Officer (CEO), Jeb Duke, Kentucky Medicaid Chief Financial Officer (CFO), Patrick Szydlowski, or an individual with delegated authority who will attest that, to the best of their knowledge, the data we submit is accurate.

Commitment to Collaboration

We are committed to working collaboratively with DMS to align how Managed Care Organizations (MCO) present data to improve DMS' ability to:

- Compare data and performance across health plans
- More effectively use the information in the reports by incorporating an analysis component
- Identify opportunities for improvement in the Medicaid Managed Care program
- Improve the overall health and well-being of Enrollees

Humana is fully committed to partnering with DMS and excited about the opportunity to work collaboratively to develop innovation enhancements to the reporting package to improve DMS' ability to conduct comprehensive analysis and drive better outcomes for Enrollees.

Innovation is a Priority

In October 2019, Humana and Microsoft announced a strategic partnership focused on creating new healthcare solutions for Humana members aimed at simplifying their healthcare experience and improving health outcomes. This seven-year collaboration will develop predictive solutions and intelligent automation to improve members' care by giving care teams real-time access to information through a trusted and secure cloud platform.

As part of this partnership, Humana will modernize its technology platforms and aggregate data, enabling a truly longitudinal view of its members' health histories. This will help Humana's members and their care teams have complete health records at any time and any place via a connected infrastructure driven by state-of-the art data lakes. Beyond enhancing Humana's technology platforms, this partnership will also address two core innovation areas: We will develop on-demand and virtual medical services and deliver a more integrated healthcare experience across all touchpoints with Azure AI and voice capabilities to personalize patient care.

Humana's partnership with Microsoft will streamline data reporting and analytic capabilities and result in numerous process improvements. For example, these improvements will enable associates to use a secure hub to exchange real-time information about coordinating Enrollee care.

Humana's Microsoft partnership is led by Heather Cox, Humana's Chief Digital Health and Analytics Officer, who reports directly to Humana President and CEO, Bruce Broussard. Ms. Cox is accountable for our digital care delivery operations and enterprise analytics. Under her leadership, we have opened a Center for Digital Health and Analytics, to be known as Humana Studio H. Studio H focuses on pioneering new products and services that better serve our Enrollees: Exploring integrated data aggregation at an Enrollee level to quickly identify behavior patterns, enabling strategies for population health, and addressing Social Determinants of Health (SDOH). **Our goal is to create a simplified user experience within the healthcare delivery system – an experience that is more mobile and tailored to their individual needs – at the intersection of health and lifestyle to influence health and well-being in a holistic, integrated way.**

a.i.	Proposed reports and report templates that will result in a comprehensive, Department-accepted reporting package.

GENERAL CONSIDERATIONS

The first step in identifying improvement opportunities is to clearly define end-goals. By understanding the purpose behind each report and what DMS seeks to learn, the path to that information can be clarified. We commend DMS for seeking suggestions on collaboration opportunities; in our experience, this leads to the best results for the state Medicaid agency and it's contracted MCOs.

Transparent and comparable information in reporting is key to providing DMS with the information it needs to analyze health plans' performance. Many of Humana's data decisions are founded on the idea "**Re-think Routine and Pioneer Simplicity**." Humana's rigor and support for data development and analysis can be used to help DMS drive towards clearly defined goals and analysis to inform decisions.

Humana is committed to being a cooperative and transparent thought leader within the Medicaid reporting space by sharing our values of Re-Think Routine and Pioneer Simplicity. While revisions of a reporting package seem like a large undertaking, **Humana is excited to assist with this process and be a partner with DMS to ensure reports help drive actionable insights and outcomes.**

REPORTING TEMPLATES

The purpose of a reporting template is to provide clear and concise guidance so the information collected is transparent and in a consistent format. Key to a useful template is balancing the amount of information collected with the level of analysis so that the report is useful to the reviewer. We have attached five templates for DMS to consider in developing a comprehensive reporting package.

The first template, **Attachment I.C.27-1 KY Medicaid Rate Template (MRT),** simplifies the existing Medicaid Rate Template report. This template includes financial tracking at a cohort level, including benefit expenses, administrative expenses, and Medical Loss Ratio (MLR). The template's quarterly analysis provides rigor to monitor for trend detection and early insights on financial performance. Additionally, this template can help drive deeper insights during one-on-one plan meetings and work sessions.

The second template attached, the KY Financial Summary, **Attachment I.C.27-2 Kentucky Financial Summary Template**, provides a program-wide view of financials to monitor progress and spending across all participating MCOs. The presentation of the information in this format drives accountability and insight into plan level financial performance. This format monitors programmatic initiatives driven to help improve Enrollee access to care and outcomes across the Commonwealth.

The third template attached, **Attachment I.C.27-3 Kentucky Medicaid Overview Dashboard Template**, is a side-by-side plan comparison of operational and Enrollee outcomes. This report creates a transparent view into plan performance across the Medicaid Managed Care program. The benefit of a report template structured in this format is that it allows for the data to be refreshed more frequently than on an annual basis to enable DMS' priority initiatives to be tracked on a recurring cadence and detect outliers earlier throughout the year.

The fourth template, **Attachment I.C.27-4 Kentucky Potentially Preventable Events MCO Report Template**, measures plan performance on Potentially Preventable Events (PPE) measures. We suggest this report be submitted semi-annually. DMS can easily aggregate PPE data provided in this format to provide additional insights regarding how health plans perform on national PPE benchmarks.

Finally, **Attachment I.C.27-5 Medicaid Network Access Report Template** includes a template that reports plan network access standards. This template displays the information in multiple formats (i.e., by list, map, etc.) and

by both geography and specialty. The template also includes trend views so that DMS may analyze plans' network composition and Enrollees' access at a point in time and trended over time.

We believe the five templates described above establish a strong starting point in the development of the central core of a reporting package that will provide a comprehensive view of health plan and industry performance.

ENHANCEMENTS IN THE EXISTING REPORTING PACKAGE

Along with the recommendations outlined above, we believe there are adjustments to make within the existing reporting package that could improve efficiency and allow for DMS to more effectively use the data it currently has.

Reporting Manual. We recommend DMS consider developing a reporting manual to increase data and reporting transparency to better understand the risks and opportunities. The development of a reporting manual could be a collaborative process between the MCOs and DMS. For example, in Illinois, Humana participated in a Dual Demonstration project where health plans worked cooperatively with the state and NORC, a social science research organization based at the University of Chicago, to review and revise more than 100 reports for the program. Given Humana's experience in Illinois, we are well-positioned to be a thought leader to DMS and other MCOs as they develop a reporting manual that could result in greater transparency of data and stronger comparative analysis across plans.

Increased Analysis by the MCOs: Reporting requirements should move past simply sharing data/metrics to also include resulting insights and actions. Highlighting the phases of the trend review and management process and the resulting reporting/insights derived across each phase is valuable. We recommend DMS consider collecting more trend tracking and outcome review data to allow for a more thorough analysis of performance.

Using Industry Standard Measure Sets: Data analytics is at the center of our strategy to improve health outcomes and drive change by maximizing value. In order to achieve our Path to Value, our approach to shifting from fee-for-service (FFS) or volume-based care to value-based care and population health, we have partnered with 3M to implement an informed analytics tool. As an example how this tool functions, prior to its use, plans calculated Potentially Preventable Events (PPE) according to different methodologies, leaving states unable to aggregate and analyze across their populations. 3M solves for this by incorporating industry-standard measures using dashboards that highlight PPEs using 3M's proprietary and industry-standard Clinical Risk Groups (CGR). This allows for benchmarks to be set by Primary Care Provider (PCP) practices, hospital systems, etc. Information is then delivered in content-focused packages. This 3M solution allows us to build custom dashboards that provide access to detailed information to help inform strategies to improve patient quality. This tool exemplifies our strategy of using standardized, comparable measure sets to improve quality of care within our plan. Please refer to **Attachment I.C.2-6 PPE Report Metrics Scorecard.**

We believe that using industry-standard measure sets to benchmark leads to measurable improvements in outcomes, and recommend that DMS consider using a similar reporting technology. As an example of its success, in Florida, the 3M tool helped inform our strategy for incentivizing providers to ensure that our Enrollees receive preventive care, including engagement of unreachable Enrollees and attention to Social Determinants of Health (SDOH) to avoid PPEs. By investing in integrated care and coordination with specialists, including behavioral health (BH) providers, we see fewer admissions and emergency department (ED) visits as well as lower expenses. **Humana's Florida Medicaid risk providers average 25.3% fewer ED visits per 1,000 Enrollees and 17.4% fewer inpatient admissions per 1,000 Enrollees**, as compared to their non-risk peer group. By reducing preventable events like these and helping Enrollees access care in appropriate settings, **Florida risk providers also have 14.7% lower inpatient medical expenses and have reduced pharmacy expenses by 11.4%**.

Sub-population Tracking and Trending: Adding subpopulations to reports such as #77, Population Health Management Program Report, will allow DMS and the MCOs to develop initiatives that target and impact a sub-populations' unique needs. For example, Humana has a comprehensive population health report that stratifies

data by county and region. Presenting data in this format will allow DMS to target its approach to solve problems to communities' characteristics, needs, and resources. Adding subpopulations to reports such as #77, Population Health Management Program Report, will allow DMS and the MCOs to develop initiatives to target and impact a sub-populations' unique needs and help close gaps in health equity across diverse communities in the Commonwealth.

Reduce the Number of Ad-Hoc Reports: In our experience, DMS requests more ad-hoc reports than similar programs. This likely occurs, in part, because the current reports do not meet DMS' needs, necessitating ad-hoc requests. Reviewing past ad-hoc reporting requests across MCOs and analyzing the missing information requested could help DMS add this data into the standardized reporting package. Humana would welcome the opportunity to contribute to or lead this analysis.

Reduce Redundancies: The current reporting package includes multiple instances of the same data collected through multiple reporting periods (e.g., weekly, monthly, quarterly, etc.). For example, in the program integrity reporting area (#65-71), data about the same cases is collected multiple times across the reports. Consolidating the reports or reducing the number of times the information is requested may result in more transparency so that staff can more effectively analyze the data trends.

Provider and Enrollee Satisfaction: Annual satisfaction surveys are required (Reports #38 and #39). We suggest that DMS collect more frequent reporting of key Enrollee and provider touchpoints to provide a comprehensive view of the Enrollee and provider experience. These details better inform DMS about barriers to access and drive proactive management of these relationships. Additionally, more regular reporting of key Enrollee and provider touchpoints would allow for consistent and routine monitoring, allowing DMS to adjust its approach using data to meet goals and objectives.

REPORTING WORKGROUP

Humana is excited to collaborate with the Commonwealth to ensure reporting is easily understandable, transparent, and actionable. To enable this, we propose that DMS and the Medicaid MCOs work collaboratively to form a workgroup or other forum to revise the current reporting package, add improved reports, and determine whether there are dashboards that could better inform DMS' analysis, monitoring, and oversight of the MCOs. There are several existing forums that could host this workgroup, such as the Kentucky Health Plan Association or the Medicaid MCOs could host the reporting workgroup on a rotating basis.
We also propose that DMS consider a series of one-on-one learning sessions with Humana where our associates can demonstrate our vast data and technological capabilities to inform DMS staff's decision-making. These sessions would allow DMS staff to better understand what types of data Humana and other plans can access and how to use that data analysis to drive DMS' strategies and initiatives.

DASHBOARD REPORTING

Advances in IT have changed how we collect and analyze data, which has simplified processes and generated new opportunities for understanding our Enrollees and internal operations. Dashboards are one example of these types of advances. We suggest DMS consider incorporating dashboards as the next step in advancing its reporting package.

Dashboards of Humana's operational functions have become an essential part of our monitoring processes and that of several Medicaid agencies around the country. Dashboards provide access to real-time data, helping us adjust operations and staffing quickly. Through our integrated data systems and the EDW, we can customize dashboards to see at an aggregate or detailed level (depending on the need) progress on operations and metrics. These dashboards also allow for trended views to monitor and track progress over time. Humana has had great success in partnering with the Florida Agency for Health Care Administration (AHCA) on reporting templates and dashboards. Some highlights of this partnership have resulted in simplified templates that provide detailed information in a standard format, as well as the development of a Humana-provided web portal for AHCA to have on-demand reporting of agreed-upon measures/areas. This report demonstrates the level of

rigor Humana has regarding weekly updates to monitoring key Service Level Agreements across multiple operating areas. We have attached a sample report from this portal as **Attachment I.C.27-7 Medicaid Dashboard**.

End-to-End Health Plan Dashboard: As part of the increased use of dashboard reporting, DMS could consider implementing a “whole plan” dashboard that views MCOs’ operations across multiple domains. For example, this dashboard could include access to care, clinical, quality and utilization measures (e.g., Health Effectiveness Data and Information Set (HEDIS) and Consumer Assessment of Healthcare Providers and Systems (CAHPS)), claims payment, financial performance and MLR, provider network adequacy and access, provider and Enrollee satisfaction, and SDOH measures. This dashboard could be the foundation for DMS to build an MCO scorecard that allows it and Enrollees to compare plan performance.

a.ii.	Proposed ideas for collaborating across MCOs to ensure consistent and comparable reporting using the same data definitions and specification can be achieved.

Humana’s approach to data reporting includes a commitment to rigorous standards of quality and transparency. Engaging with DMS and the other Kentucky Medicaid MCOs is an important component of this commitment. We have successfully collaborated with our state partners to achieve improvements in data and reporting in other Medicaid programs, and are eager to replicate this process and success in Kentucky. Humana commits to hosting a workshop for DMS and its invitees on the latest data and reporting technologies and ways to more fully integrate rigorous, standardized measures. This workshop could be the first step in a regular (monthly, quarterly) workgroup to align on data definitions.

Reporting Manual: As mentioned above, Humana believes that one example of collaboration between the MCOs and DMS could be the development of a reporting manual. During the development of a duals demonstration project, Humana associates worked closely with the state Medicaid agency and our other MCO partners to review and revise programmatic reporting requirements. In that case, the participation of an expert such as NORC, an independent research organization housed at the University of Chicago, helped provide expertise and facilitate the conversations. Additionally, through collaborative dialogue across MCOs, Humana sees value incorporating standard data and attribute definitions, report instructions, and frequently-asked questions to drive consistency across reports and the MCOs submitting them.

Use Local Expertise: DMS could access the expertise of researchers or faculty at one of the local universities for assistance in facilitating the development of a reporting manual, identifying opportunities for improved analysis, and facilitating changes to the exiting reporting package. **As a Kentucky-headquartered company, Humana partners with several universities across the Commonwealth, including the University of Louisville, University of Kentucky, and Bellarmine University.** Additionally, Humana hires several researchers and faculty from these institutions and could use our relationships across Kentucky to secure expertise from one of these local universities to assist in developing a reporting manual for DMS.

LEVERAGE EXISTING FORUMS TO PROMOTE COLLABORATION

Kentucky Health Plan Association: Our Kentucky Medicaid CEO, Jeb Duke, is an active member of the Board of Directors of the Kentucky Health Plan Association. While the association includes all health plans, Medicaid is a frequent topic of discussion. In our experience, these types of associations can play an important role in hosting or facilitating workgroups or taskforces related to various aspects of health insurance and Medicaid, specifically. **We believe that this could also be a forum for DMS to address targeted topics, including reporting improvements, through a Data Governance Workgroup.** Reporting-related topics for consideration include opportunities for improvements in pharmacy and program integrity reporting.

Multi-Agency Forums: From January 2017 through February 2019, DMS, other state agencies, and the MCOs, including Humana, met frequently to discuss reporting and technical requirements of a previous RFP. These

meetings included discussion of reporting requirements and technical specifications, including MCOs' suggestions on options and opportunities. **This group could continue its successful work, expanding the discussion to include ways to measure and report SDOH factors in a way that ensures consistency and comparability across plans.** Consistent and comparable collection of SDOH data is central to developing solutions to these issues, which often takes cooperation across not just MCOs and DMS, but also other state agencies and community partners.

Issues surrounding incarceration are similarly suited for a multi-agency or department forum such as this. Currently, all enrollment information comes from the 834 files with an incarceration indicator. However, this data isn't always reliable. There is an opportunity to improve the information flow between the MCOs and DMS and its state partners by collaborating to develop a report template and procedures. As a leader in data architecture thanks to our rigorous data governance processes, we commit to partnering with the relevant state agencies, MCOs, and enrollment technology firms to **Rethink Routine and Pioneer Simplicity** on data transmissions.

EXAMPLES OF COLLABORATIVE PROJECT OPPORTUNITIES

Humana's commitment to collaboration is demonstrated through the examples below.

Encounter Reporting: Humana is an active participant in Encounter Technical Workgroups in the states where we participate in Medicaid Managed Care. In our more than 20 years of working with CMS, we have developed certain initiatives that have improved the accuracy, quality, and completeness of our encounter submissions. One such initiative was the creation of the Encounter Escalation Workgroup. This is a bi-weekly meeting between claims subject matter experts, encounter submissions experts, and IT systems support. This workgroup identifies encounter submission problems, analyzes root causes, and develops sustainable solutions. Initiatives such as the updating of NDC editing logic, Federally Qualified Health Center (FQHC)/Rural Health Center (RHC) billing logic, and Child Health Check-Up logic have all recently emerged from the efforts of this workgroup. **We believe DMS could replicate a similar process that focuses on implementing the CMS' workgroup solutions in the Commonwealth.**

Standardizing Quality Reporting: As discussed above, Florida's state Medicaid agency, AHCA, engaged its Medicaid MCOs to address one of its priority areas: improving their understanding of certain clinical episodes, including PPEs. The Medicaid Quality Workgroup, a Medicaid quality forum in Florida, collaboratively decided to implement technology by 3M to standardize the collection of quality measures. Humana and the other plans committed to purchasing the software as part of the state's last Medicaid Managed Care procurement, and integrated this reporting tool into operations to allow for more regular monitoring of trends and insights from the tool. **We believe that a similar collaboration could be successful in the Commonwealth.** For example, Kentucky Medicaid MCOs identified a mass overuse of urine drug testing. This issue took more than two years to resolve, which was accomplished through a revised authorization requirement. However, it would be beneficial for DMS to measure effectiveness of this, and other, policy changes moving forward. **We believe the Kentucky Medicaid Quality Committee may provide a similar, successful forum to measure the effectiveness of policy changes.**

Provider Simplification: Kentucky Medicaid providers have identified several challenges related to the Medicaid Managed Care program. They have indicated that having different procedures for processes such as prior authorizations (PA) recently addressed by DMS, or multiple provider satisfaction surveys have created a significant administrative burden. Similarly, providers state that having multiple measures or requirements for value-based payment (VBP) models creates barriers to their participation. **To address this administrative burden on providers, we recommend that the Medicaid MCOs collaborate to identify ways to reduce this burden.** This collaborative model should include sharing reports across MCOs to see where we could best align. This could lead to such ideas as developing or agreeing to a single provider satisfaction tool or similar PA requirements. There may also be opportunities to align VBP programs (e.g., measures or incentives) to achieve consistency across health plans or to otherwise encourage participation while driving improved quality

outcomes for all Enrollees across the Commonwealth. Humana has collaborated with state partners in Florida to develop an incentive plan for specific services, including: PCPs, OB/GYNs and Pediatric Specialists. We complete regular measurement and reporting of qualifying criteria and share them with providers. Connecting with providers around reporting results continues to promote alignment around value-based incentives.

Iterative Process to Improve Report Templates: Humana's collaborative relationship with DMS over the last seven years has allowed us to solve problems and address challenges together. A clear example related to reporting centers on the Pharmacy Lock-In Report (Humana's 74B). The required report collected data but did not collect any information about the impact of the pharmacy lock-in. Humana worked through DMS' regulatory approval process to submit an alternate report that we developed to communicate the quantitative financial impact of Enrollees assigned to the lock-in program that also included a detailed narrative. **This exemplifies the iterative and collaborative process that we could implement to improve consistency and comparability of data across plans while also monitoring progress of new policies.**

Setting up individual face-to-face meetings between the Commonwealth (or Commonwealth subcontractors) and Humana has been essential in reducing encounter errors. These meetings provide us with an opportunity to develop a more personalized relationship with the Commonwealth and Subcontractor representatives because using data and reporting facilitates a more-depth discussion that drives progress in a group MCO setting. Through these meetings, Humana representatives have influenced updates and changes to tip sheets and other published documents. Through this workgroup we have also reduced provider-specific errors.

a.iii.	Requirement of Subcontractors to participate and or comply with this process.

Required Participation Through Our Subcontractor Agreements: We clearly state our data and reporting expectations in our agreements with our Subcontractors. Our Subcontractor agreements incorporate additional Service Level Agreements that define additional performance expectations related to reporting. These agreements also require that Subcontractors adhere to the performance requirements included in the Draft Medicaid Contract and DMS' policies procedures and expectations. For example, Humana requires all submitted claims and all encounter files from Subcontractors (and sub-capitated providers) pass the same electronic edits. That way the documentation and coding of encounters are consistent throughout all records, regardless of the data source or provider type. We also require our Subcontractors participate in DMS events, including workgroups and taskforces to further reporting and data innovations.

Subcontractor Oversight Program: To ensure that each Subcontractor adheres to or exceeds the expectations defined in its subcontract, Humana has implemented a rigorous oversight program with corporate and market-based teams responsible for Subcontractor performance. Humana's Subcontractor Performance Oversight (SPO) program delineates how we monitor performance across all Subcontractors via periodic submissions of Subcontractor Performance Summary reports. The SPO team collects and provides reports and insights to various Humana Plan functions receiving the subcontracted services for additional review. Subcontractor performance issues, including issues related to data transfer and reporting, are presented through the periodic Subcontractor Performance Summary reporting.

The Subcontractor's Relationship Manager (RM) monitors and oversees Subcontractors with delegated functions. RMs hold Joint Operational Committee (JOC) meetings with the Subcontractor that include review of regular reporting metrics as required in the Subcontractor's agreement. JOC meetings, typically held monthly between the Subcontractor and RM, are designed as a formal way to review the previous period's Subcontractor performance as compared to Service Level Agreements and agreement provisions. This established communication ensures that we clearly communicate and enforce the process made through direct collaboration with DMS with our Subcontractors.

RMs also participate in our Subcontractor Oversight Committee (SOC), which monitors performance across the Kentucky Subcontractors with specific focus on the following areas:

- Oversight and monitoring activities
- Key performance matters of interest
- Data analytics and reporting

The purpose of the SOC is to provide oversight of services provided by the DMS-approved Kentucky Subcontractors using a comprehensive, Contract-wide system of ongoing, objective, and systematic monitoring. The SOC consists of the SPO team; the Kentucky Medicaid Chief Operating Officer (COO), Samantha Harrison; RMs; Network Contracting leaders; the Kentucky Medicaid Medical Director, Dr. Lisa Galloway; and representatives from operational areas within the Plan. The SOC forwards summaries of Subcontractors' performance to the Kentucky Quality Improvement Committee (QIC) each month and on a quarterly basis. Matters meriting broader engagement are presented to the Executive Steering Committee, which is composed of our Kentucky Medicaid senior leadership team.

Service Level Agreements: In our Service Level Agreements with our Subcontractors, we describe specific penalties for not complying with data and reporting requirements. For example, our Service Level Agreements with those Subcontractors transmitting encounters include the following terms:

- Encounter Data File Timeliness: Failure to deliver an encounter file meeting agreed-upon specifications within the times specified will result in a charge of $1,000 per late submission per calendar day
- Encounter Data Accuracy: An error rate > five percent in encounter data received from a Subcontractor based on a Humana encounter response file will cost $1,000 per file that exceeds the standard of more than five percent errors
- Encounter Data Completeness: We require a completeness rate of at least 90% in encounter data received from a Subcontractor based on a Humana encounter response file. The fee is $1,000 per file that does not meet the standard for completeness rate
- Encounter Data File Transfers: Files must be transferred no later than Friday 12 a.m. midnight Eastern Standard Time. The fee is $100 per late file per calendar day
- Encounter Data Corrections: Within 30 calendar days after notice by Humana of encounters/claims failing X12 (EDI) or Humana edits, Subcontractors must correct all encounter/claim records for which errors should be remedied and resubmit to Humana. The fee is $1,000 per late resubmission per calendar day after 30 days. A resubmitted file with uncorrected errors is not considered to be a timely resubmission.

Subcontractor Data Integration to Comply with Reporting Requirements: Our major Subcontractor for this Contract is Avēsis, which provides dental and vision services. Avēsis's Cadence system, which adjudicates both dental and eye care claims and encounters, securely loads enrollment and eligibility 834 information into its MIS for Medicaid on a daily and monthly basis. Cadence is a tiered architecture system with a SQL Server back end and Internet Information Services front end. The system houses all Enrollee, provider, group, and claims data, along with associated billing and invoicing data. Avēsis has the appropriate technical software system and onsite technical resources to support MIS interface file processing and all Enrollee enrollment operational activities. Avēsis ensures that additions, deletions, modifications, and adjustments to enrollments are reflected in the system, with accurate begin and end dates. Avēsis's Electronic Data Interchange (EDI) team works diligently to ensure timely file processing.

Avēsis accurately and efficiently transfers and transmits encounter data with Humana in the approved Health Information Portability and Accountability Act (HIPAA)-compliant formats and in accordance with the HIPAA 837 Companion Guides and encounter submission guidelines. Its system extracts all required data elements for Medicaid encounter submissions and captures all standard billing taxonomies, procedure codes, and diagnosis codes to describe services delivered and encounter data transactions. This ensures accuracy, timeliness, and completeness of encounter data warehouse submissions by adhering to strict process controls. Avēsis uses pre-processing and post-processing scripts to identify and validate encounter transactions for Humana's Kentucky Medicaid membership.

In 2019, the Medicaid Data and Reporting Analytics team produced more than 700 state reports with a 99.03% compliance rate.

DST Pharmacy Solutions, the claims adjudicator for Humana Pharmacy Solutions, Inc. (HPS), our in-house Pharmacy Benefits Manager (PBM), is a 24-hour, real-time point-of-sale (POS) processing engine running on a DB2 database. Humana connects with DST Pharmacy Solutions via a secure virtual private network (VPN) tunnel used by all data transmissions, systems interfaces, and transactions between the two organizations.

Reporting and Ad-Hoc Analysis: Subcontractor encounter data is fed into our EDW daily and is aligned with other data to create a comprehensive, person-based, longitudinal record on each Enrollee. Due to the integrated nature of our EDW, we can derive additional insights that enhance our reporting and analysis. For example, integration of pharmacy interactions with medical claims and encounters allows us to understand patterns of medication adherence for those with chronic conditions such as hypertension. Similarly, integrating data feeds from vision care providers, such as ophthalmologists, with other medical claims can help us determine if those with diabetes are receiving needed vision care.

Integration of data into EDW and our report generation processes supports routine reporting such as HEDIS and enables other ad-hoc analysis that may lead to clinical interventions, population health approaches, or enhancements to benefit design.

Annual Subcontractor Evaluation: As part of our SOP, the third-party risk management team completes an evaluation annually with feedback by corporate and market leadership. Data quality and reporting are part of this evaluation. For Subcontractors providing Covered Services, this annual evaluation includes performance metrics related to network composition, access and adequacy standards, and quality of care.

b.	Provide a detailed description of the Contractor's capability to produce reports required under this Contract, including an overview of the Contractor's reporting systems and capability to configure such systems to capture data according to reporting definitions and specifications as required by the Department.

REPORTING INFRASTRUCTURE

Humana's goal for data collection and reporting is to show transparency, drive accuracy, and enable our leaders and associates to achieve results. Because of the volume of information we collect about our different lines of business (e.g., Medicaid, Medicare, Commercial, and TRICARE) and operational areas (e.g., quality, clinical, provider network, enrollment, authorization, claims, etc.), our processes for organizing and representing this information are standardized to maintain data integrity and transmit information accurately. This unified approach allows us to understand who our Enrollees are across data platforms and sources.

Humana has nearly 1,800 associates dedicated to data and reporting, including experts in business intelligence (BI) and data science. Approximately 1,000 of these associates are based in Kentucky. Humana also has nearly 20 associates dedicated to data analysis and reporting on Medicaid performance metrics. **This team, the Medicaid Data and Reporting Analytics (MDRA) team is led by Cody Kendall and includes four associates dedicated solely to Kentucky's Medicaid reporting.**

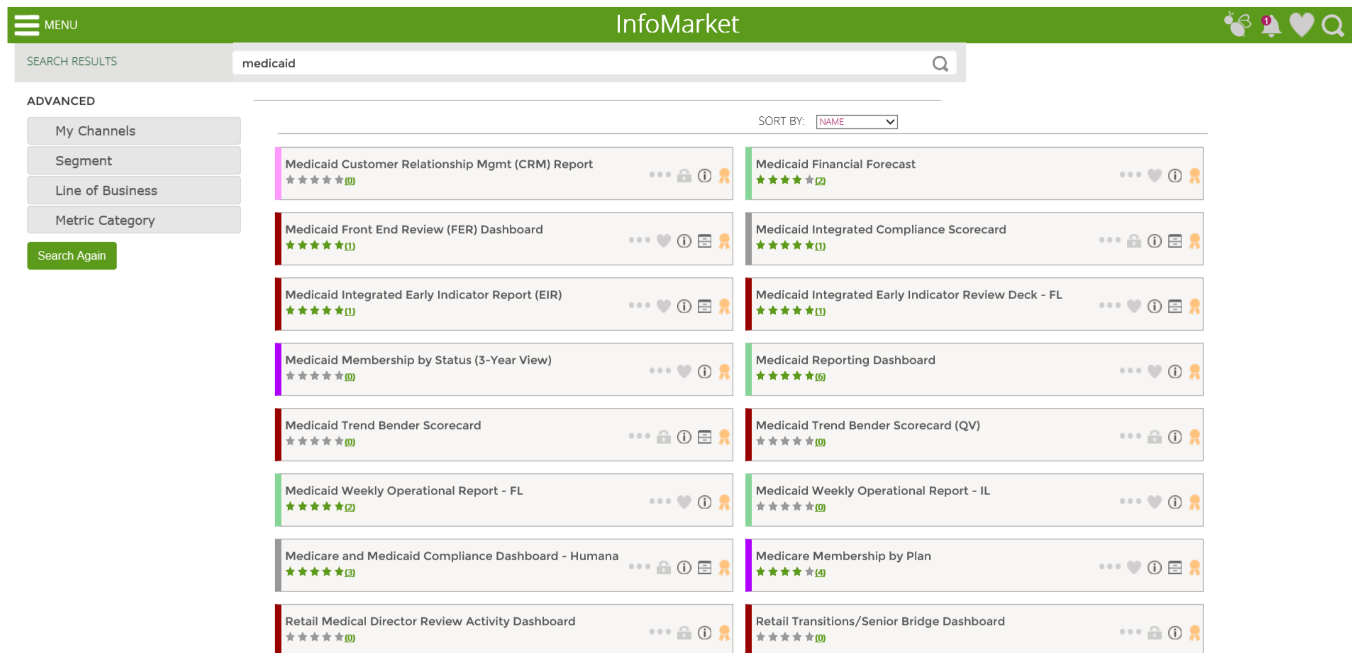
ASSOCIATE SPOTLIGHT:
Cody Kendall, Director, Medicaid Data and Reporting Analytics

A native Kentuckian, Cody exemplifies the best of Humana's commitment to understand the communities we serve. Cody was born in Louisville and attended Belllarmine University, where he studied accounting. He began his career in 2007 as an intern in Humana's Pharmacy Plan-2-Plan program, after which he moved to finance to learn the core domains of the health plan business: membership, premium, claims (FFS and Capitation), and authorization. Part of Cody's responsibilities included managing the applicable IT resources, effectively resolving issues in a timely manner to meet a two-day Service Level Agreement. In this role, he developed a deep understanding of the functionality and interoperability of Humana's platforms and systems. Most recently, Cody was promoted to Director of Medicaid Data and Reporting Analytics, where he continues to focus on increasing efficiencies by supporting data-informed decision-making to identify opportunities for improvement across our Medicaid operations.

Data Storage Systems. We use a vast data storage system, including data lakes that follow our core principles of data architecture: ensuring data flows ubiquitously and seamlessly, bringing together data from all core operating systems (e.g., enrollment, claims, clinical, quality, etc.), and enabling deep, data-driven insights. This data, governed by our Enterprise Data Governance Leadership Council, creates an environment where data assets are valid and reliable, using a structured framework for assessing the quality of data (Bronze, Silver, and Gold).

Our EDW collects data and generates reports that are accessible across the company via InfoMarket. InfoMarket is Humana's central location for Gold standard reporting. The InfoMarket portal simplifies accessibility to reporting across the enterprise, providing answers to business questions more readily and reducing the administrative resources necessary to produce redundant reporting/analysis. It is a key component in the Governance process and promotes Humana's goal of reporting excellence. InfoMarket has transformed the data consumption experience by housing reports and their metadata, documentation of attribute definition to ensure accuracy, and proper use of data for reporting. A screenshot of the InfoMarket Dashboard is below in **Figure I.C.27-2**.

Figure I.C.27-2 InfoMarket Screenshot



Guided by our Medicaid Governance Committee, Humana continually invests in our IT platform to enhance its Medicaid business capabilities. We made specific enhancements for our Medicaid Enrollees, including: (a) streamlining our clinical capabilities to supply Service Management (SM) and Utilization Management (UM) teams a 360-degree view of the Enrollee, including authorizations and referrals, care plans, and health assessments; and (b) developing Medicaid DataMart, Clinical DataMart, and powerful business intelligence tools. These enable insightful data analytics and reporting that support our performance goals and lead to improvements in operational performance.

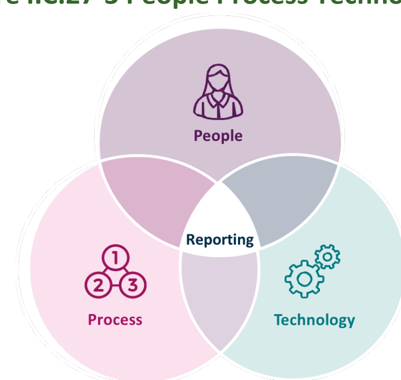
Standardized Procedures: Our reporting system operates on standard operating procedures outlined in our Data Universe Generation Guide (DUGG). DUGG specifically outlines required attributes of State-mandated reports (Report Guide Driven). It allows data users within Humana to understand the State requirements and ensure that we compile the required reports. The DUGG procedure mandates standard steps users must follow to generate and complete each report. This standardization is intended to maintain data integrity and ensure reporting accuracy. Upon changes to State-mandated reports, we require data users to review the revised State template and meet with the business owner to document how to complete report modifications, if needed, to ensure accuracy and completeness.

CAPABILITY TO PRODUCE REPORTS

Humana uses a **People-Process-Technology framework** to manage reporting requirements and deliverables. See **Figure I.C.27-3 People Process Technology** to the right.

Humana's investments in data and reporting are firmly anchored in **people.** To ensure accountability and transparency, in accordance with our data governance principles, our MDRA team is responsible for developing and submitting required reports to DMS. This team includes four associates dedicated to Kentucky who work closely with 10 other Medicaid-dedicated associates and nearly 1,800 data and reporting associates across Humana.

Figure I.C.27-3 People Process Technology



Humana's DUGG procedure mandates a **process** with standardized steps users must follow to generate and complete each report. Upon changes to State-mandated reports, data users are required to review the revised State template and meet with the business owner to document report modifications, to ensure accuracy and completeness. The MRDA team works closely with market leadership and business process owners across Humana to ensure data transparency and tracking in adherence to our governance process, which we continuously review and assess. The following describes the associates that have responsibility for completing reports:

- Report Owner: Within the MRDA Compliance team, each report is assigned to an associate who is responsible for tracking, collecting, reviewing, and submitting all reoccurring Medicaid and Duals-related reporting requirements. Each ad-hoc report request is also assigned to a report owner, who will convene a committee to review the request and assign accountable owners.
- Business Process Owner: Business owners are responsible for assembling the data for their assigned reports, uploading the data to ESP, and attesting to accuracy of the data.
- Market Oversight: There are multiple levels of review built into our market-level quality assurance process. Our Kentucky Medicaid CEO, Jeb Duke, bears ultimate responsibility for ensuring reports are accurate, transparent, and timely. The Kentucky Medicaid CEO, Jeb Duke, and our CFO, Patrick Szydlowski, must review and attest to the accuracy of data submissions and reports. Our Kentucky Medicaid COO, Samantha Harrison, oversees associates who assemble data for reports. Our Corporate Compliance Officer (CCO), Kimberly Myers, oversees general contractual obligations, including reporting requirements.
- Subcontractors: Each Subcontractor has an assigned Relationship Manager who is responsible for overseeing Subcontractors' overall performance, including report development and submission. Relationship Managers and Subcontractors meet regularly in Joint Operating Committees to review reporting metrics, including accuracy and timeliness of data submissions to support Humana's reporting requirements.

Humana replaced a cumbersome, manually generated reporting matrix tracking system with **technology**, a state-of-the-art automated Governance Risk and Compliance tool, which we call Enterprise Solution Point to provide multi-layer tracking and accountability for reporting accuracy and timeliness.

Humana's integrated platforms and deep investments in technological advances, such as data lakes, enable associates to collect, analyze, and produce the data necessary to assemble reports in accordance with DMS-required definitions and specifications. Because we primarily own or manage our data systems, we can configure them quickly and efficiently.

OVERVIEW OF THE INTEGRATED INFORMATION MANAGEMENT SYSTEMS

Humana has demonstrated its capacity to exchange data and comply with reporting requirements in Medicaid programs in several states. We can confirm our capability to interface with Kentucky's Medicaid Managed Care program and its intermediaries concerning key functions, including the eight subsystems described below. These eight subsystems, which are fully integrated into Humana's reporting systems, provide the foundation for accurate and transparent reporting.

Enrollee Subsystem: Humana's enrollment process is fully automated to add or modify membership information (including coverage effective and end dates) based on incoming enrollment data from the Commonwealth. The Enrollment Subsystem currently manages intake of more than 145,000 Medicaid Enrollees in the Commonwealth. This subsystem houses plan and Enrollee-level data for Humana's Medicaid membership, including: Medicaid ID, Humana ID, demographics, contact, and coverage information. It serves as the source of data for other systems.

Provider Subsystem: Humana offers integrated provider capabilities to enable provider onboarding, discovery, and network directory services. Accelerated Provider Exchange (APEX) is the provider data intake system with

robust business workflows and automation for provider onboarding and data updates. Humana currently exchanges provider files with DMS via APEX on a weekly basis.

Payment (Reference) Subsystem: This Subsystem is a collection of applications, services, and data stores that interact to ensure accurate and timely payment of providers based on the most up-to-date clinical coding, procedural coding, pricing documentation, and provider contracts available. The Contract Information System (CIS), a core component of the Reference Subsystem, is responsible for the build, update, and display of all Humana provider contracts. Through CIS interactions with the Claims Adjudication System (CAS), Humana prices or re-prices more than 15 million claims per month. These claims encompass major payer categories (Commercial, Medicare, and Medicaid) and service types (medical, dental, BH).

Claims and Encounters Subsystem: Humana's front-end claims routing system, eHub, receives claims from more than 200,000 providers through more than 100 clearinghouses. eHub performs eligibility verification and routes electronic and paper claims (formatted for HIPAA 837) to Humana's CAS multiple times per day. Humana's internal and integrated encounter data system, which generates more than 500,000 encounters per day, six days a week, receives claims and enrollment data from CAS, CI, and eHub systems to create compliant HIPAA 837 encounters. After CAS has checked the Covered Services and processed claims accordingly, we track Covered Services that Enrollees received through the system, and accurately and fully maintain those Covered Services as HIPAA-compliant encounter transactions.

Humana uses an in-house PBM through a wholly-owned subsidiary, Humana Pharmacy Solutions, Inc. (HPS). HPS contracts with DST Pharmacy Solutions, a claims adjudication platform, which adjudicates all pharmacy claims at the point of sale (POS), rejecting claims that do not meet POS requirements. DST Pharmacy Solutions sends Humana a feed of paid claims daily.

Financial Subsystem: Humana uses the Oracle EBS Financial platform to support all financial operations and processing. We use this integrated Enterprise Resource Planning (ERP) platform as the single source of general ledger (GL) external and Department of Insurance (DOI) reporting. The sub ledgers are used to classify operational transactions (such as claims, premiums, and commission payments) that feed the GL to ensure our monthly, quarterly, and year-end external reporting represents a full financial picture for the company's external and Security and Exchange Commission (SEC) reporting. We use Total Reconciliation Solution (TREC) to perform all reconciliations (sub ledgers to GL, bank account, and system-to-system) monthly, as well as chain of trust compliance for any interfaces coming into the GL.

Program Integrity Subsystem: Humana's Fraud, Research, Analytics and Concepts (FRAC) team conducts several activities to proactively detect insurance fraud, waste, and abuse (FWA). The process begins with reviews of information provided through several sources, including communications from government agencies, industry associations, and other private payers. FRAC conducts data mining based on identified risk. The data mining entails analyses of large amounts of data from a variety of sources. Typically, this analysis involves comparisons of information on claims with information on other databases including provider information, diagnostic coding, drugs purchased, and Enrollee information. This analysis aids in identifying FWA by medical providers, prescribers, Enrollees, pharmacies, and Subcontractors and vendors.

Coordination of Benefits (COB) Subsystem: Humana has a robust coordination of benefits process designed to preemptively avoid making payments for services that are the responsibility of another payer, thereby minimizing the amount of "pay and chase" activity that occurs. We proactively investigate other insurance new Enrollees may carry, educate Enrollees, and update other insurance using email, outbound calls, mail, and coordination with other entities that supply insurance coverage validation services. We also investigate claims submitted to other insurance companies indicated on the claim form.

Utilization/Quality Improvement Subsystem: Humana uses CareHub, our internal and proprietary integrated set of tools, to monitor and track health outcomes and utilization for Enrollee populations. To supply clinicians a holistic view of the Enrollee, CareHub integrates Enrollee data from a variety of sources (claims, Health Risk

Assessment (HRA), biometrics, personal health profile, lab tests, and results) through the Clinical Guidance eXchange (CGX), which in turn supports the Clinical Insights Engine (such as Transcend and Atlas) and clinical analytics. As a fully integrated platform, CareHub supplies enhanced capabilities to identify candidates for programs, document gaps in care, automate care planning, monitor plan compliance, and identify undesirable outcomes for further intervention. All clinicians have access to a 360-degree view of each Enrollee's clinical profile. As a fully integrated approach, this enterprise solution supplies: better Enrollee outcomes; enhanced sharing of clinical data; better, faster, and more consistent decision-making; integration across multiple programs and their disciplines; and robust predictive modeling, risk assessment, and Enrollee outreach.

Within each of these subsystems are rich stores of data that enable us to produce actionable internal reports and support our external reporting requirements. For example, within the Utilization/Quality Improvement Subsystem, CareHub enables us to produce reports that guide utilization management and quality improvement efforts. Some examples include:

- **Utilization Management (UM)/Disease Management (DM) Report**: Humana uses a customized solution to ensure full oversight of our UM/DM cases and Enrollees. Through this solution, leaders across our organization can monitor and review open cases, ensuring our providers are meeting with Enrollees to help them achieve their best health.
- **Early Indicator Report (EIR)**: This custom reporting suite allows Humana to track and trend hospital admissions, re-admissions, and ED visits by multiple dimensions such as: geography, demographics, disease state, and hospital/provider system. This robust reporting suite allows all areas within the organization to oversee trends while enabling deep-dive reviews to address opportunities with specific providers or adjust clinical delivery models to ensure optimal quality.
- **High-Utilizer Report (HUR)**: Monitors and tracks ED utilization at the Enrollee level, identifying those Enrollees who have disproportionately high ED utilization (e.g., "ED frequent fliers").

As shown in **Table I.C.27-1**, Humana achieves systematic measurement and assessment of quality of care using multiple data systems. We evaluate these systems annually to verify that we have adequate resources to meet the needs of the program.

Table I.C.27-1 Tools Supporting Management and Reporting on Quality

Report	Description
Enterprise Data Warehouse (EDW)	EDW houses Enrollee- and claim-level data, and is one of the largest data sources used for quality and clinical analytics activities.
Rules Engines (Cotiviti/Anvita)	Cotiviti serves as the official source of truth for Humana's HEDIS results and HEDIS rate progress throughout the year. With each **monthly refresh** of HEDIS rates, HEDIS member-level detail tables are generated and sent to EDW, where they are also used for operational progress reporting and clinical/quality analytics. Anvita is Humana's internally managed clinical rules engine that allows us to generate care gap reporting on a more frequent basis to source Enrollee alerts, predictive models, and provider reporting on open care gaps and needed preventive services. It also supports our rapid-cycle quality improvement activities.
Predictive Models	We use predictive models to anticipate individual Enrollee behaviors and proactively intervene, usually via outreach and engagement.
Business Intelligence (BI) Tools	Humana uses multiple BI tools to observe and analyze many subsets of the quality landscape. From simple Excel dashboards to complex Qlikview and Tableau reporting portals, we monitor and analyze performance via root cause analysis. BI also allows us to slice and manipulate data for areas such as BH, population health, pharmacy, UM, provider-level reporting, cohort- and demographic-level reporting, clinical and operational process monitoring, etc.

Table I.C.27-1 Tools Supporting Management and Reporting on Quality

Report	Description
HEDIS Dashboard	Our HEDIS dashboard serves as our internal Medicaid reporting tool. Updated monthly, it aggregates Medicaid Enrollee data, provides data at an Enrollee-level detail, and helps define populations for pilot campaigns. This dashboard includes all HEDIS measures and sub-measures on which we report and trend performance, including a prior three-month trend and our performance relative to the 50th and 75th percentile bands, to monitor and assess progress on any measure. The dashboard can be filtered by market, region, demographics, etc. to identify specific performance disparities.
State Priority Reporting	Our strategic State Priority Reporting is designed to track quality and other outcome measures required within our State Medicaid Contract. These reporting capabilities allow continuous monitoring of measures required by DMS and facilitate both required reporting as well as identification of our QI opportunities.
UM Operational Dashboards	We produce operational dashboards and reports that aggregate data in an actionable format to help identify Enrollees who are at high risk for high-cost utilizations. Refer to Section I.C.10 - Utilization Management of the RFP more information.
3M Potentially Preventable Events (PPE) Suite of Tools	Our Medicaid Trend Analytics team uses the 3M PPE suite of reporting products to complement the Early Indicator Report (EIR) used to assess admit, readmit, and ED visit trends. This suite provides additional insights into utilization trends, identifies PPEs, and creates reporting consistency across all of our Medicaid programs.

As of January 1, 2020, we have fully integrated the data, systems and platforms used in the Kentucky Medicaid managed care program with Humana's MIS.

OVERVIEW OF THE REPORTING SYSTEMS

Humana maintains a highly effective and efficient data analytics and reporting system to support the complex demands of our health plan activities. Our reporting fuels innovation and facilitates operational activities and oversight. We recognize that data is the backbone of our core business functions, so we strive to collect and store it in a way that drives integrated reporting and analysis.

Reporting Systems: Our MRDA team uses our EDW and applicable data lakes to consolidate different data sources across all work streams and store data in one central database: the Medicaid Datamart. The purpose of the Medicaid Datamart is to make Medicaid data transparent and accessible, simplifying associates' experiences with the data. Humana's mature IT reporting infrastructure incorporates best practices into its data acquisition, reporting, and analytics environment. Humana uses industry-leading reporting tools such as:

- PowerBI
- Data Robot (Machine Learning)
- Tableau
- Qlikview
- Oracle's BI Publisher
- Oracle Business Intelligence Enterprise Edition (OBIEE), and
- SQL Server Reporting Services (SSRS)

We integrate core databases from the IT subsystems described above (enrollment, claims, clinical, provider, and financial) to develop reports, including drill-down dashboards as well as scheduled and ad-hoc reports. We aggregate data at the required intervals (daily, weekly, monthly) along dimensions such as quality, service level, and population, to meet reporting requirements.

CAPABILITY TO CONFIGURE REPORTING SYSTEMS

As an incumbent, Humana is responsible for producing all reports required under the current Contract. In our Kentucky Medicaid program, Humana operates a Humana-owned and operated MIS, including physical health, behavioral health, and pharmacy. Reporting systems are one component of this MIS. Our integrated MIS enables our architects and engineers to update system capabilities in response to the needs of the business without

disruptions or downtime. Similarly, we are able to configure our reporting systems to capture data according to reporting definitions and specifications as required by DMS independently and without delay. As a result, we are able to re-configure reporting templates quickly and in accordance with new reporting definitions and specifications. For example, in early 2019 we completed implementation of a new Medicaid Managed Care contract in Florida. As part of that successful implementation, we added 13 new deliverables and modified 36 additional reports to ensure compliance with the state's timeframes and expectations.

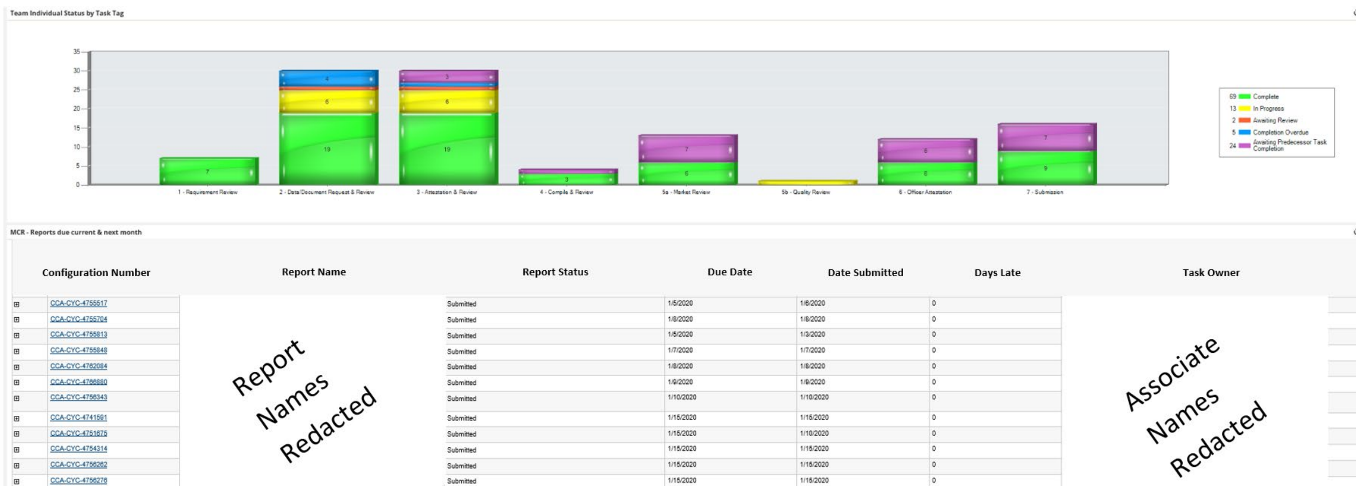
Rapid Cycle Improvements. Rapid cycle improvement is a quality improvement methodology for accomplishing measurable and meaningful results in an accelerated timeframe, typically less than 90 days. It requires the management of an organization to identify a specific opportunity for improvement, assign a team to gather data about the issue and assess it, select the improvement strategy, implement the strategy, and test whether the strategy was effective. In addition, the organization's management must commit to supporting the process so that it happens in an expedited manner. **Humana's governance structure enhances information technology and reporting performance by creating a consistent process for providing progress and status updates and identifying risk and escalation procedures to senior management.**

Our Process Transformation Office (PTO) supports the rapid cycle improvement structure is supported by. The PTO partners with segments and functions across Humana to transform cross-functional end-to-end processes, improve measurement and accountability, build capability through access tools and education opportunities, and achieve process excellence. With a cross-functional perspective, the PTO helps identify process improvements that span the organization, including those related to IT and reporting infrastructure.

SYSTEM TO MANAGE REPORTING REQUIREMENTS

Along with the systems to collect and produce the data to support reporting requirements, ESP provides an oversight system to automatically assign and track accountability for fulfilling reporting obligations. ESP makes the state reporting process transparent across the organization by functioning as a repository for all report data, including Subcontractor reporting data, and providing insight into responsibilities, as well as the status of each reporting deliverable in real time. This allows all levels of leadership to monitor and oversee upcoming deliverables. Please see **Figure I.C.27-4** below for screenshot of the ESP dashboard.

Figure I.C.27-4 ESP Dashboard



ESP provides a structured process of accountability for each step in the development of a deliverable, from initial notification to final submission, structuring notifications to appropriate business owners, stakeholders and Subcontractors (if applicable) for each step in the report production. ESP organizes the review process, sending out automated notices and escalations to allow real-time monitoring of the deliverables. ESP also requires each person assigned a task to document their contribution and review, attesting to the data comprising the report.

ESP houses information at the state deliverable level, corresponding to the reports required in Appendix D of the Draft Medicaid Contract and each ad-hoc report that DMS requests.

Humana spends approximately $1.8 million per year on technology solutions to maintain and enhance this component of ESP. Our budget has grown more than 10% year over year for the last five years, which demonstrates our commitment to a full and transparent reporting process.

c.	Describe the Contractor's processes to review report accuracy and completeness prior to submission to the Department.

REPORT REVIEW

Complete and accurate reporting originates from complete and accurate data. Humana's Enterprise Data Governance Leadership Council creates an environment where data assets are valid and reliable, using a structured framework for assessing the quality of data (Bronze, Silver, and Gold) and ensuring the appropriate mix of human and technological resources across operational areas drive toward excellence. Humana has a mature IT infrastructure that incorporates industry-leading best practices in its data acquisition, reporting, and analytics environment. Humana's Business Intelligence and Informatics Competency Center works directly with IT and is responsible for determining "Gold Standard" data sources within the Humana environment. Humana also has dedicated Data Quality Stewards and Data Quality Technology associates who work to provide continuous improvements in both the quality and quantity of data available for consumption.

Associates' work is supported by numerous industry-leading business intelligence and data analytics tools used by internal Humana associates, external business partners, government agency partners, and individual Enrollees to review and analyze data available to them. For example, the Humana Medicaid Datamart continuously harvests and stores "Gold Standard" data for use in both internal and external reporting and analytics. Accountability is built into every step of Humana's processes to develop, review, and produce reports to our government partners, including DMS.

Dedicated Compliance Team to Ensure Accuracy and Completeness. Humana has a dedicated compliance team, Medicaid Compliance Reporting, to track, collect, review, and submit all reoccurring Medicaid and Duals-related reporting requirements. We have included an example of this dashboard as **Attachment I.C.27-8 Compliance Metrics Homepage Dashboard.** This team, which is part of our Medicaid Data and Reporting Analytics team, is responsible for monitoring the timing, accuracy, and completeness of all regularly recurring reports.

Medicaid Compliance Reporting uses ESP to maintain oversight of these reports and ensure accurate and timely completion. Each report follows a similar process:

- ESP sends out a series of automated email notifications to those parties responsible for compiling, reviewing, attesting, and submitting the various reports. These email notifications contain links to the tasks to accomplish prior to the report's submission to the Medicaid Compliance Reporting associate dedicated to that particular product line or state.
- The Medicaid Compliance Reporting associate initiates the ESP process for the required reports each month, quarter, etc. depending on the frequency of the report submission. An example of the report we use to identify non-compliance risks related to reporting is in **Attachment I.C.27-9 Medicaid Regulatory Reporting Status Template.**
- Once a Medicaid Compliance Reporting associate has ensured that the report requirements, template, and timing are all correct in the system, a notification is automatically sent to the business area that owns the data associated with the report.
- ESP provides the business area owners with a due date to compile and upload the report into the ESP system and requires them to attest to the validity of data included.

- A leader within each business unit must attest to the completion of the review and to its accuracy, data appropriateness, formatting, and completeness.

Multi-Level Review Process to Ensure Accuracy and Completeness: After the business area owners upload the report into ESP, it goes through a multi-level review process:

First, relevant business units' associates review it for accuracy, data appropriateness, formatting, and completeness: These reviews include, at minimum, the following checks:

- Correspondence of data to state-specified validation rules, as available
- Trending against previous submissions to identify any outliers that may require further review
- Reference against other reports with similar or overlapping elements and submission frequencies that may be expected to align with each other
- Review of completeness and appropriate formatting, as outlined by the report template and/or state-specified guidelines

Next, reporting and data analytics experts again review the report again for accuracy, formatting, data appropriateness, and completeness using similar steps as those outlined above: Once all reviewers approve the final report, it is saved in a secured drive and in the ESP system.

Finally, a Medicaid Data and Reporting Analytics (MRDA) team associate then completes the submission following the appropriate path indicated by the regulatory agency: All steps are stored within the ESP system along with all submissions, including the documentation of the submission for archival purposes. This state-of-the-art system enables Humana to deliver accurate and timely results as proven by our on-time submission. In 2019, the MRDA team submitted more than 700 reports with a compliance rate of 99.03%.

d.	Provide examples of the Contractor's proposed:

d.i.	Processes for conducting comparative data analyses, interpreting trends, and summarizing findings in a manner that is easily interpreted by the Department.

Humana's system of governance and accountability embeds data into our decision-making. We have implemented a data-first approach to how we design our governance structure and have built multiple opportunities for data analyses to identify trends and opportunities to improve how we serve Enrollees and DMS.

CONDUCTING COMPARATIVE DATA ANALYSIS

Humana has numerous teams and experts that run comparative data analysis with an integrated platform of clinical, operational, and financial data. For example, our Health Care Economics team reviews return on investment (ROI) on Medicaid operations, while our Pharmacy Corporate Trend Committee focuses on pharmacy issues. **We also have a dedicated Medicaid Trend and Analytics Forecasting team, led by Amanda Creech, that includes actuarial experts and leads our Medicaid comparative data analysis.** This team:

- Monitors early indicators and presents the information to key stakeholders monthly
- Forecasts long-term trends
- Provides input into budget and rate adequacy processes
- Identifies emerging trends in data
- Assesses for potential trend bender opportunities
- Monitors PPEs and incorporates this information into other analysis
- Conduct ad-hoc analyses for key stakeholders as needed

The Medicaid Trend and Analytics Forecasting team uses the Early Indicator Reporting platform, which combines clinical data with operational and financial data, enabling associates to analyze performance across numerous metrics such as plan, region, and provider level.

Along with the Early Indicator Reporting platform, associates use a separate front end Review report that runs simultaneously to allow for additional comparative analysis. This report includes drill-downs such on clinical measures such as ED, urgent care, births, etc.

To conduct comparative analysis using these platforms, associates normalize data for variables such as season (to account for seasonable variations in certain conditions such as the flu), membership characteristics, and mix, and view it year over year (and month over month) to provide an accurate comparison. Associates then analyze the information within each platform to ensure a thorough and complete comparison. The Medicaid Trend and Analytics Forecasting and Medicaid Reporting and Data Analytics teams, as well as by numerous other corporate teams (e.g., Health Care Economics, Behavioral Economics, finance, etc.) and market level associates (e.g., Clinical, Quality, CFO, etc.), perform these types of analysis.

The comparative data analysis performed by the Medicaid Trend and Analytics Forecasting team is fed to the Medicaid Trend Committee. This team ensures consistency and identification of trend opportunities across segments and monitors trend administrative performance to ensure appropriate resource deployment. This Committee meets monthly.

The Medicaid Trend and Analytics Forecasting team works in conjunction with our Medicaid Reporting and Data Analytics team. This team ensures that the data collected is valid and transparent, conducting deep-dive operational analyses in conjunction with business owners to review efficiency and effectiveness of processes. These detailed analyses may result in revised operational practices to streamline the healthcare delivery system or additional feedback and training to operators to ensure optimal compliance results.

An example of the results of the Medicaid Reporting and Data Analytics team trend analysis is a project to revise the care managers' operational practices. The goal of this project was to enhance day-to-day operations for 450 care management associates in one of our Medicaid plans. Prior to the drill-down analysis, the care management associates received cumbersome daily reports that required technical Excel skills to navigate and determine proper next steps. The Medicaid Reporting and Data Analytics team, in partnership with the business owners and process design experts, were able to **Re-Think Routine** and **Pioneer Simplicity**, making investments in IT infrastructure to design and deliver a fully automated dashboard individualized to each specific care manager upon log-in to a simplified web-portal. This web-portal is designed with a simple task list and red-yellow-green design approach; care managers receive visual color-coded alerts indicating action is required. Today this dashboard is deeply integrated into that Medicaid plan's daily operations so we can include the data collected from the care managers in future comparative and trend analysis.

INTERPRETING TRENDS

Humana's Medicaid Trend Committee finds and analyzes Medicaid trends across the organization using our broad Early Indicator Reporting suite. The Medicaid Trend committee analyzes key metrics such as:

- Clinical data, such as inpatient and post-acute care
- Pharmacy
- Network composition
- Financial performance

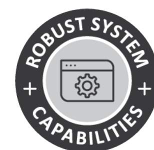
The Trend Committee drills down by diagnosis, cohort, age, and region to identify trends. They complete the analysis by the third week of every month and use it to identify potential investments and guide strategic decisions. By analyzing these metrics, the Medicaid Trend Committee can develop pilots and implement initiatives that may improve Enrollee health and reduce unnecessary costs in the healthcare system.

Our state Medicaid programs also have Medicaid Trend Committees that replicate similar analysis of state-specific metrics. Separate local trend committees allow participants to focus on specific initiatives that address the unique needs of the state. For example, our Florida Medicaid Trend Committee's data analysis process identified an increase in ED utilization through the Early Indicator Report. Please see **Attachment I.C.27-10 Early Indicator Report.** The Medicaid Trend Committee found there was an opportunity to increase urgent care utilization to offset ED visits. The Medicaid Trend Committee engaged market leadership, including the network teams and clinical leaders, to identify geographic areas of opportunity for urgent care network development (thus, targeting the ED visit problem). The urgent care strategy focused on contracting urgent care providers within the geographical area closest to the hospital facilities with the highest potentially avoidable ED visits.

After successfully implementing the urgent care strategy, the Medicaid Trend Committee has continued to monitor the progress of this initiative. Our Early Indicator report has demonstrated increased urgent care utilization with a corresponding decrease in ED visits, especially in South Florida where the strategy was most successful: we saw a 2.6% shift in urgent care usage from the ED. This shift continued into 2019. We continue to monitor this trend to review the effectiveness of the initiative as well as the reporting structure.

Enterprise Feedback Loop: Our Enterprise Feedback loop is both a process and supporting technology that enables Humana to centrally collect, analyze, and prioritize Enrollee and provider feedback to eliminate friction points and improve the overall Enrollee experience. Its goal is to proactively identify improvement opportunities we learn about them from our customers (e.g., Enrollees, providers, or DMS). The Enterprise Feedback loop completes the following activities:

- Understand inputs such as surveys, grievances, performance metrics, internal audits, and others
- Develop insights by analyzing the information from the inputs
- Formulate an action plan to address the feedback



This tool allows for continuous monitoring, re-evaluating the actions taken from the feedback by re-examining the inputs (i.e., creating a loop). By continuously addressing feedback, we can analyze and continuously improve our methods to best meet the needs of our Enrollees, providers, and state partners. As our Enterprise Feedback Loop develops and becomes more robust, we will build our predictive capabilities to anticipate Enrollee, provider, and DMS' needs. For example, we can predict what sort of incidents or trends may trigger negative feedback, such as transportation issues, admission to the ED, or any other Enrollee grievance.

Implementing the Results of Trend and Comparative Data Analysis: Our Kentucky-based Medicaid Operations team owns and drives resolution of all market-level issues. Our Medicaid Operations team includes our senior managers as well as oversight committees such as our Member 360 and Provider 360 Committees. Medicaid Operations associates identify risks through data and trend analysis, often from operational dashboards. Associates across our operational areas use internal reports and dashboards to conduct root cause analysis to benchmark performance and identify opportunities for improvement.

SUMMARIZING FINDINGS

Through our **People-Process-Technology** approach to solving complex problems, Humana has built a culture upon distilling complex processes and scenarios into tangible data insights to effect change. Humana's approach to using data and trended information to drive decision-making occurs at all levels of leadership and is the foundation of our internal committees. We use the core principle of thoroughly reviewing trended information to identify specific root cause and findings in our dialogue with DMS through our described partnership and workgroups described above.

To summarize our comparative data and trend analysis, we use customizable dashboards that distill the information into individual topical reports and numerous visuals that present the analysis in clear, understandable formats. Internally, we also use report card formats to track and trend performance. For example, in our experience, report cards are useful tools for presenting:

- Hospital re-admission rates 1,000, admissions per 1,000, ED visits, and urgent care visits to identify PPEs
- Neonatal Intensive Care Unit (NICU) visits, Maternity births and non-births
- Length of stay trends

Once the Medicaid Trend Committees complete their monthly analysis, they post the summaries and supporting data to InfoMarket so that any Humana associate can access it through our self-service portal. Associates can conduct additional analysis; for example, Kentucky associates can view trends by cohort (e.g., age, gender etc.), region, and numerous other variables.

While we currently use these dashboards and visuals for internal analysis, these tools can also be used to assist DMS in interpreting the information. Because the dashboards are customizable, we can produce the information in a visual format that summarizes the findings in the format that best suits its needs.

d.ii.	Use of dashboard reporting to monitor, track, and evaluate performance metrics, including dashboard level data the Contractor proposes to submit to the Department. Provide a sample dashboard report.

Dashboard reporting is a central component of Humana's overall reporting strategy. Through the data and analytics capabilities included in dashboards, associates have the tools and resources to have a finger on the pulse of our operations at any point in time. We have found that dashboard reporting has the following advantages:

Accessibility: Dashboards provide our associates and leaders with summaries and visualizations of data that make it easy to understand. Through our enterprise InfoMarket, all associates can see "Gold Standard" dashboards and reports across lines of business with proper access. Using InfoMarket, associates can choose a channel (e.g., clinical, call center metrics, program integrity, etc.) and review summary reports and dashboards. Leaders can prioritize information and identify areas that need immediate attention. For example, our provider Grievance and Appeals dashboard allows managers to quickly identify spikes in submissions that may indicate problems with a specific billing code or code edit.

Customizable: Our dashboards are customizable, allowing us to incorporate state measures, performance metrics, departmental priorities, and corresponding benchmarks from each state contract. Our associates can track issues most relevant to them and the Commonwealth and for us to present ad-hoc data or respond to our State partners quickly and reliably. Please see **Attachment I.C.27-11 Customizable Medicaid Operations Dashboard** for a demonstration of the depth and flexibility of our dashboard reporting capabilities.

Root Cause Analysis and Trending: Because dashboards can present data in multiple ways, managers use data to root causes and trend forward to implement lessons learned from the analysis. For example, our call center dashboards allow managers to see spikes in call volume so they can adjust staffing during peak times and ensure limited to no impact to Average Speed to Answer or Number of Rings to Answer.

Humana Medicaid leaders and associates use dashboards in nearly every functional area to monitor day-to-day operations and evaluate performance metrics. From the data contained in the dashboards, leaders can produce reports to manage staffing, view short-term and long-term performance, and identify outliers. They are an integral part of decision-making across nearly all functional domains of the Kentucky Medicaid Managed Care program. We use dashboards to monitor, track, and evaluate performance metrics across nearly all business areas including grievances and appeals, quality improvement, program integrity, claims, and financial performance. For example:

- Provider and Enrollee call center leaders use dashboards to monitor staffing and call center performance metrics. Using these dashboards, they can manage Service Level Agreements and drill down to the individual associate level, day to day, hour by hour

- The Grievance and Appeals team uses dashboards to analyze the types of grievances and appeals submitted and to monitor timeframe compliance
- The Cost Claims Management (CCM) department uses more than 12,000 data analytics and 40 dashboards to monitor FWA activities such as prepayment reviews, medical record reviews, and active investigations, and to analyze data such as claims and encounters to identify outliers in need of further review or investigation
- The Quality team uses dashboards from Quality Analytics to monitor HEDIS and CAHPS measures to identify opportunities for initiatives and improvements
- Humana Pharmacy Solutions uses dashboards to review prescription drug usage, cost, and the 340b program
- The Operational Risk Management team uses dashboards that include metrics focused on compliance measures and indicators of noncompliance. These dashboards provide a point-in-time snapshot that provides Humana insight into our overall compliance with contractual requirements
- Regulatory Compliance functions as a second line of defense, using dashboards to monitor and evaluate data, and oversee corrective action plans (CAP).

The dashboards contain large amounts of data our associates can analyze and manipulate to produce drill-down and other types of reports. Here are some examples we produce.

Network Oversight/Adequacy Report: Humana uses Quest Analytics, a geocoding technology tool, to measure Enrollee-to-provider adequacy access at the county and zip code levels (time and distance). This report summarizes individual calculations to identify areas where Enrollees currently have access, as well as areas where we need additional network development. Weekly reporting and oversight allow for detailed tracking and mitigation plans, if necessary, by business teams to ensure Enrollees have access to a high-performing, high-access network. Quest also generates maps that highlight Enrollee access and network deficiencies for review by our Provider Network and leadership teams. Please refer to **Attachment I.C.27-12 Network Oversight/ Adequacy Report.**

Utilization Management (UM)/Disease Management (DM) Report: Humana uses a customized solution to ensure full oversight of our UM/DM cases and Enrollees. This solution enables leaders across our organization to monitor and review open cases, ensuring our providers are meeting with Enrollees to help them achieve their best health. Please refer to **Attachment I.C.27-13 Utilization Management (UM)/Disease Management (DM) Report.**

Early Indicator Report (EIR): This custom reporting suite allows Humana to track and trend hospital admissions, re-admissions and ED visits by multiple dimensions such as: geography, demographics, disease state, and hospital/provider system. This robust reporting suite allows for all areas within the organization to oversee trends while allowing for deep-dive reviews in cases where action is required to address opportunities with providers or adjust clinical delivery models to ensure optimal quality. Please refer to **Attachment I.C.27-14 Early Indicator Emergency Department Report.**

High-Utilizer Report (HUR): Monitors and tracks ED utilization at the Enrollee level, identifying those Enrollees who have disproportionately high ED utilization (e.g., "ED frequent fliers"). Please refer to **Attachment I.C.27-15 ER High Utilizer Report.**

d.iii.	Use of findings from reports to make program improvements and to identify corrective action.

In nearly every aspect of our Humana Medicaid operations, we use reports, dashboards, and analytics to drive our decisions, prioritize resources, and oversee our Subcontractors. From our senior leaders to individual associates, we conduct data-driven analysis of short-term decisions and long-term implications of policy changes. Data is built into our decision-making lexicon. Our call center uses data daily to adjust daily and weekly

workforce assignments using Service Level Agreements. Multiple stakeholders also use our reports and dashboards to make program improvements and identify corrective action, including: associates, leaders, operational teams, and oversight committees. Examples of how they use findings from reports to make program improvements are below.

Associates: Our associates use reports to review day-to-day actions and identify ways to improve their own performance as well as the performance of their department or unit. For example, our Provider Resolution associates, who receive and resolve provider grievances and appeals, use reports and dashboards to monitor timeliness, due dates, and other compliance metrics.

Leaders: Leaders use reports and dashboards to adjust staffing, reallocate resources, and recommend larger process changes. For example, our Call Center managers use daily, weekly, and monthly reports and dashboards to monitor compliance metrics and staffing levels and forecast the need to adjust operations to account for peak call times or programmatic changes that will necessitate additional staffing.

Oversight Committees and Teams: Operational committees rely on reports and dashboards to guide their decisions. Data for these dashboards are fed from our Enterprise Solution Point system where compliance metrics are gathered and attested to monthly by business leaders for validation and reporting. Using a centralized system ensures full transparency of operations throughout all levels within the organization.

Data and reporting are a critical component of committees such as our Medicaid Compliance Committee and Regulatory Compliance Committee. These first-line and second-line compliance teams review state reports to identify deficiencies and take appropriate action. For example, the Medicaid Compliance Committee uses the following scorecards and metrics:

- Monthly Medicare and Medicaid Integrated Compliance Scorecards to assess a point-in-time assessment of overall compliance for Medicare and Medicaid
- Medicare and Medicaid Compliance Dashboards (Metrics) to review metrics focused on compliance measures and indicators of noncompliance, internally and for our Subcontractors

These committees also use reports and dashboards to monitor areas of risk, identify synergies and strategic opportunities across our functional areas, and track their oversight activities.

Case Example: Provider Directory data and the SPËD Algorithm

Humana closely monitors the accuracy of Provider Directories, which are challenging to maintain due to provider mergers and acquisitions, location changes, retirements, and contractual modifications or terminations etc. The “gold standard” in directory data validation has traditionally been telephonic outreach, which is time- and resource-intensive, particularly because our reports have demonstrated that demographic data degrades at a rate of approximately 15% month over month. To address this issue, Humana developed a SPËD algorithm designed to predict which providers in the Humana Provider Directory are most likely to have a demographic data error (e.g., phone number or address) in order to optimize outbound directory validity call campaigns. The algorithm accounts for factors such as the number of providers per group, number of offices, and data matches from sources such as Google or DEA. We continuously monitor the results of this algorithm and note statistically significant improvements year-over-year and plan-by-plan in our CMS audit results.

Corrective Action Plans (CAP)

We also use reports to identify corrective action decisions. Examples include the following:

Timely Adjudication of Claims Following Receipt: In January 2019 our Compliance Oversight Committee identified a lag in adjudication of claims to out-of-network (OON) providers using our Metrics/Evidence and Attestation solution in ESP. The root cause analysis demonstrated there was a delay in conducting outreach to claims for these providers. There was also issue with the system over-capturing what needed to pend, which slowed down the process of sorting through claims. We put a CAP in place with the Subcontractor and entered it into ESP. They then updated and implemented new logic to ensure claims are pending accurately, dedicated additional resources to this function, and continued to monitor the issue through resolution.

Grievance and Appeals Dashboard: Our Grievance and Appeals (G&A) team noted that we acknowledged four of the 48 new Enrollee grievances they received in an untimely manner. Their root cause analysis indicated that one Enrollee had submitted three of the grievances and another Enrollee had submitted one, and that all the late acknowledgements concerned a Medicaid transportation Subcontractor in that state. The G&A team determined that the delay resulted from the Subcontractor's failure to submit the grievances in accordance with their subcontract and our policies and procedures. Our G&A team informed the Subcontractor's Relationship Manager (RM, who in turn notified the Subcontractor of the corrective action, educated the Subcontractor about the importance of submitting the grievances in a timely manner, and reminded the Subcontractor of our required process.

Welcome Calls: Using the Member Services Call Center Metrics Report, our Outreach and Education team observed that our success rate for welcome calls was lower than its performance goal. The Outreach and Education team determined that the issue was a priority and that the solution would likely be complex, requiring the assistance of more than one team to address the problem successfully. The Medicaid Operations team convened a workshop to examine the Enrollee onboarding process and identify opportunities for improvement. The workshop included associates from the following teams and functions: enrollment, clinical, quality, data analytics, marketing, education, and outreach. The participants identified opportunities for improvement along each step of our onboarding process and developed an Onboarding Strategy that describes specific steps to conduct outreach to Enrollees and assist them as they begin their relationship with Humana. It includes strategies for improving our Unable to Contact (UTC) procedures and reaching our Enrollees for welcome calls and other touchpoints.

These examples demonstrate that Humana's associates derive insights from our reporting system that lead to process improvement solutions. Beginning with our many industry-leading reporting tools, associates, leaders, and cross-functional teams and committees leverage the information to improve the Enrollee experience and maintain a strong, high quality network of highly-satisfied providers.

e.	Describe the Contractor's processes for monitoring, tracking, and validating data from Subcontractors.

Our Subcontractor oversight begins with a clear contractual agreement that defines Subcontractors' obligations with respect to data and reporting requirements. Prior to beginning work, our Market Development team conducts an on-site audit to ensure the Subcontractor can perform the contracted services and meet our performance expectations. All Subcontractors are also required to complete mandatory training within 30 days of starting performance.

Monitoring Subcontractors' Data: Humana has a rigorous oversight program. Our Subcontractor Performance Oversight program (SPO consists of corporate and market-based teams responsible for Subcontractor performance, including monitoring Subcontractors' data. Each Subcontractor has an assigned Relationship Manager who monitors and oversees Subcontractors' performance, including data and reporting-related issues. Relationship Managers hold Joint Operational Committee (JOC) meetings with the Subcontractor to include reviews of regular reporting matrix as required in the Subcontractor's agreement. JOC meetings, typically held monthly between the Subcontractor and Relationship Manager, are designed as a formal way to review the previous period's Subcontractor performance as compared to Service Level Agreements and agreement provisions. The Relationship Manager and JOC oversight ensures that we clearly communicate the processes we have established collaboratively with DMS to our subcontractors.

Relationship Managers also participate in our Subcontractor Oversight Committee (SOC, which monitors performance across the Kentucky Subcontractors with specific focus on the following areas:

- Oversight and monitoring activities
- Key performance matters of interest

- Data analytics and reporting

The purpose of the Subcontractor Oversight Committee is to provide oversight of services provided by the DMS-approved Kentucky Subcontractors through a comprehensive, plan-wide system of ongoing, objective, and systematic monitoring. The Subcontractor Oversight Committee consists of the Subcontractor Performance Oversight team; the KY Medicaid Chief Operating Officer (COO), Samantha Harrison, relationship managers, Network Contracting leaders; the Kentucky Medicaid Medical Director, Dr. Lisa Galloway; and representatives from operational areas within the Plan. The Subcontractor Oversight Committee forwards summaries of Subcontractors' performance to the Kentucky Quality Improvement Committee (QIC each month and on a quarterly basis. Matters meriting broader engagement are presented to the Executive Steering Committee, which is composed of our Kentucky Medicaid senior leadership team.

Annual Subcontractor Evaluation. As part of our Subcontractor Oversight Program, the Third-Party Risk Management team completes an evaluation annually, with feedback by corporate and market leadership. Data quality and reporting are a key part of this evaluation. Humana's SOC or JOC impose CAPs on Subcontractors that fail to meet Humana's expectations regarding the provision or validity of data. Repeated or higher risk issues are escalated to the Regulatory Compliance team, which imposes additional remedial actions that it tracks through its regular ESP processes and Medicaid Compliance committee structure.

Validating Data: We maintain all data from Subcontractors in our systems, including our EDW, which allows us to validate the data in the same manner in which we would validate our own data. We review data from Subcontractors using the same multi-level review process as our internal process, including the following checks:

- Review of correspondence of data to state-specified validation rules (if applicable)
- Trending against previous submissions to identify inconsistencies or outliers
- Comparison to other reports with similar or overlapping elements that we would expect to align
- Review of completeness and appropriate formatting defined in the report template state guidelines

We forward summaries of Subcontractors' performance to the Quality Improvement Committee each month and present matters meriting broader engagement to the SOC quarterly.

Tracking System: We use our ESP platform to track and monitor Subcontractor performance, including performance related to data submissions. ESP contains workflow software, including automated emails, automated escalation, automated notifications of upcoming due dates, and a repository for evidence storage and attestations. ESP contains multiple risk and compliance modules, allowing for an integrated risk and compliance view so we can track submission, compliance, and overall performance in one place. All operational areas and teams across Humana use ESP, including our Subcontractor oversight teams. This ensures that data and processes are connected for true visibility and transparency into the operational performance as related to Contract and programmatic compliance.

Monitoring and Oversight Processes

We have clear, comprehensive policies and procedures related to monitoring and oversight of Subcontractors. This includes our Compliance Policy for Contracted Organizations that details our goals and expectations, which we provide to all Subcontractors and incorporate into our contractual terms and conditions.

RMs are responsible for monitoring Subcontractors' performance, including the timeliness and accuracy of their data submissions. Data and reporting are standing items on the JOC meetings held with the RM and Subcontractor. The SOC also discusses data and reporting as regular topics in their monthly oversight meetings.

Corrective Action Plans (CAP): The Delegation Compliance department will issue a CAP when the delegate fails to meet established compliance thresholds, contractual requirements, or other requirements. Humana will issue a CAP to any Subcontractor who fails to submit data on time, submits poor data or data that cannot be validated, or submits data in the wrong format. Other deficiencies resulting in a CAP include, but are not limited to:

- Failure to achieve an overall audit score of 95%
- Failure to achieve required threshold for any single-item score
- Failure to meet compliance thresholds for critical elements as specified on standardized audit tool, during a pre-delegation, annual delegation audit, or contractual review

CAPs include issues and deficiencies identified, root cause analysis, the corrective actions the Subcontractor is required to complete, and the timeframes for performance of the corrective actions and achieved results. We track CAPs in ESP, and either the JOC or Regulatory Compliance team monitors the CAP until it is complete. Subcontractors' failure to complete a CAP could result in termination.

f.	Describe the Contractor's proposed process for the receipt, generation, interpretation, and provision of ad hoc reports requested by the Department.

Humana's EDW and dashboard reporting capabilities enable us to easily collaborate with DMS regarding ad-hoc reports.

Receipt of an Ad-Hoc Request: Upon receipt of an ad-hoc request, the associate receiving the request either enters DMS' request into our ESP system or contacts the Medicaid Reporting and Data Analytics team to enter it. ESP automatically generates a notification to our dedicated Kentucky associates in our Medicaid Reporting and Data Analytics team. This notification initiates a collaborative process between the business owner responsible for the report, market leadership, direct managers, and the Medicaid Report and Data Analytics team, which recognizes that ad-hoc requests are time-sensitive and frequently require an accelerated timeframe to meet the State's request on time.

Ad-Hoc Kickoff Meeting: When an ad-hoc request comes in, the Medicaid Operations team sets up an Ad-Hoc Kickoff meeting with all of the stakeholders and Contract Management Unit (CMU) to review the request in detail, assign additional responsible parties and internal deadlines, and build in time for the final compliance review before submission. During this Ad-Hoc Kickoff meeting, we identify any clarifying questions for the Commonwealth that could impact our response and quickly reach out to our Commonwealth partner for resolution. Additionally, we schedule regular follow-up meetings to ensure we are aligned cross-functionally, and can respond to DMS in a timely and comprehensive manner.

For example, if DMS requested an ad-hoc report regarding Enrollee outreach efforts, the Medicaid Reporting and Data Analytics Team would collaborate with our Contracting Management Unit to track compliance and deadlines and with our Education and Outreach team to produce, review, and validate the report. The leader in our Education and Outreach team would review the ad hoc report and attest to its accuracy, which we would document in ESP.

Tracking System for Tracking of Ad-Hoc Reports: As discussed above, ESP has multi-layered cycles that assign tasks to the individuals responsible for providing or compiling the data in an ad-hoc report, reviewing the accuracy and completeness of the data, and attesting to the information provided. This oversight enables real-time monitoring of requests to ensure proper escalations (as required) and oversight by senior leaders within our Medicaid Operations team as well as accurate and timely delivery. Through this cyclical process, multiple business owners become accountable for the data comprising the ad-hoc report, ensuring it meets DMS' ad-hoc requests in a complete and timely manner.

Effective Communication and Ad-Hoc Report Submission: ESP exemplifies the communication we have across our organization. We use our operational committees and other cross-functional forums to foster communication and relationship-building across teams, resulting in strong channels to share information and respond quickly and completely to ad-hoc requests. Depending upon how DMS requests the report, either the Kentucky Medicaid Chief Compliance Officer (CCO), Kimberly Myers (who is responsible for facilitating communication with DMS), or the business lead will submit the report to DMS.