

Appendix 1 – Research Questions and Methodology

Project Overview

The implementation of the State of Colorado Value Based Payment (VBP) and Colorado Provider of Distinction (COPOD) initiation will provide an industry-leading analytical solution supporting state-specific alternative payment model (APM) programs to advance outcomes-driven care delivery.

The KPMG team is tasked with supporting Colorado's Department of Health Care Policy & Financing goals of improving affordability and quality of care for all Coloradans in three primary areas:

- Designing, developing, and implementing new alternative payment model (APM) program
- Implementing an analytical solution for APM program monitoring and achieving CMS Certification to maximize project funding
- Implementing Colorado Providers of Distinction (COPOD) performance-based programs

The purpose of the new APMs is to help the State move away from fee for service payments for primary care and obstetric providers, and towards a value-based model, with the goal of reducing health care spending, identifying unnecessary or duplicative care, and improving quality of care for the state's Medicaid population.

Our team will support activities around stakeholder engagement and research to redesign the primary care APMs for Adults and Children, a new Maternity APM and the design of the Colorado Providers of Distinction (COPOD) program. The COPOD program will allow Members to identify high quality primary care and specialist providers as well as surgeons and hospitals that perform common or high-cost procedures to help consumers make more informed choices in their health care.

Research Questions

PHI Data Element Needs

The following PHI data elements are applicable across all programs.

PHI Data Elements Required

- **Member 5-Digit Zip Code** – used to define urban/rural designations. Analysis in quality of care and out of network visits due to proximity of resources.
- **Member Census Tract** – used for benchmarking against Census population as well as provide a more holistic population percentage where race and ethnicity in APCD data may not be complete due to payer submissions.
- **Member County** – used to define RAE for claim
- **Member Eligibility Date** – used to identify trends and patterns related to healthcare utilization for below programs. Not limited to but including denial management, reconciliation, resource allocation, utilization, and risk management.
- **Member Dates of Service** – used in seasonality and trending analysis to identify healthcare utilization patterns for individuals or groups of patients. These include treatment patterns, provider performance, quality of care, and cost management.

APM

Research Objective

The APM Program Evaluation and Feedback Report will evaluate the performance, successes, and opportunities of the Department's existing primary care alternative payment models, APM 1 and APM 2, to inform the Department's strategy of phasing out the APM 1 Program in favor of the APM 2 Program and to inform the future design of the APM 2 Program.

1. How should current methodology for APM program be updated based on analyses of Member data?
2. How should current methodology for APM program be updated based on analyses of Provider leakage?
3. How should current methodology for APM program be updated based on analyses of billing patterns?
4. What are the differences in episode logic and cost in consideration of alternative episode groupers around chronic conditions as they relate to:
 - Episode triggers
 - Selection of relevant services
 - Patient and service exclusions
5. Variation in episode costs and sources of variation
6. What is the financial impact of modifying episode definitions?
7. What changes should be recommended of the current episode attribution methodology for the APM Program and resulting utilization patterns and Provider leakage?
8. What updates should be made to the risk adjustment methodology and model for the APM Program?
9. What are the benefits to APM 2 Program participation and operations, as well as possible areas for improvement?
10. What are the Colorado CMS Core Measure performance and key observations in relation to the streamlined APM 2 Program quality model?
11. What are other payer value-based payment programs in primary care that may qualify for potential alignment?

Methodology:

- Provider leakage – Identifying instances where the patient received services outside of their primary care network. Classifying these services as either leakage or non-leakage based on predetermined criteria which might include whether the service was for a condition that could have been handled by the primary care physician, or whether the service was for an emergency or a specialist referral.
- The current partial capitation methodology - based on analysis of Member data, Provider leakage, and billing patterns.
- The quality model - informed by feedback from the Department and other impacted Stakeholders, and by evaluation of Colorado CMS Core Measure performance.
- The current episode attribution methodology for the APM 2 Program - based on analysis of utilization patterns and Provider leakage.
- The risk adjustment methodology - based on the evaluation of the current risk adjustment model.

Pediatric

Research Objective

Create a recommendation regarding the best way to perform an analysis and report of the proportion of Health First Colorado pediatric health care access via an assessment of Provider workforce. Present an evidence-based approach that offers insight and critical information on national leading practices and current landscape of Colorado Medicaid pediatric providers and members.

1. What are the differences between primary care delivery for children and adults?
2. Why are pediatric members high utilizers of primary and preventative care?
3. What are the quality of indicators that currently exist to measure access to care when compared to the entire population?
4. What measures of provider capacity/supply and patient access exist (specific focus: pediatric) across the following datasets:
 - CMS
 - Medicaid programs from other states (selected based on characteristics similar to CO, such as geography, income, and age)
 - Other CO programs, including CDPHE
5. What data is determined to be relevant for these measures?
6. What are the pros and cons for each measure in terms of identifying access issues including data availability, feasibility of calculations, alignment to other programs etc.?
7. How does Colorado's FFY2022 performance in total and stratified by age, sex, race, ethnicity, and location (urban, rural, and frontier) compare to all 50 states' performance with respect to the CMS Child Core Measures Set?

Dental Claims

Dental care is an essential component of comprehensive healthcare, and children's oral health is critical to their overall health. Including dental claims in pediatric quality of care analysis enables a more complete view of the patient's overall health and encourages a more coordinated approach to care. Many dental issues, such as cavities, are preventable with early intervention, preventive care, and education. By analyzing dental claims data, KPMG can identify opportunities to intervene early and prevent dental disease, which ultimately leads to better health outcomes and lower costs.

***Note we do not need dental claims for adults. Pediatrics age 0-18 only**

Methodology:

- Pediatric utilization trends categorized by cost drivers by common/frequent co-morbidities and chronic conditions, geography, and other groupings agreed upon the three most recent years of claims
- Colorado Current Provider Attribution Methodology - Analysis of the attributes that link the member to a provider (geography, member-choice, visits)

Maternity

Research Objective

The Health Disparities Research will help inform the evaluation of the current Maternity APM program and inform the design of the new Maternity APM program. This research will provide an in-depth analysis/description of the current disparities that Health First Colorado Members experience regarding maternity care outcomes and maternity care service delivery. This will help the Department identify specific disparities that Health First Coloradan Members experience, which will support identifying program goals for the new Maternity APM program. This will facilitate confidence, rapport, and trust with key stakeholders (i.e., provider networks, Health First Colorado Members, and advocacy groups)

1. What are the outcome and access disparities by race?
2. What are the outcome and access disparities by ethnicity?
3. What are the outcome and access disparities by geographic location?
4. What are the areas of avoidable costs in maternity care for Health First Colorado Members?
5. What are the in-depth comparison of the above populations that are experiencing positive/negative outcomes and/or access disparities
6. When available, how is does the analysis differ over Behavioral Health analysis and claims data analysis particularly in the areas of:
 - Overuse of services
 - Adverse events and avoidable complications
 - Underuse of recommended services
7. What are areas of avoidable costs across ED and urgent care visits related to pregnancy, inpatient hospitalizations and readmissions that could be related to pregnancy, and usage of providers other than obstetricians?

COPD

Research Objective

To develop measurement criteria for selecting two procedure episodes, in addition to cholecystectomy, for a total of three procedure episodes, which three procedure episodes will be determined by the Department. The development of measurement criteria to be used for:

- 1 Identifying the measures that help demonstrate the greatest opportunities for performance outcomes improvement (Volume, Cost, Quality, Safety, Equity)
- 2 Identifying two procedure episodes that demonstrate the greatest opportunities for performance outcomes improvement

The measurement results will support the recommendation of the two procedure episodes, in addition to cholecystectomy, to the Department.

1. What data accurately captures procedure episodes and measures for hospitals and ambulatory surgery centers?
2. How are surgeon performances for non-members?

3. What are appropriate benchmarking measurements for procedure episodes using commercial and Medicare data?

Methodology:

- Performance outcomes –
 - Define the outcomes of interest: Identify the areas of interest such as patient outcomes, utilization metrics, financial metrics, and quality of care, among others.
 - Determine the data elements needed to calculate the outcomes of interest. This may include data such as patient demographics, claims data, billing data, and clinical data.
 - Utilize algorithms to calculate the different outcomes of interest, using appropriate statistical techniques and software tools.
 - Perform quality checks on the algorithms to ensure that the results are accurate and consistent. These checks may include examining the data distribution, outliers, data trends, and testing for statistical significance.