



**COLORADO**  
Department of Health Care  
Policy & Financing

November 1, 2016

The Honorable Millie Hamner, Chair  
Joint Budget Committee  
200 East 14<sup>th</sup> Avenue, Third Floor  
Denver, CO 80203

Dear Representative Hamner:

Enclosed please find the Department of Health Care Policy and Financing's response to the Joint Budget Committee's Request for Information #1 regarding fraud detection efforts.

Legislative Request for Information #1 states:

*The Department is requested to submit a report by November 1 each year estimating the total savings, total cost, and net cost effectiveness of fraud detection efforts.*

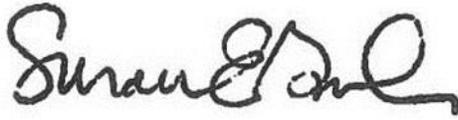
In May 2013, SB 13-137, "Concerning System Improvements to Prevent Fraud in the Medicaid Program", was enacted with the intent of shifting the State's Medicaid program from a retrospective 'pay and chase' review model to a prospective prepayment review approach. In 2015, the General Assembly granted the Department one Full Time Equivalent (FTE) to research prepayment analytics. This position was filled in September 2015 and was tasked with obtaining data on what prospective prepayment review approaches could be possible for the Department, and determining if the Department was currently in an adequate position to move from a traditional, retrospective identification and collection model to a prospective prepayment review model. In addition, this position was asked to analyze how a prospective, prepayment transition could positively address Medicaid fraud, waste, and abuse, as well as effectively utilize Department funds and taxpayer dollars.

This FTE has conducted research on this subject, including gathering information on what prepayment review efforts are occurring at the federal level and reaching out to other state Medicaid programs to learn what prospective prepayment review are in existence and how they are utilized. A summary of the work conducted since last fall is included. This work continues and the Department will continue to update the legislature on progress.

If you require further information or have additional questions, please contact the Department's Legislative Liaison, Zach Lynkiewicz, at [Zach.Lynkiewicz@state.co.us](mailto:Zach.Lynkiewicz@state.co.us) or 720-854-9882.



Sincerely,



Susan E. Birch, MBA, BSN, RN  
Executive Director

SEB/ktn

Enclosure(s): Health Care Policy and Financing FY 2016-17 RFI #1

Cc: Senator Kent Lambert, Vice-chair, Joint Budget Committee  
Representative Bob Rankin, Joint Budget Committee  
Representative Dave Young, Joint Budget Committee  
Senator Kevin Grantham, Joint Budget Committee  
Senator Pat Steadman, Joint Budget Committee  
John Ziegler, Staff Director, JBC  
Eric Kurtz, JBC Analyst  
Henry Sobanet, Director, Office of State Planning and Budgeting  
Bettina Schneider, Budget Analyst, Office of State Planning and Budgeting  
Legislative Council Library  
State Library  
John Bartholomew, Finance Office Director, HCPF  
Gretchen Hammer, Health Programs Office Director, HCPF  
Tom Massey, Policy, Communications, and Administration Office Director, HCPF  
Chris Underwood, Health Information Office Director, HCPF  
Dr. Judy Zerzan, Client and Clinical Care Office Director, HCPF  
Jed Ziegenhagen, Community Living Office Director, HCPF  
Rachel Reiter, External Relations Division Director, HCPF  
Zach Lynkiewicz, Legislative Liaison, HCPF



**Health Care Policy and Financing**  
**FY2016-17 RFI #1**  
**Page 1 of 4**

*The Department is requested to submit a report by November 1 each year estimating the total savings, total cost, and net cost effectiveness of fraud detection efforts.*

The Department is conducting research and evaluating the addition of pre-payment predictive analytics as part of its Program Integrity Strategy. Pre-payment predictive analytic technology utilizes data, statistical algorithms and approaches to identify the likelihood of future outcomes based on historical data. When applied to Medicaid claims submitted by providers for reimbursement, pre-payment predictive analytics can discover erroneous claims to prevent payments from being made. This technology can be a powerful tool in saving valuable health care dollars and improving cost containment.

As part of the Department's research, other state Medicaid agencies who have added a pre-payment predictive analytics solution as part of their provider compliance efforts were contacted on how they have implemented the technology, including gathering information on their best practices and challenges from their programs. In addition, the Department looked at how the Centers of Medicare & Medicaid Services (CMS) has incorporated pre-payment predictive modeling as part of its Fraud Prevention System to detect, suspend and deny inaccurate claims through its payment processing system. CMS is in its third year of using this technology as part of their overall system.

Since the last update to the legislature, the Department has learned from other state Medicaid agencies that implementation costs for each Medicaid agency varied from one another, depending on the size of each program's client population, type of pre-payment predictive analytics technology product purchased, and amount of services needed from an outside vendor. In addition, the amount of federal funding requested by these Medicaid agencies to assist in the implementation of their solutions varied widely, from a few million dollars to more than \$15 million.

The Department has learned of other states' best practices and challenges they have experienced while implementing pre-payment predictive analytics solutions, including how to apply such technology to their claims processing systems and utilizing it within their prompt payment laws to review claims before they must be paid under state statute. Challenges reported by the states include not having enough funding at the state level to implement pre-payment predictive analytics (all states reported that it received federal funding) and lacking adequate staff to follow up on leads generated by their system within the requirements of their prompt payment laws.

The Department has also researched how CMS is evaluating whether pre-payment predictive analytics should be expanded across all Medicaid programs in the future. As part of its report to Congress of its Fraud Prevention System in 2015, CMS reported successes in preventing payments to Medicare providers, however, it noted that a rollout of a single pre-payment predictive analytics program to all Medicaid programs nationwide would not yield the same level of achievement because each Medicaid program has specific and unique rules and requirements from one another. Instead, CMS has offered technical assistance to states who are considering implementing pre-payment predictive analytics programs on their own. In addition, CMS is



offering federal matching funds of at least 75 percent to assist Medicaid agencies in their implementation of a pre-payment predictive analytics solution.

In order to further develop the pre-payment predictive analytics program within the Colorado Medicaid program, the Department has determined that several items should be examined:

- The Department has learned from other states that their pre-payment predictive analytics models are based on previous audits and reviews conducted by traditional post-payment reviews and newer post-payment predictive analytics reviews. Post-payment predictive analytics reviews use data analytics tools to identify trends of aberrant behavior; this information can be used on the front end to create system edits and algorithms that would catch incoming claims and prevent payment from happening. In addition, these states all reported challenges with having enough time to review flagged claims within the time constraints of their prompt pay laws. While laws vary from state to state on how many days a claim could be held for review prior to adjudication—between 25 to 45 days—all states reported that all leads could not be reviewed because they lacked staff, which resulted flagged claims to be paid and reviewed later on in a post-payment review.

All states reported that their pre-payment predictive analytics program goes hand-in-hand with their post-payment review work, and recommended that any pre-payment predictive solution include a post-payment function. The states' post-payment audit systems and processes all had pre-payment implications that could help determine the most efficient path to focus pre-payment predictive analytics and eliminate potential overpayments. For the Colorado Medicaid program, post-payment predictive analytics functionality will be implemented by spring 2017, which will enhance the Department's existing provider compliance monitoring efforts. The Department will be launching new software that will give analysts and investigators new tools that were not available before:

- ArcGIS Geospatial mapping software that can help the Department better understand and visualize client and provider location data;
- Hyland Onbase Information Case Management Tool that allows the ability to store, monitor and track audit review cases across multiple Department areas in one central system;
- Informatica data integration platform that can bring together data from multiple sources into one central, accessible location;
- IBM i2 Social Networking Tool that analyzes client and provider data for relationships, patterns and associations;
- SAS Analytics that will improve data mining, as well as forecasting and modeling of client populations; and
- Truven Advantage Suite that allow for more streamlined and comprehensive reporting abilities.

As the Department adjusts to these new post-payment auditing abilities, it will take into account other states' recommendations and conduct further research in how it can apply



its own post-payment review experience to a new pre-payment predictive analytics implementation. The Department will also consider staffing challenges heard from the other states and look at how the Department can properly implement a pre-payment predictive analytics solution with enough staff to run it.

- The Colorado Medicaid Management Innovation and Transformation project (COMMIT) will redesign and redefine systems and business processes for the Colorado Medical Assistance program with a new service delivery model system, while also providing new user-friendly interfaces and business intelligence and analytics tools for easy access to data and comprehensive reporting. Launched in 2012, the COMMIT is made up of three major components:
  - The interChange will move the Department from the aging Medicaid Management Information System, to a new claims processing and payment system that will be able to support cost-effective business process and improve health outcomes;
  - The Business Intelligence and Data Management system (BIDM) is a first-of-its-kind data warehouse that will collect, consolidate, and organize data from multiple sources for reporting and business process analysis; and
  - The Pharmacy Benefits Management System (PBMS) will process all pharmacy claims and serve as a point of sale system, giving pharmacies real-time approval to dispense medications to Medicaid members.

All three systems under COMMIT will revolutionize how the Department will handle, report and analyze claims data. The Department's prepayment analytics work has been informing the implementation of COMMIT and vice versa since September 2015. This includes providing input on system requirements, participating in design sessions, test case writing, software and systems testing, and training. In addition, the Department has already conducted post-payment audit work, including contacting providers and issuing demand for overpayment letters for billing errors found within claims. The information learned from these reviews—from researching state and federal rules and regulations to identifying provider billing patterns and behaviors—will be used as the groundwork to develop data algorithms that will become a part of the Department's prepayment predictive analytics solution to prevent Medicaid payments on erroneous claims. As the Department continues its implementation of the interChange, BIDM, and PBMS, it will work to best leverage these systems and determine how a pre-payment predictive analytics solution will compliment this new environment.

- As the COMMIT project is implemented, the Department will also gain a clearer picture of how pre-payment predictive analytics should be programmed within the new systems, specifically what modifications would be required and how much it will cost the Department to implement. In an effort to remain aligned with the Department's Performance Plan of ensuring sound stewardship of state funding and taxpayer dollars, the Department is researching opportunities for federal funding, as well and examining



**Health Care Policy and Financing**  
**FY2016-17 RFI #1**  
**Page 4 of 4**

how enhancements from COMMIT could also be leveraged in pre-payment predictive analytics solutions.

The amount of extensive research conducted in this past year, along with sweeping technological changes in the near future, has laid down a path for the Department to continue toward its goal of having a pre-payment predictive analytics model within Colorado's Medicaid program. The Department fully believes that this solution will improve its ability of overseeing providers while also demonstrating sound stewardship of the state's resources and taxpayer dollars.

