Scenarios to Illustrate the Offeror's Proposed Solution

Scenarios to Illustrate the Offeror's Proposed Solution

HP welcomes this opportunity to demonstrate how our proposed solution handles specific business scenarios. Showing how we address a business scenario end-to-end gives the Department insight into how the parts of the overall solution come together to serve Colorado's business needs.

The interChange MMIS directly addresses the forward-looking needs of Colorado stakeholders. Using the guiding principles of the CMS Seven Conditions and Standards, the Colorado interChange MMIS drives the users to effective business results. From extensive user configuration capabilities to immediate self-service capabilities for clients and providers, Colorado interChange is all about flexibility and adaptability.

In the following sections, we describe how Colorado interChange MMIS simplifies the level of effort involved in updating the MMIS to accommodate the individual business scenarios. Besides the narrative responses provided, we have provided a series of videos aligned to the business scenarios as a means of communicating the depth of value that the Colorado interChange offering provides to the Department. If a picture is worth a 1,000 words, the videos of the advanced business features of Colorado interChange are priceless for gaining an understanding that this solution offers high value to the Department and Colorado clients and providers. Before responding to the individual scenarios, we would like to provide an overview of the interChange Business Policy Administration (BPA) functional area, which is related to many of the scenarios.

The BPA rules are responsible for the vast majority of claims adjudication, pricing, editing, and auditing decisions. The configurability built into the BPA rules gives the Department the flexibility and scalability to use the Colorado interChange MMIS for preadjudication transaction processing for multiple programs across the Medicaid enterprise. The BPA rules engine defines and processes these rule types:

- **Provider Contract Rules**—What services a provider is allowed to perform

- **Member Plans Rules**—What services a client is eligible to receive

- **Reimbursement Rules**—What pricing methodology to apply

- **Assignment Plan Rules**—What services to carve out of a capitated managed care plan

- **TPL Rules**—What services are covered by carrier-specific rules, allowing cost avoidance and recovery

- **Edit Rules**—Edits are rule-driven through configuration

- **Audit Rules**—Audits are rule-driven through configuration

- **Copay Rules**—Client responsibility amount

Because a client can have more than one member benefit plan or assignment plan, the BPA rules engine defines a benefit plan hierarchy and assignment plan hierarchy. Each unique combination of benefit or assignment plans is entered as a thread on the corresponding hierarchy table. The hierarchy enables the State to maximize its federal financial participation rate by ranking the member plan with the highest federal match as a higher priority than the lower-matched plans. The ability of an MMIS to be adaptable and meet the changing business demands is based on key principles of the system architecture. One of those keys is the use of a rules engine tailored to healthcare. Through the interChange BPA rules engine, HP pre-dates the CMS 7SC vision. Our innovation has been ahead of the curve, and because of our experience in having the BPA rules engine serve multiple state customers, we are highly confident that the Colorado-specific business needs will be efficiently addressed.

Besides our investment in business rules separated from application logic, we have been leading the market in other aspects of the 7SC. From interoperability through interChange Connections, to integrated workflow that increases MITA process maturity levels to advanced analytic dashboards, the interChange MMIS is ready to meet the Colorado business scenarios.

Following the specific scenarios defined by the RFP, we have included five additional scenarios to round out highlights of the total offering.

RESPONSE 41

RESPONSE 41: Scenario One: How does the Offeror's proposed solution create a new Health Benefit Plan (Ambulatory Services only) for an existing client population with the following conditions:

- **New plan provides coverage for ambulatory medical services only. Ambulatory services include outpatient, physician visits, and radiology services.**

- **Covered services fee schedule is 10% more than the regular Medicaid benefit plan.**

One of the constants in the dynamic business of state healthcare is change. Change manifests itself in numerous ways, such as new client populations being covered for care, a set of benefits for which they are eligible, or the business model that covers those services. Because HP has the broadest state customer base in Medicaid, we have experienced the greatest number of these business model requirements compared to all other vendors. From aspects of fee-for-service to multiple variations of managed care arrangements to hybrid approaches that include accountable care arrangements, our team has met each of these challenges.

CLICK FOR VIDEO

A video demonstration follows our narrative response.

To address the continued evolution of healthcare, the HP team took a step back and carefully thought through how to simplify the management of these updates. The solution should be flexible to enable various code values to define the business rules. The solution should be adaptable to support the various healthcare business models and most of all the solution should put the power of the creation and maintenance of these rules directly in the hand of business analysts. Through our analysis and development, we created a healthcare-focused business rules management capability long before CMS set the vision for this work through the Seven Standards and Conditions. This means our solution inherently offers the following benefits to the Department:

- Online business policy administration rules
- Flexibility of the number of variables rules can use
- Ability to copy and inherent rules to ease maintenance
- Adaptability to server multiple healthcare models
- Business policy analysts empowered to perform configurability
- Helps maximize federal benefit funding

For this particular business scenario of creating an ambulatory benefit plan for an existing population, the BPA rules engine provides significant flexibility of how those rules defining this policy are implemented. For example the plan could be configured using data attributes, including geographic location of the provider or client, the provider role (performing or billing), the diagnosis, the age of the client, or the use of a single or multiple modifiers on the claim. To simplify the long-term maintenance of the rules, the configuration can be performed at any level.

Configuration can be done at the most detailed level, such as the procedure code, or at a high grouping level, where the rule would encompass the subsets within the folder.

We built our BPA solution specifically for the business of Medicaid and the varied healthcare delivery model that Medicaid supports. A primary benefit of the BPA processing is that our solution processes each service detail separately through the plan rules. By taking this approach, we apply the most applicable benefit plans to each detail on the claim. Most healthcare systems that are commercial payer-based systems typically do one plan for the whole claim, taking a "most likely to cover approach." The Colorado interChange BPA approach is a more accurate way to adjudicate the services and produces significant savings for the state by maximizing the application of federal participation plans. When possible, the federal matching plans are applied first under our rule hierarchy structure with the state-only benefit plans applied if other plans are found not to apply.

The Colorado interChange solution brings this innovation to the Department with flexibility, adaptability, and optimization of benefit expenditure management. The following are our responses to the detailed requirements related to this scenario.

In this scenario, the new benefit plan was for an existing client population and required no customization to create the new benefit plan or reimbursement rule.

Authorized business analysts create the new client benefit plan (ambulatory services only) through the BPA benefit maintenance web pages and configure the rules through the business rules editor. To create the new benefit plan, the business analysts navigate to the BPA Benefit Maintenance screen and selects add, as shown in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

After entering the client plan ID, selecting the type of plan benefit, entering a short and long description, selecting the associated financial payer, and entering the effective and end dates, the analyst saves the benefit plan. After the plan has been saved, the business analyst selects the benefit rules tab to begin configuring the coverage rules.

Before creating the rules, the business analyst must indicate which code sets to use for the rules. This can be the standard code sets—such as Current Procedural Terminology (CPT), Health Care Common Procedure Coding System (HCPCS), and Diagnosis-Related Groups (DRGs)—or the analyst can create a customized code set that consists of a subset of the standard code sets. After the code sets have been established, the analyst can begin defining the rules.

As shown on the following figure, rules can be created at any level within the code set tree.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The business analyst checks out the blank rule sheet associated with the newly created benefit plan. The process of checking out the rule sheet "locks" the rule sheet from being edited or modified by another user. The analyst configures the criteria for coverage for the "Ambulatory Services Only" plan by choosing the level to create the rule, selecting the variables to include, and entering the criteria. For example, to create a rule at the benefit grouping of "consultations" within the CPT code set, the analyst would open the UI by selecting create a new record to reach the following web page.

As shown in the following figure, the analyst enters the ages for coverage, enters the dates of service, selects the appropriate claim types, and selects the relevant places of service codes before clicking "submit." The rule is then displayed in human-readable format.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The analyst repeats the process for the applicable code sets, and then submits the rule sheet for approval, as shown in the following figure. The rule sheet is then routed through workflow to the next person in the process for review and approval. The change management process within the Colorado interChange enables authorized users to create and change rules in a controlled manner so only approved changes are used for claims adjudication.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

After creating the coverage rules for the new client benefit plan, the next step in this scenario is to verify there is an entry in the benefit plan medical status code cross-reference table. This table is used to determine which benefit plans a client is eligible for based on the medical status or aid category for the client as shown in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The business analyst selects "add," then completes the fields through the drop-down selectors and entering effective and end dates. The managed care indicator is used to designate the benefit plan as a managed care plan. After completing the fields, the analyst selects "save," and they are ready for the next step.

In our scenario, the requirement was to allow 10 percent more than the regular max fee amount. Therefore, the business analyst needs to create a benefit adjustment factor (BAF) or find an existing BAF that allows 10 percent more. The BAF is defined in the supporting tables within Benefit Policy Administration. The business analyst navigates to the benefit adjustment factor table shown in the following example and looks for an entry that meets their criteria. If none exists, the analyst clicks "add" to create one. The following figure shows an example of the adjustment factor web page.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

For each adjustment factor the analyst specifies the rate—a specific dollar amount, percentage, or both—which is to be applied. Additionally, the analyst also specifies when to apply the calculation: before or after comparing the billed amount to the allowed amount and the effective, end, and inactive dates. In our scenario, benefit adjustment factor 1005 already exists, which adds 10 percent to the max fee before comparing the billed amount to the allowed amount.

Similar to the process for client benefit plan, the analyst checks out the rule sheet through the BRE by selecting rule type of Reimbursement Agreement (RA), and then the corresponding provider contract to define the rule for pricing.

The analyst opens the UI and selects the criteria for pricing the particular service as shown in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

After selecting or entering the criteria for the reimbursement agreement, including the selection of the benefit adjustment factor, the business analyst inserts the record and submits the rule sheet for approval.

The final step is to create an entry on the benefit plan hierarchy table for the new benefit plan. The hierarchy table indicates the order in which benefit plans will process when a client is eligible for more than one benefit plan. It also is a means for the Department to maximize federal funding by placing a higher priority on those plans with the highest federal match.

In summary, for this scenario, the business analyst completed the following steps:

- Created a new benefit plan through the UI

- Configured the benefit coverage rules

- Updated the benefit plan medical status code cross-reference table

- Configured the reimbursement agreement rules to allow 10 percent more than the max fee

- Updated the benefit plan hierarchy table

The MMIS handles interoperability through interChange Connections, which provides the following benefits:

- Message delivery protocol (both inbound and outbound) is abstract from the processing engine

- Allows for message delivery to be handled by configuration rather than code

The value to the Department is simplification of changes in the future for the overall healthcare program and the interaction with the MMIS.

For this scenario, the Colorado interChange will communicate with the State eligibility system to collect information on the customer to assign the correct client benefit plans to the customer. Each client benefit plan would have its own effective and end dates.

The HP solution aligns with CMS' Seven Standards and Conditions. The following table outlines how different components of our solution align with 7SC.

Solution Alignment with CMS 7SC

Condition	Feature	How HP meets
Modularity Standard	Rules	Business Policy Administration (BPA) rules perform nearly all claims adjudication logic. These rules are human readable, manageable, and publishable. These Claim Adjudication Rules can be authored, edited, managed, and approved through spreadsheets outside the system, and then imported into the system for processing.
Modularity Standard	Rules	Identifiers of the rule actually used in claim processing are stored with the claim indefinitely for reference.
Modularity Standard	API, Modularity, SOA architecture	Clearly defined Application Programming Interfaces connect interChange components. Healthcare Portal, HP Exstream, IBM OnDemand, and Business Objects Operational Dashboards all expose and use clearly defined APIs to perform their functional capability as part of a service-oriented architecture.
Modularity Standard	Design	The Colorado interChange core architecture is based on the separation of presentation, business, service, and data access layers. The functional capability specific to each layer is separated for increased flexibility and modularity.
Modularity Standard	BPA Rules	BPA is a purpose-built rules engine that can be configured within the UI or through external worksheets. Most claim adjudication logic is configured within this rules engine.
Leverage Condition	EDI/BES	HP Business Exchange Service (BES) provides a common EDI Translation Service for both government and commercial enterprise.

Condition	Feature	How HP meets
Industry Standards Condition	UI	UI design and development processes comply with the Rehabilitation Act's section 508(c) standards and are verified by automated external UI testing.
Interoperability Condition	ESB	The interChange Connections Service Delivery Components receive, translate, process, and track HIPAA compliant transactions and batch files. This important component of our SOA solution orchestrates the activities enabling flexible and secure data exchanges.
Interoperability Condition	ESB/EDI	The interChange Connections Solution simplifies sharing standard transaction sets with trading partners through an integrated enterprise service bus (ESB), file tracking system and service-monitoring framework.
Interoperability Condition	ESB	Simplify data exchange and integration with external agencies and programs through interChange Connections.
Interoperability Condition	ESB	The interChange Connections enables collaboration, open and reusable programs, applications, systems, centralized business rules, enhanced security features, and centralized web services UDDI registry.
Business Results Condition	UI Enhancements	@neTouch functions enable staff to significantly enhance productivity. Now, the information they are looking for is literally available at the touch of a button.
MITA Condition	UI MITA Process Steps	The UI is closely aligned with MITA business processes. Many UI Web pages present the most common MITA Business Process functions that are performed by that Web page.
MITA Condition	Online Help	Interconnected online help is available at three levels—field, panel, and Web page. The page- level help presents the MITA Business Process Steps supported by that Web page.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

RESPONSE 42

RESPONSE 42: Scenario Two: How does the Offeror's proposed solution handle a new client population that needs to be enrolled into several existing Health Benefit Plans with the following conditions:

- **New client population will have a unique data element sent from the eligibility system.**

It is said that the best way to solve a problem is to have already solved the same challenge before and apply that lesson to the current situation. A trend within state healthcare business is the need to define the rules around new client populations in a fast and effective manner. With the experiences our teams have gained by being the fiscal agent in more states than any other vendor, we have solved this kind of business challenge many times before. Our solution provides the adaptability needed to solve these business requirements in an organized and controlled manner.

CLICK FOR VIDEO

A video demonstration follows our narrative response.

SOA INTEROPERABILITY

The interChange MMIS places a particular focus on interoperability, understanding that the MMIS is a component of the broader healthcare environment. Our experience and development efforts have culminated in the creation of the interChange Connections module. The Connections module is best solution for COMMIT because:

- Adaptability of the MMIS to information management
- Interoperability of the MMIS with outside stakeholders
- Empowered by market leading COTS packages

Specific to this business scenario, interChange Connections enables the ability to accept the new client eligibility data from the state eligibility system. At the translation portion of the Connections model is where the new data attribute would be mapped to the internal interChange processing. If business translation must be performed on the field, HP will configure the translation logic to perform that work.

Now that the new eligibility population is received by the MMIS, the rest of the configuration occurs by business analysts within the interChange Business Policy Administration module. The new aid category and aid status code can be cross-referenced to multiple benefit plans as applicable. This is configuration work done directly by the business analyst. This configuration setup provides further benefit when future inquiries are made related to the client's benefit plan. The results provide the details such as the medical status code (aid code) and the percent of poverty level. The important aspect of the solution is that this information is online, and the cross-reference provides the traceability from how the client is defined as eligible for specific benefits.

The interChange solution brings this innovation to the Department delivering benefits of faster adaptation across the life of the contract to changes in the client community served. The following are our responses to the detailed requirements related to this scenario.

Because of the flexibility and interoperability of interChange Connections and the configurability of the interChange MMIS, no customization is required to accept a new data element and map it to an existing field.

The following response walks through how the interChange MMIS adapts to the scenario of a new client population that needs to be enrolled into several existing health benefit plans and specifically where the updates include a unique data element sent from the state's eligibility system.

The interChange MMIS facilitates the adaptation of the business demands through a series of updates described later in this section. The interChange MMIS efficiently supports this change, starting with the interoperability update to pull in the new data attribute and extending to the configuration of the business rules for the new population into the existing benefit plans. The first of the updates would be to the acceptance of the updated eligibility information.

The existing interactions between the Department's eligibility file and the MMIS Client Management business module is managed through interChange Connections. The following figure illustrates the orchestration that the interChange Connections module provides to the solution.

interChange Connections – Interoperability
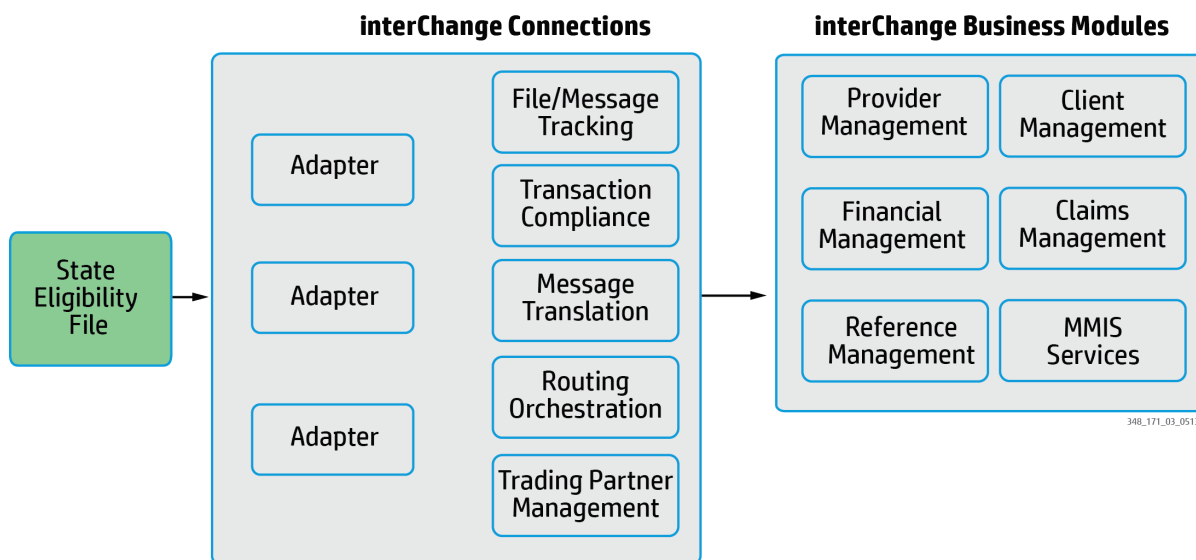
In this scenario, the Department has made a decision to add a new unique data element to their eligibility file. Because of this change, the first alteration is within interChange Connections. We make a change at the message translation level to map the new data element to an existing medical status code or a new medical status code.

For this scenario, we assume we are mapping the unique data element to a new medical status code. interChange uses the medical status to map the client to the specific benefit plans for which clients are eligible. Having this assignment configuration capability performed through the user interface makes these updates fast and effective. Now that the system can accept the new data element as part of the eligibility file, the next steps are within the Colorado interChange MMIS. First, we need to add the new medical status code shown in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The business analyst selects add, then completes the required fields by entering the new medical status code, providing a description, indicating if this new code has a related premium, selecting the dual enrollment status from the available drop-down list, selecting the institutionalized status, and finally selecting the % Federal Poverty level. After completing these fields, the analyst clicks on "Save" to add the record.

Now that we have created the medical status code, the next step is to configure the association with the appropriate benefit plans. The business analyst opens the benefit plan medical status cross-reference table—shown in the following figure—and adds a new record by selecting the benefit plan from the drop down list. After that, the analyst selects the new medical status code from the drop-down list, enters the effective and end dates, and indicates if the cross-reference is to be used for a client assignment plan or managed care, then clicks "Save."

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The business analyst adds an entry in the cross-reference table for each unique combination of medical status code and benefit plan.

The next steps are to complete the benefit plan hierarchy and assignment plan hierarchy tables. The benefit plan hierarchy determines the order of processing when a client has one or more benefit plans. This configuration feature allows the Department to place the higher federal matching benefit plans at the top of the hierarchy, maximizing federal funds. The assignment plan hierarchy enables the Department to determine the order of processing when a client has one or multiple assignment plans.

In summary, we have shown how we mapped the new unique data element to a medical status code through interChange Connections, created the new medical status code in interChange, cross-referenced that medical status code to a benefit plan, and then determined the hierarchy order when a client has multiple plans. Because we have made the changes through interChange Connections and the UI, the interaction between the Department's eligibility file and the Client Management Business module is simplified.

interChange Connections Enterprise Service Bus handles interoperability with the MMIS, which allows unparalleled interoperability both within interChange and to external clients by offering the following capabilities:

- **Abstract Message Delivery**—Message delivery between two points is managed by the ESB, so end points and connection information are not stored within applications. Additionally, this allows systems to communicate using any delivery protocol.

- **Message Translation**—Messages between two points can be transformed from their native format into a standardized format. This allows changes in message format to be configured within the ESB rather than maintaining code.

The value of the Enterprise Service Bus as an integration hub removes the complexity of integration changes from the overall healthcare program and the interaction with the MMIS.

For this scenario, the Colorado interChange MMIS will interface with the Department's eligibility system through interChange Connections to collect information on the client to assign the correct client benefit plans to the client. Connections is the conduit by which interoperability is performed for information exchange in and out of the MMIS. Each client benefit plan would have its own effective and end dates.

The HP solution aligns with CMS' 7SC. The following table outlines how different components of our solution align with 7SC.

HP Solution Alignment with 7SC

Condition	Feature	How HP meets
Modularity Standard	interChange Business Policy Administration (BPA) Rules Engine interChange Connections	The modularity aspect of the 7SC places an emphasis on the use of business rules separated from the processing logic. Through the interChange BPA rules engine, the business analyst can configure the aspects of the business rules that align to this scenario of a new client population. Additionally, through the Connections module of the solution the existing SOA framework is shared saving time on the interoperability updates that have to be made to the MMIS.
MITA Condition	interChange BPA	By having the rules update process performed through the interChange user interface with integrated change management built into the rule update activities the business process of performing the configuration is at a higher level of maturity. .
Industry Standards		This is not applicable to this particular business scenario.

Condition	Feature	How HP meets
Leverage Condition	interChange Connections Correspondence Management	Additionally, through the Connections module of the solution, the existing SOA framework is used—saving time on the interoperability updates that have to be made to the MMIS. The correspondence management capability is used when the business scenario warrants direct communication with the clients such as notification of managed care eligibility.
Business Results	interChange BPA	Because of the ease of updates to the MMIS and the direct configuration that business analysts can perform, the direct business results of having an additional client population served through the leveraged MMIS is a cost-effective way to expand the value of this health payer system and take care of the greatest number of clients care activities.
Reporting Condition		This is not applicable to this particular business scenario.
Interoperability Condition	interChange Connections	Additionally, through the Connections module of the solution, the existing SOA framework is used—saving time on the interoperability updates that have to be made to the MMIS.

RESPONSE 43

RESPONSE 43: Scenario Three: How does the Offeror's proposed solution handle the need to create a new Health Benefit Plan that is a hybrid of fee-for-service and a managed care organization with the following conditions:

- **Fee for service benefit plan is similar to the regular Medicaid fee for service benefit plan, with the exception of disease management.**

- **Client receives disease management services from a managed care entity.**

To address the many benefit management needs of the client population an MMIS needs to be able to configure not only multiple benefit plans, but also provide the ability to support hybrid approaches. The solution must be adaptable to support the various healthcare business models and put the power of the configuration directly in the hand of business analysts. The following highlights why our proposed solution is the best for the Department:

CLICK FOR VIDEO

A video demonstration follows our narrative response.

- Supports client plan assignment
- Provides flexibility in client assignment plan rule configuration
- Supports hybrid benefit plan configuration
- Enables rule relationship hierarchy configuration
- Business policy analysts empowered to perform configurability

For this business scenario of creating a hybrid benefit plan that includes properties of fee-for-service (FFS) and managed care, the interChange BPA rules engine is particularly strong. Through BPA, a client can be assigned to multiple assignment plans, such as the fee-for-service base Medicaid plan and a specific managed care plan covering disease management services. This capability could be applied to the creation of a special disease management focus on diabetes or other client care priorities. The BPA module is built specifically for state healthcare and the combinations of benefit management that are unique to this business. BPA can manage Medicaid while taking into account related arrangements, such as managed care organization (MCO) and FFS offerings. Additionally, BPA can be configured to define dependencies on the assignment plans such as, requiring a particular FFS plan to have a specific MCO disease management assignment plan. By being able to configure this dependency of the rules, if a claim comes in as fee-for-service, but the diagnosis is in the disease management list, the rules would determine that the MCO is responsible for those services.

The Colorado interChange solution brings this innovation to the Department, delivering health plan configuration flexibility to support the delivery models used to best manage the client's care. The following are our responses to the detailed requirements related to this scenario.

Because of the flexibility and configurability of the Colorado interChange MMIS, no customization is required for this scenario.

In this scenario, the client would have both a fee-for-service client benefit plan and a disease management assignment plan. The authorized business analysts create a new client benefit plan for fee-for-service only through the BPA benefit maintenance screens and configure the rules through the business rules editor. To create the new benefit plan, the business analysts navigate to the BPA Benefit Plan Maintenance screen and select "add" as shown in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

After entering the client plan ID, selecting the type of plan benefit, entering a short and long description, selecting the associated financial payer, and entering the effective and end dates, the analyst saves the benefit plan. After the plan has been saved, the business analyst selects the benefit rules tab to begin configuring the coverage rules.

Before creating the rules, the business analyst must indicate which code sets to use for the rules. This can be the standard code sets such as Current Procedural Terminology (CPT), Health Care Common Procedure Coding System (HCPCS), Diagnosis Related Groups (DRGs), and so on, or the analyst can create a customized code set that consists of a subset of the

standard code sets. After the code sets have been established, the analyst can begin defining the rules. As shown in the following figure, rules can be created at any level within the code set tree.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The business analyst checks out the blank rule sheet associated with the newly created benefit plan. The process of checking out the rule sheet "locks" the rule sheet from being edited or modified by another user. The analyst configures the criteria for coverage for the "Ambulatory Services Only" plan by choosing the level to create the rule, selecting the variables to include, and entering the criteria. For example, to create a rule at the benefit grouping of "consultations" within the CPT code set, the analyst would open the rule user interface by selecting create a new record to go to the following screen.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

On this screen, the analyst enters the ages for coverage, enters the dates of service, selects the appropriate claim types, and selects the relevant places of service codes then clicks "submit." The rule is then displayed in human readable format.

The analyst repeats the process for the applicable code sets, and then submits the rule sheet for approval. The rule sheet is then routed through workflow to the next person in the process for

review and approval. The change management process within Colorado interChange enables authorized users to create and change rules in a controlled manner so only approved changes are used for claims adjudication.

Next, the benefit analyst would repeat the previous steps and create a client assignment plan for the disease management plan, such as diabetes management. When creating the plan, the analyst selects "assignment plan" rather than "benefit plan," but the remaining steps are the same.

After creating the coverage rules for both the new client benefit plan and the new assignment plan, the next step in this scenario is to be sure there is an entry for each in the benefit plan medical status code cross-reference table. This table, shown in the following figure, is used to determine which benefit plan(s) a client is eligible for based on the medical status or aid category for the client.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The business analyst selects "add," and then completes the fields through the drop-down selectors and by entering effective and end dates. The managed care indicator is used to designate the benefit plan as a managed care plan. After completing the fields, the analyst selects "save," and they are ready for the next step.

The final step is to create an entry on the benefit plan hierarchy table for the new benefit plan and on the assignment plan hierarchy. The benefit plan hierarchy table indicates the order in which benefit plans will process when a client is eligible for more than one plan. It is also a means for the Department to maximize federal funding by placing a higher priority on those plans with the highest federal

match. The assignment plan hierarchy enables the State to determine the order of processing when a client has one or multiple assignment plans.

In summary, for this scenario, the business analyst completed the following steps:

- Created a new benefit and assignment plan through the UI
- Configured the benefit coverage rules and the assignment plan coverage rules
- Updated the benefit plan medical status code cross-reference table
- Updated the benefit plan and assignment plan hierarchy tables

The analyst implemented the business logic using simple configuration steps, with no assistance or intervention from a developer (customization). The raw configurability and ease of use of our BPA rule management process will bring the Department flexibility that only an HP interChange implementation can provide.

Interoperability is attained through interChange Connections, which features an Enterprise Service Bus (ESB). The ESB is a core component required to implement a service-oriented architecture (SOA), and thus the interoperability condition of the CMS Seven Standards and Conditions (7SC).

We provide more details on our interChange Connections solution in RESPONSE 39i and 38q.

The Colorado interChange MMIS will exist within a much larger ecosystem, encompassing eligibility data (CBMS), financial data (COFRS), integrity and analytics data (BIDM vendor), pharmacy data (PBM vendor), and Medicare and PA vendors, to name just a few.

HP has a rich breadth of experience integrating diverse systems across 20 current MMIS implementations, and will implement the robust and flexible interChange Connections SOA-compliant solution to meet this critical requirement. The wide range of communication adapters available in interChange Connections will enable the Colorado MMIS to exchange data with ancillary systems, both internal to the State and external vendors or entities.

We provide more details on our interChange Connections solution in RESPONSE 39i and 38q.

The HP solution aligns with CMS' Seven Standards and Conditions. In the following table we outline how different components of our solution align with 7SC.

HP Solution Alignment with CMS' 7SC

Condition	Feature	How HP Meets
Modularity Standard	SDLC	The HP System Development Life Cycle (SDLC) methodology provides a robust and comprehensive set of life cycle activities that support the system

Condition	Feature	How HP Meets
		design and development. It integrates Project Management Life cycle and includes support for the following work streams: Organization Change Management; Business Process and Requirements Traceability; Data Governance, Management and Conversion; Infrastructure Engineering and Deployment; Quality Management and Testing; and Training.
Modularity Standard	Rules	Benefit Plan Administration (BPA) rules perform claims adjudication logic. Rules are human readable, manageable, and publishable. Claim adjudication rules can be authored, edited, managed, and approved through spreadsheets, and then imported into the system.
Modularity Standard	Rules	The rules a claim passes through on its path to adjudication or denial are stored with the claim and are available indefinitely for reference.
Modularity Standard	API, Modularity, SOA architecture	Clearly defined APIs connect Colorado interChange components. Healthcare Portal, HP Exstream, IBM OnDemand, and Business Objects Operational Dashboards expose and use clearly defined APIs to perform their functional capability as part of a service-oriented architecture.
Modularity Standard	Modular Components	Web Portal, EDI, interChange Connections, and HP Exstream are examples of loosely coupled components or services that support the Colorado interChange solution. TPL Coordination of Benefits is one example of loose coupling with partners to support healthcare administration. The interChange user interface is logically separated at the subsystem level (such as provider, recipient, or claims). Each subsystem functions as a discrete, modular component, communicating with other subsystems using an interface contract.
Modularity Standard	Design	The interChange core architecture is based on the separation of presentation, business, service, and data access layers. The functional capability specific to each layer is separated for increased flexibility and modularity.

Condition	Feature	How HP Meets
Modularity Standard	Benefit Plan Administration (BPA) Rules	BPA is a purpose-built rules engine that can be configured within the UI or through external worksheets. Most claim adjudication logic is configured within this rules engine.
Leverage Condition	Correspondence Generation	HP Exstream uses open API interfaces and can be deployed as a cloud-based software as a service solution for correspondence generation.
Leverage Condition	Care and Case Management	HP will integrate Colorado interChange with a cloud-based implementation of the McKesson VITAL platform. This approach will allow scalability and provide the Department with a leading care and case management capability.
Leverage Condition	Workflow and Rules Engine	K2 blackpearl provides end-to-end workflow orchestration and management integrated directly within the interChange UI application. We use Corticon rules engine to define configurable business rules within the application. Corticon is ranked as a BRE leader by Gartner (Magic Quadrant) and Forrester (WAVE).
Leverage Condition	MAPIR	Medical Assistance Provider Incentive Repository (MAPIR) is a multistate, web-based portal, designed and maintained with the input from 13 states, to support Meaningful Use applications and track meaningful use participation and payments for providers.
Leverage Condition	SunGard	SunGard Data Capture provides a leading COTS Optical Character Reader (OCR) translation from paper to XML.
Industry Standards Condition	Testing	HP LoadRunner and Quick Test Pro enable standardized and repeatable testing to evaluate compliance and performance.
Industry Standards Condition	Healthcare Portal, Transaction Standards	Healthcare Portal supports HIPAA content-compliant transactions and includes standardized interfaces for provider and client services.
Industry Standards Condition	EDI	interChange supports X12 5010 HIPAA transactions, including the Council for Affordable Quality Healthcare (CAQH) CORE operating rules as described in ACA Section 1104.

Condition	Feature	How HP Meets
Industry Standards Condition	UI	UI design and development processes comply with the Rehabilitation Act's section 508(c) standards and are verified by automated external UI testing.
Interoperability Condition	ESB	The interChange Connections Service Delivery Components receive, translate, process, and track HIPAA compliant transactions and batch files. This important component of our SOA solution orchestrates the activities to enable flexible and secure data exchanges.
Interoperability Condition	ESB/EDI	The interChange Connections Solution simplifies sharing standard transaction sets with trading partners through an integrated ESB, file tracking system, and service monitoring framework.
Interoperability Condition	ESB	Simplify data exchange and integration with external agencies and programs through interChange Connections.
Interoperability Condition	ESB	interChange Connections enables collaboration, open and reusable programs and applications or systems, centralized business rules, enhanced security features, and centralized web services UDDI registry.
Business Results Condition	UI Enhancements	@neTouch functions enable staff to significantly enhance productivity. Now, the information they are looking for is literally available at the touch of a button.
Business Results Condition	Dashboards	interChange inSight operational dashboards keep staff informed of the key process indicators at a glance. This simplifies SLA and KPI monitoring.
Reporting Condition	Reporting	interChange inSight reporting services allow users to take the actual data that generated the operational reports and export as comma separated (CSV) files into the application of their choice. Data is not confined to a static, predefined report structure.
Business Results Condition	Claim Engine	The system supports online, real-time processing of claim types, including nursing home, institutional, and crossovers. This covers new claims, adjustments, and data corrections.

Condition	Feature	How HP Meets
Business Results Condition	Healthcare Portal/ interChange	Providers can interactively submit, correct, or adjust claim types through the HC Portal with adjudication results presented in real time.
Business Results Condition	Healthcare Portal/ interChange	Provider self-service supports claims inquiry and submission, including attachments; prior authorization and referral request and submission; RA download; check payment inquiry; Fee Schedules; and provider manuals and bulletins.
Business Results Condition	ESB	The interChange Connections provides dashboards for tracking, monitoring, and presenting every event and service transaction that travels across the ESB.
Business Results Condition	McKesson VITAL/ HC Client Portal	Clients can do more independently. The Client portal allows users find a doctor, check on their own claims, review their own prior authorizations, or find and download important information. With the McKesson VITAL platform, clients can help manage their own care in coordination with the case manager and physician in a shared environment.
Reporting Condition	Mapping	Geo-spatial mapping allows the user to understand the data in a whole new context. Now, data can be a presented as a dot on a map, not just a row in a report.
Reporting Condition	Business Intelligence and Analysis Reporting	Business Objects provides support for ad hoc reporting needs and allows point-in-time operational analysis to benefit both the Department and HP.
MITA Condition	User Interface (UI) MITA Process Steps	The UI is closely aligned with MITA business processes. Many UI screens include links to the most common MITA Business Process functions that are performed using that screen.
MITA Condition	Online Help	Interconnected online help is available at three levels: field, panel, and screen. The screen level help presents the MITA Business Process Steps supported by that screen.

RESPONSE 44

RESPONSE 44: Scenario Four: How does the Offeror's proposed solution handle the need to interface with existing and new data sources to support provider screening and validation. The systems or database that the proposed solution needs to interface with are:

- **LEIE/MED**
- **EPLS**
- **NPPES**
- **Medicare terminations**
- **Other state Medicaid or CHP terminations**
- **HHS' Healthcare Integrity & Protection Database**
- **Social Security Administration's Death Master File**

In today's healthcare environment there is heightened focus on reviewing the background of providers who want to participate in the Medicaid program. While in the past provider enrollment was more direct, the need to properly screen applicants to protect the client population and the benefit expenditure funds has transformed enrollment to encompass credentialing activities. To accomplish this work the MMIS must reach out to external data sources to validate an application. The following highlights why our proposed solution is the best for the Department

- Uses LexisNexis for coordinated background searches
- Gathers screening information from many sources
- Quickly identifies providers to decline during enrollment
- Prevents potential fraud and abuse activity up front
- Makes optimal use of provider enrollment staff efforts
- Aligns to the 7SC vision of service based interoperability

For this business scenario of interfacing with external data sources as part of provider screening and validation activity, the Colorado interChange MMIS solution uses a service-based approach. After a provider enrollment application has been completed by a provider in the Healthcare Portal, the interChange MMIS gathers the newly submitted application. The receipt of the application is the trigger event for the Provider Enrollment workflow. The workflow coordinates the standard business processes that must be followed for each provider type per application.

During the workflow activity a service call is made from interChange, through the interChange Connections Enterprise Service Bus (ESB) to our best-in-class vendor, LexisNexis. LexisNexis provides the value of "one-stop shopping" for provider screening and validation information. They have established relationships with the leading provider exclusion lists and consolidate that information and deliver it back to interChange to complete the service request.

When the interChange workflow receives the results from LexisNexus, the business rules engine interprets the results, and per the defined business rules, auto adjudicates the applications that meet approval criteria. Applications that do not pass the auto adjudication criteria are then passed to the next stage of the workflow process, where the enrollment team reviews the results and follows the defined protocols to request additional information, approve the application, or deny the application. Because the combination of the rules engine within the workflow orchestration auto adjudicates applications that pass defined rules, the provider enrollment team can focus its review efforts on applications that warrant greater scrutiny. Thus, the overall effort for provider enrollment is reduced and directed to applications that need the greatest attention.

The interChange solution brings this innovation to the Department, delivering service-based interoperability with a market-leading vendor who collects, summarizes, and passes back to the MMIS the provider validation and screening information that is critical for tight control of enrollments. The following are our responses to the detailed requirements related to this scenario.

The "Provider Management" Business Module gains access to the "Screening Sources" through services in an efficient manner and requires no customization for this scenario.

To increase the overall quality of the provider enrollment and screening processes, external provider screening data sources are checked during the enrollment business process. The provider enrollment process is a part of the Provider Management business area of the MMIS. Here, the applications that have been received through the HC Provider Portal are worked as part of the formal enrollment processes.

As noted in the following figure, the Provider Management process makes a service request through the interChange Connections module when needing to validate key information as part of the enrollment process.

Provider Enrollment Scenario 1
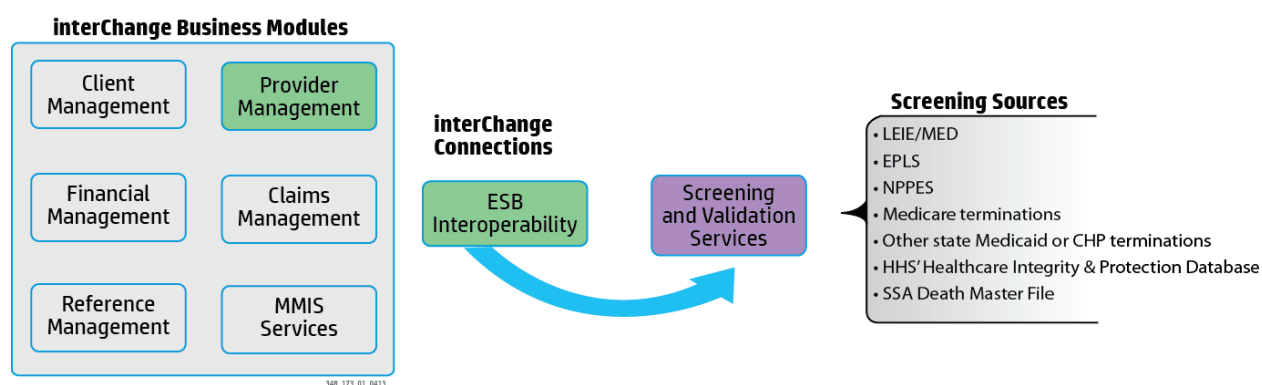
The interChange Connections module is how interoperability with Screening and Validation Services such as LexisNexis is established. The screening and validation services function as a conduit for simplifying the validation of multiple provider screening sources for the MMIS provider enrollment process. For example, LexisNexis has established relationships with a many the data sources to provide the information requested by the MMIS provider enrollment process.

As noted in the following figure, the screening and validation services return the requested results and the interChange Connections module coordinates the receipt of that information and routes it to the Provider Management business area of the MMIS.

Provider Enrollment Scenario 2
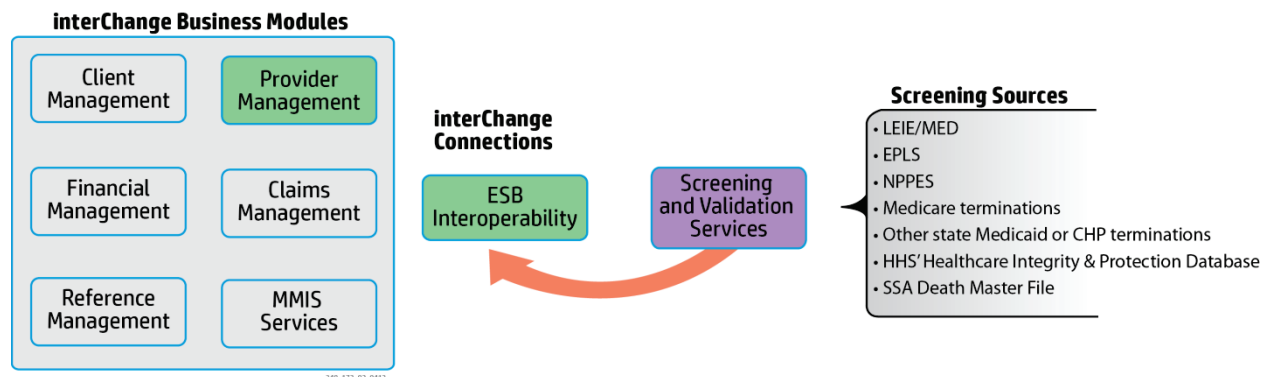
interChange Connections simplifies the interoperability of the MMIS to the broader healthcare ecosystem. Specifically for the added value of interfacing with the provider screening data sources, the MMIS through interChange Connections sends service requests to LexisNexis. Through the established relationships LexisNexis has with provider screening data sources, the process of validating a provider's background is simplified.

Interoperability is attained through interChange Connections, which features an ESB. The ESB is a core component required to implement a service-oriented architecture (SOA), and thus, the interoperability condition of the CMS Seven Standards and Conditions (7SC).

Specifically, interChange Connections provides the following benefits:

- Message delivery protocol (both inbound and outbound) is abstract from the processing engine

- Allows for message delivery to be handled by configuration rather than code

The value is simplification of changes in the future for the overall healthcare program and the interaction with the MMIS.

More details on our interChange connections solution can be found in RESPONSE 39i and 38q.

To enable this interoperability of the new MMIS, we will use our interChange Connections component that orchestrates interaction of the MMIS with the broader healthcare ecosystem. interChange Connections is driven by the BizTalk Server, which can be used for interfacing with the Department and the other various systems, such as Colorado Regional Health Information Organization (CORHIO). The following figure illustrates the role that interChange Connections plays as the gateway between the MMIS and the related healthcare entities.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

A fundamental purpose of the server is to support integration of the MMIS to external applications and enabling the communication between the MMIS and those applications through defined services. The important part of meeting this requirement is that the core framework and integrated tool solution based on Biztalk positions the State for expanding interoperability between the MMIS and other entities throughout the life of the contract. The HP solution aligns with CMS' 7SC. In the following table we outline how different components of our solution align with 7SC.

HP Solution Component to CMS 7SC Alignment

Condition	Component	How HP Meets
Leverage Conditions	interChange Connections	Because the interChange MMIS is built on a business services framework, we can use the building blocks such as the interoperability through interChange Connections.
Interoperability Condition	interChange Connections	For the interoperability of the MMIS to LexisNexis, the interChange Connections module directly aligns with the CMS vision through the introduction of an enterprise service bus to facilitate the connections.

RESPONSE 45

RESPONSE 45: Scenario Five: How does the Offeror's proposed solution handle the need to change interfaces when the State of Colorado procures a new financial management system (FMS). Describe how the Offeror's proposed solution can be Configured or Customized in order to interface with the new FMS and integrate all applicable FMS changes into the System with the following conditions:

- **All accounting codes (e.g. general ledger codes, appropriation codes) need to be replaced.**
- **Field names, types, and sizes have been changed.**
- **New fields and codes have been added.**
- **Interface hardware and software have been replaced.**
- **The FMS requires additional information from the System before processing payments.**

7 CMS
CMS 7 STANDARDS

In today's healthcare environment modularity and interoperability are the new norm. MMIS is less a monolithic tool and more a piece to the greater healthcare solution. Understanding that the MMIS must actively coordinate with and share information among other entities, we have created the interChange Connections module. interChange Connections functions as the conduit that facilitates EDI and ESB functions between the MMIS and other entities. This model is directly in line with the CMS 7SC for interoperability and the use of COTS tools to drive the orchestration of information. The solution proposed for COMMIT is the best solution for the following reasons:

CLICK FOR VIDEO
A video demonstration follows our narrative response.

- Facilitates the user of different adapters based on source system capabilities
- Enables file transformation between MMIS and external entities
- Orchestrates secure information delivery
- Aligns to the 7SC vision of service based interoperability

For this particular business scenario of adapting to a new state financial system, we will walk through the changes that would occur within the interChange Connections model. In the detailed responses, we will review the scenario where the original state financial application could communicate through SFTP while the new application enables HTTP communication. By performing the updates within the Connections module the core MMIS financial business module is insulated from changes making the overall update process simplified. Depending on the specific changes to be made during a financial application swap out, there certainly could be scenarios where the MMIS financial business area would have to be updated. For example, if new fields are to be included we would use our change management and release management process and procedures to perform the updates that would include potential database updates and coordinated application business logic updates. The changes would go through the controlled

testing practices and be released into UAT for validation, followed by production implementation.

The interChange solution brings this innovation to the Department delivering service based interoperability with a market leading vendor who collects, summarizes, and passes back to the MMIS the provider validation and screening information that is critical for tight control of enrollments. The following are our responses to the detailed requirements related to this scenario.

Depending on the specific scope of the change required of the new State financial system, there could be customization of the core MMIS financial module. In the scenario of new data attributes, the level of customization would include updates to the financial area data model and the specific business process logic intended to use the new data attributes when determining business processing functions defined at the time of the change.

Updates that include the database schema and the associated application logic are managed in a coordinated testing management and release effort so that the customization is tightly controlled for quality purposes. The existing interactions between the Department's financial application and the MMIS business modules is managed through interChange connections as illustrated in the following figure.

Original Financial Application Connection: Existing Protocol
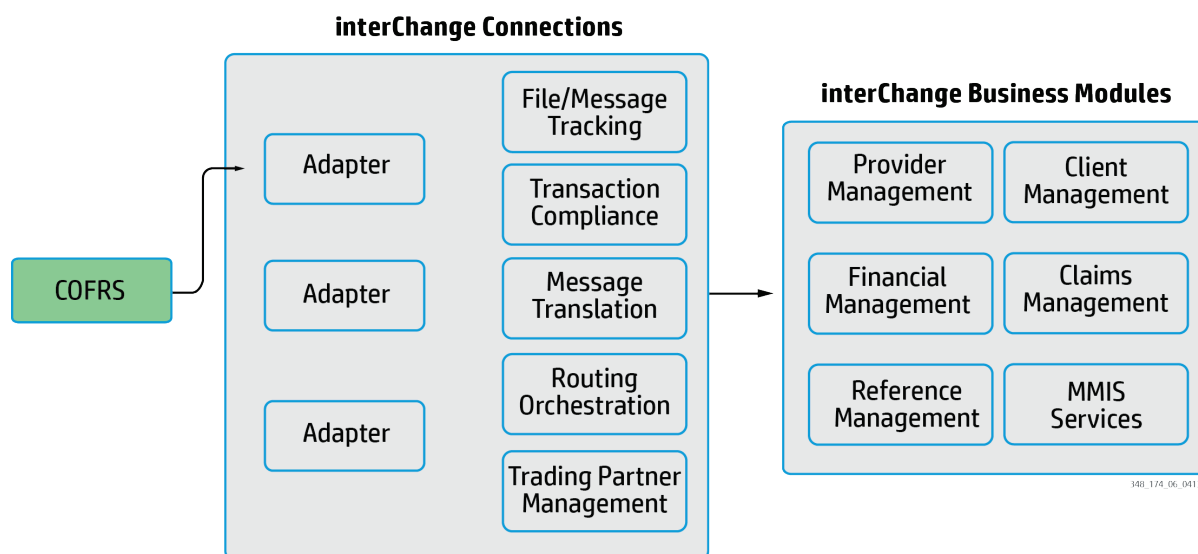
In this scenario, the State has decided to replace the State financial application. The new financial application has the capability of communicating through HTTP while the previous State financial application communicated through SFTP. Because of this capability, the first alteration within interChange connections is to change the adapter to match the new protocol.

The additional change would be within the message translation portion of interChange connections. Within message translation is where new data attributes would be mapped from the source to the target file layout.

Because we've made the changes at the adapter module and the message translation module within interChange Connections, the interaction between the new State financial application and the interChange business modules is simplified.

Now that we've given you an overview of the process, let's take a look at how those changes are accomplished in interChange Connections in the following figures.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Through the user interface, an authorized user can change the transport type by selecting the appropriate type from the drop down list. Next, the authorized user specifies the properties related to the transport type through the user interface screens.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Message format changes are managed through translation, which allows message formats to easily be configured to standardized formats. This allows for re-occurring records to be iterated and mathematical functions to be performed with no code.

This mapping tool illustrates a transformation that accomplishes the following:

- Moves a flat file with a single account per line to XML record format
- Sums the value of each account into a separate total XML node

The following figure shows the mapping tool that the support team uses to map the new data attributes from the new state financial interfaces to the internal schemas.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The input data source is on the left with the interChange destination layout on the right. For data attributes that are direct moves, the lines represent that by connecting the attributes from the left to the right. For data attributes that require business transformation, the icons in the middle of that line indicate a transformation is performed. By clicking on that transformation icon a popup is presented with the documented transformation rules.

The following figure illustrates the result of the configuration changes to the overall process, including changes to the adaptor and the transformation-mapping component of the interChange Connections module.

New State Financial Application Connection: interChange Connection Updates
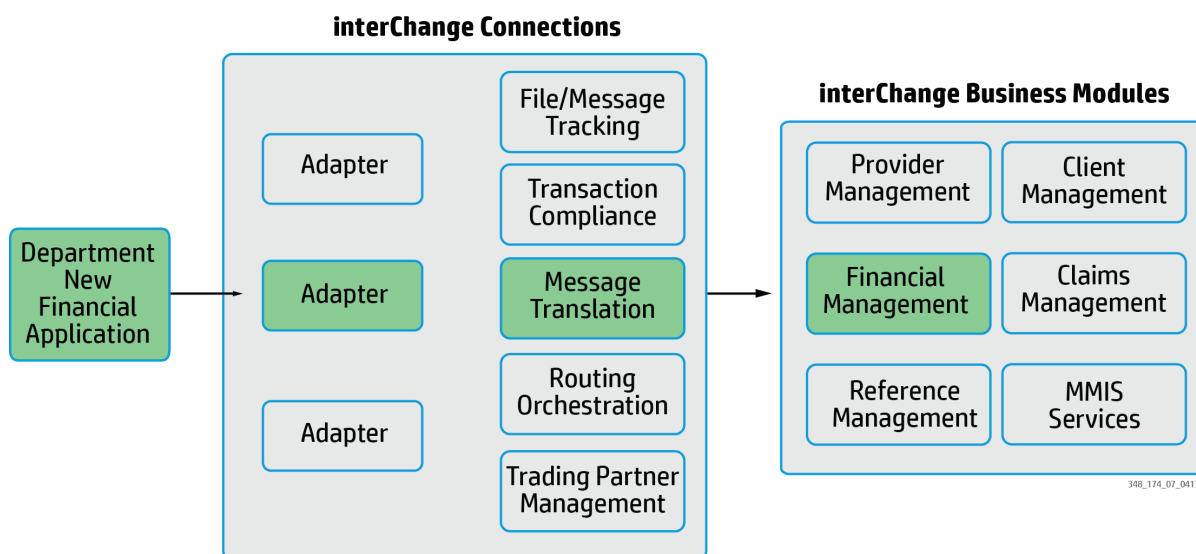
Interoperability with the MMIS is handled through interChange Connections. Specifically, interChange Connections provides the benefit of the following:

- Message delivery protocol (inbound and outbound) is abstract from the processing engine
- Allows for message delivery to be handled by configuration rather than code

The value is simplification of changes in the future for the overall healthcare program and the interaction with the MMIS. The following table summarizes the features of the interChange Connections module.

interChange Connections Features

Feature	Description
Communication Adapters	Integrating systems starts with the ability to connect and exchange messages through a common protocol. interChange Connections has more than 100 communication adapters available to quickly link to new trading partners and begin transferring data. Common adapters such as HTTPS, JMS, and secure FTP are available to support synchronous and asynchronous processing of the Department's transactions. Support for these and other protocols verify that communication with the trading partners can be established quickly.
Security	Security is crucial to enterprises exchanging private information, and this is especially true for an MMIS. interChange Connections uses two basic types of security when exchanging messages. Messages can be encrypted using an agreed-on public key or digitally signed using a private key certificate. These two methods are industry standards for protecting a state's data.
Routing and Orchestration	The interChange Connections ESB handles simple and complex service processing. In some cases, the messages will simply be transported to a single

Feature	Description
	service. Other times, it will be necessary to guide the transaction through many services and dynamically determine the path based on the data submitted and the business rules associated with that data. interChange Connections simplifies the implementation of complex orchestrations. Most important, it verifies delivery of messages using a publish or subscribe architecture.
Trading Partner Management	Working with external trading partners is an important part of providing a good experience for providers and keeping the system running smoothly. Trading partners will work with HP staff members to register for and test each transaction format they wish to be certified. After testing is complete, the Trading Partner Management function of interChange Connections will store the trading partner contact information and the HIPAA transactions the partner can send and receive. This verifies that interChange Connections can properly receive and track information from registered trading partners. It also facilitates ongoing communication and testing with trading partners as transactions are added or modified.
HIPAA Compliance Checking	An important aspect of EDI is verifying that incoming and outgoing X12 transactions meet the HIPAA standards. interChange Connections will validate X12 transactions for HIPAA compliance as they are received and before they are sent to our trading partners. Edifecs XEngine is used to check HIPAA compliance of transactions sent from Medicaid trading partners. It also validates to "WEDI SNIP Level 7" to verify transaction data meets the requirements to be processed through the MMIS. Edifecs XEngine is part of the EDI interChange Connections architecture.
Message Translation	Another key component for systems integration is the ability to translate a message into a format that is understandable to the service that will receive it. Whether an X12 transaction or a non-HIPAA transaction, interChange Connections uses a visual point-and-click mapping tool to translate and transform messages into the appropriate format for the system receiving them.
File and Message Tracking	File Transfer Service (FTS) monitors, tracks, logs, and moves files throughout the interChange solution. FTS provides a complete file audit trail with real time, processing stage updates through the file-tracking web interface. FTS includes detailed error notifications, which allow quick response to failed files.
Command Console and BAM	One of the key factors in business success is the right information at the right time, which is where the Business Activity Monitor (BAM) plays a vital role. BAM allows business users to monitor and analyze data from defined business process sources. By using BAM, users can get information about business states and trends in real time.

The HP solution aligns with CMS' Seven Standards and Conditions. In the following table we outline how different components of our solution align with 7SC.

HP Solution Component to CMS 7SC Alignment

Condition	Component	How HP Meets
Modularity Condition	interChange Connections	The interChange Connections component of the overall solution is powered by an Enterprise Service Bus for interconnectivity between the MMIS and external systems.
MITA Condition	interChange Connections	The interChange Connections centralized management of interactions between the MMIS and other systems increases the maturity of the business management of these interactions.
Industry Standards	interChange	The interChange Connections module provides the framework to keep current with industry standard transaction definitions.
Leverage Conditions	interChange Connections,	Because interChange Connections is a base solution and encompasses any interaction between other systems and the MMIS we can use this service and the built in adaptors to meet the changing business demands.
Business Results	interChange Connections	The ability to adapt to a new state financial application provides the state with the flexibility to use new data attributes as part of having better insight and control of the business results.
Reporting Condition	interChange Connections File Tracking System	Through the File Tracking System capabilities of Connections the dashboard style reporting of the inputs and outputs of the MMIS are available to the authorized users.
Interoperability Condition	interChange Connections	The interChange Connections module directly aligns with the CMS vision through the introduction of an enterprise service bus to facilitate the connections.

RESPONSE 46

RESPONSE 46: Scenario Six: The Department would like to issue gift cards to clients who maintain a healthy BMI (e.g., less than 25) for more than two years with the following conditions:

- **Clients must have a physician visit each year that records the client's BMI.**
- **BMI is only available in the EHR information available at CORHIO.**
- **Client information required to issue the gift card is not currently stored in the System or by the Department, only the client's address and other basic information is available in the Department's eligibility system (CBMS).**

In today's complex healthcare environment, innovation is important when trying to influence a client's personal engagement in their own healthcare. One such innovation is the use of incentives as a means of establishing long-term healthy behaviors for clients. This model of healthcare management directly maps to the CMS 7SC under the Business Results condition, specifically the focus on the result of improved care and overall better health of the clients being served.

The following highlights why our proposed solution is the best for the Department:

- Solution that is adaptable to include a client's BMI for incentive evaluation
- Simplifies the gathering and storage of BMI metrics
- Orchestrates the disbursement of the incentive gift cards and communication
- Aligns to the 7SC vision of improved business results for clients

For this business scenario, we are using a simple approach to enable the analysis of a client's BMI to trigger a gift card award:

- The Healthcare Portal configuration will be updated to enable direct data entry of a client's BMI value for a specific date. Having a date associated with the BMI will allow the MMIS to store historical values of the metric, enabling a view of the BMI trend across time.

- The MMIS also would obtain a regular snapshot of the client's BMI using an interface to the HER—assuming optional requirement 1261 "Ability to accept, maintain, and link Electronic Health Record (EHR) information to client data within the System" has been implemented.

- The remainder of the incentive process would be performed by a regularly scheduled, automated letter generation process that would query BMI values for the participating clients, and based on the defined business rules for this program, will distribute the letter and gift card to the clients who meet the criteria.

Additionally, BMI values stored within the MMIS will be available to the McKesson VITAL care management platform to provide care managers with a view into the metrics when reviewing a client's care history. This link also will enable care management triggers within VITAL to be configured to drive reporting or case assignment business rules.

The level of customization required to implement the changes requested is as follows:

- New online interactions for clients and providers will be implemented to allow direct data entry of the BMI information into our Healthcare Portal, the same portal that facilitates provider enrollment, eligibility verification, and claim submission.

- The Colorado interChange also can accept BMI as part of an EHR record obtained from CORHIO.

- The Colorado interChange will store and report on the client-specific BMI information entered into the portal to determine which specific clients who should receive gift cards for meeting the defined goals.

- HP will produce a report—either real-time interactive or batch, run regularly—to identify those clients who maintain a health BMI for more than two years.

- Gift cards will be mailed to the clients on the list with a letter generated using HP's correspondence management system, HP Exstream.

The level of configuration required to implement the changes requested is as follows:

- Depending on the specific business requirements for the Healthcare Portal interactions, the BMI metric could be implemented using configuration as opposed to customization.

- Our correspondence generation solution for the Colorado MMIS allows business users to create notifications using configuration within HP Exstream, rather than requiring customization effort from a developer.

Interoperability with the MMIS is handled through the interChange Connections component. This module of the MMIS solution is directly aligned to the vision of the CMS Seven Standards and Conditions. Specifically, interChange Connections provides the benefit of:

- Message delivery protocol (both inbound and outbound) is abstract from the processing engine

- Allows for message delivery to be handled by configuration rather than code

The value is simplification of changes in the future for the overall healthcare program and the interaction with the MMIS.

HP will interface with the CORHIO to receive the BMI information, and also allow physicians to enter the BMI information directly into the Healthcare Provider Portal. To enable this interoperability of the new MMIS, we will use our interChange Connections component, which orchestrates interaction of the MMIS with the broader healthcare ecosystem. interChange Connections

is driven by the BizTalk Server, which can be used to interface with the CORHIO. The following figure illustrates the role that interChange Connections plays as the gateway between the MMIS and the related healthcare entities.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

An important aspect of meeting this requirement is that the core framework and integrated solution based on Biztalk positions the State for expanding interoperability between the MMIS and other entities throughout the life of the contract. It is the framework of the interChange solution that provides the Department with the most flexible and cost-effective solution across time.

The HP solution is closely aligned with CMS' Seven Standards and Conditions, as outlined in the following table.

HP Solution Component to CMS 7SC Alignment

Condition	Component	How HP Meets
Modularity Standard	Healthcare Portal interChange Connections	The Healthcare Portal is a modular component of the overall solution that uses an enterprise service bus for interconnectivity.

Condition	Component	How HP Meets
Modularity Standard	Correspondence Management	The HP Exstream correspondence management component is a modular, highly configurable COTS product.
MITA Conditions	Healthcare Portal Correspondence Management	The process to meet this optional requirement would be a simple, straightforward one whereby the gathered BMI metric would be evaluated by an automated process and based on the configured business rule, which would initiate the correspondence management activities to send a letter and associated gift card to the client.
Leverage Conditions	interChange Connections, Correspondence Management Healthcare Portal	Because the interChange MMIS is built on a business services framework we are able to leverage the building blocks such as the interoperability through interChange Connections and the communication with the clients through the Correspondence Management tool.
Business Results Condition	Correspondence Management	Through the coordinated collection, storage, and evaluation of the BMI metrics and the follow on correspondence with the clients for distribution of the gift cards the solution achieves the "business results" of positive impacts to the client health. We will leverage our Correspondence Management capabilities when communicating the results to the clients.
Reporting Condition	interChange Reporting	By having the BMI metrics for the individual clients the MMIS could be updated to include reports that document the trend in effectiveness of the gift card project in relation to the BMI and overall health status of the participating clients.
Interoperability Condition	interChange Connections	For the interoperability of the MMIS to the CORHIO and the interoperability of the Healthcare Portal and the MMIS payer system, the interChange Connections module directly aligns with the CMS vision through the introduction of an enterprise service bus to facilitate the connections.

RESPONSE 47

RESPONSE 47: The Offeror my present up to five (5) additional scenarios that the Offeror expects may actually occur during the term of the Contract and how the Offeror's proposed solution can be adapted to handle the change.

The additional scenarios HP has chosen to present are:

- @neTouch Family of Features
- Business Rules Management
- Integrated Workflow
- HealthCare Portal—Provider and Client
- Performance Dashboards

For the additional scenarios, no customization is necessary to implement. These scenarios focus on the power of the interChange MMIS and how, through configuration activities, the users are empowered to shape their daily experiences to meet their unique needs. A distinct value of the HP solution is that configuration is not limited to the DDI activities, but rather configuration is built into the features of the MMIS and healthcare portal to enable configuration throughout the operational support of the program.

Additional Scenario #1—@neTouch Family of Features

This scenario covers the everyday need by business analysts to navigate the MMIS efficiently, including the following:

- Establishing personalization of the user interface
- Hyper-link jumps to related business areas of the MMIS instantly
- Access and navigation of online user help
- Review of process documentation defined within the MITA 3.0 framework

CLICK FOR VIDEO

A video demonstration follows our narrative response.

The business of healthcare seems to be getting more complicated year after year, with changes in legislation, changes in priorities, expanded populations, and so forth. How to simplify a business analyst's job in this environment can be a challenge. That is why HP has invested in the MMIS user interface by adding a series of features called the @neTouch family of features. These capabilities in the new generation of the interChange MMIS are all about simplification in performing daily tasks. The solution proposed for COMMIT is the best solution because:

- @neTouch simplifies the navigation of the user interface.
- Business users can personalize the configuration of the UI to their tasks.
- MITA Business Process Steps are mapped to the CMS MITA 3.0 Business Processes.
- Context-sensitive help is provided at the click of the mouse.
- Sticky note broadcast messages provide team communication.

- Business configurable print profiles exist for viewing and printing.

The breadth of business processes the MMIS supports is broad. There are hundreds of windows across the various MMIS business functions. But typically, an analyst only needs a focused subset of the windows to perform the most common tasks every day. Through the @neTouch personalization of the MMIS, the system becomes a personal tool for simplifying the business of healthcare. The following are our responses to the detailed requirements related to this scenario.

Business Scenario – MMIS Online User Configuration and Personalization

HP is known for its trailblazing in transaction processing—we started the services business more than 40 years ago. We have a deep understanding of the business from the beginning, and we pushed for automated claims processing. HP has *12 successful certifications since 2002*—more than all other vendors combined have achieved in the same period. HP has been proactively evolving the interChange MMIS business functions, incorporating both MITA and 7SC guidelines when recently adding advanced features and architectural capabilities. In 2012, we enhanced the user interface (UI) for ease of use—with an emphasis on personalizing the MMIS to each user, making usability and accessibility a high priority.

The advanced business features of the interChange MMIS user interface (UI) simplify daily tasks through quick and direct access to information as follows:

- The UI has been redesigned for users by users, maximizing the effectiveness of each interaction with the system.

- The flexibility of user-configurable settings personalizes the work experience.

- The @neTouch family of features enhances productivity with improved navigation, personal favorite links, MITA process information, profiles, and context-sensitive help.

- The workflow engine module has been integrated within the interChange UI. Users receive their work list directly within the MMIS without navigating to a separate application. This streamlines education for new users and makes experienced users even more effective.

Healthcare is complicated, but navigating to the required information when needed is now intuitive, fast, and context-sensitive. HP's business awareness and enhanced solution features simplify the tasks through interChange.

Within the overall interChange UI, HP built the @neTouch family of features based on guidance from our business experts who perform the detailed work every day. HP's business awareness and enhanced solution features simplify your tasks in interChange.

@neTouch features provide quick and timely access to the following:

- Hyperlinks to related business screens
- User-configurable favorite links
- Business-configurable helpful tips and team news
- Business-defined Print Profiles for viewing and printing

- MITA Business Process Step documentation
- Context-sensitive help

These features are controlled through online configurability at the business analyst or personal level. The @neTouch Access feature provides dynamic, context-sensitive, single-click navigation to the most relevant screens based on the current business process being worked.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

On a UI page such as claims, click on the @ next to a field. A new browser window opens with the most commonly required pages and tabs related to that field already populated. The user can then toggle easily between the different browser windows or place them side-by-side on the display to view simultaneously.

Individuals access certain screens frequently to complete their tasks. Each user can pin the screens they use most to their own Favorites list. Users do not have to navigate through the menu

tree to access their favorite screens or searches. The Favorites information link at the top of interChange MMIS expands the Favorites drop-down at a click and retracts with a second click. Favorites include Favorite Pages and Favorite Searches. Additionally, users can personalize the tabs that open automatically when accessing a particular screen. In the following figure, the user can select a tab to open automatically by placing a checkmark in the appropriate box.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

After a user has selected the tab preferences, every time they access the screen, the selected tabs automatically open.

The user can then click through the tabs to see the requested information. Additionally, if the user wants the selected tabs to display the information at the same time, the user can select the option of "Show All" from the navigation bar. All of the tabs will open, and the user can scroll vertically to see the requested information. Horizontal scrolling is not required to view the requested information.

HP designed interChange to meet the complex needs of Medicaid program administration. HP initially built interChange with a Powerbuilder UI, and then upgraded to a .Net UI. In 2012, we enhanced the UI around ease of use, providing authorized users with point-and-click access to MMIS data through easy-to-learn, browser-based panels. This web access is enhanced through the specifically designed productivity capabilities of our @neTouch family of features:

- @neTouch Help (account configurable)

- @neTouch Favorites (user configurable)
- @neTouch Access (account configurable)
- @neTouch MITA Business Process Steps (account configurable)
- @neTouch Profiles (user configurable)

As noted in the following figure, the advanced features of interChange @neTouch complement the user's work patterns by simplifying system navigation, configuration, printing, and profiles.

The @neTouch pages provide the pull-down menu, pop-up windows, and point-and-click functions users have come to know from their work with Windows-based PC applications. This familiar look-and-feel greatly reduces the learning curve required to master the new system and increases the comfort level of staff members as they use the system to monitor claims inventories or respond to provider billing inquiries. Additionally, the user-focused design of the interChange @neTouch helps reduce manual input and improve productivity and accuracy of data.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

@neTouch Context-Sensitive Help

interChange provides context-sensitive help at any level in the system. @neTouch Help goes beyond other help available through the inclusion of business-defined MITA Business Process Steps—directly maintained and available through the Help feature. This approach applies MITA concepts where they matter most, at the individual user level. Through standardization of process step documentation, training is easier, and overall business quality is improved.

Process step documentation and help information updates are performed online in real time. This capability is available to authorized users on the whole operational business team. Now it is much easier to update the documentation as business processes change while climbing the MITA maturity ladder.

Resource Help

Besides the help features discussed in the following sections, the @neTouch family of features enables users to link related pages throughout the system. As shown in the following figure, the related pages can be found on the left side of the screen.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The related pages link is user-configurable. The user enters the title for the link and the period to display the link, selects the pages to display the link on, and then selects where to link. Additionally, authorized users can create team news and helpful tips. Similar to the related pages, the user creates a title, indicates the period and pages to display it on, and enters the text of the news or tip. This can be used to publish reminders of policy changes. Another resource help that will be available is a link to the detailed data element dictionary and provider manuals through the Help menu option.

MITA Business Process Help

The MITA Business Process Help details the business processes that are supported on a page. The following figure shows the Modify Provider's Address Currently on File process within the provider business area.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

- **MITA process**—A brief overview of the business process that is performed on this screen, including a mapping to the specific MITA 3.0 business process steps being performed

- **Prerequisites**—The specific predecessors or activities that must be completed before this business process starts

- **Process steps**—The list of process steps that are followed to complete this business process

- **Process outputs**—Outputs from the completion of this MITA business process

The MITA Business Process Help permits customized documentation of standard and state-specific business processes.

Multiple Levels of Help

Each type of help launches an independent help window, as shown in the following figure. Three levels of help—Page Help, Tab Help, and Field-Level Help—provide teams with the necessary assistance. All three levels of help are interrelated, and users can navigate through the help tree for a high-level overview or a detailed description.

Detailed online help provides the following benefits:

- New staff members can use the system faster.
- Experienced users can instantly access reminders of infrequently performed processes.

- Power users need not click past levels of inappropriate help.
- Trainers or trainees can use the tree navigation and image enlargement features.
- Business analysts use the tree to view or edit help and MITA process information.

@neTouch Help is much more than a mouse-over description of a field. It indicates the definition of every field on the screen, their related data type and format, and screen edits and validations performed.

Page Help

Page Help provides a high-level overview description of the page, including a screen print as illustrated in the following figure. Business analysts, trainers, and learners can launch Page Help or MITA process information from two convenient locations:

- Navigation bar—available except from Search pages
- Main Menu at any time

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

- **Tree navigation**—The @neTouch Help Tree Navigation is available from any Help function. Simply click the gray button at the left of any help window.
  Expand by clicking + button.
  The tree view presents the tabs and MITA business processes linked to a page.

- **Enlarge image**—Clicking on the original smaller image of the screen shot expands it to full size.

Tab Help

New staff members will appreciate having complete information regarding the current tab being worked and always within easy reach on interChange. Users click on the Help button in the Navigation bar and choose Tab Help. The following figure provides an overview of the screen and the available fields, their definitions, and their edits.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Field Help

Power users will appreciate mouse-over access to complete help for just the field—perfect for a screen that is seldom used. The user clicks on a field name. Its definition, format, and edits are displayed in a separate browser window, as shown in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

@neTouch Favorites

Individuals access certain screens frequently to complete their tasks. Each user can pin the screens they use most to their own Favorites list. Users do not have to navigate through the menu tree to access their favorite screens or searches. The Favorites information link at the top of interChange MMIS expands the Favorites drop-down at a click and retracts with a second click. Favorites include Favorite Pages—shown in the following figure—and Favorite Searches.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

@neTouch Favorites Window

Adding a Favorite page is the same in interChange as it is in a traditional web browser. Simply click the Add Favorite Page button when a page or tab is open in the work area pane. Adding a Favorite search is as simple as clicking on the Add Favorite Search button after entering the search criteria used often.

Users can manage their favorites by clicking on the Manage Favorites button. This allows users to customize their search results as follows:

- Delete saved searches or pages at any time
- Rename saved searches—Instead of viewing a providers ID, rename the search to display as the provider's name making identification easier

The Navigator pane to the left of the work area automatically saves the five most recent searches performed on this screen. If a user wants to keep a search for future reference or pick up where they left off, they can save it as a Favorite.

Navigation

Besides the enhanced navigation noted previously, the interChange MMIS contains the standard drop-down lists and menus, hypertext links, and the ability to cut and paste. In interChange, a user can perform a search such as a claim search, receive those results, select a claim to view in detail, and navigate back to the search results without losing those results.

Additional Scenario #2 – Business Rules Management

This scenario covers the business need to change the business
rules used to define the processing logic of the transactions
through the MMIS, specifically the ability to do the following:

- Engage and review online rules in human readable form

- Use a rule change management process for control of updates

- Have configurability access to a wide variety of rule types
  such as client plans, provider contracts, reimbursement, edit,
  audit, TPL and co-pay rules, and so on

- Ability to view the set of rules and what hierarchy level the rules are defined within the set of
  rules

- Ability to edit rules include adding a variable to be used in rule development and/or coping
  rules

- Ability to filter on just the rules that have been updated for review during change
  management

CLICK FOR VIDEO

A video demonstration follows
our narrative response.

The vision articulated in the CMS Seven Standards and Conditions modularity condition states
that the MMIS use a business rules engine as a means of enabling a configurable approach to
rules definitions. The interChange Business Policy Administration rules engine directly aligns to
the vision and goes beyond the basic capabilities of a rules engine. The BPA rules engine is a
purpose built rules engine made specifically to address the dynamic aspect of state healthcare
business. The interChange Business Policy Administration rules engine is the best selection for
the solution because of the following reasons:

- Directly aligned to CMS 7SC
- Rules are in human readable form
- Rules are exportable from the application
- Flexibility of the number of variables rules can use
- Ability to copy and inherent rules to ease maintenance
- Adaptability to server multiple healthcare models
- Business policy analysts empowered to perform configurability
- Maximizes federal benefit funding

The BPA rules engine provides significant flexibility of how rules defining the state policy are
implemented. For example, the plan could be configured using data attributes including the
following:

- Geographic location of the provider or client
- The provider role (performing or billing)

- The diagnosis
- The age of the member
- The use of a single or multiple modifiers on the claim

To simplify the long-term rules maintenance, the configuration can be performed at any level. Configuration can be done at the most detailed level such as the procedure code or at a high grouping level where the rule would encompass the subsets within the folder.

Our solution is the best because BPA was built for the business of Medicaid. It is built for the varied healthcare delivery model that Medicaid supports. A primary benefit of the BPA processing is that our solution processes each service detail separately through all plan rules. By taking this approach, we apply the most applicable benefit plans to each detail on the claim. Most healthcare systems that are commercial payer based systems typically do one plan for the whole claim. They take a 'most likely to cover approach' and apply that plan across the whole claim. The interChange BPA approach is a more accurate way to adjudicate the services and produces significant savings for the state by maximizing the application of federal participation plans. When possible, the federal matching plans are applied first under our rule hierarchy structure with the state-only benefit plans applied if other plans are found not to apply.

The interChange solution brings this innovation to the Department delivering benefits of flexibility, adaptability, and optimization of benefit expenditure management. The following are our responses to the detailed requirements related to this scenario.

Business Scenario – Business Rules Configuration and Change Management

interChange Business Policy Administration (BPA) rules are responsible for the vast majority of claims adjudication, pricing, editing, and auditing decisions. The configurability built into the BPA rules gives the Department flexibility and scalability to use the interChange MMIS for pre-adjudication transaction processing for multiple programs across the MMIS enterprise. The BPA rules engine defines and processes these rule types.

- **Provider Contract Rules**—The services a provider is allowed to perform
- **Member Plans Rules**—The services a member is eligible to receive
- **Reimbursement Rules**—Decisions on appropriate pricing methodology to apply
- **Assignment Plan Rules**—Which services to carve out of a capitated managed care plan
- **Edit Rules**—Edits are rule-driven through configuration
- **Audit Rules**—Audits are rule-driven through configuration
- **Co-pay Rules**—Member responsibility amount
- **TPL Rules**—The services are covered by carrier-specific rules allowing cost avoidance and recovery

Because a client can have more than one member benefit plan or assignment plan, the BPA rules engine defines a member plan hierarchy and assignment plan hierarchy. Each unique combination of benefit or assignment plans is entered as a thread on the corresponding hierarchy

table. The hierarchy enables the State to maximize their federal financial participation rate by ranking the member plan with the highest federal match as a higher priority than the lower matched plans.

The following figure shows how a claim will move through BPA rules engine. It shows the extensible nature of the rules and the business questions the rules address.

interChange BPA Rules Flow
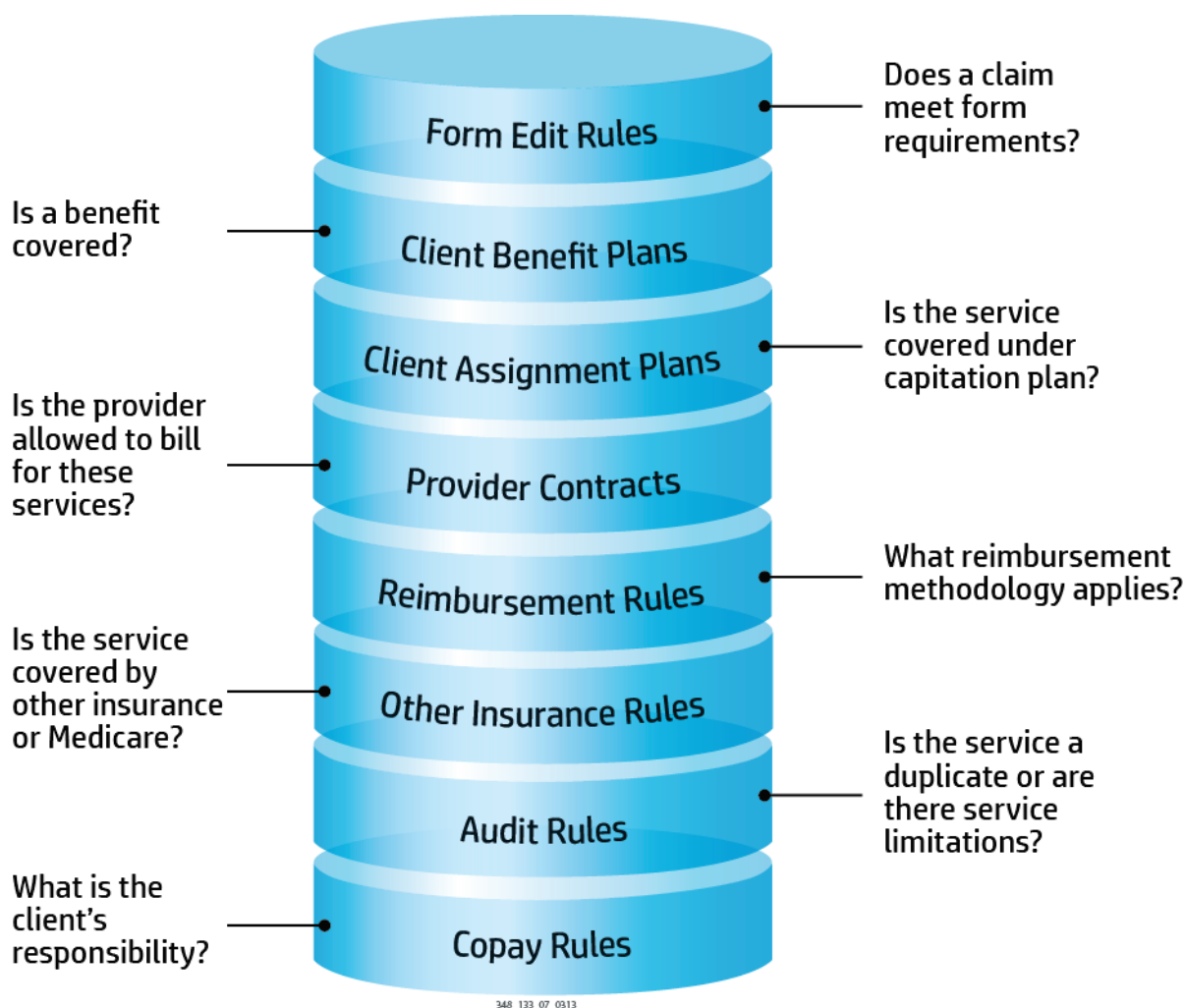
The authorized user can export, manage, and maintain the rules in a human readable form. They also can publish them to an external registry, such as an HHS repository, leading to a more standardized mode of operations between states. Not only does this fully support a "reuse and reduce" practice, it also enables the transparency of the processing logic. As mentioned, extending rules throughout the system, beyond BPA, is handled through the integration of a general-purpose rules engine from Corticon.

The nature of managing changes to the processing rules of the MMIS changes as compared to historical MMIS solutions that had the business rules buried in program code. Instead of a

technical resource making a coding change through the interChange BPA Rules Engine, a business analyst now performs the work of defining and maintaining the business rules.

This approach makes changes faster and by defining the rules within the rules engine. It is essentially self-documenting the processing logic for the transactions. However, having a rules engine and effectively using it within the MMIS are two different things. To explain the full-circle business rules management approach that interChange brings to Colorado best, we offer a systematic rules management example.

Self-documentation by having the rules in human readable format not only meets the CMS vision, but makes daily research into the rules much easier for the business analyst.

The interChange business rules engine allows analysts to implement in real-time newly defined rules and have those rules apply immediately.

> *Rules Engine Case Study Example: From our kickoff room during the first day of operations for the new Wisconsin MMIS, the State and HP personnel monitored the start of the new MMIS. As part of the monitoring activity, we noticed that a newly defined policy was causing an unexpected high denial rate for claims. The lead state manager asked if the rule was processing correctly. Our Business Policy Administrator quickly validated that the rule was processing as defined by the business policy. The lead state manager requested that the new policy rule be turned off immediately. Through the interChange rules engine, the Business Policy Administrator updated and promoted the rule to production. On the review of the next set of claim reports, we confirmed that the rule had been turned off and the next claims processed with the new rule base.*

While this example illustrates the potential to have immediate impact through interChange, our proven practices suggest that careful management of the rule base is critical for tight control and communication about the defined MMIS program policy. To that end, we offer the following systematic explanation of how to update MMIS business rules. This eight-step process provides the mature business process management of rule configuration in the MMIS.

Business Rules Management Example

Step 1: The business team receives policy change request.

Rule Management Actions: The team receives the request for change, understands request, and through the interChange UI, navigates to the proper Rule Type/Rule Set. The interChange UI presents a representation of the rules through a highly malleable rule sheet. By default, this rule sheet presentation is read-only, preventing inadvertent changes.

After validating that the rule sheet is not already checked out, the analyst can check it out for this rule type/rule set to allow editing.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Choices for Active Rule sheet: Download a copy, check out a draft, or simply view in read-only mode.

Step 2: Business Analyst Checks out Rule Sheet

Rule Management Actions: Checking out a rule sheet makes a copy of the sheet into a working table with a status of "Draft." The original sheet remains unchanged with a status of "Active." The user interface enables a user to look at either the Draft or Active rule set spreadsheet. Additionally, checking out a rule sheet locks it and prevents any other user from making changes to that particular rule sheet until either the user discards the checkout or the rule sheet is approved and loaded.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

For rule maintenance to be effective, there must be advanced capabilities to navigate through the thousands of rules that are used when processing the high-volume transactions of the MMIS. The interChange BPA Rules Engine provides this capability to ease the research of how to best update the rules for the change requested.

Step 3: Uses interChange UI to review, filter, group, and manipulate draft rule sheet.

Rule Management Action: Unlike rules engines that are not fully integrated within the MMIS, the interChange BPA rules engine is integrated directly with the user interface, which simplifies how business analysts work with the rules management. The interChange user interface allows significant control presenting, grouping, and filtering the rules within a rule sheet. Visibility and comparison is focused to a single rule sheet at a time. The rule sheet holds rules and their relationships for this rule type and rule set across code sets—such as Procedure, NDC, or DRG. They are always managed as a complete entity and the user can control how they are viewed. The ability to filter, group, and manipulate the draft rule sheet enables users to quickly find and view the specific rule(s) they are interested in. A user can view the rules from a single code set at a time.

interChange BPA Rules Engine contains the following options for rule sheet display:

- **W/Rules Only toggle**—Toggles between only showing services or nodes (benefits) in the hierarchy that have a rule written against them or showing the services within the scope regardless of if they have a rule.

- **Abbreviated Rule toggle**—This view shows the content of the rule in a single string using abbreviations versus showing the contents of the rule on a line per attribute with expanded names.

- **Descriptions**—This rule hides or shows the description of the service or node in the Benefit column.

- **Show Children toggle**—This view shows the rules under this node and children, grandchildren, and ancestor nodes within scope versus simply showing rules at the level in focus and one level down.

- **Active Rules Only toggle**—Shows only active rules that have an end date greater than three months ago (may eventually make the look-back period configurable) versus showing active and inactive rules. Inactivated rules are not the same thing as an active rule that happens to be for a historical date of service. Inactivated rules represent "deleted" rules—ones that never should have been written. It is most common that this will be toggled to active rules only.

- **Group dropdown**—This feature lets the user select any attribute within this specific rule type—such as claim type, end date, or place of service—and group the rules with matching values in that attribute. This feature is powerful for research because it reveals which rules, if any, are restricted to children by grouping on the age range.

The following figure illustrates that the analyst reviewing the rules has selected the "abbreviated rule" presentation mode. This is commonly done to reduce the amount of information presented for each rule. Under the Business Rule column, the analyst can see which rules are labeled as excluded.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The next example of the rules engine depicts where the analyst has elected to include the description and the children of the rules. The folder menu on the left helps the user understand at what level these rules are documented about/concerning other rules in the repository.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Step 4: Analyst edits draft rule sheet

Rules Management Action: When the analyst chooses to edit a specific rule with the edit wizard, an intelligent data form appears to guide the rule development. Only valid values from valid attributes for this rule type are allowed. Various pick-lists, calendars, or drop downs verify that only appropriate values are selected. If the user wishes to add an allowable attribute that is not a part of this rule sheet for any of the rules, the UI will allow them to add that attribute—for example, gender—to the rule sheet. The UI editor will automatically change to include the validations for that additional attribute. This is because the rule sheet and UI are reading the metadata associated with this rule type. This same metadata affects how the claim engine processes the business rules.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Edit rule UI is auto-generated based on the attributes used by any rule within this spreadsheet. It performs the same validations as the current BPA UI windows do.

Step 5: Copy/Paste rules between benefits within a rule sheet

Rule Management Action: Analysts can copy a rule from one benefit (service or node) to one or more services or nodes within the same rule sheet, retaining the rule's content and avoiding re-entering. The content of the rule—except the rule number and benefit—is copied. The copied rows may then be edited, if desired, to change dates or other attribute values.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The system highlights the row to copy.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Users can select the rows they want to copy to by holding the "ctrl" key while clicking on a line.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Users right-click to bring the context menu back up, and then select "Paste."

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

After users select "Paste," it will copy the rule in yellow or green to the rows selected in orange.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Step 6: Review rule differences

Rule Management Action: The analyst downloads the rule sheet to review changes. When the analyst downloads a rule sheet, the system performs two actions. It saves a Microsoft Excel workbook of the rule sheet into a selected location. It also adds a new tab to that workbook to identify the differences between the Active rule sheet and the downloaded rule sheet. The differences tab only shows rules for which at least one element is added, changed, or deleted between the downloaded rule sheet and the corresponding active rule sheet. The following table indicates the action and impact of the action.

Rule Sheet Actions

Action	Impact
Strikethrough	Value was removed or modified
Underline w/red font	Value was added
Otherwise	Value not modified

Unchanged rules are hidden from this view. New rules, deleted rules, and changed values are color-coded for ease of interpretation. Note—this "differences tab" is only generated on a download and is only viewable in the Excel version of the downloaded sheet. It is not visible in the UI. An analyst may upload and download a draft sheet multiple times, if necessary.

The following example shows the differences tab of the downloaded rules sheet. It is easy for the analyst to see which rules have changed based on the underscores and strikethrough text.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

While this presentation of updated rules seems simple, it is actually a powerful feature of the interChange BPA Rules Engine. There are thousands of rules within the MMIS, but often updates are to specific rules or groups of rules. The differences tabs filter out the rules that remain the same so that the quality control review can focus on just those rules that have been updated.

Thus, the focus for the quality review is exactly on the rules that require attention. This capability is a tremendous maturity in the business process of actively managing rules as part of the transaction processing of the MMIS.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Rules have effective dates for when they are to be applied. The rule effective dates define for the system when the rule is used in the processing logic. Within the rules are additional effective dates, such as Dates of Service, that can provide further flexibility of how to apply rules in a tight policy manner.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Step 7: Upload rule sheet

Rule Management Action: Several actions are performed when a rule sheet is uploaded. First, a validation routine is run on the rule sheet, comparing each cell to the attribute type and performing validations for valid values. Any errors found are written to an error tab in the Excel workbook. It must be downloaded to be seen, as it is unavailable within the UI. If there are any errors, a third version of the rule sheet is stored in the database with a status of "V"alidation errors. The "A"ctive and "D"raft versions of this rule sheet remain unchanged. If there were no validation errors encountered, then the existing draft version—if it exists—is simply overlaid with the uploaded version; the old version will no longer be available. A successful upload without any validation errors will delete a matching rule sheet in the "V"alidation error status.

Step 8: Submit for approval

Rule Management Action: The analyst selects the Submit for Approval and begins a workflow process that references both the BPA Rule UI and Workflow engine. The analyst can submit notes and comments and upload an Excel workbook that includes the difference tabs. The approver can review comments, Excel worksheets, rules within the UI, or other supporting information.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The approver verifies work as submitted. After the approver has approved the changes, then the rule sheet may no longer be edited. On a defined schedule, the BPA loader program will pick up the approved rule sheets and perform the load process. This will update the rule tables with the data from this rule sheet, where they will be available for processing. The loader program also creates an "A"ctive copy of the rule sheet for the UI to present. The model office/simulation environment will be populated with scrubbed production data as a means of testing the rules against real data. In the production environment, rules are typically procedurally updated daily but can be implemented immediately.

Summary of the Rules Management Process

The management of the rules within interChange is a well-structured, process-driven activity that is easy to follow and provides the quality control required of such critical metadata as the rules by which the program is managed. Through this systematic process description, we have shown that the process helps facilitate the management of change, which is critical given the number of rules managed for the program.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Additional Scenario #3 – Workflow

This scenario covers the business need to automate and standardize business processes into efficient workflow processes that include:

CLICK FOR VIDEO

A video demonstration follows our narrative response.

- Easy-to-navigate user work list of work items to process, including status indicator

- Ability to leverage a business services framework for interaction with other MMIS support modules

- Ability for authorized users to delegate tasks

- Ability to view a historical depiction of a visual presentation of the workflow steps

- User review of detailed process metrics at the process and business analyst level

MITA maturity, as part of the CMS 7SC, is all about a service-based architecture and the maturation of business processes over time. The interChange MMIS, including the integrated workflow engine, delivers on this vision. The interChange workflow solution is not a bolt-on, separate workflow tool as in other MMIS offerings. Rather, the interChange workflow capability is directly integrated with the MMIS user experience and integrated through service calls to the shared COTS components—such as correspondence and document management. The solution proposed for COMMIT is the best solution because:

- Workflow standardizes business processes
- Visual workflow capability provides overview of the process
- Users work list organizes tasks
- Workflow electronically routes attachments
- Transparency in process efficiency is unprecedented
- Built in business activity monitoring simplifies research

The interChange workflow solution provides the standardization, metric gathering, and service integration needed for a solution with such a strong foundation that best positions the long-term process maturity over the life of the contract. The following are our responses to the detailed requirements related to this scenario.

Business Scenario – Workflow standardization and automation

Workflow technology will transform the daily work with the interChange MMIS. It is one of the key areas of transformation requested within this RFP. Successful workflow is more than just having a piece of software. The use of workflow technology needs to standardize and enhance the business steps, making it easier to route information, track stages of a workflow, automatically send correspondence, and track the detailed metrics of each of these steps along

the way. We understand the full potential of workflow. We have designed our solution to be holistic and integrated into the interChange UI and the Business Services framework as depicted in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

This solution focuses on using COTS integration into the interChange system to create one integrated view that brings high value and efficiency to the user and increases configuration in the feedback loop. Standard application workflows will not suffice for the type of transformation Colorado requires, and as such, we have focused on integrating high-quadrant, enterprise-capable COTS tools to achieve the goals. The framework streamlines business processes, provides visibility into detailed metrics, and facilitates consistent quality and productivity to promote optimal performance. Our HP Workflow Management solution will standardize practices into processes supported by a COTS workflow engine. Workflow will provide visibility into the status and issues of business processes, allowing supervisors to identify, resolve, and prevent bottlenecks to produce higher-quality business outcomes.

Benefits to the State

The new interChange MMIS Workflow Management solution will prove to be a cornerstone for improvement of processes and will give Colorado the following benefits:

- Increases the maturity of business processes and supporting systems pursuant to MITA—The HP Workflow Management solution directly increases the maturity of business processes by automating, standardizing, reporting, and supporting them with business rules.

- Maximizes the efficiency in operational costs with simplified processes and systems— Workflow maximizes efficiency through standardizing and enforcing business processes throughout the enterprise. This creates predictable outcomes and formal paths for handling exceptions.

- Creates client and provider interactions that are clear and responsive—The HP Workflow Management solution provides predictable outcomes for client and provider requests, such as provider enrollments, third-party liability (TPL) updates, or grievances and appeals.

- Provides enhanced transparency, traceability, and accountability for the workflows—The HP Workflow Management Solution implements enterprise-level data exchange, data cleansing, data store, and professional rendering capability. Our solution supports agile data architecture through the integration of workflow into the interChange UI and consistent data trails for each process, step, and participant.

Throughout this section, we will examine the following business processes— provider enrollment and TPL review—as examples of how analysts will manage them in the Colorado interChange with full support of workflow. We take this approach because at the heart of workflow is the ability to transform processes, and by investigating the improvement in these three scenarios, we illustrate that the interChange workflow engine is the optimal solution for the State. To start, we will give an overview of the Provider Enrollment process improvements.

With thousands of requests and inquiries from providers each month, provider enrollment is a business process that is difficult to manage using ad hoc communication methods, such as conversations, sticky notes, and email. Users have many different activities to perform to enroll a provider, and it is difficult to achieve consistent application of rules without automated support. The following table outlines how our workflow solution will transform the provider enrollment business processes.

Colorado interChange MMIS Provider Enrollment Workflow Transformation

Before Workflow Management	After Workflow Management
Inconsistency: Each representative may handle enrollment decisions differently. Providers with identical criteria may receive	Consistency: Workflow will use a business process engine to apply defined rules for enrollment decisions consistently. Providers

Before Workflow Management	After Workflow Management
different enrollment outcomes.	will receive timely and consistent outcomes.
Inaccuracy: Representatives often refer to manuals or their own knowledge when working with providers, leading to the possibility for incorrect results requiring rework.	Accuracy and higher quality: Policies from provider manuals (captured in rules and workflow steps) guide analysts through the orderly enrollment process.
Poor visibility: Supervisors have to make individual inquiries to determine the status of enrollment issues. Supervisors are often not aware of critical issues promptly.	Transparency and traceability: Reports provide detailed metrics, allowing supervisors to identify areas for improvements.
Bottlenecks: Provider enrollment bottlenecks occur when representatives are waiting for decisions, support, or information from supervisors.	Notifications: Supervisors receive notification of issues automatically and can approve items electronically. Additionally, notifications can be sent to multiple Department stakeholders of issues based on agreed-on escalation criteria.

The interChange MMIS Workflow solution is part of the interChange application. It is not a stand-alone tool but is integrated into each of the layers in the SOA. This includes data, presentation, services, and the processing engine. This connectivity between the MMIS, the workflow engine, and supporting COTS tools transforms the business activity, simplifies the analyst's job, and standardizes the processing. Our solution provides a single workflow management view that allows specific work configurations by the MMIS business areas.

Users do not need to navigate to a separate workflow application. Rather, they perform workflow tasks as part of their daily interaction with the interChange MMIS. To demonstrate how intuitive and easy it is to use workflow, let us walk through a scenario involving TPL.

The presence of TPL or other insurance can lead to the rejection of a claim. Sometimes, the TPL record in the MMIS database is out of date and requires investigation by specialists. For this scenario, the Colorado interChange provides a workflow that captures the tasks necessary to complete a TPL review. The call center agent receives a call indicating improper claim denial because of incorrect TPL information on file. With a few clicks on the keyboard, the analyst can initiate a TPL review, which will immediately show up in a TPL analyst's work queue. The workflow enforces proper validation procedures for appropriately updated TPL policy information, leading to a quick turnaround and appropriate claims payment.

As part of the simplification of healthcare management, the HP Team has added MITA Process Triggers as part of the @neTouch family of features to the Colorado interChange. The MITA Process Triggers are context and role-based–sensitive links that enable one click to initiate a

business workflow. Workflow triggers will be on the left-hand navigation column within interChange under the heading "MITA Process Triggers" as depicted in the interChange Workflow—Process Trigger figure below.

Different UI screens can act as the initiation point for different workflows, allowing the user to trigger the proper workflow based on the activity performed. It is not necessary to navigate away to a centralized "Workflow Initiation Screen." Business analysts can define any number of process triggers in the interChange Form Builder. Workflow forms allow users to enter workflow-specific data, such as case notes or attachments that support the business process. Within the workflow Smart Form Builder, we can select from predefined workflows configured through our COTS solution, K2 blackpearl. The following figure depicts the workflow initiation form that will pop up when the call center representative selects the "Request TPL Review."

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The form contains data fields, such as priority and reason, representing the information necessary to complete an investigation of this type. The claims adjuster will input available information before submitting the request.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Some fields can provide instant access to the data necessary for the analyst to perform their tasks. Features such as these increase the efficiency and accuracy of interChange MMIS users. The previous figure depicts the additional tabs included with the workflow form. Besides the main data page, users can navigate to additional pages to include notes and attachments. Submitting the Request TPL Review form triggers workflow, saves form data into workflow databases, and sends it to the work list queues of the group assigned to TPL investigations.

TPL Review—Work List

The primary UI for workflow participants is the Work List screen. This primary interface simplifies navigation, facilitates data access, and increases the productivity of staff members. The interChange Business Analyst Work List figure below depicts the Work List window within the interChange MMIS.

Workflow automatically assigns tasks and delivers them to individual or group task lists. Automatically distributed notifications inform users they have work to be performed. The tasks remain in the work list until they are completed—they cannot be lost, ignored, or deleted.

The Work List window presents the user with a list of assigned tasks. In the figure below, the analyst has grouped the work list items by the carrier ID to better facilitate a call to that company and through one call take care of the set of follow-up items specifically for that carrier. By being able to change the organization of the work list data dynamically, users can configure the list to optimize their work efforts. Each list item represents the next workflow step to be completed. Tasks are assigned to users based on that specific user's group memberships, which can be tailored to reflect departments, business areas, or even individual task specialization.

MMIS staff members can view and update workflow tasks in the familiar environment of the interChange MMIS. Additionally, staff also can receive notifications and participate in workflow review and approval, as desired. The TPL Review task is now on the work list of TPL investigators with a status of "Available." When an investigator accepts a task, it is removed from the work lists of other investigators.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Coordinated Workflow Processing

Accepting and opening up the workflow task will open the Work Task Detail window, detailed in the following figure. The data entered by the claims adjuster is available along with notes and attachments. Data collected to support a workflow—for example, the provider application and enrollment data—is held with the specific workflow instance in a workflow database until the workflow is completed. Then the data is saved into the interChange MMIS database. This approach allows the data to be reviewed, updated, and approved before it is written into the production database. Data is retained in the MMIS database for historical research and playback of the workflow execution.

At the top of this window is a bar with a menu of actions that the investigator can select while working through this workflow. The workflow engine dynamically presents the available actions appropriate for the current workflow step. The system guides users through the process so they apply consistent business processes in their work. Additionally, our workflow solution accelerates new user training because the system restricts choices to the logical next steps and provides a graphical road map of the process in the ViewFlow screen.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

TPL Review—ViewFlow

A key feature of the interChange MMIS workflow solution is the process flow view of workflows in progress. As depicted in the following figure, users can view workflows that are in progress, see the completed steps, and determine what steps remain. This interface is available within the workflow window through the ViewFlow action button on the menu bar. This is helpful to allow a participant with a task in the middle of the flow to see what has happened in previous steps.

The interChange MMIS workflow solution transforms workflow from an abstract concept to a user-centric, high-value capability. ViewFlow mode provides the "big picture," showing what has been completed and what will occur next.

The ViewFlow is available for in-process and historical workflows, allowing reviewers to determine exactly which path a given instance of a workflow followed, even months later. Processing data is retained for every work instance. This data supports research or dispute resolution should the need arise.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

This view flow depiction of the workflows provides an innovative method of providing a visual guidance to the business users who now see how the business process steps relate to each other. The flow of the workflows and the respective view flows can be configured and customized to meet local business policies. This includes the ability to define and configure workflows of security alerts. The security alerts workflow capability and features would parallel the workflow engine capabilities described in the TPL example detailed in this section. This single workflow engine, integrated with the interChange MMIS, is flexible enough to provide comprehensive workflows across the MMIS business areas.

Management Console and Reporting

The interChange Business Services Management Console allows supervisors or other authorized users to create and manage routing configuration, escalation, and notification policies of workflow tasks. Using this screen, authorized users can view work lists and reassign tasks when an analyst is unavailable. For example, authorized users also can make ad hoc detour assignments—such as, "Jane Doe needs to look at this before I finish my part"—or initiate workflow reassignments in exception situations.

At the managerial level, the interChange workflow engine provides in-depth reports and ad hoc abilities that provide information about staff workload and productivity at an enterprise level. Such data will help managers identify bottlenecks in processes. Managers can drill down to the individual level to determine productivity measures or compliance to service-level agreements (SLAs). The workflow web services store key performance metrics in the Business Activity Monitoring (BAM) repository database, allowing transparency into business processes.

At predetermined steps along the way, logging points built into the workflow services collect and store information. This allows the dashboard to present the Key Performance Indicators and SLA categories related to timeliness, throughput, approval, and denial percentages for workflow-enabled business processes graphically. The interChange MMIS workflow drives efficiencies by presenting real-time or historical metrics in the form or graphs, pie charts, and more. It also provides the key inputs to improve workflow processes based on that information. Analysis of these reports can help identify exactly where business processes can be improved, enabling evidence-based enhancements in the business process.

Managers can use the following five predefined workflow reports:

- Activity statistics
- Process statistics
- Process information
- User performance
- Process overview

The following figure depicts the Process Overview report that drills down into a single workflow instance. The report details the statistics such as completion time for each step of the workflow process.

One of the most powerful features of our workflow solution is the ability to analyze workflow information visually in real time. This feature will allow Colorado to adapt business processes in response to data gathered from the field.

The following figures depict the Activity and User Performance statistics reports. These reports display the productivity statistics associated with an individual step in a workflow process or a user. Managers can use this information to determine easily which workflow steps may be a roadblock in business processes and update to increase efficiency.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Managers also can identify individuals who may need additional training or support to complete certain workflow steps. Users may "drill down" into key data and customize reports, providing ad hoc information to aid in business process management.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The ability for the interChange workflow solution to provide transparency into the real metrics of the business processes and the team members working the processes is one of the main benefits of our offering. MITA is about continual evaluation and improvement of business processes striving for continued maturity of those processes. Now, through the interChange MMIS workflow and business rules solution, the ability to make informed decisions based on real metrics is what enables continuous improvement of business results.

Additional Scenario #4 – Healthcare Portals – Provider and Member

This scenario covers the business need to provide a 21st century healthcare experience to the clients and providers who engage with the MMIS:

- Giving providers advanced self-service features
- Providing clients self-service features in a cost-effective manner

CLICK FOR VIDEO

A video demonstration follows our narrative response.

With the expansion of healthcare associated with the revolution of interconnectivity of technology, there has never been a better time for self-service interaction with the MMIS. For the clients and providers in Colorado, the best solution is the HP Healthcare Portal. This easy to use and secure portal facilitates many features directly for the benefit of the end stakeholders. Features of the solution include:

- Online, wizard driven provider enrollment for efficient enrollment activity
- Configurable style sheets for localization of the portal style
- Real time adjudication of all claim types
- Member-focused view combining eligibility, claims and authorization views
- Batch healthcare transaction submission capability
- Authorization submissions
- Secure and efficient communication distribution

The HP Healthcare portals have been a market leader in the industry from the first portal for real-time adjudication of all claims types to the initial Medicaid member portals for effective communication. CMS has stated the vision is to deliver a 21st century healthcare experience for the stakeholders of the program. The HP Healthcare Portal delivers that vision and provides a cost-effective way to engage the clients and providers. The following are our responses to the detailed requirements related to this scenario.

Business Scenario – Client and Provider MMIS engagement

HP will enable the Department to do more with less through our web-based HP Healthcare Provider and Member Portals. The portals empower constituents through self-service capabilities that enable more efficient access to, and more effective use of, relevant information.

Provider Portal

The proven HP Healthcare Provider Portal offers a self-service model for authorized program stakeholders. This 24 x 7 access provides easy-to-use and intuitive design, encouraging users to navigate the site to locate necessary information. Reducing paper consumption by replacing formerly paper-based processes, the web portals also offer a green, sustainable way to do business.

HP's Healthcare Provider Portal solution is the web-based front end to multiple back-end payer systems. It consumes the services these systems provide, takes existing information, and presents it in new contexts—creating new value from the feature-rich functional capability and personal healthcare content in these systems.

The Provider Portal offers an easy-to-use enrollment wizard to any provider who is interested in submitting an application. The wizard guides the provider through collecting important information for creating the provider record and submitting it to the back-end system. When enrolled and registered, providers can use the Provider Portal to view and update their respective information, such as service location addresses, telephone and fax numbers, enrollment data, and other contact and demographic characteristics, such as languages spoken at a given location. Certain information gathered by the provider enrollment wizard is configurable at the Department's discretion—for example, the information can be displayed, hidden, required, or optional. Providers can easily maintain their enrollment by submitting updated credentials and licensures through the portal.

The portal captures enrollment information optimized for provider type and taxonomy from initiation through to disclosures, with a wizard that guides the provider through collecting important information and online submission, replacing paper-intensive, manually driven processes. After the enrollment application is confirmed, the provider receives a message indicating that the application has been submitted, along with a tracking number. The provider can use this tracking number to inquire on the status of the enrollment approval. A confirmation email will be sent to the provider.

The Department can configure some of the information gathered by the wizard. The following figure indicates what information is gathered and configurability options.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The following are options available to users of the HP Healthcare Portal:

- **Enrollment type**—Choices include group, facility, individual, individual within a group, and atypical.

- **Group-related information**—This can be the group an individual is associated with if enrollment type is individual within a group or a listing of the providers associated with the group if enrollment type is group.

- **Specialties**—The provider will be required to enter one or more specialties, as the following figure highlights. One specialty must be designated as primary. The provider can choose to associate a taxonomy code to each specialty but is not required to do so. An additional taxonomy code can be entered that is not associated with a specialty.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

- **Provider identification**—The provider enters identifying information such as name and various IDs, such as Tax ID, NPI, DEA, and license numbers, as the following figure details. Surety Bond Data-related information can be entered for facility enrollment types.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

- **Addresses**—The provider must include a primary address, as the following figure details. Additional addresses can be added. Address standardization functional capability is available on this page for the different address types. This allows an entered address to be sent to a third-party address standardization service to be checked for validity. The address standardization service returns the results of the validation to the portal. The results may include an exact match, multiple possible matches, or a message indicating no matches and which part of the address is invalid.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

- **Languages**—Providers may indicate languages they speak, but this is optional, as the following figure highlights.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

- **Banking information**—Providers have the option to have claims payments deposited directly into their bank accounts, as the following figure details. If they choose to participate in electronic payment, they will be required to enter their bank account information. Bank address information can be entered on an optional address screen.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

- **Other information**—Providers may enter commercial insurance that they accept, as the following figure highlights. The provider may enter certifications they have and the effective dates of the certification. This information is not required. The provider also may enter specialty board and degree information, but this information is not required. Decertifying pharmacy information and data related to a collaborating physician also can be entered. A list of board members can be entered for group or facility enrollment types.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

- **Disclosures**—The disclosure questions are customer-configurable, as the following figure details. Some of the available response types include yes or no, text, drop-down, multiple choice, and dates.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

- **Agreement**—The provider must accept the terms of the enrollment agreement to submit the enrollment, as the following figure highlights. The terms of agreement text is customer-configurable. Additionally, customers may add customized links in the Supporting Documentation screen to applicable federal and state regulations documents.

- **Summary**—Before confirming the enrollment application, a summary is displayed to allow the provider to review the information, as the following figure details. The provider may edit the information by selecting the link for the section they wish to update. The provider may print the summary.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The provider is prompted for a password before the application can be submitted. A provider can check the status of their enrollment using the Provider Portal. The provider will need to enter the tracking number received after the enrollment was submitted—along with the tax ID and chosen password. The enrollment status will display the date the application was submitted and the status of the application.

The Member in Focus View of the Provider Portal allows focus on a single specific client, which makes it easy to complete prior authorizations and referrals through the provider portal. The provider can select links to submit new requests, and we will pre-fill subsequent screens that need client search criteria with the details for the client in focus. Providers also can change PA requests and submit supporting documentation. The Member in Focus View shown below highlights coverage and claims and makes it easy to request new authorizations or check the status of pending authorizations for that specific client.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The following screens show an Electronic Health Record (EHR) with a Member in Focus view
of the details.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

The EHR provides a wealth of information about the member and presents it in a concise, efficient manner.

With the use of a web-based tool for claims processing, providers can submit HIPAA content-compliant claims through a user-friendly and secure method. This interactive tool allows for instant claim status notification, allowing for faster processing of necessary modifications and resubmission for denied claims. The Provider Portal empowers users with self-service for online submission and viewing of claims. Enhanced features provide users maximum efficiency, exceptional productivity, and personalization:

- Pre-populated claims, with billing provider (submitter) information

- Member in Focus View allows providers to select links to submit new claims with the details for the client-in-focus prefilled

- Systematic, user-friendly process for claim and data entry, featuring radio buttons, check boxes, and text fields to facilitate data capture. These features enable the user to return to previous steps as needed. Header information remains visible as the user progresses through the entry steps.

- Accommodates full and valid entry of every claim type

- Provides a predictive search feature on many fields—characters keyed by the user narrow the list of choices

The figures that follow show how easy it is to move through the data entry steps for claims processing.

Step 1—The first screen in the professional claim entry process elicits provider information, patient information, and claim information. Many of these fields can be pre-populated with information about a client in focus and for the billing provider. This saves the biller time keying information.

Step 3C—The claim is complete. Billers know instantly if a claim was submitted successfully and receive the claim ID number. Billers will know instantly if their claim paid. Any patient liability, such as a co-pay amount, also is given here.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

After a claim has been submitted successfully, billers have the option to print the claim, copy member or claim data to another claim, edit and resubmit the claim, or to submit a new claim.

Member Portal

The secure HP member portal for Colorado will provide clients access to their coverage, claims, prior authorization, and general information through the client portion of the Healthcare Portal solution. Clients can check areas such as benefit details, track spend-down, and third-party coverage quickly and easily. A search feature for provider locations will be available on the Colorado Healthcare Portal solution, providing an effective channel for locating care access. The portal provides clients with the following benefits:

- Provides services and benefit information directly to the client, including service and dollar limits, services available to them periodically, details about their spend-down, and details about their level of care

- Enables clients to log on and manage, update, or view their current information

- Allows clients to view eligibility and coverage for themselves and dependents on the same eligibility case

- Provides the ability to view service authorizations and claims for themselves and dependents on the same eligibility case

- Allows clients to search for potential providers using a comprehensive search feature including partial name, distance from client, and address search

- Allows clients to map the provider search results to one of several readily available mapping tools—such as Google Maps or MapQuest—using standard mapping application program interfaces (APIs)

- Provides the ability for secure messaging and clients to indicate interest in specific distributions and their preferred method of communication

Many of our MMIS customers report significantly improved provider and client satisfaction rates after their healthcare portal implementation. It provides for "as needed" access to Colorado Medicaid information on the program—such as claims, provider requests, and status of client transactions—and therefore eliminates many of the routine calls into the service desk.

Additional Scenario #5 – Performance Dashboards

This scenario covers the business need to present the Department and HP leadership effective access to performance metrics to evaluate the effectiveness of the system and supporting business functions.

CLICK FOR VIDEO

A video demonstration follows our narrative response.

- User ability to view graphic representations of performance metrics
- Ability to filter the graphic data using multiple variables
- Ability to review multiple performance metric graphs simultaneously
- Ability to see trending of performance metrics

A portion of the CMS 7SC that has been a little overlooked with the recent strong focus on SOA architecture, interoperability, and rules engines capabilities is the Reporting Condition. This condition is about gathering, organizing, and presenting meaningful information to evaluate the effectiveness of the overall program. The HP solution understands that MITA maturity cannot be realized or the business results cannot be properly evaluated without accurate and easy-to-interpret analytics. With this in mind, the HP interChange solution includes the inSight Dashboard. Features of this advanced reporting solution include the following:

- Visualization of related metrics that simplify research
- Multi-dimensional metric presented
- Dashboards that are analytic, interactive tools
- Drill-down graphics
- Online contract performance metrics
- Online program metrics
- Online process metrics

To achieve maturity in process and to keep a high-operational set of services, it is critical to be able to research the metrics that reflect those processes. Only through reviewing the metrics and drilling into the information can we gain an understanding of where management attention needs to be focused for improvement. The analytic dashboard reporting provides that information to make the effective decisions based on facts. CMS has stated the vision is to have reporting analytics capability that provides the decision-makers quality information. The HP inSight Dashboard delivers that future vision today. The following are our responses to the detailed requirements related to this scenario.

Business Scenario – Performance Management

The Department will have complete visibility into HP's performance standards. Using our proven performance-monitoring tool, inSight Dashboard, key performance indicators (KPIs) are tracked, monitored, reported, and constantly visible.

The interChange inSight KPI Dashboard is where the key metrics aligned to service delivery excellence are captured and reported. The HP Colorado interChange solution exceeds expectations by going beyond static dashboard presentation and enables the users to have a true analysis tool at their desktop to evaluate, drill into the details, and filter the metrics to understand the business drivers behind the KPI numbers better. Our inSight Dashboard will be provided through a centralized content management system of Microsoft SharePoint. Through the inSight KPI Dashboard, the technical and operations performance data is directly available to the Department and HP leadership team for real-time, meaningful analytics.

The following figure further explains the advantages of the interChange inSight KPI Dashboard.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Within this Contact Management example, the many advantages of the interChange solution become apparent. The top half of the screen lists the many interactive dimensions that the reviewer has access to such as "Frequency Description, Contact Date, Contact Reason Description, and Contact Method Description." Managers can change these dashboard filters to drill into the specific metrics they elect to focus on. The bottom half of the screen shows

historical data. In the multi-presentation method illustrated in the previous figure, line charts complemented by the two pie charts provide quick and visually meaningful information.

The exciting part of this process is that by changing the filters, the reporting displays of the dashboard change dynamically, eliminating the need to rerun a report and wait for a response. The presentation of the results is completed in real time, making the interChange inSight KPI Dashboard more than a reporting tool.

This interactive capability takes the concept of a dashboard and makes it an analysis tool by enabling the users to drill through the contents to understand the metrics related to the Contact Management Dashboard better.

Interoperability is attained through interChange Connections, which features an Enterprise Service Bus (ESB). The ESB is a core component required to implement a service-oriented architecture (SOA) and thus, the interoperability condition of the CMS Seven Standards and Conditions (7SC).

Specifically, interChange Connections provides the following benefits:

- Message delivery protocol (both inbound and outbound) is an abstract from the processing engine

- Message delivery to be handled by configuration rather than code

The value is simplification of changes in the future for the overall healthcare program and the interaction with the MMIS.

More details on our interChange connections solution can be found in RESPONSE 39i.

To enable this interoperability of the new MMIS, we will use our interChange Connections component that orchestrates interaction of the MMIS with the broader healthcare ecosystem. interChange Connections is driven by the BizTalk Server, which can be used for interfacing with the Department and the other various systems. The following figure illustrates the roles that interChange Connections play as the gateway between the MMIS and the related healthcare entities.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

A fundamental purpose of the server is for the support of integration of the MMIS to external applications and enabling the communication between the MMIS and those applications through defined services. The important part of meeting this requirement is that the core framework and integrated tool solution based on BizTalk positions the Department for expanding interoperability between the MMIS and other entities throughout the life of the contract.

The HP solution aligns with CMS' Seven Standards and Conditions. In the following table, we outline how components of the additional business scenarios align with 7SC.

HP Solution Component to CMS 7SC Alignment

Condition	Component	How HP Meets
Modularity Standard	interChange Business Policy Administration (BPA) Healthcare Portal Client and Provider	BPA is a highly optimized rules engine used to configured transaction processing rules. The Healthcare Portal is a modular component of the overall solution that uses the Enterprise Service Bus for interconnectivity.
MITA Condition	interChange Workflow interChange User	interChange workflow standardizes business processes and enhances efficiency, optimizes outcomes, and brings greater maturity to the MMIS Concept of Operations.

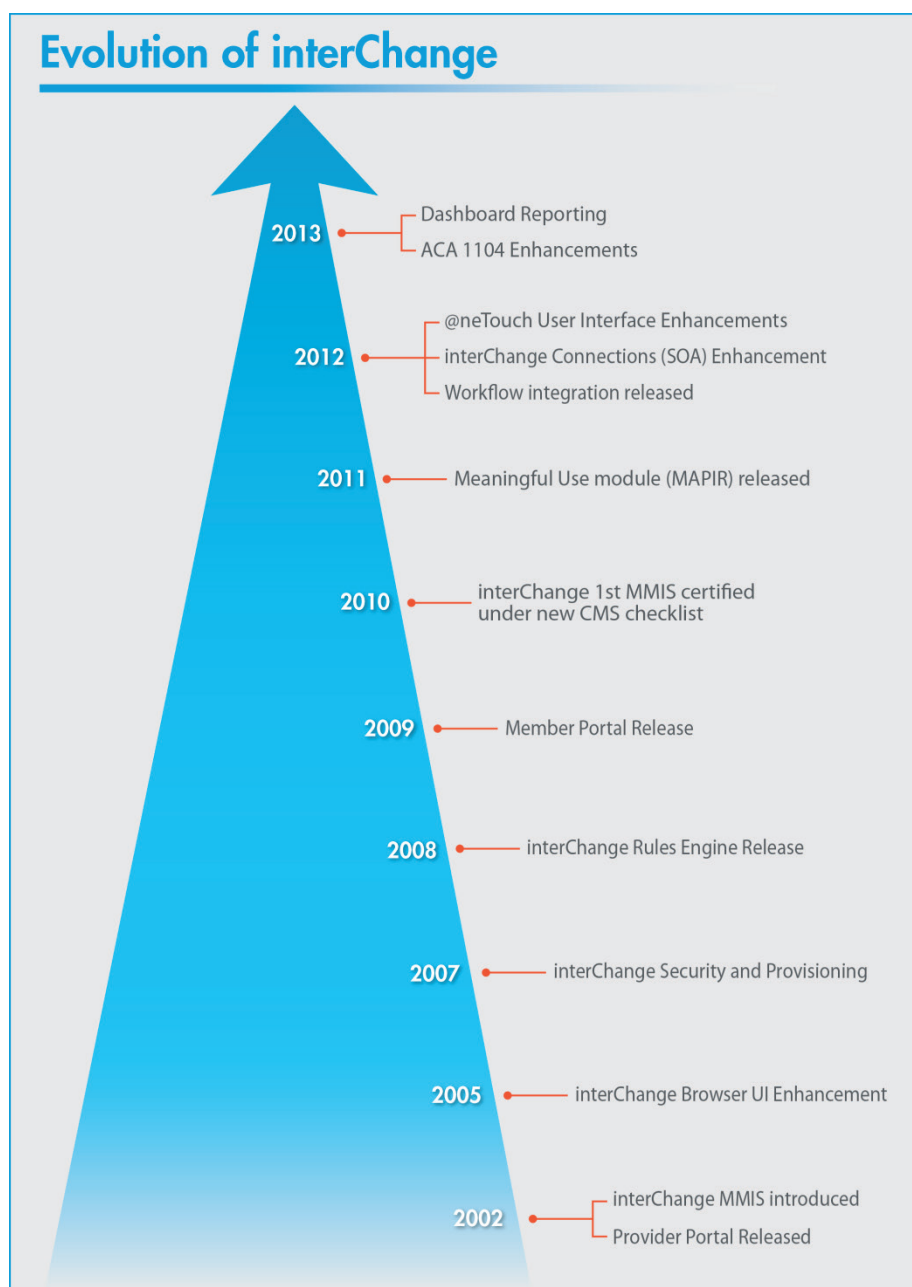| Condition	Component	How HP Meets
	Interface MITA Business Process Steps and @neTouch Family of Features	The UI is closely aligned with MITA business processes. Within a given business area, users can view the MITA business process steps performed in that area.
Leverage Condition	interChange Business Services Framework interChange Connections Client Healthcare Portal Provider Healthcare Portal	The interChange MMIS is built on a business services framework. We take advantage of the building blocks, such as the interoperability through interChange Connections, and use of the client and provider healthcare portals.
Industry Standard Condition	Healthcare Portal interChange Connections UI	Healthcare Portal supports HIPAA content-compliant transactions and includes standardized interfaces for both provider and client services. interChange Connections supports X12 5010 HIPAA transactions. The UI design and development process comply with the Rehabilitation Act's Section 508 (c) standards and verified by automated external UI testing.
Business Results	Client Healthcare Portal Provider Healthcare Portal inSight Performance Dashboards	Enhanced self-service capability through the healthcare portal enables clients and providers to interact with the MMIS independently. inSight Operational Dashboards keep staff informed of the key process indicators at a glance, for interactive and simplified performance monitoring.
Interoperability Condition	interChange Business Services Framework interChange Connections	The interChange MMIS is built on a business services framework. We take advantage of the building blocks, such as the interoperability through interChange Connections, and use of the client and provider healthcare portal. The interChange Connections module directly aligns with the CMS vision through the introduction of an enterprise service bus to facilitate the connections.

Business and
Technical Innovation

Business and Technical Innovation

By selecting HP, Colorado gains a vendor who is dedicated to continual innovation and improvement to our offering. The improvements manifest themselves in the form of technical innovations, improved operational activities, and the continual evaluation of the business process maturity. From a MMIS solution perspective the road map of our innovation has a tremendous lineage as we have led the market in the introduction of advanced features. The following figure provides a sampling of these innovations.

The Evolution of interChange

Evolution of interChange

Year	Innovation
2013	Dashboard Reporting
	ACA 1104 Enhancements
2012	@neTouch User Interface Enhancements
	interChange Connections (SOA) Enhancement
	Workflow integration released
2011	Meaningful Use module (MAPIR) released
2010	interChange 1st MMIS certified under new CMS checklist
2009	Member Portal Release
2008	interChange Rules Engine Release
2007	interChange Security and Provisioning
2005	interChange Browser UI Enhancement
2002	interChange MMIS introduced
	Provider Portal Released

348_177_01_0513

HP continues to advance your Colorado interChange Medicaid Enterprise system functions by aligning to the CMS Seven Standards and Conditions (7SC) and Medicaid Information Technology Architecture (MITA) guidelines to meet changing legislative and healthcare needs. Our solution brings together unmatched experience, proven capabilities, domain expertise and industry knowledge, strong application know-how, and practical innovation.

Our MMIS solution and proven record aligns with the COMMIT project objectives:

- **Maximize Enhanced Federal Funding**—HP has a documented record of successful interChange implementations within the defined period, translating to enhanced Federal Financial Participation (FFP) for our state customers. Georgia implemented interChange and received CMS certification in eight months, accelerating Georgia's ability to recover and maximize federal funding.

- **Ensure Federal Standards Compliance**—interChange is flexible and adaptable for the Department's transformative business needs in meeting growing federal and state legislative obligations. Additionally, Colorado interChange's vision of continual evaluation aligns with CMS' 7SC to help achieve ongoing compliance with federal requirements.

- **Obtain Federal Certification**—interChange is certified by the latest CMS processes and standards; our team incorporates certification requirements into the design of interChange from day one. HP applies those lessons learned from multiple CMS certifications into the next project, continuously improving our efficiency and effectiveness for our state customers.

- **Integrate with Statewide IT Systems**—With its SOA platform, interChange brings interoperability with the data exchanges necessary to integrate into the larger Colorado healthcare ecosystem, helping shape an enterprisewide secure method of communication.

In the following sections, we present the value-add features and optional services within the Colorado interChange solution, along with demonstrating how the HP team shares experience, knowledge, and success across our 20 MMIS accounts. This combination is key to HP and its solution, understanding, and resources necessary to successfully bring the COMMIT project to fruition.

- Examples of additional value or enhanced service offering (RESPONSE 48)—HP is focused on innovation and delivering that innovation to our customers. We highlight our value-added solution components of the Colorado interChange MMIS and how these set us apart from other vendors in our discussion of the following features:

  – @neTouch
  – Integrated Workflow
  – Business Policy Administration
  – Care Management
  – inSight Dashboard
  – interChange Connections

- Advanced interChange Security
- Program Management

- Descriptions of optional requirements identified in Appendix and Matrix (RESPONSE 49)—Colorado interChange encompasses most of the optional requirements, demonstrating the breadth and depth of this MMIS solution and the tested and proven capabilities residing in the system.

- Illustrations of cost savings and sharing across multiple accounts (RESPONSE 50)—from our successful installations, implementations, and ongoing support of the premier CMS-certified MMIS in the country, the HP team gathers lessons learned and applies those lessons across our other accounts. Our team shares the best practices we have accrued through our past work with new and ongoing account projects. We have found that sharing work, when able, saves our state customers the often scarce resources they can then use on other life-changing initiatives.

RESPONSE 48

RESPONSE 48: The Offeror may provide additional examples to demonstrate how their approach and solution will offer additional value or enhanced service offerings.

Based on our understanding of the Department's desired future state, we have identified six major objectives for the winning solution:

- Certified Technology Based on Interoperability and Configurability
- Innovation and Adaptability
- Delivering High-Value Service to Colorado Stakeholders
- Alignment with CMS Seven Standards and Conditions
- Successful Approach for High Productivity
- Delivery of Business Results for Client Health Management

The solution we bring to Colorado meets these objectives beyond the RFP requirements. We roll together our technologically advanced MMIS with a suite of supporting products to bring the most robust, web-based solution.

HP will deliver interChange not as a stand-alone MMIS, but as the core administrative system interconnected with the PBM and BIDM analytics modules. interChange uses a successful suite of products, installed on HP hardware and protected by high-level security. We provide the entire package.

As you read the detailed sections that describe our solution, you will find we are not offering a disjointed mass of products from many sources and vendors. The proposed Colorado interChange pulls it together as one entity, united in form and function, personalized to the user's job. And we do this while meeting the CMS Seven Standards and Conditions (7SC).

"Along with delivery and customer service ratings, our customer's rating of HP on innovation is the most important attribute that we measure to evaluate as part of our service excellence program."

Sue Arthur, Vice President and General Manager U.S. Healthcare

We have divided our response to RESPONSE 48 into the following three main areas:

- **Enhanced Value Add Features**—Value-add features of the proposed base HP solution

- **Additional HP Offerings**—Additional offerings that HP believes would provide value to the Department and the Colorado Medicaid program which have been listed in Price Schedule J

- **COTS Market Status**—Gartner and Forrester analysis of COTS software used in the proposed HP solution
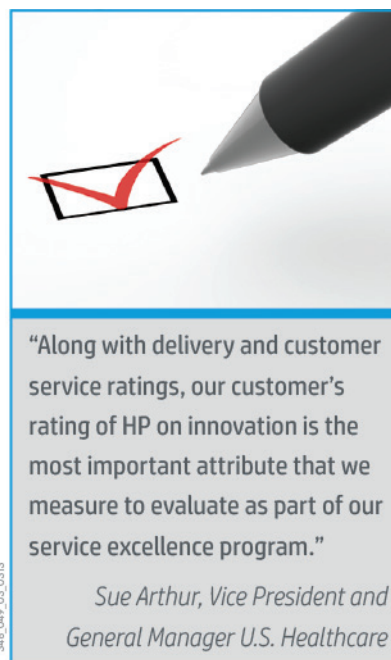
Enhanced Value Add Features

HP's business model is focused on relentless innovation – and delivering that innovation to our customers. During more than 45 years of successfully delivering services to customers, our team has learned that we must earn customers' business every day: continually raising the bar of technology and service leadership. HP's approach includes several value-added features that focus on continuous improvement. The following are the most important features that add value to the proposed Colorado interChange solution:

- **@neTouch**—Personalized navigation tool

- **Integrated Workflow**—Process standardization with visual tracking of progress

- **Business Policy Administration**—Configurable rules for flexible program management

- **Care Management**—Coordination of effective client care management

- **inSight Dashboard**—Performance management at a glance from your desktop

- **interChange Connections**—Business services management for healthcare interoperability

- **Advanced interChange security**—MMIS enterprise security and user provisioning management

- **Program Management**—Proven team and process for high-quality services

These value-added features are what set us apart from the other bidders as we deliver the framework of a solution that addresses current needs and provides the flexibility and adaptability to continue to deliver value throughout the contract. The interChange MMIS simplifies healthcare management at the touch points, enabling our solution to set the benchmark by which the other MMIS solutions are measured. Our Colorado interChange delivers the following:

RFP Flexibility Objective

Business users can personalize the MMIS through self-configuration of the user interface.

- Makes it easy for business users to personalize the MMIS user interface to their personal job
- Enables the workflow engine to raise the process maturity
- Features a care management solution that delivers business results for the client population
- Offers advanced security that provides traceability to user access to each environment

@neTouch

The interChange MMIS has delivered browser based user interface (UI) capabilities for years. Because we have such a broad number of interChange installations, our teams have the advantage of pulling in user experience information from many locations. Based on this user feedback, we have made user-defined enhancements to the interChange UI. These changes are called the @neTouch family of features and are about enabling the users to personalize the MMIS to their specific roles and make navigation within the system easier than ever.

@neTouch Defined

HP built the @neTouch family of features based on guidance from our business experts who perform the detailed tasks every day. Healthcare is complicated, but navigating to what you need when you need it is now intuitive, fast and context sensitive. HP's business awareness and enhanced solution features simplify your tasks in interChange. @neTouch navigation provides quick and timely access to:

- Context sensitive business panels
- Configurable Favorites links
- Consolidated content profiles for viewing or printing
- Context-sensitive help
- User-controlled features through online configurability at the personal level

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

How @neTouch Will Benefit Colorado

The @neTouch Access feature provides dynamic, context-sensitive, single-click navigation to the most relevant panels based on the current business process being worked.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

In a call center, speed is critical. Navigating through complex menu trees takes time. Users need immediate access to supporting, related data from across the system to answer questions. For example, a call center agent is talking with a provider about a claim that has denied. While on the claim screens, new navigation controls provide direct access to a vastly expanded set of data related to that specific claim.

- **@neTouch**—The provider page, other data, type, and specialty and contract tabs appear with a single click.

- **@neTouch**—Specific client information, their eligibility, their primary care physician appears.

- **@neTouch**—Error code details, disposition, and resolution information appears.

How @neTouch Works

With user customization at your fingertips, @neTouch Favorites provides personalized access that makes staff more effective.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Each individual has a job to do, and there are certain screens they access frequently to do their tasks. Each user can pin the screens they use most to their own Favorites list. Essentially each user can configure their own MMIS favorite navigation menu that best suits their needs.

Users do not have to navigate through the menu tree to access their favorite screens or searches. The Favorites information link at the top of interChange MMIS expands the Favorites drop-down at a click and retracts with a second click. Favorites include Favorite Pages and Favorite Searches.

RFP Technical Objective 2

Highly configurable and flexible platform that will be the enabler of expansion.

- **@neTouch—**Favorites window appears.
- **@neTouch2—**Your desired page or tabs are open.

Adding a Favorite Page is the same in interChange as it is at home in your web browser. Simply click the Add Favorite Page button when a page or tab you use often is open in the work area pane. Reduced clicking through navigation menus allows staff to access frequently used pages

faster and easier, making them more productive and efficient. Improving efficiency at the task level of the interChange MMIS enhances overall staff effectiveness.

@neTouch offers Profile to View or Print. This feature produces a preconfigured profile or snapshot of data based on the selected entity such as a provider or a client. Profiles can be configured by users for each business area; for example, different information can be presented on the physician or hospital profile. interChange generates profiles in PDF format with a single click of the Print button to view, save, or print as needed.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Our business users defined the @neTouch Profile to achieve a simpler way to record a snapshot of information. This feature replaces the need for cumbersome screen prints and delivers custom configured PDF output in a separate browser window to support the business functions.

The @neTouch family of features within the interChange user interface contains enhancements that go beyond the basic MMIS user interface. These are user personalization and navigation features designed by users for users.

@neTouch adds value to front line staff, which adds value to the Department. Efficiency and effectiveness are increased across the board.

Integrated Workflow

The interChange MMIS workflow solution is a market leader because the workflow tools naturally integrate within the overall framework of the MMIS. We built the workflow tools on the same software platform as our MMIS user interface.

Workflow Defined

While other workflow solutions are a clunky collection of disparate parts and are bolted on to the MMIS, the interChange MMIS workflow solution directly integrates with the user interface for an optimal user experience through a single application. Workflow adds value in three ways:

- Standardized business processes
- Visual tracking of task progress
- Transparency to efficiency metrics

How Workflow Will Benefit Colorado

Because we base the Colorado interChange on a business service framework, many MMIS tasks such as attaching supporting documents, creating and tracking correspondence, and analyzing detailed business process metrics to drive efficiencies flow together naturally in a universal, next-generation approach to healthcare management.

How Workflow Works

HP designed the interChange workflow solution to support users. The following figure shows the four major stages of interChange workflow.

interChange Workflow Stages
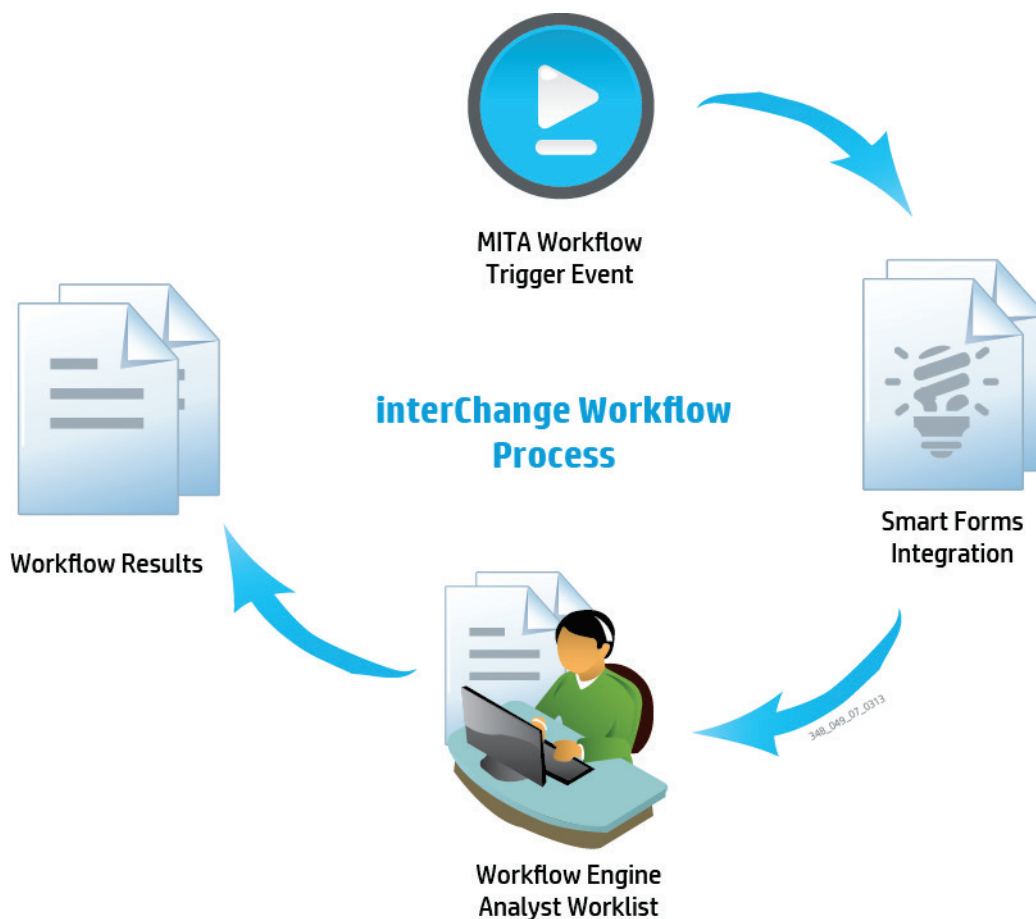
As shown at the top of the figure, the process starts with a workflow trigger event. A business event—such as receipt of a provider enrollment application—will trigger a call to a web service that will start a new workflow process. Analysts can begin the process by clicking on the 'MITA Workflow Triggers' within the system. The workflow triggers are displayed directly on the user interface of the MMIS and are context sensitive to the business area that the user is working within.

Smart Form Integration

By clicking on the MITA Workflow Trigger, the next step of workflow is engaged. At this point the workflow presents the user with a Smart Form that makes it easy to document key information needed when working through the business task. Within the smart form, the analyst can key data directly into the form as well as enter free form notes and link electronic attachments related to this business event. The Smart Form transforms manual, hardcopy routing of information throughout an office to a purely online, paperless coordination of information.

Workflow Engine

In the next stage of the process the workflow engine generates work items and prepares them for assignment to the appropriate workers' work lists. We tailor the work lists to reflect departments,

business areas, or even individual task specialization as configured to the local business appropriate allocation and security. Within the workflow engine the status, stage and responsible owner is tracked until the completion of the work. At each stage of the activity, key metrics are recorded within the workflow engine: the activity start and end times as well as the specific analyst who owned the business task. Based on predefined actions or data, the engine will traverse the appropriate set of tasks to complete the workflow. As tasks are completed, they are removed from the work list.

A single workflow may have multiple paths, include escalation for issues, and involve multiple users drawing tasks from different work lists. The transferring or escalation of tasks can be between participants from multiple organizations, such as HP staff members and the Department staff members. Additionally, the interChange Business Services Workflow engine can make web service calls to kick off external processes or request data through the ESB as necessary in the process. As the workflow progresses through the defined paths, there can be interaction with the business rules engine, document management system and the correspondence management solution. This activity is coordinated for the user through the interChange Business Services Framework.

Workflow Results

When the workflow has been completed, the information is permanently stored within the interChange MMIS. This includes detailed data to the MMIS transactional database, electronic attachments to the document management system, and the historical workflow metrics that document the actions taken and duration of activity for each workflow.

RFP Goal 4

Automated workflows to increase process maturity

There are two keys to the interChange workflow solution. First, the workflows are aligned to support the MITA processes as documented in MITA 3.0. This is a key toward the overall business maturity of the support teams, which is a key goal of CMS Seven Standards and Conditions. Secondly, the interChange workflow solution is an integrated workflow approach where the user stays within the interChange online user interface when performing their tasks. interChange handles the coordination between the needed document management and correspondence management systems automatically for the users. This translates into a set of processes through the system.

Business Policy Administration (BPA)

The heart of any MMIS is the ability to pay claims correctly and the agility to input your policy in a configurable manner. If your system cannot do that, everything else it does is meaningless. Applying the Department policy to the MMIS correctly must be the focus of the chosen vendor. The Business Policy Administration rules engine built into interChange sets HP apart from other

bidders. When added to the other features we are highlighting, the Department will realize significant benefits.

BPA Defined

BPA is central to nearly every process in the interChange MMIS. The Benefit Program Administration (BPA) rules engine is used in claims for coverage, editing, auditing, and pricing features. The BPA process has multiple impacts throughout the system, including the following:

- Determining the appropriate benefit plan for a recipient
- Determining the provider type and specialty the provider is enrolled in
- Identifying the billing rules applied during claim adjudication and where they apply

How BPA Will Benefit Colorado

interChange BPA Rules Management allows trained users to identify, create, refine, and maintain business rules that effectively capture and enforce medical policy. Within interChange, various business rules govern each claim processed—billing rules from policy and contracts, coverage rules from benefit plans, and reimbursement rules that determine how to price and pay the claim. The disposition of edits associated with business rules determine whether to pay, suspend, or deny claims, according to State policy on how each service should be adjudicated.

RFP Flexibility Goal

The interChange benefit management provides great flexibility to adapt as the programs business rules change.

The following are BPA rules that must be applied within the system to determine how to process a claim:

- **Recipient Plan (Benefit Plan and payer)**—The Recipient Plan rules determine the services a client is eligible for based on the defined benefit plans and the conditions of that coverage.

- **Provider Contract (authorized provider type/specialty)**—The provider contract rules determine if the provider is authorized to perform, refer, or bill for a particular service. These rules are based primarily on combinations of provider types and specialties with several other attributes helping to establish that authorization.

- **Reimbursement Agreement (pricing methodology)**—These rules define the pricing methodologies and adjustment factors that can be applied to a given service.
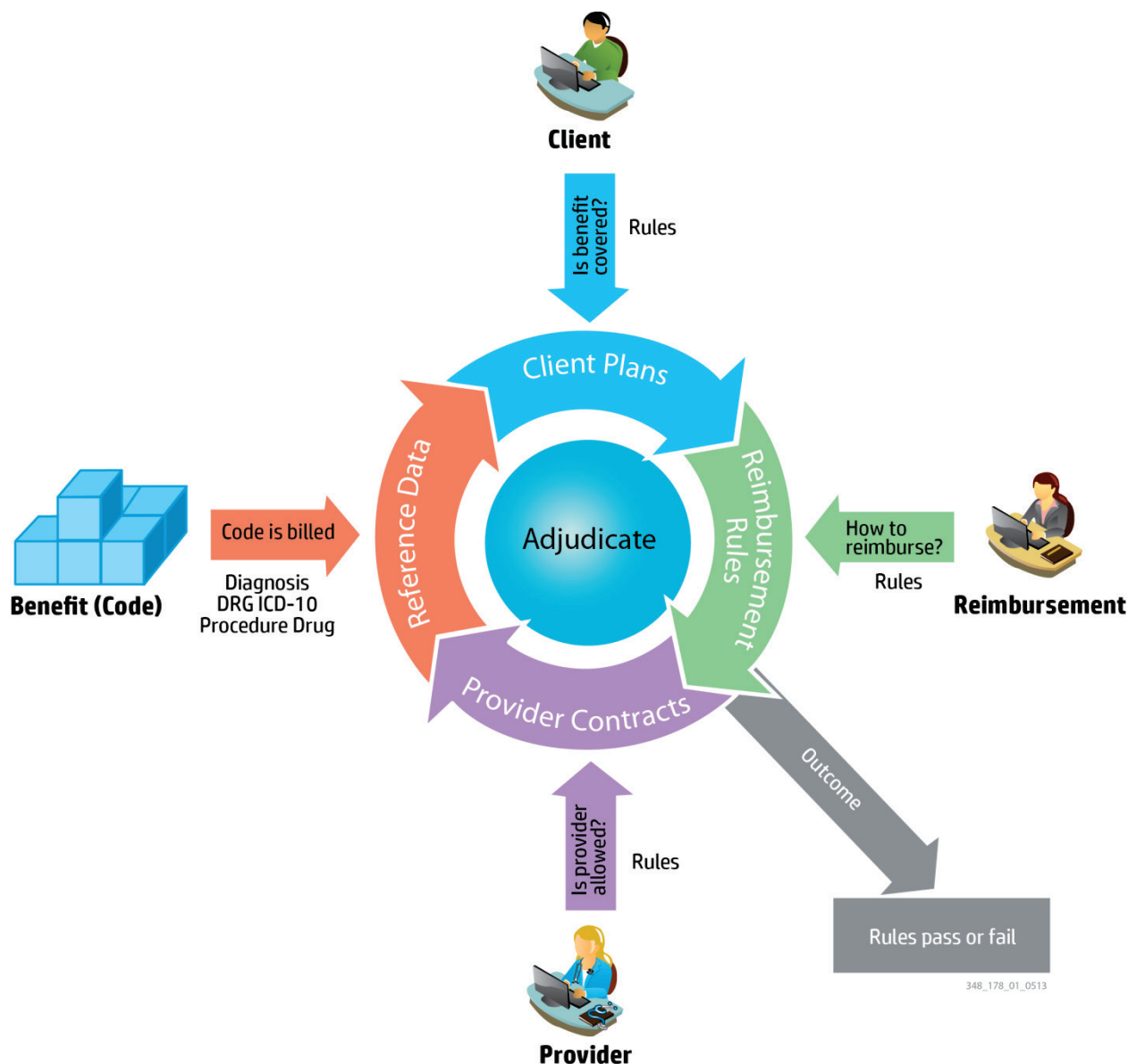
**interChange Business Policy Administration Overview**

If a policy changes, it is critical that the system reacts quickly to the change yet does not allow for illogical or inconsistent results. We designed the interChange rules-authoring panels to allow change while automatically reviewing those changes against existing rules to simplify the rule or prevent overlap. Users can make and apply complex updates intuitively and simply, without unnecessary steps or complications.

interChange also reviews the modified rule to determine if it is inconsistent with another existing rule. For example, a user may try to load a coverage rule for a group of procedures and indicate that medical review is not required. If a rule for the same coverage group already existed and indicated that medical review is required, the rules are in conflict and interChange automatically generates a notification to the user.

How BPA Works

The interChange BPA process and rules allow the policy and claims to be configurable end to end. The following figure is another representation of how the claim will move through these rules and shows end-to-end configuration of the process.

How Rules Are Applied to a Claim
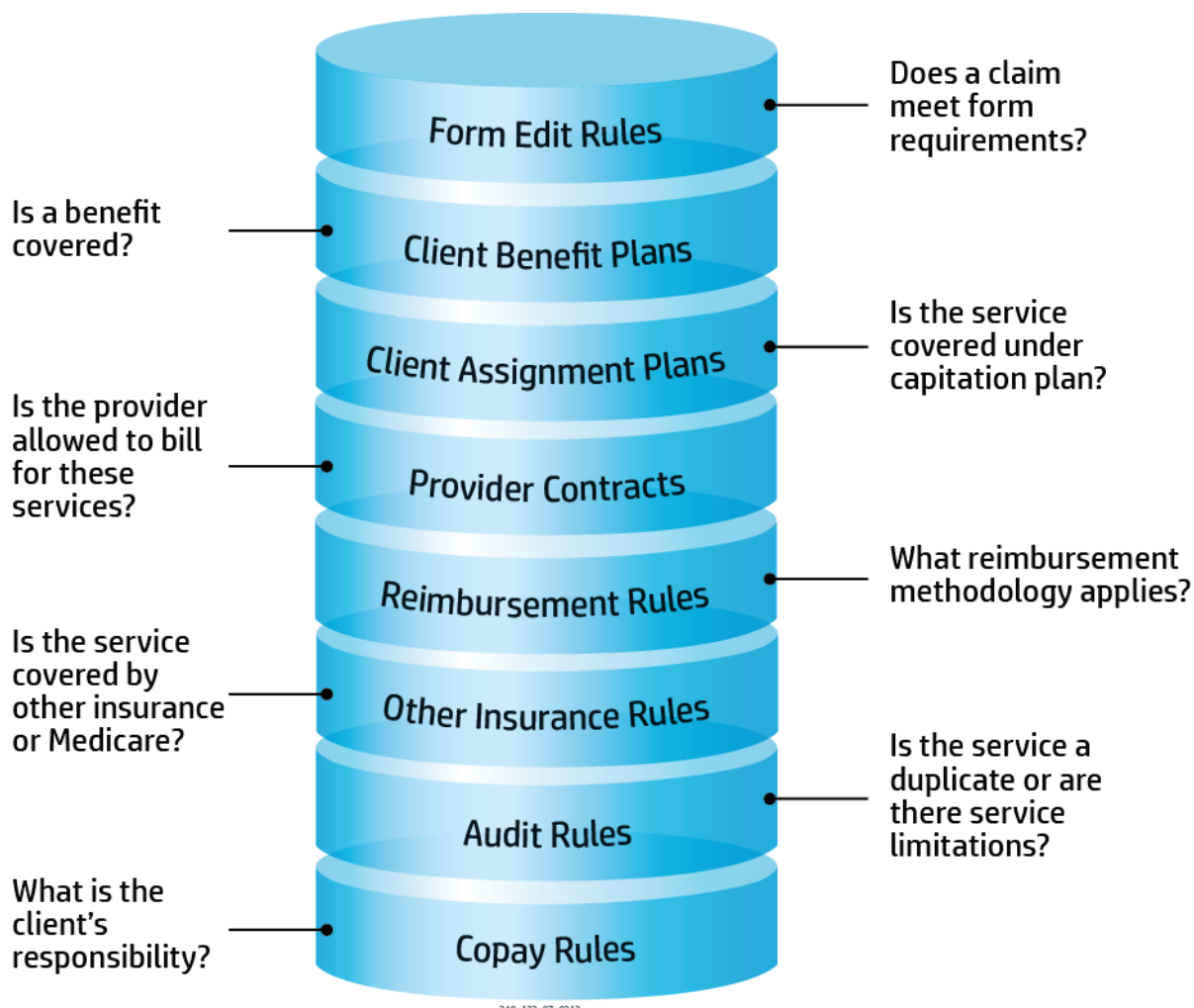
interChange BPA uses a business rules engine to deliver a user-configurable, faster, and more responsive system to manage benefit services and program features. User-friendly, online MMIS browser pages allow the configuration of benefit plan criteria, edit or audit disposition rules, procedure, drug, diagnosis, diagnosis-related group (DRG), and revenue code rules and restrictions, and the establishment of pricing rates and methodologies. interChange presents users with a graphical interface displaying a combination of easily understood parameters and navigation paths. Parameters can be combined in numerous ways through online browser panels to establish a flexible, yet structured, rule repository.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

BPA methodology keeps simple tasks easy. Step-by-step processes prevent erroneous rules and keep long-term defined policy clean and accurate. interChange BPA uses the business rules engine to deliver a configurable, faster, and more responsive system. Rules help policy analysts and SMEs define and manage how services are covered, delivered, and processed.

Additional importance lies in rules traceability. The system keeps track of which rules have been applied to the claim and how they processed/set. Even further, the system allows users to quickly trace that path from the claim, to the rule, to the benefit plan attribute, to the pricing and reference information. Doing this allows for quick research and understanding of what the system and process is doing and how it impacted the transaction. The following figure shows the portion of this process linking the claim to the rule.

The right processing rules allow the following:

- The Department can identify, refine, and maintain the business rules needed to manage today's Medicaid healthcare requirements.

- The Department can logically group services according to recognized medical standards and incorporate rules at any level within the classification.

- The Department can configure their rules according to the way that their policies are written—as broadly or with as much granularity as needed.

interChange BPA uses rules management to define and manage how services are covered, delivered, and processed. The business rules engine adds value to support healthcare services management through interChange easily and effectively. BPA provides an efficient structured process for managing complex healthcare policies and responding to the need for rapid reaction to legislative changes.

Client Care Management

The HP team proposes the VITAL Platform, the foundation of our Versatile Interoperable Technology Advancing Lives (VITAL) Care Management Suite, as the ideal care management application to support Department objectives. The VITAL platform provides functions and interoperability to facilitate complete management of clients—including alerts, work lists, and dashboards—and integrates multiple data sources and tasks into a single workflow. Additionally, the VITAL platform is embedded with InterQual Coordinated Care Content, strengthening the care management process with clinical integrity.

The VITAL Platform Increases Operational Efficiencies

The VITAL platform is a browser-based software solution that combines utilization, disease, and case management activities into a smooth workflow, enhancing care team coordination and providing the foundation for a unified health management program. The VITAL platform will enable the Department to streamline each facet of care management by connecting case managers, providers, and the clients.

With the VITAL platform and the supporting components of the VITAL Care Management solution set, the Department will maintain comprehensive client records, perform authorizations, and receive alerts to address client needs based on informed decisions. With a few mouse clicks, the VITAL platform enables the following:

- Create and assign cases with comprehensive User Management tab

- Conduct assessments and establish a clinically-sound care plan based on InterQual Coordinated Care Content, which makes it easy to manage clients with complex cases and co-morbid conditions in a single assessment

- Create customized assessments and criteria with the InterQual Content Customization Tool

- Evaluate, conduct, and document utilization events

- Capture notes and attach documentation to a client record

- Set automatic reminders for follow-up and schedule further events

- Capture report and outcomes information

- Refer and track clients, authorizations, and cases

- Trigger alerts based on patient gaps in care

Configurable and Interoperable Care Management Solutions

The VITAL platform is highly configurable and simple to use. The Department may determine specific fields for data capture, customize clinical content assessments, and tailor the workflow to meet specific business requirements. Additionally, the VITAL platform works with other VITAL Care Management Solutions and external third parties to support the Department's current and future requirements. Besides the VITAL Platform, the HP team provides pricing for the following VITAL Care Management solutions.

InterQual Content Customization Tool

The InterQual Content Customization Tool provides a simple editing environment to configure InterQual Coordinated Care Content (embedded within the VITAL Platform). In the VITAL Platform, the InterQual Content Customization Tool allows the Department to configure pre-existing assessments, or create new content for assessments. Users can customize sections, subsections, questions, rules, alerts, and notes. Furthermore, the InterQual Content

Customization Tool enables the Department to configure problems, goals, interventions, instructions, educational components, and notes.

Quality Products Based on Industry Experience

The VITAL platform demonstrates system agility in light of changing market demands. Originally launched in December 1997 as Coordinated Care Management System (CCMS), the platform has evolved into an intuitive system to integrate delivery of utilization, disease, and case management services. Today, 71 individual organizations and health plans use the platform covering nearly 23 million lives and approximately 4,000 users.

inSight Dashboard

What gets measured gets done. This straightforward approach is exactly the philosophy behind the interChange production reporting environment and specifically the capturing and reporting of key performance indicators (KPI). The solution deployed by HP is a comprehensive system and services metrics approach that provides unprecedented access and visualization of efficiency and effectiveness of the metrics reflecting the quality of the services provided.

inSight Dashboard Defined

Within the interChange workflow engine is the ability to capture detailed metrics including start/finish date and times as well as the responsible party for the business action taken on every step of a workflow. The interChange workflow engine thus provides the ability to evaluate the efficiency of each business step, the overall efficiency of the MITA business process, and how effectively each analyst is in accomplishing the work. Such detailed, accurate and easy to evaluate reporting is inherent within our solution and we developed it with the CMS vision of continual evaluation and MITA process efficiency across time.

> **RFP Reporting Objective**
> Providing transparency into system performance and program metrics

How inSight Dashboard Will Benefit Colorado

Besides the business process flow metrics reported through the workflow engine, our solution includes the interChange inSight KPI Dashboard where the key metrics that are aligned to service delivery excellence are captured and reported. The HP solution exceeds expectations by going beyond static dashboard presentation and enables the users to have a true analysis tool at their desktop to evaluate, drill into the details and filter the metrics to better understand the business drivers behind the KPI numbers. We provide our inSight dashboard through a centralized content management system of Microsoft SharePoint. Through the inSight KPI Dashboard, the technical and operations performance data is directly available to the Department and HP leadership team for real time, meaningful analytics.

How inSight Dashboard Works

With the HP inSight KPI Dashboard, what gets measured gets done correctly. The HP solution is a forward-looking approach that directly aligns with the MITA vision of continual measurement

and improvement over time. To further demonstrate the advantages of the interChange inSight KPI Dashboard we provide the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Within this Contact Management example, the many advantages of the interChange solution become apparent. First, the top half of the screen lists the many interactive dimensions that the reviewer has access to such as "Frequency Description," "Contact Date," "Contact Reason Description," and "Contact Method Description."

The manager can change any of these dashboard filters to drill into the specific metrics they elect to focus on. The exciting part of this process is that by changing the filters, the reporting displays of the dashboard change dynamically, as the following figure details. There is no need to rerun a report and wait for a response—the presentation of the results is completed in real-time—making the interChange inSight KPI Dashboard more than a reporting tool. The bottom half of the screen shows historical data. The multipresentation method illustrated previously, line charts complemented by the two pie charts, provide quick and visually meaningful information. Users can change the view if desired.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Alerts

Utilization of the dashboard gives the enterprise another key feature: alerts. HP can configure alerts within the system so that monitoring occurs not only in the tool, but also dynamically informs management of changes that go beyond the intended range. This allows users to then be alerted to go research further and address any potential concerns. The dashboard brings the Department users the ability to quickly view status and understand program direction. The alerts take this to the next step indicating the potential locations to address and when. The following figure shows the configurable nature of the alerts.

The inSight Dashboard offers access to performance indicators like never before. HP adds value to the Department's ability to be responsive and proactive.

interChange Connections

Today's complex healthcare enterprise requires the receipt, translation and monitoring of vast amounts of data in a trusted and secure environment. New connections must be easy to set up—real-time management consoles must provide accountability for guaranteed transaction delivery, capacity monitoring and early warning for potential bottlenecks—

RFP Interoperability Objective

SOA platform that will bring interoperability between the MMIS and the broader healthcare environment.

auditing, logging and reporting activities must provide activity details and traceability for research.

Connections Defined

interChange Connections component enhances the healthcare enterprise environment through robust interoperability capabilities. These include the following:

- High availability
- Failover
- Load balancing
- Clustering
- Virtualization support
- Exception handling
- Data encryption

With the interChange Connections Business Services, the Department will have this and more.

How Connections Will Benefit Colorado

The HP interChange MMIS offering simplifies Business Services Management by combining a workflow engine, rules engine and enterprise service bus into a comprehensive business process management capability. We bring the power of these leading edge tools to life through the dedicated efforts of experienced HP technical and business professionals.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

interChange Business Services workflow solution manages and integrates human and machine tasks, supported by a high speed business rules engine. Each process contains unique business logic, triggering chains of decision-making events.

Subject-matter experts and users guide the process development in a visually designed, collaborative environment that addresses what the users actually do.

How Connections Works

When combined with the HP technical and business healthcare expertise, the workflow and business rules capabilities of the interChange Business Services solution dramatically increase user productivity as well as business process quality and transparency.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

Analyst Worklist

The analyst worklist is the one-stop portal presenting a single view showing how assigned tasks integrated directly into the interChange web user interface. It is easier to keep track of everything if it is in one place.

Efficient screens save analysts time and keystrokes—a single environment allows them to perform their jobs of enrolling providers or updating provider addresses as well as change and complete these assigned tasks on their worklist. Workflow orchestration automatically presents the next required screen, filled with the appropriate data based on the choices already made.

The feature-rich, process-driven, visual workflow designer allows analysts and technical professionals to define and deploy the appropriate role security, queues, business logic, notification, redirection, escalation and exception processes.

Design wizards automatically create web services to interact with service-enabled applications such as the HP Exstream Correspondence Generator, an Electronic Document Management

System or a contact tracking system. Workflows can be initiated through web services, process schedules or manually as needed.

BAM Reporting

Business Activity Monitoring (BAM) is available both in a near real-time console view and in easy to define reports and charts providing clear insight into the overall performance of a department or single individual.

Because each individual process is monitored, it is easy to generate Key Process Indicator (KPI) reporting to provide early warning when intervention is required to keep the system operating within specified parameters. This proactive view allows us to recognize bottlenecks before they reach a critical stage, rather than the next day.

If questions arise, audit logs graphically depict the actual flow through a specific workflow instance using colored lines, removing the guesswork of exactly which decisions were made.

Management Console

The management console enables supervisors to manage and monitor the heartbeat and throughput of business processing. Work redistribution, scheduling, escalation notifications and exception interventions can be performed through this portal. Clear and simple presentation dashboards provide the pertinent information at a glance with the ability to drill down into the details of any process selected.

Business Rules Engine

For really complex business logic, the interChange Business Services can call the business rules engine as a service for process evaluation. These decision points are configured directly within the workflow modeling environment using standards-based integration.

While the Business Services workflow is one use of the business rules engine, it can be also called as a service from any application or process. Business rules engines externalize business logic, increasing the performance, scalability and reliability of systematic decision-making. They allow key logic to be separated from base code as recommended in the CMS Seven Standards and Conditions guidance.

HP's Business Rules Engine provides a model driven, visual environment where analysts, subject-matter experts and designers collaborate on establishing the proper processing logic. These optimized, compiled rules are extremely fast, maintaining system performance even as the number and complexity of the rules grow.

Automated tools evaluate the rules for completeness, collisions and circular logic. Test cases and criteria are stored for automated regression testing of new or changed rules.

The service-oriented architecture of the Connections Business Services Framework provides a complete package of ESB, integration, and messaging capabilities. Using a single management console/portal, HP IT

professionals describe and orchestrate the messages and web services.

Orchestration, On and Off Ramps, Web Services, Exception Management

We get the right data to the right place in the right format using a palate of capabilities. These include: on-ramps and off-ramps with endpoint management; pre and post processing scripts; standards-based data translation and transformation adapters. Complex business logic is implemented through the orchestration of activities, configurable rules, and routing based on either data content or context.

Repository and Orchestration Service

Preconfigured data maps and a data transformation engine provide support for EDI, X12 and HL7 schemas. IT professionals monitor: application health; availability; usage; performance; KPI compliance through Business Application Monitoring (BAM) and alert notification reporting.

Universal Description, Discovery and Integration (UDDI) Services

Security management supports single log on, security token management, access authentication, and digital signatures. Extensible APIs allow integration with various applications and environments.

Management Portal

The management console provides a single control point for efficient performance tuning, trading partner management, and streamlined deployment across environments. Working together, service-oriented architecture of the ESB, workflow, rules engine and HP expertise creates interChange Connections Business Services.

interChange Security

Protection of Medicaid data is of utmost importance to every state. The need to wrap the data in a security blanket comes with challenges in allowing access as needed to those users authorized to view or edit the data. Security around the MMIS and peripheral systems has become a full time job, sometimes at the cost of delaying access in the interest of "getting it right." interChange Security is the value-added solution from HP to make sure access is granted correctly and timely for each user to each program or application needed.

interChange Security Defined

We have a comprehensive security solution that provides centralized identity management. HP provides a single point of access for authorized system users. Centralized user authentication and authorization, as well as de-provisioning a terminated user, is accomplished with a set of interoperable tools.

Historically, users were burdened with separate user names and passwords for separate systems based on their job duties and level of responsibility. Provisioning those names and passwords could take days and required separate forms for separate functions. The solution uses Active Directory to achieve the following:

- Single Log on and Authentication
- Self Service Provisioning
- Delegation
- Role Management/Help Desk
- Password Management
- Hierarchal Structure

Instead of having an assortment of forms for requests, we create a consistent method for requesting access to applications and network resources. The solution manages user access through automating the request and approval that replaces the existing manual and paper driven processes.

How interChange Security Will Benefit Colorado

The Department will see positive gains in worker time and efficiency because of having single log on. Workers will log on to their workstations and automatically gain access to the applications they have been authorized to use through the landing page.

Our state employees in Kentucky estimated gains of 2 minutes per day per worker, which does not sound impressive at first. But multiplied by 2785 workers for 252 working days per year, they achieved savings of 1,403,640 minutes annually. This is just in log on alone. Further savings were seen in reduced help desk staff, lower paper costs by eliminating forms, and reduced down-time for staff waiting for password resets.

HP can bring these same results to the COMMIT project. interChange Security delivers significant return on investment to the Department. The security foundation brings system access to the forefront of technological advances.

How It Works

HP will configure security around the Colorado interChange Active Directory.

Single Sign-On and Authentication

The solution provides single log on for MMIS users to access integrated enterprise applications by Microsoft Active Directory Federation Services. Authenticated credentials and roles are passed through standard SAML tokens to the receiving application for use as application specific authorizations. MMIS users can access applications through links on the landing page. This is the starting point for the Medicaid activities through the web. The activity through the landing page is logged and reportable. Direct access to individual applications using "deep links" is handled as well by routing users through the log on page before initial application access.

Self-User Provisioning

The solution allows for self-user provisioning. Based on user type, accounts can be created through access to a web page, an internal link, or PIN information sent through the mail with a provider ID. Providers are automatically given the appropriate authorizations based on their enrollment information. Internal fiscal agent or state staff users can request access to MMIS

applications as needed. Requests are routed through preconfigured workflows of approvers who approve or deny the requests for authorizations. The authorization request process is managed using emails sent to the series of approvers. Status emails are sent also to everyone involved with the request.

Delegation

Providers can allow administrative office staff or contracted billing agents to access MMIS functions on their behalf while maintaining a separate set of authentication, authorization, and security audit information. Each administrative staff member and contracted billing agent will have a separate logon ID. Through interChange Security, providers can delegate selected authorizations to these accounts based on the account owner's roles within the provider's business processes. Those links are maintained, even across providers, while having an individual identity for each delegated user.

Role Management and Help Desk

The solution provides a help desk application to manage each aspect of configuration: users, applications and roles with corresponding reporting features for each. The help desk is the central control center for daily operations. Call center staff will be given basic access to the help desk (not administrative access) to manage user calls related to typical security issues.

Password Management

The solution allows for self-service password resets. If a user forgets their password, there is a link on the security log-on page to reset it. This link results in a system generated email to the user's registered email address that contains a link that will take the user to a page that will ask a preconfigured security question. The user must answer successfully to reset their password.

Hierarchal Structure

State and fiscal agent staff user IDs are grouped based on organizations and departments. Many organizations can be defined within the solution. Each organization must have one or more departments. Each internal user is assigned to one organization and one department. These assigned groups are the basis for the authorization approval workflows that are processed when an authorization request is initiated by a user. Owners of these groups can be given the authority to manage configuration of the group, add users to the group, and terminate users in the group.

User Provisioning

Exceeding the basic security management requirements, the interChange Security solution includes workflow user provisioning to allow efficient access and assignment of roles to users within the solution. User provisioning and management is a critical part of the security process. Not only should the process have controls and workflow, but the process must allow for the detailed user management necessary to verify the proper controls are in place for system access. This also means users do not have to wait days for access and can get the information they need quickly and be self-managed. This means that the emphasis is placed on policy and policy

monitoring, not the work to do it. This component of the solution allows for quick user auditing and review of user management and access.

The following figure illustrates a request for security access to specific applications within specific environments.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Security requests are routed through preconfigured workflows of approvers who approve or deny the requests for authorizations. The authorization request process is managed using emails sent to the series of approvers. Status emails are sent also to everyone involved with the request.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The final figure shows the screen that a manager will use to grant authorization to the security request. Because the security requests are managed through this online controlled set of defined workflows, interChange provides the oversight and efficiency required of an enterprise wide MMIS offering.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

Because the security provisioning is worked and tracked electronically, we can easily report an audit of what users have access to which applications in the environments. While other vendors attempt to track such information on manual tallies or through spreadsheets, our solution provides an auditing report ability linked directly to the actions taken through the provisioning system.

Additional HP Offerings

In this section, HP describes additional offerings we have proposed to provide additional value to the Department:

- MAR Reporting and Analytics from MMIS
- Enhanced Penetration Testing
- Encounter Claim Clearinghouse
- Enhanced Policy Consulting
- Provider Audit Case Tracking
- Enhanced Check-In/Check Out with Scheduling and Claim Submission

MAR Reporting and Analytics from MMIS

HP understands that having the right information in the right format is vital to the success of any MMIS. To comply with federal reporting requirements, the right data is needed at various scheduled intervals to generate the corresponding report. The Colorado interChange reporting environment maintains the detailed transactional data that forms the basis of the reports to meet Federal Certification Requirements. Having the critical federal reporting produced directly from the MMIS transaction data solution reduces the changes for issues that would arise and also

saves overall time to create the reports. The detailed transactional data will provide the necessary information to generate the following reports to meet CMS federal and State reporting requirements:

- **CMS-372**—Annual Report on Home and Community-Based Services Waivers

- **CMS-372S**—Annual Report on Home and Community-Based Services Waivers and Supporting Regulations

- **CMS-416**—Annual EPSDT Participation Report

- **CMS-37**—Medicaid Program Budget Report

- **CMS-64**—Quarterly Expense Report

- **CMS-21**—Quarterly CHIP Expenditure Report

- **CMS-21B**—Quarterly CHIP Program Budget Report

- **TMSIS**—Monthly submission of the eight TMSIS files

- **PERM**—Payment Error Rate Measurement

In response to these enhanced requirements, HP created an initiative to address the new T-MSIS file structure and submission requirements. The primary objective of the project is to provide a shareable solution for the T-MSIS data storage, file creation, and submission processes avoiding duplication of effort across the Medicaid enterprise. This solution will have the following components:

- The first component defines data elements and relational data tables for T-MSIS data storage.
- The second component provides for output file creation in the format specified by CMS as well as implementation of specified data-validation edits.

The project will enable accounts to take advantage of centrally produced work products to be used in the development and execution of their specific T-MSIS compliance efforts. This combined initiative across HP MMIS accounts is estimated to reduce the work effort 40 to 60 percent on each account—translating to a 40 to 60 percent cost avoidance for the State and CMS. The project team also is estimating a 20 percent reduction in the elapsed time for the account to initiate the project, given the shared resources.

Managed Penetration Testing

The intention of vulnerability scanning is to detect vulnerabilities exposed to your network environment such as communication services, operating systems, routers, email servers, web servers, and firewalls. HP maintains about 4,000 publicly known vulnerabilities in a central database. This repository is used to scan for known vulnerabilities in your IT environment. The results from the vulnerability scan will be used to identify and assist in prioritizing threats for remediation planning (high, medium, low). The scan will verify the identification of causes of noncompliant devices or applications and will address the planning of mitigation—for example,

change configuration settings or apply patches—before being exploited and causing business risk from any kind of attack.

Managed Penetration Testing goes beyond Vulnerability Scanning by using additional tools and manual operator intervention to try and exploit the vulnerabilities identified by Vulnerability Scanning. This removes false positives and gives a better picture of whether the target system can actually be compromised, and how.

Penetration testing is the next step in a proactive network security. It can help to assess the real effect of vulnerabilities on a network and to prioritize remediation. Vulnerability scanning and penetration testing go hand in hand. Vulnerability scanning results are used as the starting point for penetration testing.

Penetration testing is the act of assessing the security of your network by attempting to penetrate it by simulating the actions of an attacker. Penetration testing is authorized and scheduled, and will probably be detected by an Intrusion Detection System. Penetration testing is done with either manual or automated tools. The penetration test can gather evidence of a vulnerability including reading and writing files, executing commands, or taking screen shots.

Successful penetration testing provides indisputable evidence of the problem as well as starting point for prioritizing remediation. Penetration testing focuses on high severity vulnerabilities and there are no false positives.

HP views the complete spectrum of vulnerability scanning or penetration testing as follows:

- Vulnerability Scanning
  - Information Gathering
  - Internal (Intranet) Scan
  - External (Internet) Scan
  - Analysis and reporting

- Penetration Testing
  - Manual probing
  - Analysis and reporting

HP has included automated vulnerability scanning as part of our base service. This additional service is to include a manual penetration test each year. The results of the vulnerability scanning are the required input for Manual Probing to verify false positives or to determine feasibility of an attack and evaluate the risk and impact on business for high risk vulnerabilities.

Manual validation of findings is performed to determine the relevance of vulnerabilities identified during the scans. Obfuscation techniques used by some administrators may result in false positive items being reported during vulnerability scanning. Manual validation is an essential step to prevent false positives from being listed in the final report.

A combination of automated commercial tools, manual techniques, knowledgeable and experienced consultants and the information collected during other testing phases are used to conduct comprehensive penetration testing and identify the data or function that may be compromised by an attacker.

Encounter Claim Clearinghouse

HP is proposing an additional service for an encounter claim clearinghouse. HP has found that this solution provides significant value to our Medicaid clients and their providers. With the solution, providers submit the claims and encounters to HP. HP splits the FFS claims from the encounter claims. The FFS claims are processed through interChange. The encounter claims are edited to verify they are clean claims, then batched and forwarded to the appropriate MCO/RCCO. Using the interChange MMIS as the claims clearinghouse through which the managed care claims are submitted regardless of MCO payer creates the following value:

- Providers submit claims for the programs to a single entity as opposed to managing claims submission across multiple entities.

- This enables a single provider to enroll in multiple contracts.

- This provides a single repository of unfiltered data directly from servicing providers the moment a claim is filed.

- Encounter data is captured real-time and available for data analysis near real time

- The Department can view the before and after view of an encounter to better understand how the RCCOs are behaving performing and how that is affecting the client's health outcomes.

Provider files claim directly or through their billing agent/vendor to HP for eligible Colorado client. interChange processes the claims through EDI edits that align to prior FFS EDI edits and Colorado MCOs/RCCOs' EDI edits. Based on MCO enrollment data and Colorado policy, the claim is determined to be either a managed care claim or a fee for service claim. Carved out fee-for-service claims are forwarded to the MMIS and process through claims engine and financial. The FFS claim is priced and paid using Medicaid pricing.

Managed care claims are forwarded to the client's MCO. "Non-clean" data is rejected up front. Submitters are notified through a batch submit report or 277CA. Clean claims are automatically forwarded to the MCO/RCCO the same day which allows for faster processing and payment to the provider than the traditional process.

This process does not impact current provider/billing agent relationships. Providers submit Medicaid FFS and managed claims through a single entity and even in the same batch. The MMIS automatically forwards managed care claims to the appropriate MCO based on client enrollment.

The Department can analyze FFS payments avoided compared to capitation payments to gauge program cost-effectiveness and services provided over and above the standard FFS program to track additional benefits and services clients are receiving.

Enhanced Policy Consulting

HP is using Sellers Dorsey to support the BPR effort. They will provide an ongoing role of continued policy consulting to the Department and HP semiannually. HP has used policy consulting with the State of Nevada effectively and we are now rolling it out to several of our other Medicaid clients. We have developed a tool to record and maintain information on potential initiatives and mandates. The tool allows a team to collaborate on the following:

- Identify and prioritize future initiatives

- Develop activities and timelines of pre-initiative start-up work that needs to be accomplished so APDs and amendments are completed and project can start on time

- Track progress of activities and filter top priority initiatives and outstanding activities to drive status checkpoints and meetings

- Develop high level resource matrix to support prioritization and decision-making with export to Excel

- Collect justification, projected costs, and projected savings to feed presentations, APDs, and more to support review and approval process with export to Microsoft Word

- Provide Gantt chart view of initiatives and supports export into Microsoft Project

We propose to increase the frequency of the strategic planning/policy meetings to one each quarter with this optional service. This will double the amount of time we collaborate at this strategic level. We welcome the PBM and BIDM vendors to join this collaboration.

Provider Audit Case Tracking

HP proposes an additional integrated solution that our clients use for program integrity. The HP Case Tracker system is a web-based CMS certified case management application. Program Integrity staff use this system to create, maintain, track, and review provider, client, ICN, and project-based cases. The robust solution enables authorized users to perform and move through audits quickly, maximizing the opportunity to recoup Medicaid dollars from fraud and abuse within the system. The HP Case Tracker has been in place in Wisconsin since 2008 and the enhanced HP Case Tracker was implemented in Oklahoma in September 2012.

The HP Case Tracker is a table-driven, feature-rich system that contains many functions including the following:

- This supports multiple types of cases—such as Medical Review, Payment Error Rate Measurement (PERM), and Data Analytics

- This supports multiple user roles—such as auditors, managers, directors, financial, legal and administrative staff)

- An electronic approval process enables staff members to generate letters and reports and route them electronically to a supervisor or manager for approval before sending to providers or clients.

- The system can link individual cases to a super-case to summarize an overall project, finding, or directive easily within the case-tracking system.

- Users can store and link documents, scanned images, spreadsheets, notes, memos, and other electronic documents to the case.

- Uploaded claim information from various interfaces enables staff members to create cases and enter findings and identified overpayments into the case-tracking system.

- Users can store Program Integrity–specific provider contacts or addresses and pull those provider specific contacts or addresses into PI letters.

- A BusinessObjects universe is available for ad hoc queries against the HP Case Tracker data. Seventeen standard BusinessObjects reports also are available.

- The system has a table-driven design with web pages providing easy point-and-click navigation.

- A slimmed-down desktop case management version is available for field audits when an auditor cannot connect to a network.

HP would be pleased to provide complete details and a demonstration of the tool if the Department is interested in learning more.

Enhanced Check-In/Check Out with Scheduling and Claim Submission

HP has proposed the use of the Electronic Visit Verification module of the Santrax® Payer Management system offered by Sandata Technologies, Inc. Santrax® Payer Management (SPM) is a web-based solution that measures, monitors, and provides electronic visit verification for home care services. SPM processes electronic files of authorizations, eligible clients and home care provider agencies, including client-directed caregivers. Providers use the software-as-a-service platform to schedule care for clients. Using a variety of technologies, the system captures caregiver arrival and departure times, location, client and caregiver IDs, and tasks performed during the visit. Rules-based claims submittal increases compliance and claims accuracy, reducing inappropriately billed services. The result is improved oversight into HCBS program delivery, streamlined claims, and reductions in fraud.

HP is proposing the remaining modules in this optional service to provide the Department with a complete solution from scheduling, to check in/check out to claims generation and submission. Sandata's solution architecture verifies that the Department and their provider community can select the appropriate modules to configure a program that meets the needs of the stakeholders.

Sandata's flexible solution offering is designed to be deployed in multiple scenarios—a single end-to-end solution, or distinct modules that can be integrated with other third-party solutions; uniting workflows to validate visit verification and care plan compliance. The flexibility of the solutions allows providers to select only the components that they need; providing a cost-effective and feasible offering for each constituent. Each component of the suite of solutions is described in detail below, including the interactions with third-party systems.

- **Assessment**—An easy-to-use data collection and remote chart access tool giving field workers the ability to collect both clinical and non-clinical information at the point-of care;

- **Agency Management**—A powerful scheduling and billing engine designed to maximize efficiency for providers;

- **Electronic Visit Verification™**—Multiple technology options to capture caregiver time and tasks at the point of care; and

- **Claims Validation**—Validates claim data against authorizations and EVV-captured data before claims are adjudicated.

Assessment

Santrax® Point-of-Care (SPoC) is an easy-to-use data collection and remote chart access tool giving field workers the ability to collect both clinical and non-clinical information at the point-of care. SPoC helps reduce clinical inconsistencies and documentation errors, enhances communication, eliminates costs associated with paper forms and printed charts, and streamlines time gaps between assessment completion, office receipt, and MCO data analysis.

Designed to work on a variety of mobile devices and platforms including Android, Apple, and Microsoft, SPoC offers a full complement of OASIS and non-OASIS documentation forms and tools. The solution allows users to complete a variety of comprehensive assessments and document visit notes using their smartphone, tablet or laptop in either a connected or disconnected mode. Completed assessment data is automatically transmitted to HP whenever internet connectivity has been established on the mobile device. Additionally, data is continuously checked against the Sandata proprietary SmartEdit engine and industry leading clinical best practices library, further supporting caregivers with best-practice guidance.

The solution has a variety of other features including full remote access to patient charts; physician, ICD-9, supplies and medications look-up capabilities; automatic triggers for physician order modifications; ability for clinicians to generate and transmit prescriptions, change the patient's plan of care, transmit and track supply orders, and review lab results online; and integrated medications management for performing medications lookup, determining drug and allergy interactions and generating teaching sheets at the point of care.

The system also promotes and improves care coordination using its online communication capabilities, which allow the user to communicate and consult quickly and easily with the

Department, patient's physician, or their peers through the easy-to-use online messaging system. Lastly, Santrax Point-of-Care is fully integrated with SPM.

A part of the reality of appropriately coordinating care for this client population is the recognition and anticipation of care being given across multiple disciplines (clinical and non-clinical) and settings (such as institutional, clinic, and community).

A common example of this reality is most often seen when a client is discharged from a necessary hospital stay and returns back to his/her community living setting. It is here that many issues can arise regarding safe, effective, and quality focused continuity of care. In short, the most fundamental focus of coordinating a client's care transition from an acute care setting is to verify appropriate timely community-based care post-discharge.

Electronic Visit Verification

Sandata's powerful combination of patented solutions for visit verification is called the Assured Coverage program and includes the following:

- **Telephone Visit Verification™ (TVV™)**—TVV uses Automatic Number Identification (ANI) technology to validate telephone calls to log on and log off, recording time and location in real time.

- **Mobile Visit Verification™ (MVV)**—Real-time GPS technology verifies caregiver location and visits using GPS-enabled devices (mobile telephones and tablets).

- **Fixed Visit Verification™ (FVV™)**—Patented technology to verify visits when no landline or cellular service is available. Caregivers press a button for a randomly generated number at the start and end of each visit. The number is then entered into the EVV system when a telephone line is available and translated to an exact date and time stamp for the visit.

Through the Assured Coverage program, the Department can be confident that multiple technologies verify visit verification is occurring at the point-of-care, helping to guard against allegations of fraud and abuse,. HP will work with each of the providers to build a customized EVV program deploying the visit verification technologies to maximize the number of visits that will be validated electronically.

Santrax Agency Management

Agency Management is software for home care scheduling and billing, used by the providers to manage their business.

Santrax Agency Management module is a powerful billing and scheduling engine designed to maximize efficiency for providers. Available only as a complement to Sandata's EVV module, the Agency Management is fully integrated with the EVV module and would use the Colorado interChange Medicaid Enterprise system data files to verify quality assurance and improved provider workflow. The Agency Management incorporates creation of schedules from authorizations with real time validation. The Advanced Scheduling Module provides proximity

and attributes searching, with real-time validation of staff compliance. Schedules can be viewed in a calendar, weekly or detailed format. A configurable alert system provides enhanced visibility and compliance tracking for administrators of schedule variances.

The Agency Management's integrated billing functional capability verifies that the ONLY claims that are sent to interChange are claims where the service delivery matches the authorization and where the visit has been properly validated. Providers generate electronic billing files after the visit is properly verified. The visits are matched back to the authorization to verify clean claims. Electronic 837 claims files are transmitted directly to interChange for adjudication and payment. The result is that incorrect claims never get to interChange. The result is less work effort for everyone and improved accuracy in billing.

The Sandata EVV solution decreases costs, improves efficiency, and supports the quality of services to Colorado's clients as follows:
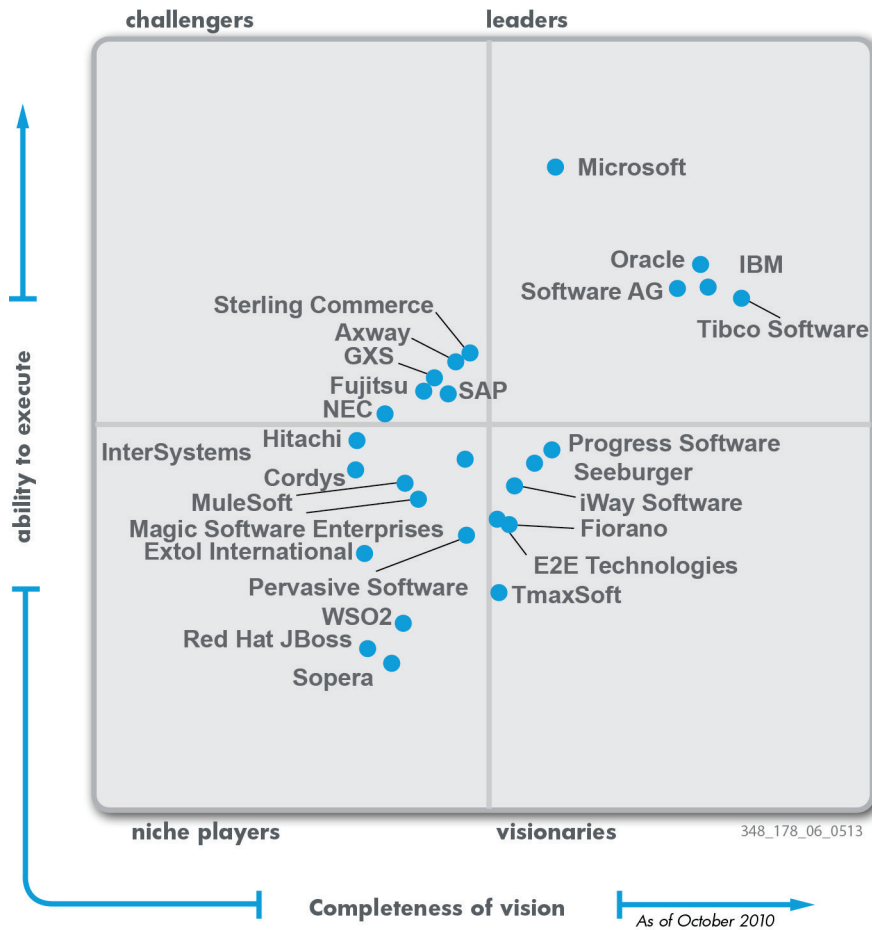
- Providing access to real-time home care service delivery data, monitoring tools, and comprehensive reporting on utilization

- Automating manual and paper-based processes, removing potential human error or time sheet "rounding" by caregivers

- Providing EVV options for Medicaid clients across Colorado's varied geography (urban and rural)

- Providing real-time alerts to provider agencies and care coordinators for late or missed visits

- Verify that only visits verified against authorized services and limits are paid, mitigating the potential for fraudulent claims and reducing the workload for claims adjudicators and program integrity staff members

- Provide a tool to consistently manage and compare provider agencies and establish benchmarks for care delivery to implement Pay For Performance ("P4P") programs or assess penalties

Electronic visit verification controls and contains the rapidly accelerating costs for HCBS while improving quality and integrity. Rather than reduce funding for vital services, EVV technology improves accuracy in service delivery and billing, verifies higher standards of care delivery, program and cost efficiencies, and enhances transparency among the stakeholders in the chain of care.

COTS Market Status

The HP solution takes advantage of many COTS products and tools. We perform a detailed due diligence before selecting a COTS product. We review the company and the product to verify the product will meet our current and future needs. Below are the Gartner or Forrester ratings on many of our chosen COTS products.
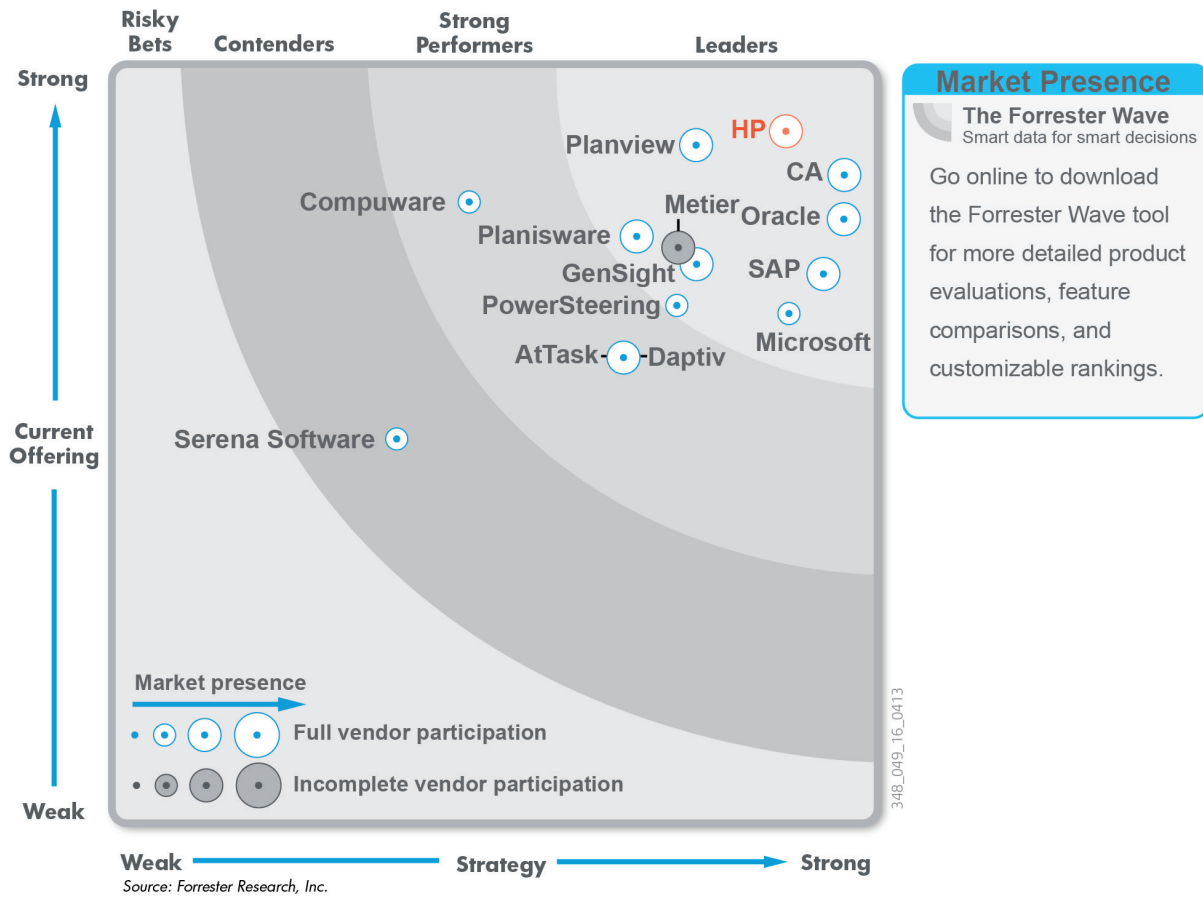
Microsoft BizTalk—Gartner Magic Quadrant

challengers   leaders

ability to execute

- Microsoft
- Oracle
- IBM
- Software AG
- Tibco Software
- Sterling Commerce
- Axway
- GXS
- Fujitsu
- SAP
- NEC
- InterSystems
- Hitachi
- Progress Software
- Seeburger
- Cordys
- iWay Software
- MuleSoft
- Fiorano
- Magic Software Enterprises
- Extol International
- E2E Technologies
- Pervasive Software
- TmaxSoft
- WSO2
- Red Hat JBoss
- Sopera

niche players   visionaries   348_178_06_0513

Completeness of vision   *As of October 2010*

IBM OnDemand—Gartner Magic Quadrant for Enterprise Content Management

challengers   leaders

ability to execute

IBM

Microsoft

Oracle

OpenText   EMC

Hyland Software

Perceptive Software

Xerox

Laserfiche

Objective

Fabasoft   Adobe

Saperlon   Systemware

Newgen Software Technologies   Alfresco

Ever Team   SpringCM

Software Innovation

SunGard

Slav

niche players   visionaries   348_178_02_0513

Completeness of vision   *As of October 2011*
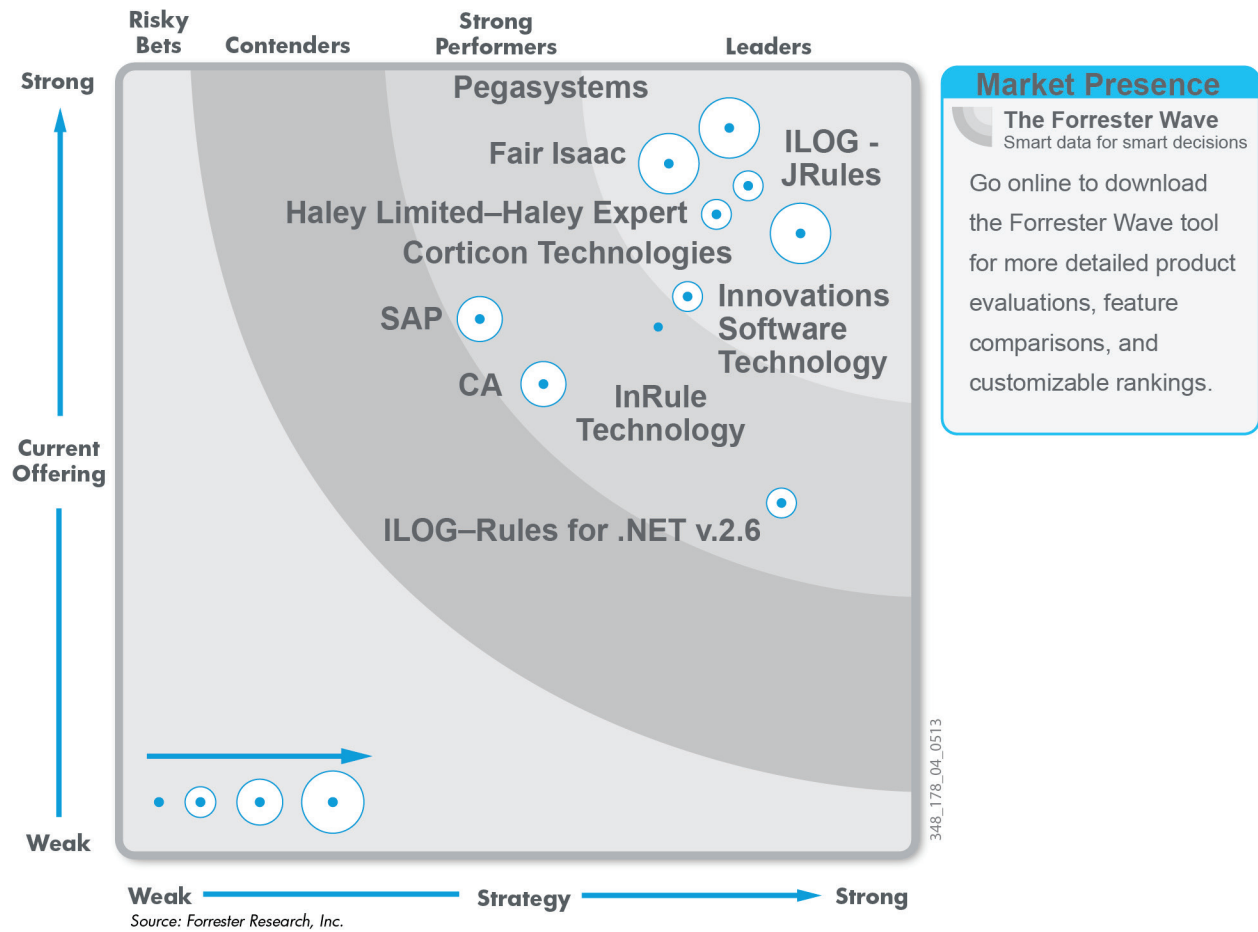
HP Exstream—Forrester Wave for Correspondence Development Systems

K2 blackpearl—Gartner Magic Quadrant

challengers   leaders

ability to execute

Pegasystems ●
IBM (Lombardi) ●
Software AG ●
     Progress (Savvion) ●
Oracle   ●   Appian ●
     Metastorm ●
EMC ●   ●   Global 360
Fujitsu ● ●
IBM (FileNet) ●   ●   Tibco Software
K2 ●   IBM (WDPE)
HandySoft ●   SAP ● ● Cordys
Pallas Athena
PNMsoft ●   ● Intalio
     BizAgi
Active Endpoints ●   Polymita

● Newgen Software Technologies

AgilePoint (formerly Ascentn)

niche players   visionaries

348_178_03_0513

Completeness of vision →

As of October 2010

Corticon—Forrester Wave

Source: Forrester Research, Inc.

Microsoft SharePoint—Gartner Magic Quadrant for Enterprise Content Management
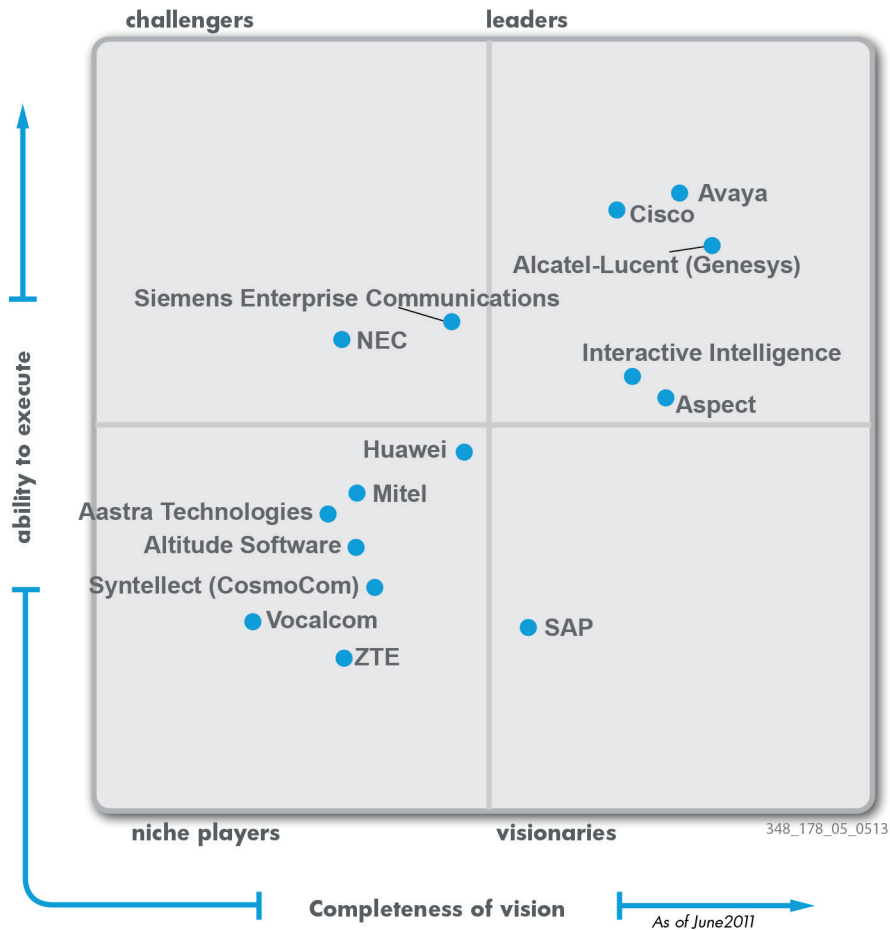
HP PPM—Forrester Wave

Source: Forrester Research, Inc.
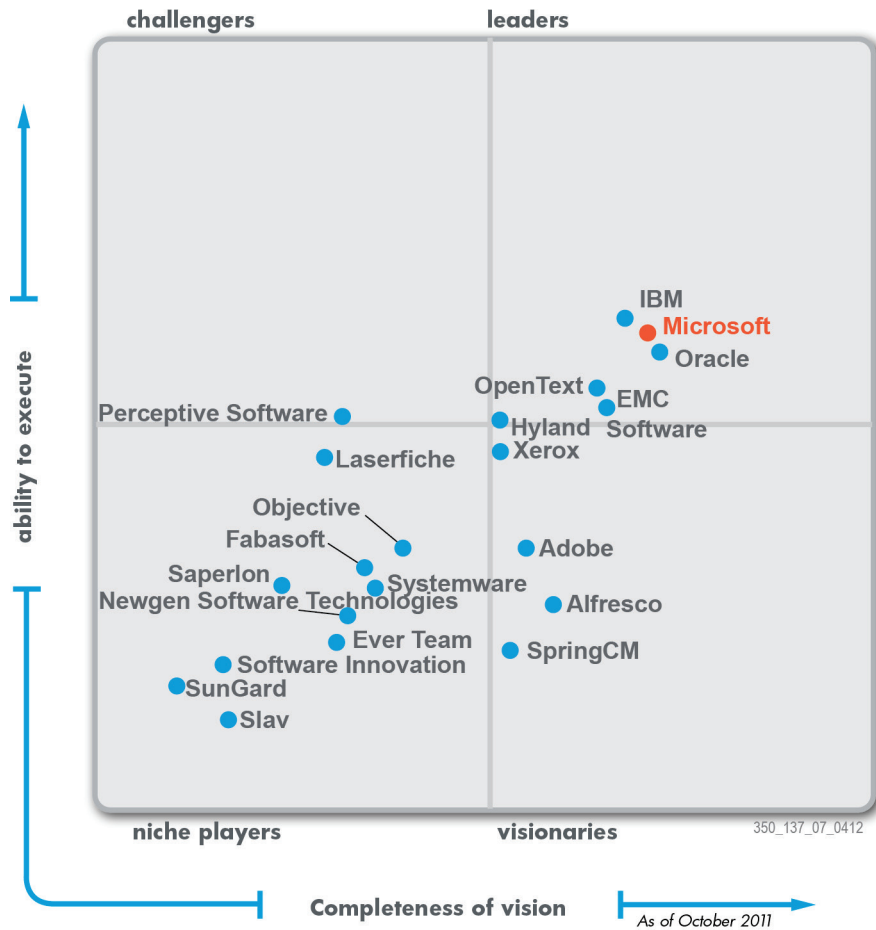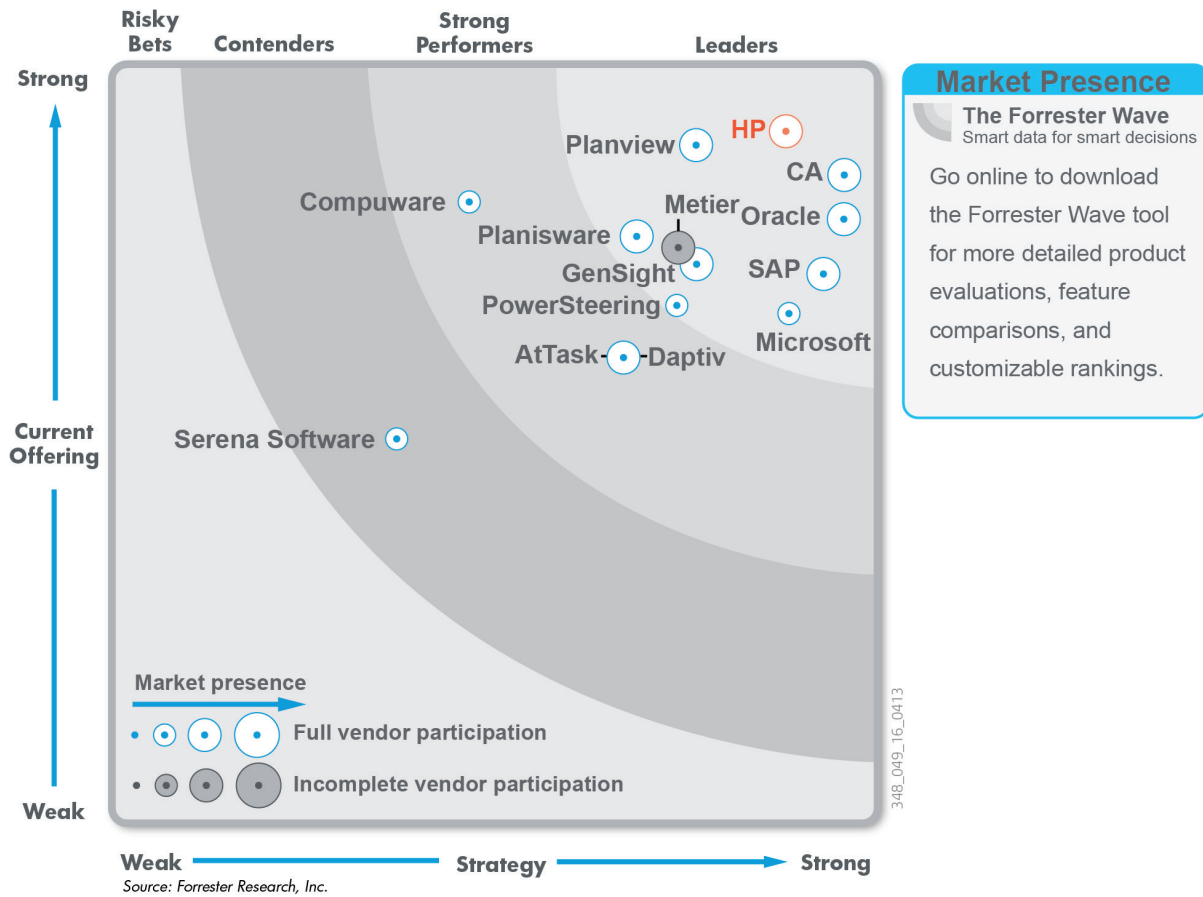
Genesys and Avaya—Gartner Magic Quadrant for Contact Center Infrastructure, Worldwide

Our approach and solution will offer additional value or enhanced service offerings. The Colorado interChange is a technologically advanced MMIS that is flexible, adaptable, and can bring the most robust, web-based solution to Colorado.

RESPONSE 49

RESPONSE 49: The Offeror will also describe their solution for any "Optional" requirements identified in Appendix A – Requirements and Performance Standards Matrix.

HP welcomes the opportunity to respond to the "Optional" requirements as identified in Appendix A – Requirements and Performance Standards Matrix. The HP team determined most of the Optional requirements reside within our base solution for the Colorado Medicaid Management Innovation and Transformation (COMMIT) project. This is a testament to the highly capable MMIS solution we are proposing for Colorado, the Colorado interChange Medicaid Enterprise system. Where requirements are not accomplished in our base solution, the HP team has broken out the associated costs separately in the pricing schedule as directed in the RFP.

Unique ID	1055, 1056, 1167, 1168, 1187, 1193, 1205, 1208, 1218, 1261, 1293, 1306, 1313, 1314, 1333, 1335, 1338, 1344, 1368, 1395-1398, 1428, 1431-1435, 1436, 1437, 1438, 1439-1445, 1485-1487, 1599, 1648, 1696, 1697, 1725, 1736, 1757, 1759, 1760, 1831, 1857, 1863-1865

Automated Testing Process for System Changes or Enhancements (Unique ID 1055)

The HP team will manage and report our DDI activities using two market-leading software tools—HP Application Lifecycle Management (ALM) for requirements and testing management

and HP Project Portfolio Management (PPM) for project management coordination. These tools allow HP to automate how requirements and projects are owned, tracked, tested, resolved, and reported.

A comprehensive testing process for changes or enhancements to the Colorado interChange system requires the use of tools that promote consistency in the management and execution of test procedures. Advanced, mature, and modern testing requires a suite of industry-recognized and proven test tools, the HP ALM and HP PPM.

HP ALM

We will use the HP ALM for documenting and integrating requirements with the test cases for testing. The COMMIT project solution objects will be individually linked to the RFP requirements in HP ALM to show how the requirements are associated with the business processes. HP ALM will be the central repository for the testing activity of projects. We will support the traceability of requirements to test cases directly from this tool. It manages and governs quality processes and facilitates software testing across the entire application environment.

HP will focus on isolating and mitigating the most critical risks first, using our testing framework and HP ALM suite to determine testing scope by identifying and prioritizing high-risk (business

and technical), high-priority requirements. This approach reduces the risk of misdirected or incomplete test coverage.

Each test requirement will be entered as a specific test case into HP ALM. The business analysts/testers will begin expanding the test scenarios into specific test cases, identifying multistep testing and documenting testing needs such as data. The business analysts/testers also will identify repeatable testing processes and create documents capturing step-by-step instructions for testing business areas such as eligibility verification and claims submission. These documents describe the testing process while the test scenarios describe particular details for the test being executed.

The Requirements Traceability Metric (RTM) provides a way to verify coverage for requirements throughout the testing life cycle of the implementation. HP ALM allows the tester to associate test cases to one or more requirements. This enables the tester to reuse test cases/scenarios across multiple requirements and provide cross-requirement testing. The final step in the test planning is to update the RTM to include correlations between requirements and the test cases. Because the RTM will be continually updated, the final step will be to review the RTM to make certain there are no additional requirements to which the test case would apply.

HP PPM

The HP team will use HP PPM for coordinating project management. HP PPM combines software, services, and best practices to digitize, automate, and enforce key mobile product and service delivery and management processes from the RFP requirements through implementation. By using automated tools, along with our experience and observation, HP can identify potential performance concerns, allowing for performance tuning of the solution as early in the testing process as possible.

Automated Defect Tracking Process for System Changes or Enhancements (Unique ID 1056)

Testing is the systematic execution of an application, its components and procedures, with the intent of assessing conformance to requirements and finding defects or performance issues. HP's Testing Management software, HP ALM, is a recognized leading product with the robust reporting needed to support delivery of complex projects such as the installation of a new MMIS. Our testing reports demonstrate how well we are proving the system meets the requirements, how quickly we are progressing through the testing execution activity, and the amount of defect/rework activity that is taking place.

We will use the Defect module of HP ALM to record, track, and manage defects through their life cycles. Locating and repairing of defects is an essential portion of the Healthcare Enterprise Enabling Delivery and Global Excellence (EDGE) Process Framework for Systems Development Life Cycle (SDLC).

During system, systems integration, UAT, and regression testing, testers will detect and submit possible defects into HP ALM. When test results do not agree with expected results, these results

will be reviewed and researched to determine if there is a defect in the current release. Following completion of the research for issues considered to be a defect, a defect item will be created, the test case tracking information is updated with the appropriate defect number, and the test scenario will be marked as failed. If the issue is not a defect and the test scenario needs to be updated with additional information, it will be updated and noted as passed with an explanation of why the issue is not a defect. A summary defect report will be generated to determine the status of testable defects.

Requirements Management Software (Unique ID 1167)

HP will use a combination of three requirements management software tools to support the COMMIT project—HP PPM, HP ALM, and an integrated SharePoint site. These tools will support the management of requirements, work orders, change orders, issues, risks, action items, schedules, testing, documents, system objects, defects, deliverables, version control, facilities, and organization as follows:

- HP PPM is a comprehensive transaction system that includes portfolio management, project and process visibility, and control. Its components can be implemented individually, starting with the area of greatest need, and expanded across the organization, adding value along the way. HP PPM can help manage and accelerate strategic and tactical daily activities and optimize the portfolio of proposals, projects, and services.

- HP ALM empowers our team to manage the core application life cycle, from requirements through deployment, granting application teams the crucial visibility and collaboration needed for predictable, repeatable, and adaptable delivery of Colorado interChange. HP ALM is the requirements repository and maintains bidirectional traceability between high-level business requirements, the detailed product requirements, and the various analyses, design, build, and test components throughout the stages of a project. This tool provides a framework for managing a project's end-to-end requirements traceability and provides critical functions that are integral to the success of a project, such as offering visibility and traceability between requirements, test, and defects across releases and cycles.

- A SharePoint site integrated with HP PPM and HP ALM serves as the document repository. The tool enables HP to create and access secure content while automating records management. It provides versioning and streamlines content management. We use these sites for "living" documents—types of documents that typically require updating and versioning. This collection and integration of collaborative tools provide a complete set of documentation capabilities throughout the project life cycle.

One key aspect of our centralized project management tool is that it provides the Department and HP teams with the information and processes needed to monitor and manage the many complex activities of this type of project, including the change of established requirements and emerging new requirements.

Project Control and Issue Tracking Process (Unique ID 1168)

HP will use our HP PPM tool to automate project control and issue tracking, providing access to the Department for smoother management practices. This role-based access to issues and documentation of the issue will be available throughout the process. We understand issue management spans the life cycle of the project and includes iterative processes and activities.

Our approach includes interaction and coordination with the Department on issue management to improve the quality of the issue reporting and resolution process and lower delivery risk. The disciplined approach focuses on working with the project teams to quickly identify, assign, and resolve issues affecting the project across the multiple phases. Coupling our approach and processes with HP PPM provides the Department with a high degree of flexibility, oversight, and control for issue management, with a focus on the areas of specific interest. Our issue management process focuses on early identification, structured issue tracking, and prompt resolution procedures to reinforce the closed-loop structure.

Training (Unique ID 1187)

We understand the importance of verifying that Colorado interChange stakeholders have the skills and knowledge necessary to access the system and perform their intended task or job—this is HP's standard operating premise for each interChange MMIS implementation. This approach has been refined through the many MMIS implementations we have performed, including numerous projects that included the establishment of a local account as part of the implementation.

For the development of initial and ongoing training approach and material development, we focus on the following:

- **Analyzing** the learning gap to determine the specific training need and appropriate method of information sharing. For initial training, we know the scope of education will be across each area of the MMIS for users and providers. In the instance of ongoing training, for example, information is gathered from higher volume provider inquiries to assess the core subject matter in need of further education.

- **Designing** the specific instructional strategies and making decisions on contents and approach.

- **Developing** the actual educational materials for web-based training and tutorials. We know we can share some common material from other HP accounts that use the interChange MMIS solution and there will be components specific to the Colorado program, providers, and users. We obtain internal peer review and assessment of our training materials.

- **Implementing** the materials through pilot testing with the target audience and revising and delivering the final product to the stakeholders.

- **Evaluating** the effectiveness of the training materials and adjusting as needed. A robust and active quality improvement process is part of our training and provider services operations.

For example, we invite participants to complete an evaluation at the end of each session for provider training and other educational gatherings. We share and discuss these results from these evaluations and determine the quality of training to guide us in recommendations for improvements and future training events.

For authorized Colorado interChange users, other than providers, we typically see three different groups of stakeholders for which we target our training approach:

- **Executive**—Brief overview course of each area of Colorado interChange including the "help" functions

- **User**—Functional capabilities across the areas of Colorado interChange including researching a client, provider, or claim

- **Super User**—In-depth training in particular areas and overall understanding of each area of Colorado interChange

To support the provider community training, we review each educational opportunity and result. With the self-help features available on the Provider Portal, we expect that most simple billing questions disappear, which frees call center and provider support staff members for research and problem-solving on complex issues and system processing questions. The Provider Portal is a valuable knowledge and education source for the providers. We publish educational resources on the portal covering items such as provider portal features, overviews of Medicaid, recordings of provider workshops, and claims submission information. Previous implementations have taught us that post-implementation provider training is critical to reinforce learning before implementation. We conduct post-implementation trainings with providers to review information covered in earlier trainings to help confirm comprehension and provider success.

HP provides additional information on Colorado interChange user training in RESPONSE 38d and provider training in RESPONSE 29g.

Learning Management System Product (Unique ID 1193)

HP will procure sufficient licenses for the learning management system (LMS) to enable the Department to provide training input as necessary. We will employ Accord's LMS to manage training content. The workbooks, handouts, instructor guides, and presentations will be stored in the LMS and available for the Department to review. When the Department identifies the need for a change to training material, our instructional designers will incorporate the changes as noted in the submitted change request.

Role-Based and Group-Based Security (Unique ID 1205)

The easy-to-use security component in Colorado interChange provides secure, role-based authentication and single sign-on (SSO) capabilities. The role-based security is at the field level, allowing the configuration of read only, update, or invisible permissions for a given field and user-role combination. The role-based security permissions also can be inherited, providing a role full access to a business functional area within Colorado interChange.

Additionally, the Provider Portal allows administrators or providers—as the Department permits—to define security functions available to their authorized delegates. The provider controls access to functions for each delegate. A delegate representing multiple providers can have different security access for each provider they represent.

Security Personnel (Unique ID 1208)

HP proposes to use a third-party COTS software package, Team Viewer, to meet this need. This software establishes a software service on a desktop, which allows the security team to passively or interactively log into a system users' desktop and view, in real time, the exact screen and information that the end user is seeing. The software can be configured to require the end user's permission before the connection is established also.

Record Maintenance (Unique ID 1218)

HP is proposing a solution for this requirement that involves implementing and configuring Oracle's Audit Vault product to monitor certain records of interest—such as those that contain PHI or PII—in the MMIS database and allow reporting to determine which records a given user or process has accessed. This is besides the robust, CMS-certified base auditing solution in the Colorado interChange, which tracks records that are modified by a user or process.

As with any database-level trigger, there is a performance tradeoff in monitoring numerous data elements versus a specific subset of fields. If the Department chooses to implement this facility, HP will work to create a monitoring configuration that provides the level of detail the Department is seeking, without negatively affecting performance of the production system.

HP is implementing this solution to support the State of Tennessee's TennCare (state healthcare) program.

EHR Information (Unique ID 1261)

Colorado interChange can interface with Electronic Health Record (EHR) information and other data exchange data services systems the Department may implement. The EDI interChange Connections simplifies data exchange and integration with external agencies, programs, and stakeholders. This capability corresponds to CMS' Seven Standards and Conditions—Interoperability Condition.

Additionally the provider can view the consolidated health information for a client through access by links to external EHR and HIE systems using the Provider Portal. The HP Provider Portal provides an innovative Client-Focused View that enables providers and their delegates to view, navigate, and perform actions in the Provider Portal with a focus on a specific client. For more information on the HP Provider Portal and specifically the Member Focused View, see RESPONSE 38i.

Electronic Document Management System (Unique ID 1293)

HP will integrate the Colorado interChange workflow and rule engine components with the Electronic Document Management System (EDMS) to support and assist in mapping business processes and sub-processes described in this requirement. Working with the Department during the Business Process Reengineering Phase, we can transform the current processes and apply the principles outlined in this requirement.

The following figure details interactions of interChange Business Services integrating interChange workflow and EDMS components together.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

We will work with the Department to understand the current organization of work processes, define requirements and implement solutions to meet the Department's objectives. HP understands the value existing documentation stored within EDMS may have in assisting in the development of business process and supporting sub-process workflow. We will review EDMS during DDI to consider how that documentation may ultimately add value to related business process workflows.

We provide additional information about our EDMS integration with business processes in RESPONSE 40h and RESPONSE 40i.

Raw Interface Files (Unique ID 1306)

The Colorado interChange batch framework creates a generation data set for each interface file. This generation capability has configurable parameters that determine how many generations to keep in the file system and how many of these should be retained in a compressed archived format. These interface files will be configured to keep the files for 60 calendar days, with a maintenance period of six months. HP will work with the Department to define each individual interface retention requirement in the Requirements Verification Phase.

Electronic Picture and Other Biometric Identifiers (Unique ID 1313)

HP interprets this requirement to mean that the authentication of the biometric is occurring at the point of biometric capture. HP will enhance the interChange solution to accept a picture or other biometric identified for providers and clients. The provider and client tables will be updated to store this information. interChange Connections will be used to accept and process the interface file and store this information on the database.

Within the interChange provider subsystem, the user interface will be updated to display the biometric information on the basic tab of the provider information screen, as shown in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

The provider portal will also be updated to support the display of the client biometric identifier. The biometric identifier will be displayed in the upper left corner within the member details portion of the Member Focused Viewing capability, as shown in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

There may be other mechanisms to access that biometric when needed versus storing another copy of it within the MMIS database. HP also would like to discuss the requirements around sharing this information.

Client Address of Record (Unique ID 1314)

HP will work with the Department to develop claim and encounter editing against the client's address when it is provided on the claim. Edits will be set during claims processing when there is an address discrepancy between the claim and the address of record. HP will work with the Department to define and implement a report showing claims with address discrepancies and distribute to the required stakeholders.

We understand the importance of the Colorado Address Confidentiality Program (ACP) and will work with the Department regarding the claim editing and reporting changes necessary to support this program.

Application Access to the System (Unique ID 1333)

Because the HP provider and member Healthcare Portal is web browser-based, the authorized user can access it using a mobile tablet. Just as they

would access the portal from their office or home desktop, the authorized users can access the secure portals through a mobile tablet today. Besides accessing the existing portal through a tablet, the HP team will be delivering a client-focused mobile application (or app) that extends the reach of the MMIS by providing access to key business features such as provider search, benefit eligibility, and other insurance lookup. This app would be capable of delivering key information directly to smart telephones.

Development of a mobile application is under way at HP and is operational on one account. The app will allow providers to log on from a mobile device and check eligibility; this feature is convenient for in-home providers. Additionally, clients can check their eligibility and find a provider. We look forward to supporting mobile strategies in the future and working with the Department to help implement its mobile strategies.

Mobile Platforms (Unique ID 1335)

HP's web-based systems are designed to follow the WS-* standards for consistent presentation and operation across popular web browsers, including Internet Explorer, Safari, Google Chrome, and Firefox. This also enables the use of our systems on tablets, telephones, and various mobile devices.

Search in Multiple Languages (Unique ID 1338)

The HP Healthcare Portal supports the option of providing web content in one or more non-English languages. Users set their primary language as part of their profile. A user can then toggle between available languages using the link on the global navigation bar. A user's primary language is always the initial language used at log-on. This will allow clients to perform provider searches and view claim and plan information in the language of their preference.

Besides the base English language support, HP plans to create a language file for Spanish and Russian. This technology will support the client's ability to toggle between these languages as we noted earlier. The HP team will work with the Department to create this language file and then perform the appropriate system and UAT to confirm functions.

Data-Dragging of Provider Information into Merge Letters (Unique ID 1344)

HP will work with the Department to define and develop a directory of contact information for its authorized staff member usage. We will enhance the interChange user interface to allow an authorized user to submit an online request and be provided a comma-separated (CSV) file to import into desktop mail merge applications. HP plans to modify Colorado interChange to comply with ACP program requirements to help verify integrity of the address confidentiality changes.

Subscribing or Unsubscribing (Unique ID 1368)

Colorado interChange users can subscribe to program publications and content through the LiveHelpNow! online knowledgebase solution through the user's Healthcare Portal access. HP will modify the HP Healthcare

Provider and Client portals to include an unsubscribe capability, should the user decide they no longer desire notification of subscribed content change or addition.

The LiveHelpNow! system supports various file formats including text, picture, and even video information. Because the security levels can be set by function, providers and clients can have different facing selections, as the Call Center staff member also can have their own level of access to information. The Call Center staff member can access the same information as seen by the caller, resulting in efficient and prompt handling of calls.

The robust reporting engine in LiveHelpNow! tracks web hits and popular search terms on the HP Provider and Client portals, offering content update ideas to share with the stakeholder groups. The library of searchable help articles will assist new HP Call Center staff members to find the information quickly and complete inquiries promptly. This online knowledge base can provide answers to many routine questions from providers and clients and may help reduce these basic information inquiries into the call center.

Web Based Training Survey (Unique ID 1395)

The Department staff members can create and maintain web-based training survey questions, with other functions using Survey Monkey. This web-based tool is used with other HP Medicaid accounts. The HP teams and their state counterparts have had success in collecting information from providers and other stakeholders on topics such as training needs and training session feedback. The surveys can be custom-branded with the Department's information.

We provide additional information on the Survey Monkey tool in RESPONSE 39b.

Group-Based Customized Training (Unique ID 1396)

HP will use Qarbon's eLearning products to facilitate the ability to edit, create, define, and release easy-to-use training modules. Common learning features and needs link our state accounts; however, we fully understand each state has unique features that require customization to meet their stakeholders' training needs.

Qarbon's Composica$^©$ web-based authoring tool revolutionizes the way in which content is created and managed by allowing real-time collaboration and providing rich development features without the need for programming. Unlike traditional authoring tools, Composica introduces a new groupware-platform approach to the authoring process. The entire course development process is managed in a centralized work group environment facilitated by the web-based architecture.

Regardless of job role or whether they sit in the same office or are a world apart, Composica is an excellent eLearning project management tool and a top-grade groupware environment. Each team member can access the centrally located project using only a web browser and work simultaneously in real-time collaboration with other team members.

Composica is fully compliant with Shareable Content Object Reference Model (SCORM). It integrates with any standard LMS to pass on performance data. It also helps create extended

course-related metadata that can be integrated with a standard LMS, allowing course results and feedback to be stored and reported using the LMS.

Online-Friendly Audio-Visual Presentations (Unique ID 1397)

HP will use the Qarbon ViewletBuilder7™ COTS for online interactive presentation creation and presentation. ViewletBuilder7 has a patented screen recording process that captures the user's screen and cursor position changes to replicate the flow of the application in a slide-by-slide editing environment. Callouts, notes, and arrows are added to guide the user through the tutorial, along with zoom areas, interactive areas, and transitions. This allows us to create professional interactive training demos and simulations that mirror the function of the application without producing large video files that might cause performance problems for remote learners like providers.

Students can interact with the tutorials to give them the "hands-on" experience that helps drive understanding and retention. Courses will be designed to allow users to learn at a self-driven pace and repeat exercises as needed. ViewletCam transforms a PowerPoint presentation into an interactive demonstration or online class. Simple to learn, an authorized system user may create his or her own courses using ViewletCam, which will then be delivered through the LMS.

Selected Population Groups (Unique ID 1398)

As we discussed earlier in this section, HP will use the web-based Survey Monkey tool for creating surveys to groups as designated by the Department. Because the user creates each unique question, the survey can be generated for the target audience to attain information, opinions, and ideas from groups such as providers, clients, or other program stakeholders. The online survey allows these groups to share their views securely and anonymously, at no charge to them.

We will work with the Department to create random samples of the selected population groups to provide a representative group of responses.

Data Elements Through the Client Portal (Unique ID 1428)

Through the following responses regarding Client Management Inquiry capabilities, the Department will understand how HP will support client access to various data elements through the secure Healthcare Client Portal. This web portal gives clients access to information about their state health benefits and allows for two-way communication between the health plan and the client. These capabilities also demonstrate how we meet the requirements of this RFP related to client inquiry.

Successful access to the Client Portal requires the Medicaid ID, date of birth, or Social Security number or date of birth. During registration on the website, each client is required to set up a unique user ID and password and provide an email address. Clients also are required to select and answer security questions. When a client logs in from a public computer, the security questions are used to verify the client's identity. If users forget their password, they can reset it after answering a security question. The new password is emailed to the address provided at registration.

Enabling the client to view and complete a wide variety of self-service tasks through a secure, regulations-compliant platform, demonstrates alignment with the CMS 7SC MITA Condition—increasing in MITA maturity for business.

Online and Telephonic Client Access (Unique ID 1431)

Colorado clients can access their own information or their dependents in the same eligibility case by using the Healthcare Client Portal for online access or by contacting the Client Call Center. Both routes of inquiry provide access to real-time information for the client, including enrollment status, eligibility, and Prior Authorization Request (PAR) information.

We understand the importance of telephonic access for clients to inquire on their healthcare coverage or other related program information, so we pay great attention to verifying our call center staff members provide the most accurate and current information available through Colorado interChange. With more than 40 years of experience working with healthcare call centers, the HP team recognizes that clients may have concerns regarding their personal medical situation leading them to become anxious about obtaining their information accurately and efficiently. We strive to make each client interaction positive and fully responsive to the client's question or inquiry.

The Client Portal allows the client to view online the information within their authorized access. The secure HTTPS connection helps validate their PHI and PII is maintained according to state and federal regulations, while making it accessible to the client as needed. Through this secure web-based environment, the client can obtain the desired information outside of Call Center hours of operations.

Centralized Access (Unique ID 1432)

Besides contacting the call center, clients can view their own eligibility, prior authorization, and other information through the HP Client Portal. The client can view their information, along with the data for dependents in the same eligibility case, and make updates to personal information that is relevant to their health benefit plan coverage at their convenience—not limited by the hours of service of a typical help desk. Because the Client Portal accesses Colorado interChange for the data request or inquiry, clients will have access to the centralized repository of information. This source of data allows the client to see the same information as their provider or the call center staff member.

Claims Data, EOMBS, and Other Communications (Unique ID 1433)

The client-specific section of the HP Healthcare Portal allows authorized clients to register and access their own information through a secure, online connection. Clients may view the following information for themselves and for dependents in the same eligibility case, based on their approved security profile:

- Claims data

- Explanation of Medical Benefits (EOMB)—PDF
- View and search provider information

The flexibility and adaptability of the Healthcare Portal provides immediate self-service capabilities for clients, giving them greater control of real-time access to their own healthcare information. In fact, the interChange MMIS leads the state healthcare market in providing self-service features.

Hearing Request for Appeals (Unique ID 1434)

Clients can check on the status of their hearing request for appeal through the Secure Correspondence feature of the Client Portal. After the client sends a Secure Correspondence message, HP will return the response and the client can continue by adding a second message to the original one. The resulting "conversation" enables the client to share additional information and remain updated on the status of the appeal.

Premium Assistance Program (Unique ID 1435)

The Secure Correspondence feature, which we introduced in the previous section, also allows a client to inquire about a premium reimbursement status. This Client Portal feature facilitates two-way communication between the health plan and the client, providing the client current status of an inquiry securely and privately.

We provide additional detail on the Secure Correspondence feature in RESPONSE 39a.

Provider Directory Information and Scheduling Module (Unique ID 1436)

The HP client portal already provides the functionality for a client to view the provider directory and search for a provider, as demonstrated in the following figure.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE
DEPARTMENT AND HAS BEEN REDACTED

A client can search for a provider by location or distance. Within this search, the client can search for a specific specialty, as well as other advanced criteria, such as provider name, group name, gender, language. The client can also include facility criterion such as ADA compliance, TDD and TTY capabilities.

HP will transmit a cancellation notice via email to the provider. This will require that the provider register their email address as part of the provider enrollment process so that it is known as to where to send messages.

A link will also be added to the provider directory page to allow the client to quickly navigate to the NEMT contractor's online transportation scheduling site.

Online Description of Covered Benefits and Benefit Limitations (Unique ID 1437)

TECHNOLOGY HIGHLIGHT

Through the Healthcare Portal, clients gain easy-to-view access to information outlining their covered benefits and the limitations associated with their specific health benefit plan. Details about the plans include the name of the health benefit plan, a brief description of the coverage, and the Department can add additional detail as desired.

Besides the covered benefits and overall limitation, the Client Portal displays benefit details for the current month, including the following:

- Coverage limits (services and dollar amounts)
- Spend-down (including non-claim charges eligible for spend-down)
- Copayments
- Coinsurance

Because the portal displays information from the client's record in Colorado interChange, the information will be the most current and will correspond to the information available to the provider.

We provide additional information about our Client Portal capabilities in RESPONSE 39a.

Online Entry of Referrals (Unique ID 1438)

HP understands this feature to mean that the provider can submit a client referral to a specialist. This referral would be recorded in the system and could be used in the future for claims adjudication. HP proposes to enhance the current prior authorization features in the provider portal, shown in the following figure, to allow a provider to submit a client referral much like a PA request.

RESPONSE HAS BEEN GRANTED CONFIDENTIAL TREATMENT BY THE DEPARTMENT AND HAS BEEN REDACTED

This will allow for a quicker implementation, as well as quicker provider adoption, as it will be a familiar process for them. This information will be transmitted to the interChange solution and stored in tables much like a prior authorization. Leveraging existing table structures will also allow for the re-use of edit logic in the adjudication process to validate if a referral is present and occurred prior to date of service.

Client Access to Client EOMBs (Unique ID 1439)

The client can view their EOMBs, based on policy and criteria defined by the Department, to verify billed services were in fact rendered. As the one who receives the healthcare-related services, the client is often in the best position to alert the Department to inaccurate billing of services. During the Requirements Validation Phase, HP will work with the Department to determine if modification is necessary to Colorado interChange to provide reporting to meet this need.

Portal Customization (Unique ID 1440)

HEALTHCARE SIMPLIFIED

The HP Healthcare Portal offers customizable look and feel options for the Department to communicate with clients—giving the client greater independent action in such functions as selecting a provider. Clients can help manage their own provider search through the Client Portal. Current provider search criteria include covered health benefit plan, distance, location, provider type, and provider specialty. The search results for a provider include the following details:

- Is the provider accepting new patients?
- Is the provider an individual or group practice association?
- Provider's hospital affiliations
- Provider's specialties
- Providers board certifications

The portal provides configurability to include Colorado-specific requirements and features, including program or clinic affiliation requirements. The provider search function is highly flexible and if requirements determination validates the need for modification, additional advanced criteria can be included according to the Department's needs.

By viewing a list of providers in order of distance from their home, the client can select the nearest provider with their address and telephone number. A map function will display the provider's location to assist the client in navigating to the office or clinic.

We provide additional information about our provider search function in the Client Portal in RESPONSE 39a.

Reporting Alleged Provider Fraud (Unique ID 1441)

While the HP Healthcare Portal does not include this function, we will work with the Department during requirements validation sessions to produce a design integrating the portal with the

workflow component of Colorado interChange. We look forward to creating a client-facing function for the reporting of alleged provider fraud, and incorporating this function into a workflow to automate the process of tracking, responding, and resolving the referral.

Provider Selection and Self-Enrollment (Unique ID 1442)

Besides the capability for a client to find a provider through the secure portal, the client also can select and self-enroll in a managed care organization (MCO). The client may select a provider from the search results to designate as the primary care physician—for the client or for a dependent of the client—after the MCO enrollment. HP will work with the Department to incorporate policy requirements into the process to allow only valid MCO and primary care physician options and selections.

TPL Information (Unique ID 1443)

The Client Portal will allow a client to enter new TPL information or update existing information. The receipt of this information into Colorado interChange will trigger the TPL Review workflow. The TPL workflow is designed for a TPL analyst to validate the policy information and update the client's MMIS file accordingly.

Notifications and Alerts Using the Web Portal (Unique ID 1444)

The HP Provider Portal allows a provider to create a new appeal and resubmit an appeal when the provider disagrees with the outcome. Because the Provider and Client portals have the same underlying base, HP can change the provider appeals function as a starting point for the client appeal and grievance capabilities.

The portal assessment engine is used to configure questions and answers for the user, which can be specific to the Department. Branching logic is associated with the user responses and tells the system which question to display next. Based on user responses, users are given dynamic instructional messages and links that will enable them to follow the appropriate workflow. At the end of the assessment process, the user will continue to the next step and create an appeal.

The current provider appeal functional capability includes the following:

- **Pre-appeal assessment—**This poses a series of questions, configured by the Department, that help direct the provider to the next appropriate step (using the workflow tool).

- **Submit appeals—**Allows the provider to submit an appeal. The appeal submission process uses a proprietary file layout and attachments can be uploaded during the submission process.

- **Search appeals—**Allows the provider to search for appeals by an ID or by appeal details. The search results display by the date of the appeal submission.

- **View appeals—**This allows the provider to view at a glance the status of their appeal on a real-time basis.

For providers, some appeals can be resubmitted when the provider disagrees. Following discussion with the Department during the Requirements Validation Phase, we will determine the appropriate functions with notification and alert creation for the Client Portal.

Manual Enrollment of Colorado Medical Assistance Program Clients (Unique ID 1445)

Besides receiving eligibility records from an outside system, interChange enables authorized users to manually enroll clients directly through our user interface. After a client is enrolled through the interChange Client Management business area, the client can be assigned the appropriate benefit plan to receive benefits.

HP has many years of extensive experience in 20 states coordinating client eligibility data from many sources, including eligibility determination vendors, state agencies and workers, federal programs, and other business allies.

Secure Provider Forum (Unique ID 1485)

TECHNOLOGY HIGHLIGHT

As we discussed earlier, Colorado providers or their designees can access program content and discussions through the LiveHelpNow! online knowledge base solution accessed through the Healthcare Provider Portal access.

The LiveHelpNow! system security levels can be set by function so that a provider can have a different facing selection from the client group. The robust reporting engine in LiveHelpNow! tracks web hits and popular search terms on the Provider Portal, offering content update ideas to Department staff members and other designated users. These authorized users can participate and moderate the discussion posts and threads as determined by Department policy.

This online knowledge base can provide answers to many routine questions from providers and clients and may help reduce these basic information inquiries into the call center. Additionally, providers can search for posts and discussion threads by date or subject matter.

Client Feedback on Providers (Unique ID 1486)

HP will enlist the web-based Survey Monkey tool to collect, maintain, and report client feedback about providers. We appreciate the need to determine if providers are meeting the needs of program clients and meeting the requirements set forth by the Department. Our team uses the Survey Monkey tool for other Medicaid accounts, and we know the results are an important source of information that may not have been tapped in the past for feedback. The surveys can be custom-branded with Department information.

Survey participants are sent a customizable link. Survey parameters can be set to allow only one response or multiple responses from a single workstation and with other parameters. Survey Monkey offers robust reporting and analytic services. The reporting and analytics are database-driven, meaning results can be sorted and parsed in countless ways. The results are available in

various formats—such as Excel files or PDF—and can be supplied to agencies and Department staff members as directed.

Social Media Functions (Unique ID 1487)

Social media is based around the principles of conversation and relationship building—core to mobile, accurate, and current communication. HP will work with the Department to define the parameters for the social media functions that are most appropriate for sharing fiscal agent operations and Colorado interChange functions.

Besides our social media analyst who will work closely with the Department, HP will contract with Salesforce.com to assist with online chat forums. The Chatter application allows for instant collaboration and discussion, providing a communication and Q&A forum atmosphere for participants.

The user knowledgebase solution will be supported by LiveHelpNow!, an industry-leading provider. HP can do live monitoring of users and keyboard searches of online activity. This information can assist the Department and HP in deriving areas of interest or questions from providers and provider groups. These questions or discussion points can easily be published as Frequently Asked Questions within the knowledge base.

Through Camtasia capture software, HP can create web-based video products for publication as Windows Media and QuickTime files. These videos can be published to the Provider Portal account or to other sites, such as YouTube.

Encounter Validation (Edits) Criteria (Unique ID 1599)

Form edits are one of the rule types within the Colorado interChange Benefit Policy Administration (BPA) rules engine. The purpose of form edits is to provide a mechanism to establish validation and policy monitoring rules that can be performed by analyzing and comparing a limited number of fields. These rules are based on decisions that set edits using the variables for encounters validation for each managed care program. The user can specify which fields are required and the acceptable values. The claim will then pay, suspend, or deny based on dispositioning data for that edit.

Automated Post-Payment Recovery Process (Unique ID 1648)

HP will provide a post-payment recovery process based on the federal and State business rules. We will work with the Department to determine the defined criteria necessary to implement in the payment recovery process. interChange accepts claim and non-claim specific adjustments, automated adjustments from accounts receivable, TPL case tracking, no-history adjustments, recoupments, mass adjustments, and cash transactions (refunds). Colorado interChange also can accept program integrity automated adjustments. Additionally, the base interChange can create a system generated adjustment (SGA) process to run 120 days after the bill is sent to the provider, if a response is not received from the provider.

Pre-Payment Program Integrity Reviews (Unique ID 1696)

The authorized user can place a selected provider on prepayment review, suspending their claims for designated procedure codes, claim type, place of service, or a combination of these criteria. This feature is independent of the receipt of information from the Business Intelligence and Data Management (BIDM).

After the claim suspends for prepayment review, the authorized staff member can review the claim information for possible upcoding, overutilization, or other possible fraudulent behaviors. From our years of experience in state and federal healthcare program support, we understand it is easier to prevent the inappropriate payment versus recovering the dollars postpayment.

Automated Referrals (Unique ID 1697)

As we discussed earlier, clients can view their EOMB through the Healthcare Client Portal. This access allows the client to verify services billed to the program were the services rendered to the client. As the one who receives the healthcare-related services, the client is often in the best position to alert the Department to inaccurate billing of services.

During the Requirements Validation Phase, HP will work with the Department to determine the modification necessary to Colorado interChange to incorporate the process to automate referrals from the client to the Department's Program Integrity Section.

EDMS Expansion for EDMS Document Management and Workflow Process (Unique ID 1725)

IBM's Content Manager OnDemand is one of the core products of our EDMS. It maintains and secures the scanned images of paper forms and documents, while allowing them to be retrieved directly from the interChange user interface. Taking advantage of this critical corporate asset through competent records management can enhance the Department's ability to meet governance and regulatory compliance obligations. This paperless component increases business efficiency and staff productivity.

Automated rules, classification, and workflow capabilities enable the easy capture, secure management, and discovery of business information. The workflow solution is a fully integrated aspect of Colorado interChange and interacts with other COTS software, including the OnDemand EDMS. After the workflow process, the electronic copies of documentation used throughout the workflow are permanently stored within OnDemand. Because of the scalability and flexibility of Colorado interChange, the Department can expand workflow process and associated EDMS functions as necessary to supporting growing programs.

PASRR Process (Unique ID 1736)

HP will us the McKesson Versatile Interoperable Technology Advancing Lives™ (VITAL) platform to meet the care and case management functional capabilities, which also will support the Pre-Admission Screening and Resident Review (PASRR) tracking requirements. The VITAL

platform enables users to create, track, maintain, monitor, and report the pre-admission screening process for each level of PASRR. For example, VITAL supports pre-admission screening information through its Events module, which tracks authorizations, referrals, life events, quality reviews, and appeals.

Time-Based or Home-Based Services (Unique ID 1757)

HP proposes the use of the Electronic Visit Verification (EVV) module of the Sandata Santrax® Payer Management solution. Santrax® Payer Management (SPM) is a web-based solution that measures, monitors, and provides electronic visit verification for home care services. SPM processes electronic files of authorizations, eligible clients, and home care provider agencies. Using various technologies, the system captures caregiver arrival and departure times, location, client and caregiver IDs, and tasks performed during the visit. Rules-based claims submittal increases compliance and claims accuracy, reducing inappropriately billed services. The result is improved oversight into HCBS program delivery, streamlined claims, and reductions in fraud.

The Sandata EVV solution decreases costs, improves efficiency, and supports the quality of services to Colorado's clients as follows:

- Providing access to real time home care service delivery data, monitoring tools, and comprehensive reporting on utilization

- Automating manual and paper-based processes, removing potential human error or time sheet "rounding" by caregivers

- Providing EVV options for Medicaid clients across Colorado's varied geography (urban and rural)

- Providing real-time alerts to provider agencies and care coordinators for late or missed visits

- Verify that only visits verified against authorized services and limits are paid, mitigating the potential for fraudulent claims and reducing the workload for claims adjudicators and program integrity staff members

- Provide a tool to consistently manage and compare provider agencies and establish benchmarks for care delivery to implement Pay For Performance ("P4P") programs or assess penalties

Electronic visit verification controls and contains the rapidly accelerating costs for HCBS while improving quality and integrity. Rather than reduce funding for vital services, EVV technology improves accuracy in service delivery and billing, verifying higher standards of care delivery, program and cost efficiencies, and transparency among the stakeholders in the chain of care.

Sandata's powerful combination of patented solutions for visit verification is called the Assured Coverage program and includes the following:

- **Telephone Visit Verification™ (TVV™)**—TVV uses Automatic Number Identification (ANI) technology to validate telephone calls to log on and log off, recording time and location in real time.

- **Mobile Visit Verification™ (MVV)**—Real-time GPS technology verifies caregiver location and visits using GPS-enabled devices (mobile telephones and tablets).

- **Fixed Visit Verification™ (FVV™)**—Patented technology to verify visits when no landline or cellular service is available. Caregivers press a button for a randomly generated number at the start and end of each visit. The number is then entered into the EVV system when a telephone line is available and translated to an exact date and time stamp for the visit.

Through the Assured Coverage program, the Department can be confident that multiple technologies verify visit verification is occurring at the point-of-care; helping to guard against allegations of fraud and abuse, while improving care. HP will work with each of the providers to build a customized EVV program deploying the visit verification technologies to maximize the number of visits that will be validated electronically.

Program Quality Survey Data (Unique ID 1759)

The Department can collect, edit, and update a program quality survey of major services with the InterQual Coordinated Care Content assessments. In the VITAL platform, the Content Customization tool allows Department users to configure pre-existing assessments or create new content for assessments. Users can customize sections, subsections, questions, rules, alerts, and notes. Furthermore, the Content Customization tool allows the Department to configure problems, goals, interventions, instructions, educational components, and notes.

Batch Survey Data Uploads (Unique ID 1760)

The McKesson VITAL platform will enable users to upload external batch survey data. HP will work with the Department to determine the information for uploading, frequency of upload, and the system receiving the data upload.

BIDM Analysis of Client and Provider Surveys (Unique ID 1831)

Feedback from program stakeholders is important to help verify services are delivered appropriately and these services continue to meet their needs. As a standard practice, we survey provider satisfaction during training events and after training. These results go toward refining future training offerings such as new courses and delivery methods.

For surveys to providers and clients on more general program topics, HP will use Survey Monkey to develop and disseminate these surveys. Surveys are completely configurable with more than 15 different types of question formats—such as radio button, scales, multiple choice, or open-ended narratives. Survey participants are sent a customizable link. Survey parameters can be set to allow only one response or multiple responses from a single workstation and with other parameters.

Survey Monkey offers robust reporting and analytic services. The reporting and analytics are database-driven, meaning results can be sorted and parsed in countless ways. Results are available in various formats—such as Excel files or PDF—and can be supplied to agencies and to BIDM for analysis.

Additionally, the VITAL platform will integrate with the HP Client Portal to administer client surveys that will capture electronic responses and export to BIDM for analysis. The integration will allow the Department to provide clients with an interactive guided evaluation tool. Client survey results provide a picture of a client's overall health, based on his or her answers to the survey questions. The survey includes a customized action plan and several online programs and tools to support a healthier lifestyle. The Department can develop the survey to meet its needs. Through the Client Portal, clients have a single point of entry to a range of health and wellness programs. The Client Portal is available 24 x 7.

Call Center Call Flows and Call Routing Processes (Unique ID 1857)

During the DDI Phase, HP call center management will work with the Department to review current call flows and call routing processes and develop the appropriate processes and expectations on how to handle the tier-one support to support ongoing operations for this contract. If HP agents cannot assist the caller, they can warm transfer the caller to the Department's call center based on the transfer procedures that will be established.

HP's Avaya telephone system is scalable and can therefore easily be expanded to accommodate more call center agents and T1 telephone lines. Operating hours of 8 a.m. to 5 p.m., Monday through Friday will be incorporated into the call center services. HP has several years of experience operating client call centers and is fully capable of the technology, staffing, and training that may be required.

Call Center Help Desk (Unique 1863)

HP will operate the call center help desk from 7 a.m. to 7 p.m., MT. With our years of experience supporting customer call centers and help desks, we also will implement the registration and attestation help desk and cross-train selected members of the call center to take advantage of economy of scale and backups in case of call volume spikes, vacations, sick days, and other occurrences of increased telephone volumes.

Data-Merge Feature (Unique ID 1864)

Our call centers and help desk operations across the world are experienced in supporting our customers and "Customers of our customers" in resolving their questions regarding countless software and hardware products by telephone. We will provide support for the knowledgebase forum and data-merge tools as follows:

- **Web-based knowledgebase forum**—We have selected LiveHelpNow! as the platform to provide an online knowledge base solution for Colorado interChange providers. This

platform will provide strong yet appropriate Internet presence for the Department. This tool provides extended search functions that can be used by the HP call center and help desk agents as well as the providers in the Colorado program. The system supports various file formats including text, picture, and even video. Because the security levels can be set by function, HP call center staff members and the providers can have different levels of access. This tool also enables the HP agent to see the same information on the provider's screen, which will result in efficient and prompt handling of calls when a provider needs support from the help desk.

- **Data-merge tools**—We have selected "HP Exstream" as the product to extract data from the Colorado MMIS for personalized letter generation with pertinent, custom information for delivery. This tool will be used to extract data from the Colorado interChange database based on the ad hoc queries. The output of the queries will be used to generate letters by the Department using an office productivity software tool. Because these queries are to be performed by the Department only and not by the providers, the HP help desk will assist the Department if it needs support using the data-merge tool.

HP staff members will support Colorado interChange stakeholders through our call center and help desk functions. Our staff members will be trained on the aforementioned products and can support authorized users of these systems.

CRM Software Licenses (Unique ID 1865)

The proposed Provider CRM solution, known as Contact Tracking Management System (CTMS), will be accessible to Department staff members to incorporate their comments into the central system for documenting provider communication and interactions. This allows for a single source of provider inquiries, questions, and subsequent responses from the Department and HP staff members. CTMS can generate reports for trending and point-in-time data analysis purposes. We also have found this information useful in creating provider communications through Provider Portal posting, email, or U.S. mail.

RESPONSE 50

RESPONSE 50: The Offeror may provide additional response describing how their cost allocation or cost containment approach and solution will offer savings to the Department by leveraging multiple accounts across the following areas. Provide specific examples from other states, or implementations that illustrate how the solution will allow cost savings to occur and include how you leverage your other contracts to save money collectively. Specific dollar amounts are not allowed, but the Offeror should provide orders of magnitude or a range to demonstrate effectiveness in providing cost savings in other contracts.

a. **Administrative Simplification**
b. **Changes in Federal Regulations**
c. ~~**National Plan**~~ **Health Plan Identifier (HPID) as described in 45 CFR Part 162**
d. **NCCI edits**
e. **Increased automation and workflow automation**
f. **General System upgrades that can be leveraged across multiple accounts using the same System or processes**
g. **Annual System upgrades**

> *"Improving health care access and outcomes for the people we serve while demonstrating sound stewardship of financial resources."*
>
> — The Colorado Department of Health Care Policy and Financing

The Department conveys a sentiment we recognize—provide services to those most needy in the state while watching tax dollars. At HP, we understand this mission. After all, each team member at HP is a taxpayer and has a stake in how government agencies spend those resources. Our goal—our mission—is to support the Department in delivering on its promise to the citizens of Colorado. By taking advantage of our Medicaid accounts and years of experience, HP can provide costs savings to the Department while promoting its mission.

Applying Lessons Learned

HP is not just about installing a certified MMIS and implementing business processes to support state healthcare programs—HP is about learning from each interChange MMIS implementation and applying those lessons learned to the next implementation.

Cost savings

By using the premier CMS-certified MMIS solution in the country with a proven approach that we have demonstrated repeatedly, our customers can *avoid the cost of catastrophe that other states have endured.* Through our interChange system projects and deliveries, we continually use

The ability to focus on customer program enhancements *instead of spending resources to stabilize an unproven system* is what interChange and HP bring to the State of Colorado.

our lessons learned to get better at what we do—listen to our customer, develop a sound project plan, and deliver on that plan.

We have gathered more than 230 best-practice assets from our healthcare implementation experience. These assets speed development by providing starting-point work patterns, templates, guides, and resources. We learn from each engagement and drive that knowledge back into our delivery capability through clearly documented processes. For example, HP has learned from recent projects in the marketplace that it is important to build technology on a solid base that meets business needs. Efforts to develop systems for platforms that are not strong and mature often result in failed implementations. Because of this market lesson, HP has recommended starting with the most advanced MMIS in production, the Wisconsin interChange, for Colorado.

Administrative Simplification

From the administrative simplification requirements of the Health Insurance Portability and Accountability Act (HIPAA) of 1996 through the ongoing requirements of the Patient Protection and Affordable Care Act (ACA) today, CMS continues to look for ways to reduce the administrative burden on healthcare providers and stakeholders across the United States. As interChange MMIS development progresses, HP adapts to changing industry data standards such as the National Provider Identifier (NPI), 5010 transactions, and ICD-10 code sets, demonstrating our ability to develop technology to meet maturing business needs.

NPI Remediation

Our HP Arkansas team adopted the Indiana Medicaid solution for mapping NPI numbers to legacy Medicaid ID numbers, *eliminating the need to build it from scratch and therefore reducing the expense for our Arkansas State customer.*

ICD-10

With each of our Medicaid accounts represented, the HP ICD-10 User Workgroup provides regular meetings and an online forum in which team members can pose questions, seek advice, and offer ideas for an effective ICD-9 to ICD-10 transition. Because the HP accounts are at different stages of ICD-10 transition—from assessment to system testing—experienced group members can suggest proven approaches and share their "lessons learned" with others. The work group members discuss the commonalities of Medicaid, along with the unique characteristics of each state healthcare program that can make the project challenging. The group shares ideas and information about topics such as the following:

- Gap analysis findings
- DRG groupers
- Mapping ICD-9 to ICD-10 code sets
- Data-translation tool requirements
- Post-implementation activities and verification

Additionally, the ability to share test cases and test scenario ideas across the accounts saves resources and presents new perspectives and ideas.

Security

Our comprehensive security solution provides centralized identity management. HP provides a single point of access for authorized system users. We use a set of interoperable tools to

authenticate and authorize new users and to deprovision terminated users. The Department will see gains in worker time and efficiency because of having single sign-on. When workers log on to their workstations, they have easy access to their authorized applications on their landing pages.

Our state employees in Kentucky estimated gains of 2 minutes per day per worker, which does not sound impressive at first. But multiplied by 2,785 workers for 252 working days per year, *they achieved savings of 1,403,640 minutes annually* in log-on time alone. Further savings were seen in reduced help desk staff, lower paper costs by eliminating forms, and reduced down-time for staff waiting for password resets.

1,403,640 minutes saved = 23,394 work hours saved annually for Kentucky State workers

We built interChange on the proven security baseline our healthcare security experts have established for our Medicaid accounts nationwide. We meet HIPAA Administrative Simplification regulations regarding privacy, security, and individually identifiable health information.

5010 Version

HP has never missed a federally mandated change at any of our Medicaid accounts. Most recently, we delivered a smooth 5010 EDI transition in each of our states. Not every state and every vendor can make the same claim.

Our state customers needed to implement these program changes quickly or risk losing millions of dollars per week. HP evaluated how changes from version 4010 to 5010 affected transaction standards for our customers. We developed the design solutions, cost estimates, and implementation plans used as the basis for each state's Advance Planning Document (APD) submission to CMS. With CMS approval, we implemented the new standards.

Through our commitment to delivering for our customers, HP helped 20 state Medicaid programs achieve on-time compliance with the new standards, processing claims and payments for more than 1 million providers without interruption.

interChange inSight Dashboard

The interChange inSight dashboard provides instant access to key metrics in easy-to-interpret charts and graphs. By consolidating multiple business processes into a single library of program measures, this comprehensive dashboard interface offers transparency into program operations.

Our HP solution exceeds expectations by going beyond static dashboard presentation and enables the users to have a true analysis tool at their desktop to evaluate, drill into the details, and filter the metrics to better understand the business drivers behind the KPI numbers.

Colorado, and other states moving forward, will not need to complete design work on this reporting solution. Our vision is to grow the dashboard capability, building out two category dashboards:

Dashboards are not new to management, but the inSight Dashboard is an interactive analysis tool for process evaluation.

- Key Performance Indicator (KPI)—performance management dashboard.
- Management Analytics—a new way to display MAR online reporting

HEALTHCARE SIMPLIFIED

An important feature of this process is that as filters are changed, the reporting displays of the dashboard change dynamically. *There is no need to rerun a report and wait for a response—the presentation of the results is completed in real-time—saving the user valuable time and resources.*

The following are several examples of administrative simplification.

- We saved one customer millions of dollars a year by educating providers about appropriate billing practices for hospice share of cost (SOC) and recovering expenditures. A policy change required hospice providers to bill the Medicaid Program directly for hospice room-and-board services using an outpatient claim form. In the past, the long term care (LTC) facility would handle billing using a state-specific LTC form. Because the original system design assumed that SOC would be billed on the LTC form, this process change prevented the system from enforcing collection of the SOC for hospice services. The result was lower reporting of recipient SOC. Fixing this problem would not be easy, especially because we didn't have time to change the system. First, we worked with the Audits and Investigations customer to identify and target hospice providers thought to be underreporting SOC. We drafted provider letters explaining inappropriate billing practices. We developed new provider guidelines and examples to clarify appropriate billing practices, and we worked directly with the hospice provider association to confirm that providers understood the reporting guidelines. Furthermore, we recommended our customer send provider letters to recover expenditures retroactively. Our efforts resulted in a correction to hospice SOC billing practices and significant cost savings.

- HP reduced providers' error rates through innovative outreach to the Florida Medicaid provider community. Minimizing errors in a management and administrative reporting (MAR) subsystem is the goal of every MMIS vendor. As part of our state Medicaid duties in Florida, HP took an innovative approach to lowering the error rate among the 95,000-strong provider community. Our Provider Field Services representatives analyze error reports generated by the MAR subsystem and do front-end research. Then they proactively contact the providers with the 10 highest error rates by county in the state. Instead of frustrated providers having to contact us, our team members call the providers first to answer questions and determine solutions to ongoing issues. Florida expects HP to perform provider outreach, but our effort to help providers do their jobs is a value-added benefit to the state. By contacting nearly 100

providers a month, we have reduced error rates and significantly enhanced our visibility in the provider community.

- We made a high-impact policy recommendation to a customer that led to increased productivity and improved provider satisfaction. For our Medicaid customer, we analyze provider complaints, review processes in peer states, and have our technicians review system reports. Through this proactive work, we identified a particular edit that many of our other state customers had removed because it created issues in processing time. We discussed the issue with our customer and recommended removing the edit to improve processing and provider satisfaction. Our customer accepted this change in policy, which led to an immediate decrease in call volumes from providers and reduced workload caused by claim resubmissions.

- We took workload off our customer, while helping members get faster access to care. At one time, HP printed prior authorization (PA) Notice of Decision copies at our facilities and sent them to the customer staff to review and distribute. This process took several days to complete. Our HP account team decided it would make good business sense to mail the copies for the customer. With a facility and staff already in place, we could print, sort, and mail notices within 24 hours of a decision, significantly improving the turnaround time for notifying providers and members and resulting in much faster access to care. Because of this change in procedure, our customer enjoys a reduced workload and better service for its members and providers.

- We saved our customer thousands of dollars and hours by redesigning the provider recertification process, turning a labor-intensive effort into a "green" one. The process for this state's Medicaid providers to recertify their licenses used to be mostly manual. It began with a 16-page form providers had to complete. After several iterations of reviewing, signing, and mailing the form, HP enrollment staff entered the data into the MMIS provider enrollment tracking system. Ultimately, the HP enrollment staff spent more than 16,500 hours reorganizing the paperwork. In the meantime, providers questioned the need to provide HP with the same extensive paperwork year after year. In 2010, we worked with our customer to revise the entire recertification process. The process now requires the provider to supply only changes to information already on file and a copy of the most current license or certification. Our action reduced the need for overtime in the enrollment area, reduced the cost of supplies, and improved relationships with the provider community.

- Medicaid agencies face increasing pressure to provide high-quality care for their members while controlling costs. Our HP Medical Informatics Center of Excellence worked with a customer to design a fully automated process to confirm that Medicaid members are enrolled in the highest-quality and most cost-effective managed care organizations (MCOs). We designed a decision tree for enrolling new members using inputs including geographic location and medical needs assessments established by the state agency. If a member does not choose his or her own provider, the system uses a distribution algorithm to select the

highest quality provider based on tools that measure MCO quality and cost. The program also tracks these quality and cost outcomes to identify poor performers and provide incentives to improve their quality. Our customer implemented HP's solutions, resulting in an enrollment process that gives members the care they need and a greater distribution of patients to high-quality providers.

- One of our healthcare customers needed an unbiased audit of medical claims to confirm accurate coding and payment or identify errors that would lead to cost savings if corrected. Our HP Medical Informatics Center of Excellence provided in-depth research and analysis to uncover errors and save our customer money. We designed an audit based on comparable completed projects, such as CMS' Comprehensive Error Rate Testing (CERT) program, to measure the error rate for submitted claims. We performed a review of medical coding and corresponding payments for eligibility of benefits, a clinical review of the coding and diagnosis, and a medical record review if the documentation with the claim did not support the payment rendered. HP identified several errors, including incorrect coding and services that were unnecessary, undocumented, or insufficiently documented. We compiled our findings and evaluated them for trends, then provided our customer with recommendations. Our customer implemented our recommendations, which led to opportunities for significant cost savings.

Changes in Federal Regulations

Federal legislation often has the most influence on the goals and objectives of the Medicaid program because many of the laws require the Department to implement certain programs or measures. As other states face these or similar challenges, HP will bring the Department new solutions, suggested programs, and cost-containment initiatives that other states have found beneficial in addressing these constraints. Our customers rely on the HP team to bring new and innovative solutions to our state Medicaid executives—ideas that help to address these challenges.

Our community of Medicaid accounts uniquely serves our customers in these challenging times. At monthly HP meetings, our account leaders discuss implementing new federal mandates and collaborate on how best to implement the mandates, sharing ideas and potential issues. Because federally mandated requirements affect each of the states we support, we collaborate to share ideas and solutions. Another way we have found to assist our state customers contain costs is through our HP-wide initiative—the Healthcare Solution Framework program—which we describe in the following section.

The HP Healthcare Solution Framework Program

HP's Healthcare Solution Framework (HSF) program monitors government and industry communication channels for legislative mandates and opportunities that may affect the healthcare enterprise. The program analyzes and documents the requirements and effect of an initiative evaluating the potential for shareable development effort. A solution flight plan is developed and shareable deliverables produced when feasible, reducing effect on operational

accounts and cost to customers. A key aspect of the program is migration to a more homogeneous healthcare solution in the enterprise by providing consistency in solution architecture and design as well as movement in the enterprise to standard use of EDGE Application Life cycle Management (ALM) processes and tools.

With this accomplishment, the organizational structure, planning, and processes are being established and refined. Our teams are actively working on current initiatives primarily driven by the ACA and guidance issued by CMS. Initiatives in progress include the following:

- ACA Section 1104 Operating Rules Phase IV
- ACA Section 6028 Provider Enrollment and Screening
- CMS Transformed Medicaid Statistical Information System (T-MSIS)

Our HSF Team continues to evolve and is proactively researching more than 450 ACA mandates for potential initiatives in the Medicaid healthcare space. We estimate the high-level deliverables and research provided by the HSF can assist our MMIS accounts in helping their customers avoid 20 to 100 percent of associated costs.

ACA 1104

Section 1104 of the ACA requires that the standards and associated operating rules adopted will accomplish the following:

- Enable the determination of an individual's eligibility and financial responsibility for specific services before or at the point of care;

- Be comprehensive, requiring minimal augmentation by paper or other communications;

- Provide for timely acknowledgment, response, and status reporting that supports a transparent claims and denial management process (including adjudication and appeals); and

- Describe data elements (including reason and remark codes) in unambiguous terms, require that such data elements be required or conditioned on set values in other fields, and prohibit additional conditions (except where necessary to implement State or Federal law, or to protect against fraud and abuse).

Health plans must file a statement with HHS confirming compliance with these operating rules. Failure to comply with the requirements of ACA 1104 may result in significant financial penalties. Working across the HP accounts, our HSF Program created several project deliverables, noted in the following table, to help our State customers meet these requirements effectively and efficiently.

HP ACA 1104 Project deliverables

Work Product Name	Description
High-level requirements from	Translation of CAQH operating rules into more

Work Product Name	Description
CORE rules	practical requirements
Common high-level logical design	Common high-level design may require refinement to match some processing systems
CORE-compliant Companion Guides	Template that follows CORE requirements
Universal security design and approach	Supports connectivity and "safe harbor" requirements of CORE
Starting-point WBS	Tasks and proposed schedule for account implementation
Generic CAQH operating rule test suite	Set of test cases that CAQH supplies to validate compliance

Additionally, the accounts communicate with and educate their staff members. Assets for sharing ACA Rule 1104 Phases I and II work include the following:

- **ACA 1104 Project Starting Point Schedule**—A 600-line project plan containing the effort-loaded tasks and placeholders for generic ACA 1104 project implementation. HP MMIS accounts can tailor this foundation as needed for their unique state's effort.

- **Council for Affordable Quality Healthcare (CAQH) Phase I and II Minimal Test Case Suite**—Provides editable versions of the CAQH Committee for Operating Rules for Information Exchange (CORE) test scenarios and test cases as well as expected outcomes. This minimal test-case package confirms compliance with the operating rules. We expect accounts to create additional test cases as needed for their final solution and to adapt their data to the minimal test scenarios and test cases.

- **CAQH CORE Q&A Document**—Compilation of questions and answers from CAQH.

- **CORE Phase I and II High Level Requirements (HLR) Documents**—HP-developed HLR documents that established the basis for the High Level Logical Design (HLLD) effort, which provided an easy-to-read version of operating-rule requirements for Phases I and II.

- **Edifecs Test Bed Data**—If an HP MMIS account wants to use the free CORE compliance test capability, the data must be loaded or created in the state account MMIS to support the minimal test suite in the Edifecs CORE test bed. HP MMIS accounts may still choose to adapt their existing data with the test cases in the Minimal Test Case Suite.

- **CORE Recommended Companion Guide Template**—An editable version of the recommended companion guide format for the 270/271 transaction.

HP estimates these artifacts and information provided each account a jump start in remediating the ACA Rule 1104 requirements by approximately 10 to 20 percent. For an 8,000 to 10,000 staff-hour project, this translates to sizeable cost containment for state and federal dollars. Our team is working on the Phase III requirements; and we await CMS' final Phase IV rules, which are in draft form.

ACA 6028—Provider Enrollment

The ACA has been the impetus for continual evolution of the Medicaid program, including provider participation. CMS Rule 6028-FC of the ACA provides procedures under which screening activities are performed for providers enrolling in Medicare and state Medicaid programs. Provider types and specialties are assigned to a risk level and are subject to screening tasks based on their assigned risk level.

HP is actively updating the Healthcare Portal to build the associated workflows and integrate backend web services, which will incorporate automated web service calls to LexisNexis to verify outside data sources for provider verification and screening purposes. This service aids in the investigation process by quickly identifying providers who should be excluded from Medicaid participation including owners, indirect owners, and managing employees.

As we noted in RESPONSE 40d, LexisNexis compiles reports on companies and individuals associated with a Tax ID or Social Security number. LexisNexis also can validate and authenticate the identification credentials of potential providers. Automatic interfaces to LexisNexis contain provider information and the names of individuals and entities listed on the disclosure forms, including managing partners and individuals with more than a State-defined percentage interest in the business.

The HP provider enrollment solution offers a framework built around efficiency, flexibility, and control. The solution supports MITA by providing a proven, highly interoperable, and efficient platform for use by providers and our customers. Controls across the framework—beginning with electronic capture of information using the portal, through automated workflow and interfaces—support customer requirements and ACA mandates. HP's continual investment in the interChange MMIS platform and using our relationship with LexisNexis demonstrates our commitment to delivering the most innovative, yet cost-effective, solutions to our customers.

T-MSIS

On October 31, 2011, the U.S. Department of Health and Human Services (HHS) announced the final data collection standards for race, ethnicity, primary language, sex, and disability status that will apply to HHS-sponsored health data collection. These standards are required by Section 4302 of the Affordable Care Act, which is relevant to understanding and responding to racial and ethnic health disparities. Refugees are at risk of disparities in disease burden and accessing care. Identifying these disparities and effectively targeting and monitoring efforts to reduce them has

been challenging because of the lack of specificity, uniformity, and quality in data collection and reporting procedures.

Besides race and ethnicity, language and disability status data standards are defined. The disability status standard includes six questions to characterize functional disability. Together, the new data standards will enable characterization and comparison of health problems in underserved populations. To facilitate the reporting requirements for 4302 and improve the quality of data collected for program analysis, CMS is expanding the data collected through the Transformed Medicaid Statistical Information System (T-MSIS) process used for analytics for the Medicaid program.

In response to these enhanced requirements, HP created an initiative to address the new T-MSIS file structure and submission requirements. The primary objective of the project is to provide a shareable solution for the T-MSIS data storage, file creation, and submission processes avoiding duplication of effort across the Medicaid enterprise. This solution will have the following components:

- The first component defines data elements and relational data tables for T-MSIS data storage.
- The second component provides for output file creation in the format specified by CMS as well as implementation of specified data-validation edits.

The project will enable accounts to take advantage of centrally produced work products to be used in the development and execution of their specific T-MSIS compliance efforts. This combined initiative across HP MMIS accounts is estimated to reduce the work effort 40 to 60 percent on each account—translating to a 40 to 60 percent cost avoidance for the State and CMS. The project team also is estimating a 20 percent reduction in the elapsed time for the account to initiate the project, given the shared resources.

HP is awaiting the final delivery of CMS' Data Element Dictionary (DED) and Source to Target mapping tool for finalization.

MAPIR

The Medicaid Assistance Provider Incentive Repository (MAPIR) tool was developed by the HP Pennsylvania team and is now used by a consortium of states to provide a method of paying incentives to providers for adopting meaningful-use criteria. This single web-based application enables the administration of the EHR Incentive Payment Program at the state level. MAPIR is a web-based portal to support meaningful use applications and track meaningful use participation and payments for providers. The MAPIR development was funded with a 90:10 Federal match with the 13 states sharing the 10 percent of state costs. The states in the MAPIR collaborative participated in design discussions with HP resulting in the following benefits:

- The shared knowledge and experience of participants from 13 Medicaid programs enhanced the application development process.

- The collaborative provided a forum for representatives from the various state Medicaid programs to discuss operational issues and incentive-program implementation strategies.

- Because costs were distributed among participating states, each state's cost was significantly reduced.

- By sharing the expertise from each participant, states had more resources to respond to other initiatives.

HP is committed to expanding the MAPIR solution to include the capabilities, including National Registration and Attestation (NR&A) interfaces, that are required by the Federal rule across the subsequent phases of the incentive-payment program.

> Because costs are distributed among participating states, each state's cost is significantly reduced

Although the rule does not include Phase 2 or Phase 3 functions or NR&A interfaces, we expect additional capability will drive changes to the NR&A interfaces. As these interfaces evolve, the HP team will help MAPIR continue to adhere to rule changes. Given the number of states that have joined in this endeavor, CMS has been responsive and is willing to change its current processes where possible to facilitate the efforts of the collaborative. We will continue to work with CMS to identify areas in which existing practices need to be changed to facilitate a collaborative approach.

Health Plan Identifier (HPID) as Described in 45 CFR Part 162

Per the federal requirements, health plans must comply with the implementation of the standard unique health plan identifier no later than November 5, 2014. HP's HSF Team awaits guidance from CMS regarding the Health Plan Identifier (HPID) final rule. From our healthcare industry insight and work, we understand the Accredited Standards Committee (ASC) X12 may incorporate the HPID requirements into the next set of HIPAA transaction requirements, version 6010. From the decision made on the incorporation of requirements, we then anticipate guidance from CMS regarding its implementation.

As with ongoing federal requirements, HP is poised to respond with an efficient solution for implementing HPID that will be shared among Medicaid accounts.

NCCI Edits

CMS developed the National Correct Coding Initiative (NCCI) to control improper coding leading to inappropriate payment of claims. NCCI editing involves comparing multiple procedure codes for the same provider, client, and date of service to make sure the claims are coded properly. Improperly coded claims can result in improper payment.

> The inherent NCCI editing logic in interChange claim processing eliminates the need for an add-on COTS with its associated installation and ongoing costs.

Initially used for Medicare claim processing, CMS required states to perform NCCI editing for Medicaid claims by October 2010. Many states chose to work with vendors to meet these editing requirements, which involved adding a COTS product that

typically involved upfront and annual licensing fees.

While refining the interChange MMIS solution through many successful implementations, HP incorporated the NCCI editing capability into our claims processing. The NCCI editing logic is integrated with the claims engine—called subroutines linked into the claims engine. The NCCI/bundling logic exists within two programs; as the programs are part of the claims engine, they call other claims engine setter/getter logic. A Reference panel in interChange is used to view and maintain loaded NCCI data. Additionally, the claims engine records information on denied details for subsequent reporting.

We understand the complexities of applying NCCI edits to waiver claims. The HP team will analyze the needs of the Colorado waiver Health Benefit Plans and work with the Department to apply appropriate NCCI editing to Colorado's unique program.

The following are examples of edit improvements:

- Paper claims that once sat in bins waiting to be counted and coded manually now reside online, where we can quickly track and report them. Our customer needed a more accurate way to determine how many claims deny because providers do not supply carrier information. The customer also needed to determine how many claims require other insurance (OI) information for correct processing. To meet this need, we created an edit to deny a claim when no numeric carrier code is provided and OI is indicated in the system. Then we created another edit to suspend the claim so we could enter the OI information online. This approach eliminated the need to write precoding information on a claim before scanning it. Entering the data online is much more efficient than going through sheets of paper and manually writing down the information.

- Our medical management solution eliminated unnecessary expenses for our customer, while updating policies for appropriate care and billing. HP provides valuable cost-containment services to our customers through our medical management solution and continual research to uncover unnecessary costs. When conducting payment and claims auditing for our California customer, we discovered additional expenses from home health providers who were being reimbursed for initial registered nurse visits and home health evaluations when care was provided to a mother and infant. These providers were receiving two payments: one for the mother and one for the infant. HP reviewed and then updated the health policy to reflect that a mother and her infant(s) are considered integrally connected. With this policy change, home health providers who see a mother and her newborn(s) during the neonatal period are reimbursed for only one initial home health visit and one case evaluation and treatment plan. Through HP's medical management solution and our proactive efforts to execute this policy change, our customer enjoyed thousands of dollars a year in savings.

- By performing data mining and analysis to reveal an overuse of medical supplies, we saved our customer millions of dollars. HP's many cost-containment services are designed to find new, creative ideas to save program dollars for our customers. Through one of our innovative

medical management solution audit tools, we identified claims data that showed providers were supplying heel lifts and two custom arch supports on the same date of service. This indicated an overutilization of supplies, because if the arch support is constructed properly, a heel lift is not necessary. To resolve this issue, our Cost Containment team proposed that our customer create an audit for inside heel lifts when billed with custom arch supports. This would confirm that supplies were not being used inappropriately. Because of our detailed data mining exercises and this "quick-hit" analysis, we were able to cut down on unnecessary purchases and save our customer approximately thousands of dollars a year.

- We worked with our customer to establish new limits for drug screening tests, projected to save millions annually. At HP, we continually review our customers' claims data and provider billing practices to identify cost-containment opportunities. Through this proactive work, we found that our Medicaid customer spent more than $2 million for drug screens for the first six months of 2011. Through further research, we found that this was because of a high number of average tests per day. We then identified instances where multiple providers were receiving payments for drug screens for the same member on the same date of service. Because this type of billing did not follow proper mandated billing procedures, we recommended new system controls to prevent payment of multiple tests. Our customer approved our cost-containment proposal, which is projected to save millions of dollars a year.

- One of our healthcare customers needed to determine if providers were overprescribing atypical antipsychosis medication for children. These drugs not only are costly, but also may cause serious side effects, even death, when not administered properly. Our HP Medical Informatics Center of Excellence provided in-depth research and analysis that uncovered a critical issue. We reviewed FDA indications and evidence-based prescribing guidelines to assess the safety issues with these drugs. We then used insurance and claims history to examine prescribing patterns. We discovered that thousands of children were prescribed atypical antipsychotics for off-label indications, which posed a medication safety risk. By identifying these prescribers and their patients and using statistical modeling to predict off-label uses, we devised a highly targeted outreach program. We also recommended care-management alternatives to off-label indications and a prior authorization program. Our customer took our recommendations, which resulted in cost savings and a safer population.

Increased Automation and Workflow Automation

Workflow management is about streamlining standardized business workflow processes to enhance efficiency, optimize outcomes, and apply policy consistently in decision-making. The HP Workflow Management solution can help the Department meet many of CMS' Seven Standards and Conditions (7SC), including the following:

- **Modularity standard**—Built on an SOA, interChange Business Services and Connections extends workflow capabilities across business units through the Enterprise Service Bus (ESB). The use of open standards of web services—including XML, SOAP, HTTP, WSDL,

BPEL, and UDDI—offers the greatest degree of modularity, flexibility, interoperability, and reuse.

- **Business results condition**—Supported by business rules, each workflow represents a business result condition achieved through standardized steps and supported by rules. Our workflow solution enables configurable QA checks as part of a total quality business results approach.

- **MITA condition**—Aligning and advancing MITA maturity by using SOA-compliant technology in the HP Workflow Management solution delivers efficient, predictable business services regardless of the underlying technology.

The following are examples of increased automation and workflow automation.

- Wisconsin implemented a full benefit plan for Childless Adults within 60 days of going live. The streamlined configurability of the interChange MMIS solution enabled the team to implement 47 cost-containment projects in a nine-month period, saving the state millions of dollars. The adaptability of the system enabled the team to take over a call center in 60 days.

- The State of Georgia Medicaid customer has separate DSS and PBM contractors, requiring interfacing with other vendors and data sources. As part of the ongoing evolution of the interChange MMIS solution, one of the key cost-saving features in Georgia is the enhanced capability that has reduced Buy-In enrollment from 30 days to three days. When a newly enrolled client comes from the state eligibility system, HP sends the inquiry to CMS that night. We receive a response the next day and, if there is active Part A or B, we send the Buy-In enrollment transactions. The flexibility has helped Georgia avoid spending several million dollars and reduce the pay-and-chase work to recover state funds.

- In another state, providers must use electronic claim submission unless Medicaid policy requires a paper attachment. State providers needed an easy-to-use interface that would not negatively affect them or beneficiaries or put undue strain on the Provider Assistance call center. HP met this challenge by improving the Provider Web Portal, enabling users to have claims processed in real time and obtain answers to frequently asked questions regarding issues such as routine eligibility and benefit limits. We eliminated paper Remittance Advices (RAs) because providers could access RAs through the portal and submit claim adjustments electronically. We also discontinued the paper generation of some Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) and managed care reports that are now available on the Provider Web Portal. Using the portal, providers could answer most questions at their convenience, which reduced the call volume in the Provider Assistance call center by approximately 40 percent and enabled HP to decrease staffing numbers. Several million dollars were saved and provider satisfaction increased.

- In another state, priority claims require manual intervention and present special challenges for Medicaid Claims units. Some claims are submitted as priority claims that should not be;

that is, these claims are clean and have no edits suspending them, but because they are marked as priority claims, they require manual release into the MMIS. At the customer's request, HP developed and instituted a process called *scripting* that allows large numbers of claims to be processed automatically, even when they suspend for manual intervention. The scripting process lets us process the priority claim edit so the claims auto-adjudicate. In an average week, our scripting approach enables close to 1,000 claims to process automatically rather than requiring manual intervention. Aside from giving our customer a more efficient claims process, we have been able to operate the Claims unit with 1.5 fewer full-time equivalents.

- HP uncovered a more efficient way of processing pharmacy claims with third-party liability (TPL) to verify the Medicaid program is the payer of last resort. We found that we were waiting several months or longer to recover funds through an inconsistent pay-and-chase audit process. By changing the system to cost-avoid these claims at the point of sale (POS), we generated savings for our customer. We researched TPL coverage and found a way to program the MMIS to reject a recipient's pharmacy claim if it shows TPL coverage, unless the claim shows payment was already made by the TPL or the pharmacy provider indicates that the TPL paid nothing. With this system change, our customer now avoids part or all of the cost of the claim with TPL editing. Not only does this save the state money, it also is more efficient to cost-avoid claims at the POS than to rely on a pay-and-chase process that could take several months. This change has saved millions of dollars annually.

- As recently as 2009, staff members at the Vermont Medicaid program manually entered claims data from paper documents they received. The process was inefficient, error prone, costly to maintain, and difficult to staff appropriately because of the unpredictable fluctuations in the volume of receipts. Our customer needed a system that offers real-time claims workflow and status monitoring. In January 2010, HP implemented a new optical character recognition (OCR) system to replace the manual data entry system. This solution moved data entry to an HP customer site in Pennsylvania, where the OCR base already existed. Data entry clerks started processing claim forms faster, as the automated method compressed the time required for data capture. Our OCR solution reduced turnaround time, improved claims data entry accuracy, and reduced labor costs. Our Vermont customer enjoys higher productivity and lower administrative costs by controlling document workflow and capturing claim information. In fact, workers now scan nearly 85 percent of claims data directly into the system.

- HP has reduced the average abandon rate to almost 0 percent and enhanced provider support for the Florida MMIS. Going live at a call center can lead to high call volumes and too many providers abandoning their attempts to reach an agent. We crafted a one-on-one provider call plan that focused on providers who call often or required extensive call times to resolve their issues. During periods when the volume of incoming calls was low, we also scheduled meetings with the providers so our tailored training could address their needs. With this

approach, we reduced the average abandon rate from 18 percent to less than 5 percent in the first month following implementation and eventually moved the rate closer to 0 percent at the call center. Additionally, our training programs help to continually boost provider support.

- We increased provider satisfaction by eliminating paper remittance advices. Our New Hampshire MMIS customer wanted to lower postage and printing costs and decrease the mail-related risk of Protected Health Information (PHI) breaches. To address this need, we placed the remittance advices (RAs) on the provider website weekly for provider pickup, set up the providers' accounts, granted them access to retrieve the RAs, and provided them training. No longer are paper RAs printed and mailed to providers; the providers now retrieve the RAs electronically as PDF files using the secure provider website. These changes resulted in a decrease in personnel required to mail the RA and payment, lower postage and printing costs, reduced risk of a PHI breach, and fewer provider calls because of their access to RAs and answers online. Furthermore, provider satisfaction has increased because the electronic RA is available one week earlier than the paper copy, allowing providers to process and resubmit their denied claims faster.

- We saved our customer millions of dollars per year by containing the costs of new radiology tests. One cause of increased costs was a growing number of new high-tech radiology tests available in the market. We sought out a radiology management vendor to perform prior authorization (PA) services for select tests. Working with MedSolutions, we implemented a PA program for outpatient, diagnostic MRI, MRA, CT, CTA, PET, and PET/CT imaging services. This program determines medical necessity through developed, proprietary, evidence-based clinical guidelines. Because of this program, our customer has reduced the administrative burden on Vermont physicians, thereby increasing their ability to provide top-quality care.

- We identified and created system efficiency change requests for our customer that improved call throughput speed, call processing accuracy, and member satisfaction. Our Medicaid customers continually look for ways to improve their member services. In the call center, that means more efficient call handling, more accurate processing of requests, and streamlined methods of receiving caller information. HP helped our customer by identifying several system changes that would lead to such improvements. We analyzed the enrollment process and identified an opportunity to enroll family members simultaneously in the same plan, rather than enrolling each family member individually. We increased the accuracy of processing member requests by adding logic to the call center's required tasks and the program's business rules. We also eliminated the need for members to provide duplicate information to call center agents. With changes like these, we have helped our customer serve more callers in the same number of business hours, and we have made it easier for members to get the help they need.

- We enhanced an enrollment broker training program for our Florida customer to improve the expertise of their call center agents and help them better assist their members. The Medicaid

enrollment broker program can be complex, so it is critical that staff members receive annual training on the program's fundamentals and important changes. Our customer turned to us to enhance the annual core refresher training program and improve the quality of support for members. We developed 14 training modules specific to our customer's Medicaid enrollment broker program. We also improved the annual core refresher training program, provided flexible delivery options that included classroom training and self-directed learning, and devised learning checkpoints to foster better understanding of the material. Because of these enhancements, our customer's staff members can better explain the enrollment process to members and help them make more informed healthcare choices. The program also improved the call center's first-call resolution rate.

- We took the initiative to improve provider enrollment efficiency and streamline operations for our Arkansas customer. When we assumed responsibility for provider enrollment for our Arkansas Medicaid customer in 2005, the routine was heavily paper-based and few of the procedures were automated. Applications were worked as "first-in/first-out" and took three to four months to complete. We moved quickly to improve and streamline provider enrollment operations. In 2007, corporate experts came in to conduct a Kaizen assessment—an efficiency analysis and reorganization. The assessment focused on a combination of people, space, materials, and equipment to restructure our standard operating procedures. It identified unnecessary and duplicate steps, increased productivity, reduced inventory, and reduced rework. It also set provider enrollment on the path to a paperless future by recommending scanning paper documents into a central repository. We implemented significant changes because of this initiative and were able to slash application-processing times from several months to two weeks. What's more, the expense of this initiative was shouldered entirely by HP in the interest of delivering better service to our Arkansas customer and its prospective Medicaid providers.

- We created a groundbreaking online enrollment process for our Medicaid customer that increased speed, accuracy, and access to care. The Medicaid eligibility and enrollment process consisted of lengthy paper applications and the need to merge enrollment data across two systems. This often led to inconsistencies and inaccuracies. The customer asked HP to develop an enrollment system to overcome these challenges. We met this need by consolidating the two systems and enabling online enrollment. In September 2010, we launched the Online Enrollment initiative—the first in the nation to allow residents to check eligibility and enroll online at home or from various points of care across the state. Through this effort, our customer can now provide its citizens real-time online enrollment, immediate eligibility determination, and quick selection of primary care providers. The result is improved accessibility, with 40 percent of applications submitted from member homes, reduced determination times from 20 days to 20 minutes, improved coordination among service providers and agencies, and ability to accommodate the new mandated Medicaid population for 2014. We continue to work to make the system faster, available from anywhere, and more time-efficient for staff members.

General System Upgrades

HP's business model is focused on relentless innovation—and delivering that innovation to our customers. During more than 40 years of successfully delivering services to customers, our team has learned that we must earn customers' business every day, continually raising the bar of technology and service leadership.

We recognize the need for the MMIS to react to changes in state and federal regulations, often quickly. The scalability and flexibility of the Colorado interChange provide for system upgrades, and our experienced team members around the country help us to take advantage of solutions across our Medicaid accounts and interChange systems.

For example, in 2012 HP was awarded the National Governors Association's Public-Private Partnership Award, which recognizes companies that implement programs to benefit citizens. In 2010, HP worked with 13 states, led by the Commonwealth of Pennsylvania, to develop a core web-based tool—the Medical Assistance Provider Incentive Repository (MAPIR). MAPIR administers federally mandated incentive payments to help eligible Medicaid providers adopt EHR technology. This unique, innovative private-public alliance continues today in those 13 states.

Built on a service-oriented architecture, MAPIR integrates into existing Medicaid systems, maximizing savings and improving efficiencies. Development expenses are shared equally by collaborating states, significantly reducing individual costs and effort. Designed according to MITA principles and using open-source products, it accommodates the unique needs of each state through configuration or customization.

"The MAPIR project is an example of how technology and innovation can help states achieve real cost containment and efficiency," said Pennsylvania Governor Tom Corbett. "With HP's partnership with Pennsylvania's Department of Public Welfare, 13 states are recognizing savings, gaining shared knowledge and best practices, and working to effectively promote the use of certified EHR technology."

Collaboration

The Delivery Capability model is HP's organizational structure within our Healthcare Business Unit in which we administratively group our Medicaid account staff into functional and technical business areas such as those for Provider Relations, Prior Approval, Pharmacy, or Electronic Data Interchange. This organizational approach lets us take advantage of best practices and subject-matter experts across our Medicaid accounts so we optimize each capability function and use the best approaches in the industry areas (for example, Call Centers) for each state. The

When Oklahoma implemented the OPEX scanning process, we made other accounts aware of the significant productivity improvement resulting from claims no longer requiring presorting. The process eliminated approximately 85 percent of the prescreening work effort typically expended on our Medicaid accounts.

capability structure allows organizations supporting our healthcare contracts performing similar processes to share knowledge management, best practices, and enhancement opportunities. It provides ready access to accounts seeking qualified help in areas such as claims, application

testing, reference and ICD-10, provider, prior authorization, pharmacy, and immunization registry. The capability delivery managers on each account meet with their peers regularly to discuss each aspect of their areas of responsibility. To allow for enhanced interaction, each capability uses SharePoint sites to further the communities' interaction.

The capability leader oversees the business function within HP and can provide capable, trained resources with previous knowledge on a specific capability.

Increased Web-based Services

HP's enhanced provider web portal also helped save our Alabama customer millions of dollars and made it easier for providers to use our interChange MMIS. HP also discontinued the paper generation of some EPSDT and managed care reports that are now available on the provider web portal. Using this portal, providers can get answers at their convenience, which reduces the call volume in the Provider Assistance Call Center by approximately 40 percent.

Because of our August 2011 interChange implementation in Ohio, providers can take advantage of the web portal submission for PA, claim, and enrollment documentation instead of mailing hard-copy information through the U.S. Postal Service. By using the electronic attachment capability of the provider web portal, providers experience a quicker turnaround in PA decisions and claim processing, and the state staff members no longer need to deal with stacks of paper attachments to make determinations. An additional benefit of providers' verifying client eligibility through the new web portal is decreased telephone calls to county staff members for eligibility verification. These features tie back self-service, easy-to-use capabilities for providers, giving them and the program efficient and economical means to exchange client care information.

Enhanced User Interface—@neTouch

As the CMS 7SC and the MITA framework continues to evolve, HP's technical and business operation solutions for meeting the ever-changing Medicaid enterprise also needs to advance. Recognizing the needs to reduce manual input, improve productivity and accuracy of data, and achieve interChange MMIS certifications, the HP team set out to make the system even better. In 2012, HP made the investment to enhance the user front end of the interChange MMIS solution, emphasizing personalization of the MMIS for each user and making usability and accessibility for providers and clients a priority. Built modularly and layered, the user interface (UI) updates—called @neTouch—are integral to our Colorado interChange offering and also can be retrofitted into our existing interChange systems.

Business Results Condition – System Efficiency

The @neTouch family of features enhances user productivity with improved navigation, personal favorite links, MITA process information, profiles and context sensitive help.

The @neTouch functions enable users to improve productivity significantly. The information they are looking for is literally available at one touch of a button. The advanced features of

@neTouch complement the user's work patterns by simplifying system navigation, configuration, printing, and profiles.

Because we have so many interChange installations, our teams can take advantage of user-experience information from many locations. Using this feedback, we have made user-defined enhancements to the interChange user interface. HP built the @neTouch family of features based on guidance from our business experts who perform the detailed tasks every day. The result of our investment in the interChange MMIS solution is an application that makes the management of the healthcare program easier to configure, easier to maintain, and easier to navigate for users when performing the business support functions. This enhanced user interface, redesigned by users for users, will maximize the effectiveness of each user interaction with the Colorado interChange system.

Annual System Upgrades

Annually, HP will collaborate with the Department to prepare a Business Plan that includes how potential changes to technology or architecture could improve operations. We will include advancements we have made to our interChange solution either because of work in other states or from the ongoing investment HP makes to enhance our solution overall such as the @neTouch modernization feature we described earlier in this section.

Besides technology-related upgrades, we also will share ideas for optimizing fiscal agent operations in providing services to providers and clients as well as those for economizing the state's business processes. HP, through collaboration and planning, verifies that enhancements made to the interChange solution can be shared by our clients and an upgrade path is available. For example, our Healthcare Solutions Framework group led by our HP Healthcare Fellow is responsible for preparing HP and our clients for future mandates and more. The team develops common solution frameworks that can be easily deployed into each client's environment and allows for customization to meet each client's unique needs.

Some COTS-based solutions have been so heavily customized they no longer can be upgraded. For example, West Virginia had to release an RFP to request a new solution because their COTS-based solution had not been upgraded since it was first installed. interChange is designed to be modular, support MITA, and use COTS products wisely so they can be upgraded annually.

Additional Ideas

Besides the cost savings/avoidance initiatives described above, HP provides additional examples of work below that translates into saved time and cost avoidance for our customers.

Orlando Data Center

As we discussed earlier, the Orlando Data Center (ODC) provides shared services from the network, storage, and backup and restore (BUR) capabilities for Colorado interChange. The ODC environments are designed for flexibility to a variety of support standards and conditions. The hosting environment is focused on particular conditions to reuse processes, hardware,

resources, and commercial products. It adheres to the MITA condition for business and data architecture; along with security assessments. Industry standards are a core responsibility of the hosting environment, for the proper security of HIPAA data. The HP facility is designed to provide accurate, timely responses from the hosted systems for the optimal user experience.

Our hosting solution includes a highly skilled team of professionals, whose responsibilities extend across multiple states' healthcare projects. Thus the Department benefits from lessons learned and insights from other states and saves costs because a full engineer's time is not required to service one account. The operations and staffing model in place draws peer groups, where effort to each account can vary, different resources can be dedicated based on needs, and the ability to provide support for surges is covered. When an issue is identified in one state, the other states benefit from the knowledge and any corrective actions.

HP also will take advantage of the Disaster Recovery site—geographically remote from the ODC—for the interChange, along with using a dedicated disaster recovery team to support the Medicaid accounts. We will use our Colorado Springs site—our primary disaster recover site for our State Medicaid accounts—for the Colorado interChange. This recovery facility, which is rated Tier III by Uptime Institute, has more than 20,000 square feet of total space.

PASRR Uniform Screening Tool

HP is proud to introduce the HP PASRR Uniform Screening Tool, our solution for an integrated system to perform the federally required Preadmission Screening and Resident Review (PASRR) functions, generating standardized, automated, and straightforward admission strategies that are less confusing to the client and provider communities. This state-of-the-art technology helps clinical staff members better meet the needs of the long-term care (LTC) client population. The result is uniformity, improved quality control, more efficient data collection and analysis, and improved capacity for planning. More important, we provide the benefit of single point of entry that will help achieve overall cost containment and improve service delivery.

The current use of this web-enabled tool reduced Level I administrative functions in North Carolina by 60 percent and provides near-real-time turnaround for determinations, facilitating timely access to care. Consistent outcomes for screening increased because error-prone, paper-intensive processes were reduced, so fewer manual reviews by medical professionals were needed, streamlining operational processes and lowering costs. Additionally, consistent outcomes based on objective business rules integrated into a rules-based engine reduced the chance of inappropriate placements that otherwise could lead to potential legal issues.

Our uniform approach to LTC screening and assessment responsibilities bridges the gap between human-centric tasks and automation and allows access to the individuals involved in the care and placement of the client. The uniform screening system lets providers and authorized users complete a secure online medical, psychological, or social form and receive a real-time or near-real-time determination of the most appropriate level of care and placement recommendation. We accomplish this through a tightly integrated business rules engine and workflow engine that

replaces many human-centric tasks. Tasks previously handled manually by professional staff members and registered nurses that took days can be completed in seconds by the business rules engine.

The result from use of this tool and process is a reduction in the turnaround time to complete a Level II review. Previously, turnaround was an average of five business days. The tool enables the outside evaluators in North Carolina to participate in the PASRR automated workflows, allowing the evaluation to take an average of 1.6 business days. After the application receives the form, it processes the data using the business rules engine. Based on the type of screen submitted and the pathways triggered through the business rules, the uniform screening system automatically determines the proper flow for the request and moves the task into the appropriate queue for processing.

After determining eligibility, the application uses an integrated workflow process, which moves the request through a set of procedures that adhere to the business process defined by the state customer. Each procedure executes by a human-centric task or an automated task. For example, after the business rules determine eligibility, a nurse may be required to review the screen manually before final approval. We also can automate tasks such as sending system-generated letters, faxes, or emails to the appropriate parties. This provides timely written notification of determinations to appropriate individuals, as required by state and federal rules and regulations. When indicated after completion of the Level I screening, a referral for PASRR Level II screening and completion of the next level is routed electronically to the appropriate service provider. This single point of entry for PASRR functions helps achieve overall cost containment and efficiency for the State of North Carolina.

Existing HP Call Centers

Our proposal meets Colorado's requirements as noted in RESPONSE 40j for call-center service. As an alternative to this single-purposed Colorado provider call center, HP offers to share existing facilities to help reduce costs. We propose to route primary calls into our Colorado location and then route overflow calls routed to another state during peak volumes.

The following story demonstrates our expertise in shifting call center services to an alternate site if the need arises.

Provider Enrollment Streamlining Results in Arkansas

- Steps in the enrollment process reduced by 32 percent
- Rework reduced by 25 percent
- Processing time for applications reduced to 10-14 days

Collaborating to Overcome Historic Flooding

Warwick, Rhode Island—The floods of 2010 were the trigger events for our teams to provide disaster recovery and business continuity services to our Rhode Island customer. Warwick experienced a historic flood on Tuesday, March 30, 2010. Contaminated water flooded the HP Fiscal Agent Office and data center, requiring the activation of our business continuity plan for systems and business operations. The immediate focus was on critical systems to support access to care and payment to providers.
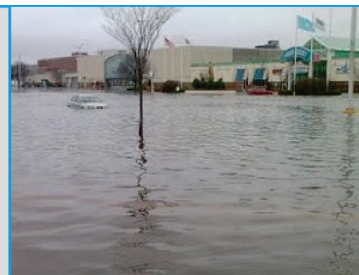
Our planned business continuity site in Herndon, Va., restored the Rhode Island MMIS production environment while our Delaware Fiscal Agent account activated the telephone support for providers and clients. We staffed the provider and client help desks and started receiving calls at 8 a.m. the morning after the flood. Within the first 72 hours, core processing systems and full provider services were operational. We restored critical systems including the MMIS production environment, which allowed providers to submit claims and confirm eligibility and claim status. We also restored the real-time/POS functions for pharmacy transactions in the same time window. Because of our planning and dedicated actions, we still paid the providers on the scheduled pay dates.

We accomplished business continuity by executing a solid business continuity plan and through the powerful collaboration of multiple HP support teams and our Rhode Island account resources. The HP-wide 24 x 7 response team provided crisis management and skilled support for immediate resolution of network, firewall, configuration, hardware, security, and real estate needs. Additionally, our other HP state Medicaid accounts also contributed resources to this urgent effort. Being the leader in the Medicaid industry with multiple accounts to count on for assistance is a distinct advantage HP brings to Colorado.

348_180_01_0513

As this story demonstrates, HP can take advantage of other HP call centers within the United States. We have been successful in routing telephone calls to alternate locations and successfully responding to program stakeholder calls and inquiries. HP has extensive healthcare and call-center experience with inbound and outbound interactions. This experience has taught us the commonalities of state healthcare programs and also that each Medicaid program has its unique aspects and requirements.

Third Party Liability

During the Wisconsin MMIS on-site certification visit, the Liens, Estate, Affidavit Processor (LEAP) automatic workflow system was impressive and an industry best practice. The CMS reviewer had done four certification visits and said that he had never seen a system such as this. HP recovers millions of dollars per year for the State of Wisconsin Medicaid Program using this TPL application, which is tied to the DSS to retrieve data automatically and identify the recovery.

Rule Configuration

The HP team has successfully used business rules engines (BREs) and rules-based processing within our MMIS solution for more than a decade in a manner that is fully consistent with the high Maturity Levels of the Modularity Condition defined by CMS' 7SC.

The BRE is used in multiple state Medicaid programs to support the complex rules associated with the Medicaid program. The rules are maintained by nontechnical staff that have specialized knowledge of business processes and policy. In these states, implementation of a new business rule is process controlled by business teams without intervention of the technical team.

In Florida, the rules engine was used to change the state's vision policy to prevent overpayments for refractions. *The change took only four hours to configure, test, and document.* After two days allocated for customer review and approval, the policy was implemented and functioning as required.

In the Future

HP looks forward to discussing these innovative solutions with the Department in the future and to developing additional cost-containment ideas to protect Colorado's state resources for a growing Medicaid program. Our goal is to help the State successfully manage its limited healthcare dollars for growing programs and expanding populations.