

USE CASE SPECIFICATION

Version 2.0

Medication Feed

Version History

Version #	Date	Author(s)	Reason for Change
1.0	12/19/2019	Use Case Team - HealthTech	New
2.0	02/07/2020	Use Case Team - HealthTech	Added two new fields as requested by client, changed colors background to approved color scheme
3.0	03/11/2020	Use Case Team – HealthTech	Medication Feed Addendum

Medication Feed for Healthcare Provider, Healthcare Organizations, and Payors

HIE Use Case Summary

Managing patient medications and ensuring patient safety can be an arduous task due to knowledge gaps regarding medication details. Healthcare providers are charged with ensuring the five rights of medication administration (right patient, right drug, right dose, right route, and right time) are strictly adhered to in an effort to reduce medication errors and potential patient harm. The challenge to prescribers is compounded due to prescriptions from disparate entities, and the simultaneous use of multiple drugs by a single patient for one or more conditions (i.e. polypharmacy). In today's healthcare arena, patients frequently visit multiple providers in various healthcare settings including urgent treatment centers, emergency rooms, primary care facilities etc. Patient are often ambiguous when recalling what medications they are taking including the dosing instructions thus making it difficult to identify this type of data. This can lead to duplicate prescriptions and/or other possible adverse drug events resulting from the prescriber not having access to an all-inclusive medication list.

A medication feed will provide an accurate, aggregated list of prescribed and dispensed medication data and history at the point of care through access to Montana's secure and trusted health information exchange (HIE), Big Sky Care Connect (BSCC). This up-to-date information will benefit providers and patients by supporting more informed care decisions through an efficient medication reconciliation process, reducing adverse drug events, and improving medication adherence. The data provided by the medication feed can help improve the dialogue between patient and provider by taking some of the guesswork out of prescribing and medication management.

This use case is beneficial to payors as well. For example, benefits can be attributed to reduced cost from fewer duplicative drug therapies, cost analysis of generic versus brand name medications, cost analysis of drug interaction prevention, and analysis to identify high-risk patients. According to an article from the American Health and Drug Benefits, preventable medication errors have emerged as a prominent cost and quality issue in the United States, and are estimated to impact more than 7 million patients, contribute to 7000 deaths, and cost almost \$21 billion in direct medical costs across all care settings annually¹. Adverse drug events (ADE) are harms that result from medication use; when these harms result from a medication error, they are known as "preventable ADEs." The inpatient hospital setting is particularly resource-intensive in terms of care delivered and exposure to potential harms and errors. In 2007, the Institute of Medicine (IOM) estimated that 1 medication error occurred per patient per day in hospital care.

¹ National Burden of Preventable Adverse Drug Events Associated with Inpatient Injectable Medications: Healthcare and Medical Professional Liability Costs: <http://www.ahdbonline.com/issues/2012/november-december-2012-vol-5-no-7/1224-feature-1224>

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Medication reconciliation is the process of creating the most accurate list possible of all medications a patient is taking and comparing that list against admissions, discharge, or transfer (ADT) orders with the goal of providing the correct medications to each patient at all transition points in an effort to reduce the risk of over or under prescribing and drug interactions. Patient medication information that BSCC will collect will help minimize adverse drug events and maximize cost benefits.

As an example of how medication feed can be used, an interface with an IT company, such as DrFirst/Surescripts that supports the electronic transmission of prescriptions, e-prescribing, between healthcare organizations and pharmacies can be implemented into BSCC. This makes available the patient's most current medication information to the prescriber at the point of care to reduce medication errors and possible adverse drug events. This query (search) feature can be seamlessly incorporated into the routine workflow of providers. For payors, having access to this information can help with prior authorizations and case management.

User Story

Clinic: Dr. Smith, an urgent treatment center provider, encounters a patient who presents to his urgent care clinic. Dr. Smith has never had a patient encounter with this individual before. In an urgent care setting, providers often interact with patients with whom they have no prior history. The patient needs a medication prescription, but the patient does not remember what medications she takes. When asked which pharmacy the patient uses, she states that she uses five different pharmacies depending upon which medication she is needing. Dr. Smith feels that having access to the comprehensive medication and allergy list would significantly decrease the danger of prescribing a medication that may adversely react with another medication the patient is taking. Using BSCC, Dr. Smith can query the pharmacy information in the HIE to obtain up-to-date, comprehensive medication data and history for better medication management.

An aging population means that there are a growing number of individuals with comorbidities (simultaneous presence of two or more chronic diseases or conditions) and complex medication regimens. Often, patients have difficulty recalling all necessary medication details. Accessing the medication feed via query will alleviate this time-consuming task, assist in improving patient safety, and aid in making well-informed decisions. Any medication prescribed during the clinic visit and filled by a pharmacy of the patient's choice will be accessible by the primary care provider and care team via HIE. Additionally, access to medication information can assist the provider who is caring for patients with chronic conditions in realizing their prescription refill patterns. For instance, if the patient is not picking up their prescriptions, the provider can have a discussion regarding the importance of following the prescribed medication regimen to improve overall health.

Hospital: Transition of care is a critical time in which a patient's medication history needs to be accurate, up-to-date, and available to the receiving facility at the point of care. In the hospital setting, most patients admitted to inpatient status first have an emergency room encounter. Some patients are unable to deliver a historical medication list; in other instances, time is of the essence and the medication history needs to be obtained quickly. Upon a new admission or discharge, providers must be able to efficiently reconcile a patient's medications in order to make well-informed care decisions, ultimately ensuring patient safety and improving overall care coordination. Providers must decide at the time of discharge which medications are to be continued, discontinued, and which new medications are appropriate to prescribe, all of which must be communicated to the receiving provider. Additional benefits include the correction of

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medication discrepancies, decreased drug-drug interactions, and minimized cost.

Providers and patients will also be able to make better use of each encounter due to time saved during medication reconciliation. The medication feed will mitigate these gaps in knowledge.

The implementation of electronic health record (EHR) technology in the healthcare setting has created an avenue to ensure access to accurate medication lists for patients at the point of care if a medication history has been obtained. However, keeping the medication lists current has become an enormous challenge because of multiple healthcare providers prescribing medications. It is cumbersome and takes a significant amount of time and resources to collect all the medication information from disparate systems that do not interface to share data. This includes but not limited to primary care clinics, hospitals, acute or long-term care facilities, and pharmacies. BSCC has the ability to receive medication feeds from various disparate systems and create a current, comprehensive medication list that would be available for facilities to use at the point of care. Utilizing a third-party medication data feed vendor such as DrFirst/Surescripts, BSCC participants could have access to medication history, identity proofing assistance, controlled substance prescriptions filled, legend drug (a drug that, by law, can be obtained by prescription only and bears the label, "Caution: Federal law prohibits dispensing without a prescription") prescriptions filled, medication adherence software, and meeting Promoting Interoperability formerly known as Meaningful Use. The medication information will be available in the HIE once the patient has filled a prescribed prescription via a third-party medication data feed.

This would give hospitals and emergency departments access to accurate patient medication histories before prescribing new medications. Additional benefits to hospitals that utilize the medication feed data derived from BSCC are reduced readmission rates and adverse drug events due to the prevention of potential duplicate medications or medications that would adversely interact with the patient's current medication regimen.

Implementation of this use case could also provide an institutional infrastructure to reduce the person-time needed to collect, compile, and reconcile medication data from different sources. Healthcare providers will also be able to evaluate medication compliance by being able to decipher whether prescriptions were filled and implement or modify care management.

Payor: A payor needs to determine medication adherence for a hypertensive patient whose specialty prescriber is requesting a name brand beta-blocker as opposed to a generic due to uncontrolled hypertension. This payor would benefit from access to BSCC to run a query to determine if this patient has been filling their generic beta-blocker prescription giving an indicator of medication compliance, thereby approving the prior authorization based on medical need. The patient could be at risk for poor health outcomes due to non-compliance resulting in extra costs for the payor.

Payors play an important role in the success of implementing a medication feed and providing a holistic view of a patient's claims-based medication history. Patients often seek care from multiple prescribing providers. When performing an individual patient query to BSCC and utilizing data from the medication feed, duplicative and/or non-formulary medications can be identified.

Payors will be able to analyze the data per individual patient query on filled medication prescriptions to form metrics which can reveal high-risk and/or non-compliant patients. Payors, such as Medicaid, can use medication information from BSCC to perform a cost-benefit analysis on drug effectiveness in chronic disease management per individual patient query including

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cancer, diabetes, and heart disease. As BSCC HIE matures and rich data is captured, the medication feed can potentially make it possible to perform comparative analysis on brand name versus generic drugs. Data can be used in population health analytics, giving insight into medication safety issues as well as prescribing behavior and patterns.

Pharmacist: Pharmacists are not only the interpreter and second set of eyes for a medication prescription but are often the liaison between the patient and their healthcare provider when it comes to managing their medications, paying for medications, and interpreting the provider's dosing instructions. A pharmacist may notice a newly prescribed drug after a hospital discharge when the patient comes to get the prescriptions filled. The medication feed query per individual patient available through BSCC will equip the pharmacist with the ability to comprehensively review the patient's medication regimen (even those medications that have been filled at other pharmacies) and properly advise him/her on potential drug interactions, cost savings with generic drugs, or even remove unnecessary medication after careful consultation with the prescribing provider.

First responders: Emergency Medical Services (EMS) is called due to a patient being unresponsive. Once EMS arrives on the scene, the patient has a pulse and is breathing but is unable to verbally communicate. The person calling 911 is a neighbor and does not know if the patient is currently taking any prescription medications. Access via BSCC to a longitudinal medical record including an active, real-time medication feed will assist the paramedic to improve treatment options and decrease adverse drug events.

Key Actors

Those who will be using the application or system; can be human or technology. Key actors include but are not limited to:

- Healthcare providers serving at hospitals, clinics, long-term health facilities, public health departments, patient centered medical homes, pharmacies, EMS, home care, hospice, as well as payors/health plans including Medicaid and Medicare.
- Platforms that support e-prescribing between healthcare organizations and pharmacies such as DrFirst/Surescripts.

Stakeholder

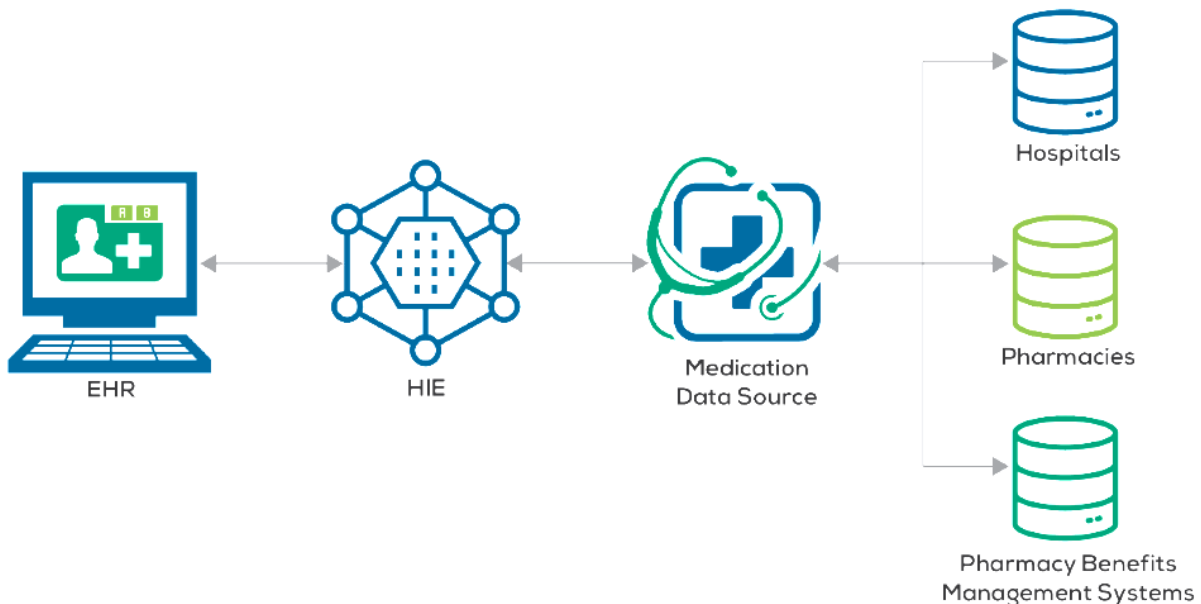
Those who have an interest in the success of the use case. Stakeholders include but are not limited to:

- Key actors listed above.
- BSCC, Montana Medical Association (MMA), Department of Public Health and Human Services (DPHHS), Montana Board of Nursing, Montana Hospital Association (MHA), as well as compliance teams and legal teams representing providers.
- Patients who have been prescribed medications (medication compliance)

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Function/Purpose

Medication feed is a service that allows an authorized user to query BSCC for medication information via a connection to a medication data vendor such as DrFirst/Surescripts. Medication feed will provide an accurate, aggregated list of prescribed and dispensed medication data and history for an individual patient, as provided by the third-party medication data vendor, at the point of care. Access to medication information will benefit healthcare providers and patients by supporting more informed care decisions through an efficient medication reconciliation process, reducing adverse drug events, and improving medication adherence. The data provided by the medication feed can help improve the dialogue among payor, provider, and patient by giving a more complete medication history and improve compliance to assist with prescribing and medication management.



Value Proposition

Having electronic medication feeds will improve the accuracy of prescribing information and increase efficiency of patient care. It can identify up to 25 percent more medications, thereby increasing patient safety by reducing the number of potential adverse drug events. Medication reconciliation is imperative because a great percentage of adverse drug events are caused by medication errors.

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Adverse drug events account for 4.7 percent of hospital admissions, 26 percent of hospital readmissions, and contributes an estimated \$1 million per hospital per year in costs². The use of HIE to ensure more consistent medication reconciliation to reduce drug discrepancies may contribute to the reduction of avoidable health care utilization and associated costs. Ultimately, the reduction of patient harm is the greatest benefit.

Providers are increasingly paid for value over volume, thus there is increased incentive to avoid unnecessary health care costs. In addition, medication feed can save approximately 20 minutes per patient in an inpatient setting. Payers also benefit from the reduction in cost. By having access to DrFirst/Surescripts medication information, payors can access real-time medical information, health history, and medication adherence information to facilitate prior authorization for both medication and services authorizations. This can potentially reduce man hours by 15 hours per week which is a cost savings to all stakeholders³.

Financial and Business Considerations

Financial consideration

This medication feed will require an investment of approximately \$200,000 to 250,000 annually. There are a limited number of vendors who offer this service; however, direct negotiation with these vendors is recommended versus a longer request for proposal (RFP) process.

- **Funding sources:** Funding for medications feeds has been budgeted in the 90/10 monies available through the Centers for Medicaid and Medicare Services (CMS) for the initial years of the HIE. Continued funding beyond September 30th, 2021 may be available via the Medicaid Management Information System (MMIS) funding.
- **End-user fees:** Once the HIE is declared “mature”, this funding will need to be paid for via subscription fees. It is not anticipated there will be any additional end-user fees beyond the user’s annual subscription fee.
- **Tie back to value proposition:** The accuracy of a patient’s medication history cannot be underestimated. Having a clear understanding of the patient’s current medications and history can circumvent adverse drug events. While a more accurate medical history will save time and money per patient visit, having access to a more accurate medications list is often an indicator of provider’s desire to utilize the HIE. If an accurate medication history is not included in BSCC HIE, providers may not consider BSCC as a real source of truth and may have reservations in using the service all together.

We would recommend that BSCC utilize DrFirst. DrFirst currently provides service for several of the hospitals in Montana; consequently, since these organizations are already utilizing DrFirst, there would be no additional fees. Fees are based on a per-bed rate and for those who are not currently utilizing DrFirst, the cost would be as follows:

² Multidisciplinary Approach to Inpatient Medication Reconciliation in an Academic Setting. Varkey, Prathibha, et al. "Multidisciplinary approach to inpatient medication reconciliation in an academic setting." *American Journal of Health-System Pharmacy* 64.8 (2007): 850-854. <https://www.medscape.com/viewarticle/555987>.

³ <https://drfirst.com/challenges/medication-adherence/#tab-4>

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Total Annual Cost:

Total Year 1 Cost: \$229,655 (includes one-time integration fee)

Total Year 2 Cost: \$219,655 (includes annual maintenance fee)

Total Year 3 Cost: \$219,655 (includes annual maintenance fee)

Business Considerations

- **Interface and access Technology negotiations:** BSCC (HealthTech) should be prepared to quickly and earnestly negotiate with the medication service vendors to procure the best pricing along with a guarantee that the implementation of the vendor's service will be completed with Phase 1 of the Intersystems project.
- **Staffing requirements:** BSCC (HealthTech) has initial staff assigned to help negotiate and coordinate the onboarding activities needed for this technology with the various vendors.
- **Workflow redesign:** No workflow re-design is anticipated since medication history is part of the base offering of the HIE core product. The accuracy and view of a patient's full medication history list is the real goal of subscribing to this service.

Upstream/Downstream Dependencies

Upstream dependencies are those dependencies where something must happen before the use case development can start.

Downstream dependencies are those dependencies where the use case must deliver something before something else can start.

Stakeholder

- **Upstream** - Stakeholders will be identified. Once stakeholders are identified information will be gathered including the end-users who seek access, as well as the contributing healthcare organization participants (providers, practices, and hospitals) that will access the medication information via query.
- **Downstream** - Infrastructure will need to be established that will support end-users, participants, contributing entities such as providers with prescribing authority and payors, and others, to include establishing access, workflow, and providing help in the future.

End-User Level

- **Upstream** - Create access including credentials and roles for end-users in accordance with the agreements from the selected vendor.
- **Downstream** - Establish a user's role and grant authorization to those healthcare organizations and systems for which they are affiliated.

Healthcare Organizations/Payors

- **Upstream** - Identify either entity or participant's role - identify providers, practices, and hospitals who will be accessing medication information via query to BSCC and identify workflow standards.

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- **Downstream** - Ensure the aggregated information is accessible to all end-users that are approved to access the system and communicate workflow standards to all participants.

Technical

- **Upstream** - Identify solution options, determine standards, supporting infrastructure, and technology options to support medication feed across multiple organizations, end-users, platforms, and healthcare organization participants. Create networks within the medication feed and develop connections to those networks and create organization access, identify medication information flow technical standards between providers, hospitals, practices and other end-users to accurately query BSCC messages and medicine information.
- **Downstream** - Ensure entities are informed of requirements to participate in Meaningful Feed, applications, platforms, networks, and organizations, ensure practices and providers are informed of the medication information standards and are prepared for the workflows.

Business

- **Upstream** - Identify and develop metrics in advance to establish goals, thresholds to show improvement in patient care. For example: measurement of decreased readmission rate less than 30 days due to medication error.
- **Downstream** - Identify where to gather the metrics/key performance indicators and establish methods to use those indicators to show progress.

Regulation

- **Upstream** - The review and analysis of federal and state laws that may impact medication feed has been accomplished and described in the Legal/Policy Consideration section.
- **Downstream** - Establish procedures to ensure end-users are only accessing systems and applications they are approved to access. Establish security measures to lock down an end-user when possible violations are detected.

Technology System Components and Services Utilization

Medication feed history provides real-time access to the largest set of medication claims and pharmacy fill data available, delivering a more complete picture of patients from admission to discharge. Real-time access enables more informed treatment decisions across the healthcare continuum including transitions of care which can contribute to reducing medication errors. Apart from preventing prescription errors, accurate medication histories are also useful in detecting drug-related pathology or changes in clinical signs that may be the result of drug therapy.

Data generally included in a medication feed:

- Name of medication
- Dosage amount
- Quantity dispensed
- Number of days' supply
- Pharmacy Dispensing medication
- Phone number of dispensing pharmacy
- Prescription date parameters
- Name of prescribing physician

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Connect to medication data provider vendor

Connection to a medication data vendor such as DrFirst/Surescripts is one way to access all the medication history data available for a given patient. These vendors receive medication information from pharmacies, pharmacy benefit management (PBM), EHR vendors and collect the medication information.

BSCC can access this medication history information by connecting to a custom web service provided by the medication data provider vendor. Depending upon the capabilities of the HIE, user access should be role based to access data. When an HIE user requests Medication data, this user is first authenticated to ensure that they can access the data. Once the user has been validated, a request is made over a web service call. At this time, the web service and the certificate are authenticated, and the medication information request is resulted once the vendor finds a match for the patient that is being queried.

The medication data from various pharmacies and PBMs is aggregated and sent back over the web service as a response with accurate information. This information is now displayed to the end-user in the BSCC portal.

There may be some options to store the retrieved medication history information into the BSCC; however, this would be contingent on the vendor contract model.

Configuration/Interfaces Required

Configure query functionality to run a query to BSCC that would query the third-party medication data vendor where BSCC acts as a pass-through for the medication information.

- A trigger event should be configured, so a query can be auto generated to request and receive medication data
- An HIE web portal should be configured to display medications data from third-party medication data vendors such as DrFirst/Surescripts

External Dependencies

- HIE technology vendor should adhere to the same standards as the medication feed vendor such as DrFirst/Surescripts to establish connectivity and transmission of data.

Legal/Policy Considerations

Montana Rule No 24.174.1404 (50-32-309)

- The state of Montana's **Rule No 24.174.1404 (50-32-309)** provides for an annual registration for those who manufacture, distribute, or dispense dangerous drugs and those persons must maintain records and inventories.
- The medication feeds available on through BSCC will be received through a third-party vendor such as DrFirst/Surescripts who will receive medication data from those entities who have maintained registration in conformance with the recordkeeping and inventory requirements of federal law and rules.

Patient Protection and Affordable Care Act (ACA - 42 U.S.C § 18001 (2010))

- The Affordable Care Act (ACA) of 2010 establishes comprehensive health care insurance reforms that aim to increase access to health care, improve quality and lower health care costs, and provide new consumer protections. The ACA supports technological innovations that promote integration of health IT systems that promote patient care and improved health outcomes. The medication feeds available in BSCC align with the ACA's goal of transforming the healthcare delivery system into a value-based and patient-centered system by providing timely patient medication information available through query that will assist providers in making critical decisions at the point of care.

HIPAA (Pub.L.104-191, 110 Stat. 1936, enacted August 21, 1996, Title II)

- The HIPAA Privacy Rule describes what information is protected and how protected information can be used and disclosed. The HIPAA Security Rule describes who is covered by the privacy protections and what safeguards must be in place to ensure appropriate protection of electronic protected health information (PHI).

With the assumption that BSCC will house PHI, HIPAA will determine how BSCC, as a covered entity, will implement safeguards to ensure the confidentiality, integrity, and availability of PHI. Further should BSCC serve as a business associate, HIPAA will guide the contents of the contractual agreements to be obtained with the covered entities with whom BSCC will work.

42 CFR Part 2 (42 USC § 290dd-2.)

- 42 CFR Part 2 describes the parameters of patient information as it pertains to medication information and in particular controlled substances. This describes permitted disclosure patient consent method for disclosure including who may access such information outlining the circumstances for access.
- The federal confidentiality law and regulations protect the privacy of substance use disorder (SUD) patient records by prohibiting unauthorized disclosures of patient records except in limited circumstances. Congress enacted the legislation in the 1970s to encourage individuals with SUDs to enter and remain in treatment.
- 42 CFR part 2 - The federal confidentiality law and regulations has been the foundation for the substance abuse treatment programs around the country. This law is very important to the implementation of medication feeds to BSCC because it permits patient information to be disclosed or exchanged to HIE systems; however, the regulation requires that patient consent be obtained prior to the disclosure of information by substance abuse treatment programs; with some exceptions such as medical emergencies, audits, and evaluations.

Assumptions

- Medication feed will be utilized by nearly all HIE users.
- Medication feed projections are for planning and estimate purposes only.
- Medication feed projections/estimates do not consider undefined business scoping elements that may be found throughout the project life cycle due to stakeholder, business and vendor requirements, negotiations with vendors, dependencies, durations, and any lag times which may result from the actual planning and implementation process.

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- Vendor costs are based on knowledge as of February 2020 and may increase or decrease depending upon final contract negotiated with vendors.
- Vendor costs have not anticipated increased costs that may occur in the future.
- These costs do not include the outreach costs which are included in the outreach/onboarding contract.
- Use case work and management is continual throughout the project.
- Activities will transfer to BSCC permanent staff as they are hired and trained as part of operational HIE process.
- HealthTech Solutions is on a time and materials contract which states a cost to not exceed contract.
- Constraints, inclusions, and exclusions are based on our current knowledge as of February 2020 and may change.
- Policies, legal and regulatory, as well as technical standards for interoperability changes may take place on both the state and federal level.
- Interface ongoing monthly fees are negotiated as part of the Intersystems Corporation's initial statement of work (SOW).
- Vendor costs identified in each use case do not include monthly fees which could increase overall costs once known.

Key Performance Indicator/Metrics of Use Case

The following are some examples of metrics that can be measured related to medication adherence, reduction in hospital readmissions related to medication errors, and reduction in adverse events:

- Number of doses dispensed in relation to a dispensing period. For example, each prescription, either paper written or electronically transferred, contains the following:
 - Date ordered
 - Patient name
 - Patient date of birth
 - Patient address
 - Name of medication
 - Medication strength of drug to be dispensed
 - Instruction to pharmacist (e.g. dispense 30 tablets, take 1 tab three times a day by mouth for 7 days)
 - Number of refills if any
 - Notation if generic substitution is allowed
 - Signature of prescriber

This information is captured when a patient fills the prescription. Data analytics can track this type of information and doses dispensed in a given timeframe.

- Patients who fail to initiate medication therapy.
- Medication trends that facilitate targeted interventions.

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Alternative Paths

To compare and contrast the alternative paths, below is a summary of the recommended path and other alternatives.

Recommended Path

Query-based exchange of data can be utilized by an authorized user to query and retrieve patient medication information that is made available by a third-party medication data vendor. The query-based exchange is typically used to support planned and especially unplanned healthcare.

DrFirst is a third-party medication data vendor that is recommended. Nationwide, DrFirst serves more than 60,000 providers, 750 hospitals and 340 healthcare IT vendors. This saves time, money, and promotes optimal attention to patient care and care coordination. In Montana, DrFirst serves several hospitals currently.

- Query-based exchange allows for speed in getting medication information via BSCC
- Query-based exchange allows for timely medication information access
- Query from BSCC to third-party medication data vendor
- Query via BSCC is a pass-through for medication information
- Query data return would not be housed in HIE unless negotiated to do so

It is not recommended to pursue Surescripts as the third-party medication data vendor at this time because the processes that Surescripts is taking at this time due to security compliance issues that have happened prior to 2019 with one of the customers they served. DrFirst includes the Surescripts data and supplements the Surescripts data with additional data resulting in a more complete medication information record. However, Surescripts does remain an alternative path.

Alternative Path

Direct exchange differs from query-based exchange in relation to medication feed. Instead of having a third-party medication data vendor, direct exchange would allow for interfaces between hospitals, ambulatory services, pharmacies, and other healthcare organizations that can contribute medication data, and BSCC. This data would be stored in BSCC. The direct exchange method is more commonly used in the transitions of care. Some challenges associated with direct exchange include:

- Potential regulation/statute changes
- Challenge to connect mail-order pharmacies
- Interfaces are configured to receive and process medication data via HL7 feeds, continuity of care document architecture (CCD-A), and National Council for Prescription Drug Programs (NCPDP) formats
- Interfaces are configured to process healthcare plans medication files to include files received from Medicaid PBMs
- Timing of receipt of pharmacy filled data may not be as timely as query-based services as most providers of data contemplated with this service may send daily or less often, as is the case with prescription drug monitoring programs (PDMP)

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Financial/Business Considerations

A campaign would need to be developed to approach the state legislature to allow the collection of all prescribed drugs administered in the State, like the State of Nebraska. Currently, pharmacies and mail order houses must filter their daily feeds to the state's PDMP in order to send only controlled substances. By allowing them to send all dispensed drugs, every evening, and sharing that information for BSCC, not only would this annual fee be eliminated but the accuracy of patient's medication history in BSCC would increase from approximately 80 percent to 95-98 percent.

Connect to pharmacies, hospitals, ambulatory services, and healthcare plans including Medicaid

BSCC can connect to pharmacies, hospitals, ambulatory services, and healthcare plans including Medicaid, and receive medication data via HL7 feeds for medication data or CCD-A and NCPDP. Once data is received, the medication data will be processed through the regular BSCC channels where the data is parsed and potentially stored. The bidirectional flow of medication data between payors and providers will result in a more streamlined approach to care coordination, medication management, and cost containment.

External Dependencies

- EHR vendor's technology capabilities adhere to application program interface (API) standards
- EHR vendor's technology abilities to adhere to prescription monitoring information exchange (PMIX) architecture or NCPDP 10.x standards
- EHR vendor's ability to send the accurate identity data
- EHR vendor's ability to consume and display the response sent by the HIE
- EHR vendor and organization's IT team resource availability.
- Pharmacies, PBMs, hospitals, ambulatory services, and healthcare plans including Medicaid payors willingness and/or ability to send data feeds to vendor
- Regulatory requirements relating to the extent of the content of the feed. For example, does the medication feed contain all prescription data including controlled medications?

Alternative - Phased Approach

Another alternative path to consider is a phased approach between query-based and direct exchange. The benefits to using a phase approach are as follows:

- Allows for speed in getting medication information via BSCC via query
- Allows for timely medication information access via query
- Implement query-based in a phase one approach would provide adequate time for phase two challenges
 - Potential regulation/statute changes
 - Challenge to connect mail-order pharmacies

Medication feed history information phased approach includes:

- Connect to medication data provider vendor
- Connect to
 - Pharmacies
 - Hospitals
 - Ambulatory Providers

- Healthcare Plans including Medicaid

Medication Feed Use Case Addendum 3/11/2020

Surescripts

There have been a series of issues in the past two years with Surescripts customers, and the way Surescripts has been doing business has had to change. Surescripts is happy to try to help us figure out how BSCC HIE can connect to them; but first, we have to start with completing a questionnaire that details the intended use of the Surescripts' data. The Surescripts' contact stated that the connection request will likely get denied by their legal team initially and that this initial review can take up to two weeks. We have gone through the process of completing the questionnaire and will be able to provide more detailed information on Surescripts as well as a comparison with DrFirst once they have completed their review.

Additional information requested:

- List of vendors providing this service and to what HIEs (you noted "limited number") they serve
 - DrFirst - provides service to more than 60,000 providers, 750 hospitals and 340 healthcare IT vendors to help save time, save money, and optimize attention to patient care and patient care coordination, including HIE relationships with NeHII, CRISP, NDHIN, and Great Lakes Health Connect.
 - Surescripts - Includes but not limited to: OHIT-AR, AdvantaChart, CRISP, CORHIO (CO), OHIP, CareEvolution, GHIE (TX), Rochester RHIO (NY), Florida HIE, HIXNY, MEHIE, KEYHIE (PA), LACIE (MO), MiHIN, Mass Hlway, (MA), NC HIE, WVHIN
- Dr. First is recommended with an alternate pathway noted of using Surescripts - please provide the comparisons between the 2 vendors, to include decision points used to make the recommendation - BSCC business requirements and ability to meet, # of customers nationally, vendor cost, monthly fee, Montana providers now utilizing the vendor, HIEs and Healthcare IT vendors using vendor, ability to meet timelines, accuracy of data.

	DrFirst	Surescripts
BSCC Business Requirements	Yes	TBD
No. of National Customers	See Description Above	TBD
Vendor Cost per Year	<ul style="list-style-type: none"> • Year 1 Cost: \$229,655 • Year 2 Cost: \$219,655 • Year 3 Cost: \$219,655 	TBD
One-time Setup Fee	\$10,000	TBD
Annual Maintenance Fee	\$10,000	TBD
Montana Providers Using	NDA	TBD
HIEs and HIT Vendors Using	See Description Above	TBD
Ability to meet timelines	Yes	TBD
Accuracy of Data	See Below	TBD

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DrFirst includes Surescripts data in addition to non-Surescripts data. Accuracy of data is based on the contributing pharmacies filled prescriptions.

This project is funded in whole or in part under a Contract with the Montana Department of Public Health and Human Services. The statements herein do not necessarily reflect the opinion of the Department.