Interoperable Electronic Health Records (EHRs) Use Case for Medicaid

(Medication History, Patient Visit History, Demographics, Procedure and Diagnosis Data, Clinical Data)

Version 1.0

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1. Executive Summary

Background: New York State Department of Health (NYSDOH) is the single state agency with responsibility to administer New York's Medicaid program. Medicaid is the single largest payer of health care services in New York State, covering 4.5 million people and underwriting almost one-third of all health care costs in the state. NYSDOH seeks to ensure that all 4.5 million New Yorkers covered by Medicaid receive high quality, cost effective care. To advance that goal, NYSDOH will employ a multi prong strategy that includes establishing interoperable health information exchange (HIE) capabilities to enable providers that contract with Medicaid to provide coordinated care to their Medicaid patients. Medicaid expects that these exchanges will lead to improved quality of care for its enrollees, especially those with chronic illnesses and multiple co-morbidities.

As part of the development and implementation of New York's health information infrastructure, the Medicaid EHR use case consists of two components: (1) technical solutions designed in partnership with regional health information organizations (RHIOs) will bring Medicaid data to the electronic health record (EHR) at the point of care to support clinical decision making by practitioners; and (2) enhanced interoperable sharing of clinical data between practitioners via EHRs across New York State will further support the provision of comprehensive care management and coordination of care. Health information exchange (HIE) of medication and visit history data for Medicaid patients will be available to clinicians to further comprehensive care management capability. Clinically relevant information not previously available will permit providers to take into account a greater spectrum of patient need. For example, the ability to retrieve visit and discharge history will enable clinicians to identify prior ER visits and hospital inpatient admissions, thereby allowing the practitioner to request records from those encounters in order to provide a more comprehensive history of their Medicaid patient's prior diagnoses and care. The ability to retrieve lab results ordered by other practitioners will eliminate needless duplication of testing and will reduce management delays caused by lack of availability of the data. The ability to review the Medicaid beneficiary's adjudicated pharmacy claims will assist in the reconciliation of the beneficiary's medication list, now a national patient safety goal (JCAHO). When used in combination with decision support systems, such data can be invaluable in identifying adverse drug interactions, drug-disease interactions, drug-laboratory interactions, and age-specific dosing issues. Identifying such issues at the point of care can assist in improvement of patient safety and quality of care. In addition, the exchange of critical clinical information between providers, including laboratory results, hospital discharge summaries, immunization data, notification of clinical services (e.g., Emergency Department visits, diagnosis of pregnancy/prenatal care), clinical problem lists, history and physicals, and clinical care plans will enable care coordination between and among clinicians and if used by clinicians can help improve the quality of care. Clinicians participating in this use case will be required to demonstrate that they are using an interoperable, CCHIT-certified electronic health record in combination with the data

exchange resources (as elaborated in this use case) to improve the quality of care rendered to their Medicaid patients and to provide comprehensive care coordination for their Medicaid patients. The evaluation of funded projects will focus on demonstrating improvements in both care coordination and quality clinical outcomes for Medicaid recipients.

Broad Area: Support the implementation of CCHIT-certified electronic health records in combination with interoperable health information exchange in New York State (NYS) to enable providers to improve both care quality and care coordination for Medicaid beneficiaries.

Specific Use Case Area: There are two components in this use case. Under the first component, NYSDOH shares patient procedures, diagnoses, visit history, demographics, laboratory results (*) and medications discernable from Medicaid claims with clinicians at the point of care via EHRs using standardized Medicaid-to-clinical-system transaction exchange, which includes sharing record locator information with Regional Health Information Organizations (RHIOs). Under the second component, practitioners involved in the care of a beneficiary utilize interoperable EHRs via the SHIN-NY to share clinical data with each other. Data to be shared includes, but is not limited to, laboratory results, hospital discharge summaries, immunization data, notification of clinical services (e.g., Emergency Department visits, diagnosis of pregnancy/prenatal care), clinical problem lists, history and physicals, and clinical care plans.

(*)Note: sharing of lab data from NYSDOH is tentative and contingent upon implementation of a mandatory reporting requirement.

2. Description of EHR Use Case for Medicaid

We have developed this use case to test different mechanisms by which the medical history of Medicaid patients is transmitted to practitioners on a real time basis and to determine the extent to which practitioners use this information to improve the value of the care delivered to Medicaid patients.

This use case has been developed in conjunction with NYS Medicaid program staff in the Office of Health Insurance Programs (OHIP). It describes the process or interaction that each primary stakeholder will invoke in the capture, discovery, anonymization, pseudonymization (where appropriate), aggregation, validation and transmission of relevant patient care and hospital resource data.

The use case addressed in this document encompasses two components.

The first component is for the exchange of patient demographics, procedures, diagnoses, visit history, medication history, laboratory results, eligibility and formulary data from NYSDOH and its authorized Medicaid HIE partners to EHRs of practitioners / clinicians treating Medicaid beneficiaries. Requests for this data via the Statewide Health Information Network (SHIN-NY) would be authenticated by NYSDOH, and responded

to via standardized electronic data interchange responses, built on existing and emerging National Health Information Network (NHIN) standards. The use case covers the ability of a clinician at the point of care to request and receive the above listed information sets about a patient for whom Medicaid is the payer. The use case also addresses the evaluation of effectiveness of these exchanges for Medicaid beneficiaries who are in long term care settings, and for those beneficiaries with a combination of mental illness and multiple chronic conditions. The Medicaid HIE use case defines scenarios intended to set statewide interoperable exchange standards and to improve the care received by the Medicaid population.

Under the second component, using RHIOs as intermediaries, practitioners share clinical data via their EHRs, including laboratory results, hospital discharge summaries, immunization data, notification of clinical services (e.g., Emergency Department visits, diagnosis of pregnancy/prenatal care), clinical problem lists, history and physicals, and clinical care plans with other practitioners. The intent is to encourage the electronic exchange of critical clinical information between practitioners to improve the coordination of care and quality of clinical outcomes. Clinicians / practitioners who participate in this use case are expected to utilize interoperable CCHIT-certified EHRs in combination with health information exchange technology to improve both the quality of care delivered and degree of care coordination provided to their Medicaid patients. The successful projects that are funded under this use case will be evaluated in terms of demonstrating actual improvements in both care coordination and quality clinical outcomes for Medicaid recipients.

3. Scope of EHR Use Case for Medicaid

This use case will present the Medicaid HIE workflow, perspectives, and pre- and post-conditions. The grant projects will iteratively refine this document and maintain it so that it can be translated into technical requirements.

This use case is composed of two components. The first component primarily includes the actions that are required for RHIO participants at the point of care to see specific patient care information that NYSDOH has on file about a Medicaid recipient, improving the coordination and quality of care for that recipient. However, the policies, processes and standards may be applicable to other use cases, including but not limited to Public Health for Health Information Exchange, Quality Reporting for Outcomes, and Connecting New Yorkers to Clinicians.

The use case scope <u>includes</u> the following:

1. Data collected from Medicaid claims, integrated with data from other sources, covering visit history in inpatient, outpatient and/or long term care settings, physician offices, pharmacies and labs. Clinical data exchanged includes: patient demographics; medication history; visit history; procedures, diagnoses and laboratory results; administrative data exchanged includes eligibility for benefits and Medicaid formulary

2. Institutional and community based service providers who have clinical data of significance to Medicaid

3. The authorized local, regional, state, and federal personnel who monitor and administer medical assistance payments under Title XIX of the Social Security Act.

The second component primarily includes the HIE capabilities that are required for practitioners / clinicians, using RHIOs as intermediaries, to share critical clinical data including laboratory results, hospital discharge summaries, immunization data, notification of clinical services (e.g., Emergency Department visits, diagnosis of pregnancy/prenatal care), clinical problem lists, history and physicals, and clinical care plans.

4. Stakeholders for EHR Use Case for Medicaid

RHIOs	Clinicians / Practitioners
Healthcare service organizations	Laboratory organizations
Medicaid	Medicaid beneficiaries
Other government and private organization	Consumers
Health Information Service Providers	

5. Pre-Conditions

Pre-conditions are the conditions that must be in place before the start of the use case. These include, but are not limited to, the state of a stakeholder, data that must be available somewhere, or an action that must have occurred. This section also includes triggers for the initiation of the use case and discussions of important assumptions made about the use case during its development.

1. Established technical, clinical and organizational infrastructures to support the ability to respond to patient-level transactional inquiries (the only function routinely supported by most RHIOs designed for clinical data exchange). This includes the ability to implement eMedNY application program interfaces (APIs).
2. Procedures and agreements supporting data exchange including privacy protections, security and confidentiality protocols, secondary data uses and appropriate data sharing agreements/business associate agreements.
3. Agreements to abide by Medicaid data and messaging standards.
4. Maximum effort to assure data quality, integrity, privacy and security.
5. RHIO's ability to electronically request and receive pertinent Medicaid data in a secure and timely fashion, using to be defined data exchange and vocabulary standards.
6. RHIO's ability to contract with NYS Medicaid and execute a data exchange agreement

7. RHIO includes clinical affiliates who are enrolled NYS Medicaid providers in good standing
8. Participating practitioners / clinicians are willing and committed to use CCHIT-certified interoperable electronic health records in combination with health information exchange technology to improve both the quality of care delivered and degree of care coordination provided to their Medicaid patients. Clinicians agree to participate in a rigorous evaluation of the project to demonstrate these improvements. For this purpose, clinicians agree that relevant charts of Medicaid recipients will be made available to the contracted project evaluator for review.
9. In the event that participating practitioners do not currently have access to CCHIT-certified interoperable electronic health records, it is permissible for the applicant to simultaneously apply to the EHR grant category under this HEAL NY Phase 5 program (see section 2.4 in the Request for Grant Applications: "Pilot Implementations of Community-wide Interoperable EHRs (EHR)."

6. Post-Conditions

Post-conditions are the conditions that will be a result or output of the use case. This includes, but is not limited to, the state a stakeholder upon conclusion of the use case, data that was created or now available, and identification of actions that may serve as pre-conditions for other use cases.

1. RHIOs will be able to automatically exchange patient demographics, procedures, diagnoses, medication and visit history, lab results, eligibility and formulary data, and other clinical data including hospital discharge summaries, immunization data, notification of clinical services (e.g., Emergency Department visits, diagnosis of pregnancy/prenatal care), clinical problem lists, history and physicals, and clinical care plans.
2. Data messages will be formulated following a standard structure, coding, and minimal required set of information.
3. Data will be transmitted in real-time, when feasible, but with a periodicity of no longer than 24 hours. The key exception to this is receiving the Medicaid Formulary which is published as a monthly batch file.
4. RHIOs will support the privacy and security of patient health information and will be contracted with NYS Medicaid to ensure that all security and privacy requirements are enforced and audited.
5. Appropriate entities (i.e., practitioners enrolled in the Medicaid program) are authorized and authenticated to send or receive data.
6. System transactions are auditable.

7. Clinicians will routinely use CCHIT-certified interoperable electronic health records and health information exchange technology to improve both the quality of care delivered and degree of care coordination provided to their Medicaid patients. This will be demonstrated through a rigorous chart review process by the contracted project evaluator.

7. Details of Use Case Scenarios and Perspectives

The following entity-driven perspectives will be part of the use case:

1. *Regional Health Information Organizations* denote an electronic network for exchanging health and patient information among providers.
2. *The New York State Department of Health* is the single state agency in NYS with the statutory authority to administer the Medicaid program.
3. *New York local governments,* including 62 county departments of social services, the New York City Department of Health and Mental Hygiene (NYCDOHMH), and the New York City Human Resources Administration (HRA) have the major responsibility for establishing eligibility for Medicaid benefits at the local level.,
4. *Consumers* include any New Yorker who might be in need of, or benefit from, public health services.
5. *Practitioners / clinicians* who will use CCHIT-certified interoperable electronic health records and health information exchange technology to improve both the quality of care delivered and degree of care coordination provided to their Medicaid patients.

Data flow models required to accomplish this use case is described in the following scenarios.

1. *Request Patient Records From Medicaid*: To support requests for records, RHIO connected systems use their respective Record locator services to select a Medicaid Continuity of Care Document (CCD) Record, including in the request which portion(s) of the record they wish to retrieve – Demographics, Procedures, Diagnoses, Medications, Visits and/or lab results. Medicaid responds to the request with the selected record in the HL7 CCD format. The records, data flow diagrams and details of the exchange are included in the Office of National Coordinator EHR-Emergency Responder detailed use case, included as Appendix I.

2. *Prescribe Medicines for Medicaid Beneficiaries*: To support prescribing activities, physician systems exchange X12 270/271 transactions to get the Medicaid recipient ID. Physician systems incorporate the Medicaid recipient ID into an NCPDP 8.1 (SCRIPT) standard request for Medication History, Medicaid response with an NCPDP 8.1 Medication History response. Physicians interact with the Medicaid-supplied formulary (see #1 above) through their ePrescribing applications to select an appropriate drug based on formulary status and issue a prescription electronically to the pharmacy. The records, data flow diagrams and details of the exchange are included in the New York State DOH Medication History Implementation Guide, included as Appendix II.

3. *Exchange of Clinical Data between Practitioners*. Where applicable, the project must employ national data formatting standards. To the extent that standards are not already in development or do not exist, applicants may propose and test a new standard.