LTC e-Rx Standards Pilot Study

AHRQ/CMS Presentation

Michael Bordelon

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Abstract

- e-Prescribing (e-Rx) is new to LTC
  - 3.5 Million Residents in 17,000 Facilities
- e-Rx Will dramatically impact LTC Operations – especially with Part D
- We will study the specific nuances of e-Rx in LTC
- The study includes two geographically diverse treatments facilities and two comparison facilities
- Three phase implementation and study
- Participants were chosen for demonstrated thought leadership in the areas of LTC technology adoption and e-Rx standards development

Participants

Achieve Healthcare Technologies is a leading provider of software systems for the long-term care industry.

Achieve Matrix® is an enterprise-class web-based software system that provides the clinical and business tools necessary to run a LTC organization.

Participants

The **Benedictine Health System** (BHS) is a Catholic, mission-directed and values-based health care organization, comprised of nine hospitals, 40 skilled nursing facilities, 19 assisted living facilities, 12 independent living facilities and a pharmacy.

Preferred Choice Pharmacy (PCP), a member organization of the Benedictine Health System, is a full service, state-of-the-art institutional pharmacy designed to meet the needs of LTC facilities and their residents.

Participants

RNA EagleT is a Microsoft Windows-based application that provides complete pharmacy management functionality for long-term care pharmacies.

Participants

RxHub provides an end-to-end solution that enables physicians to prescribe the most clinically appropriate and cost effective prescription to be sent electronically to the patient's pharmacy of choice.

Participants

Prime Therapeutics LLC is a thought leader in the pharmacy benefit management industry, transforming pharmacy through a customer-aligned and flexible business model that allows for unmatched collaboration with clients.

Blue Cross and Blue Shield of Minnesota, with headquarters in the St. Paul suburb of Eagan, was chartered in 1933 as Minnesota's first health plan and continues to carry out its charter mission today: to promote a wider, more economical and timely availability of health services for the people of Minnesota.

Typical Problems So Far in LTC Part D

- Most residents are still on December Meds
- Most the issues are related to new admits and new orders
- Figuring out who is on what plans
- NDC timing out
- Co-pays incorrect
- Doctors are refusing to do Prior Authorization
- Nurses have no formulary tools
- Reimbursement levels wrong
- Pharmacies not getting paid at all
- States are having to guarantee payment to pharmacies

OPPORTUNITIES ABOUND!!!

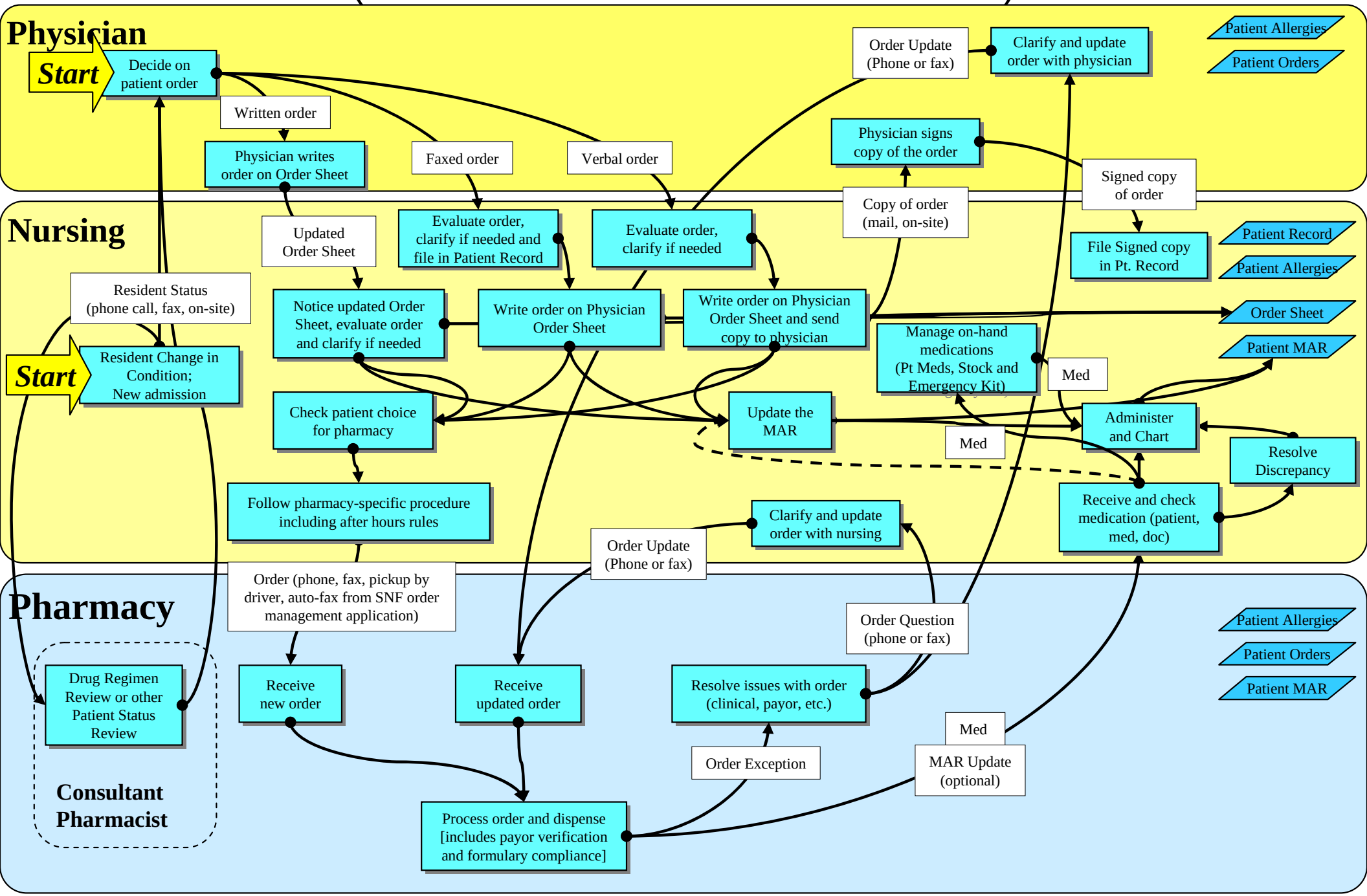
NCPDP Work

- WG 14 – Focus on LTC
- e-Rx/EHR Task Group
  - Lead by Michael Bordelon
  - Broad Participation
  - www.ncpdpwg14.org
- To- Be Process Work
- SCRIPT DERF

- Joint HL7 work on LTC EHR Conformance Criteria Roadmaps

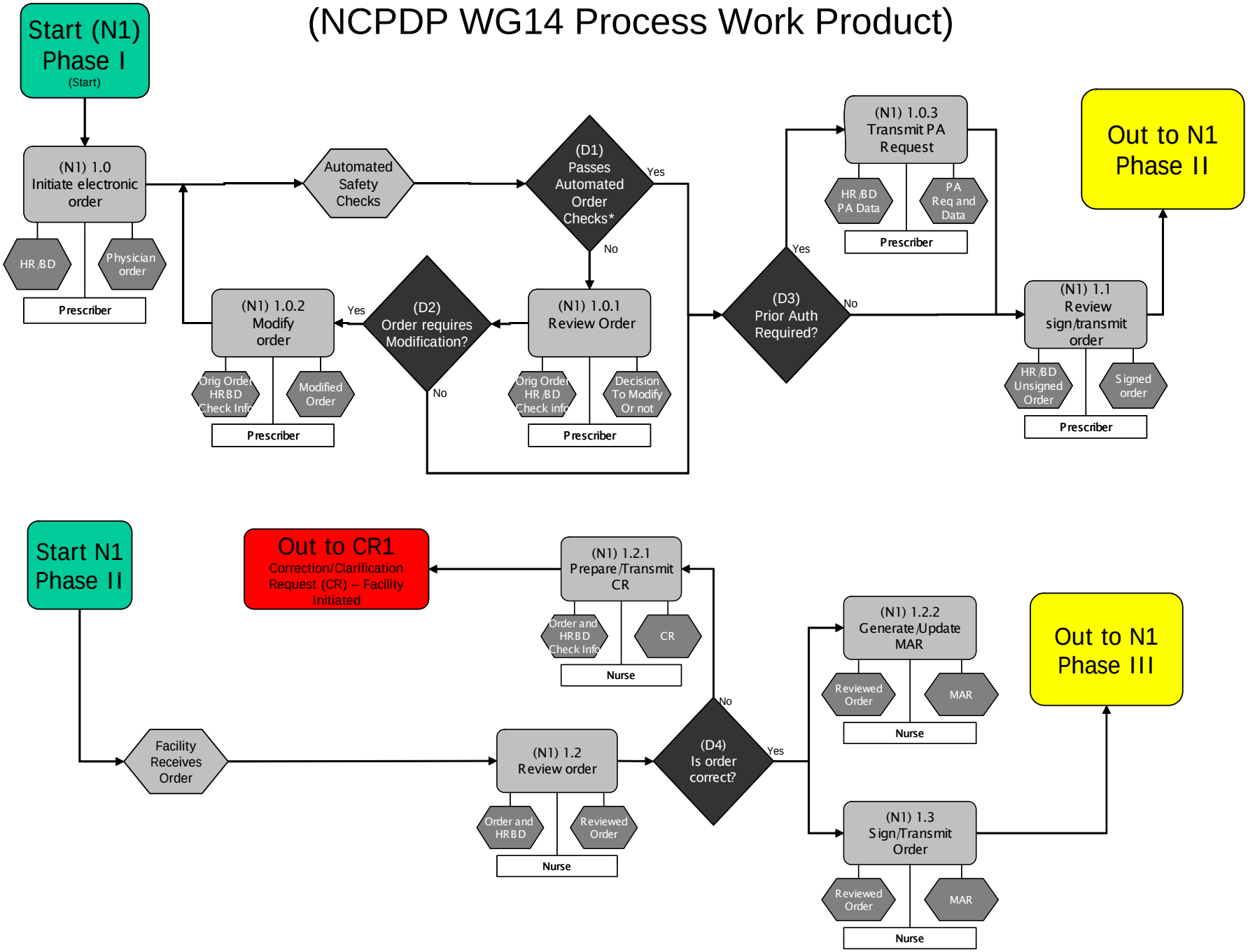
LTC New Order Process Flow: As-Is

(NCPDP WG14 Process Work Product)



LTC e-Rx To-Be Process Model

(NCPDP WG14 Process Work Product)



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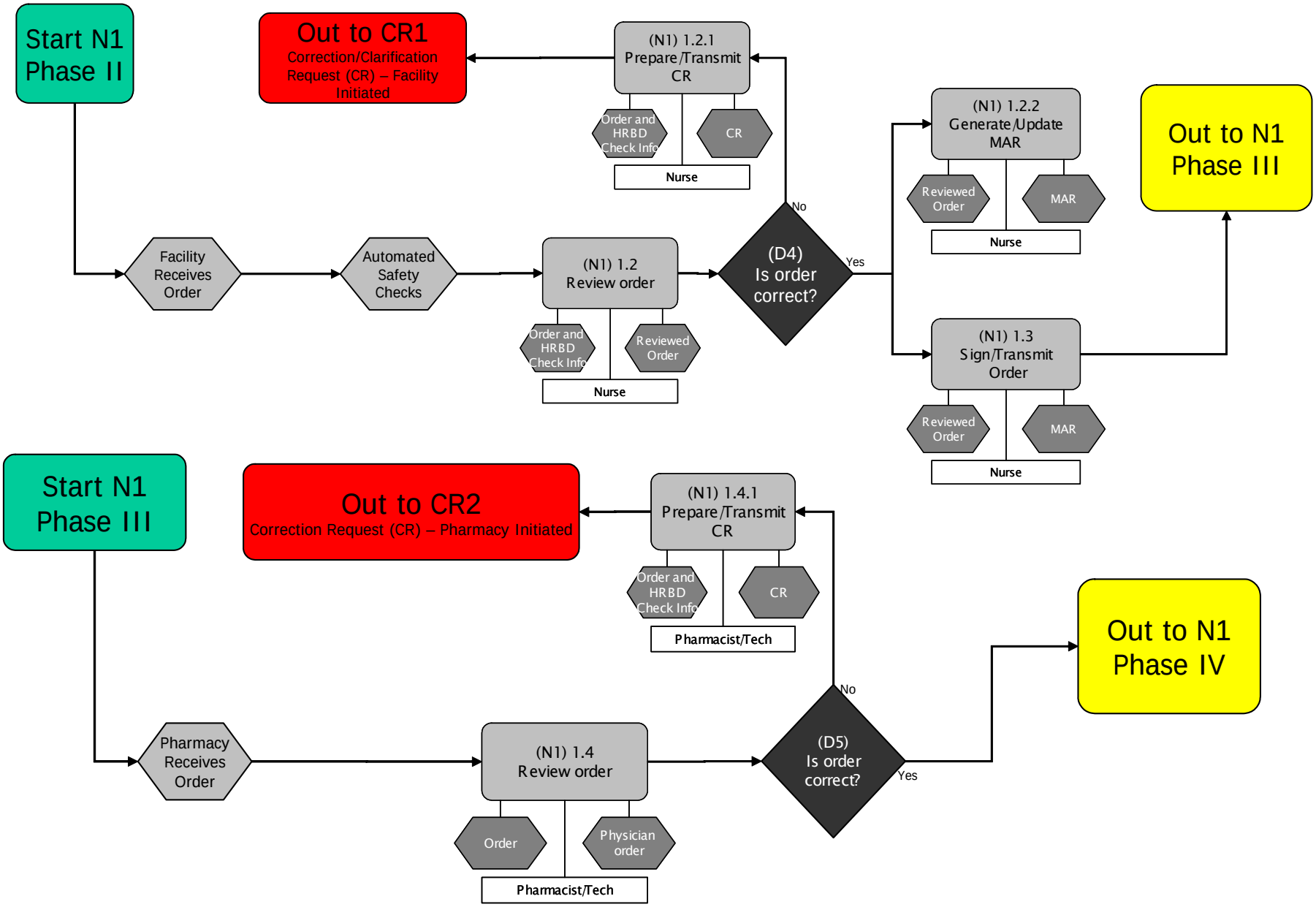
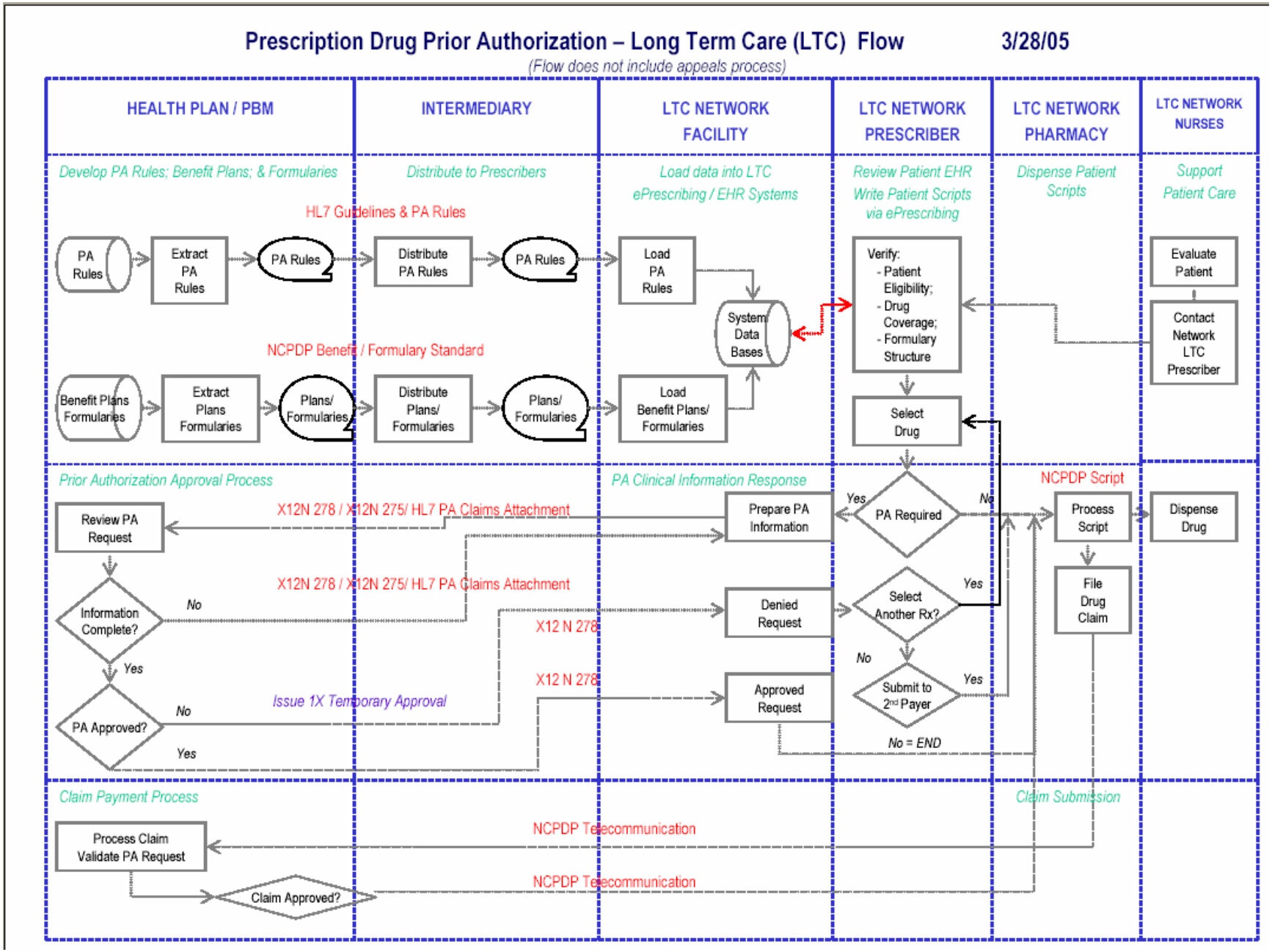


LTC Prior Authorization Process Model

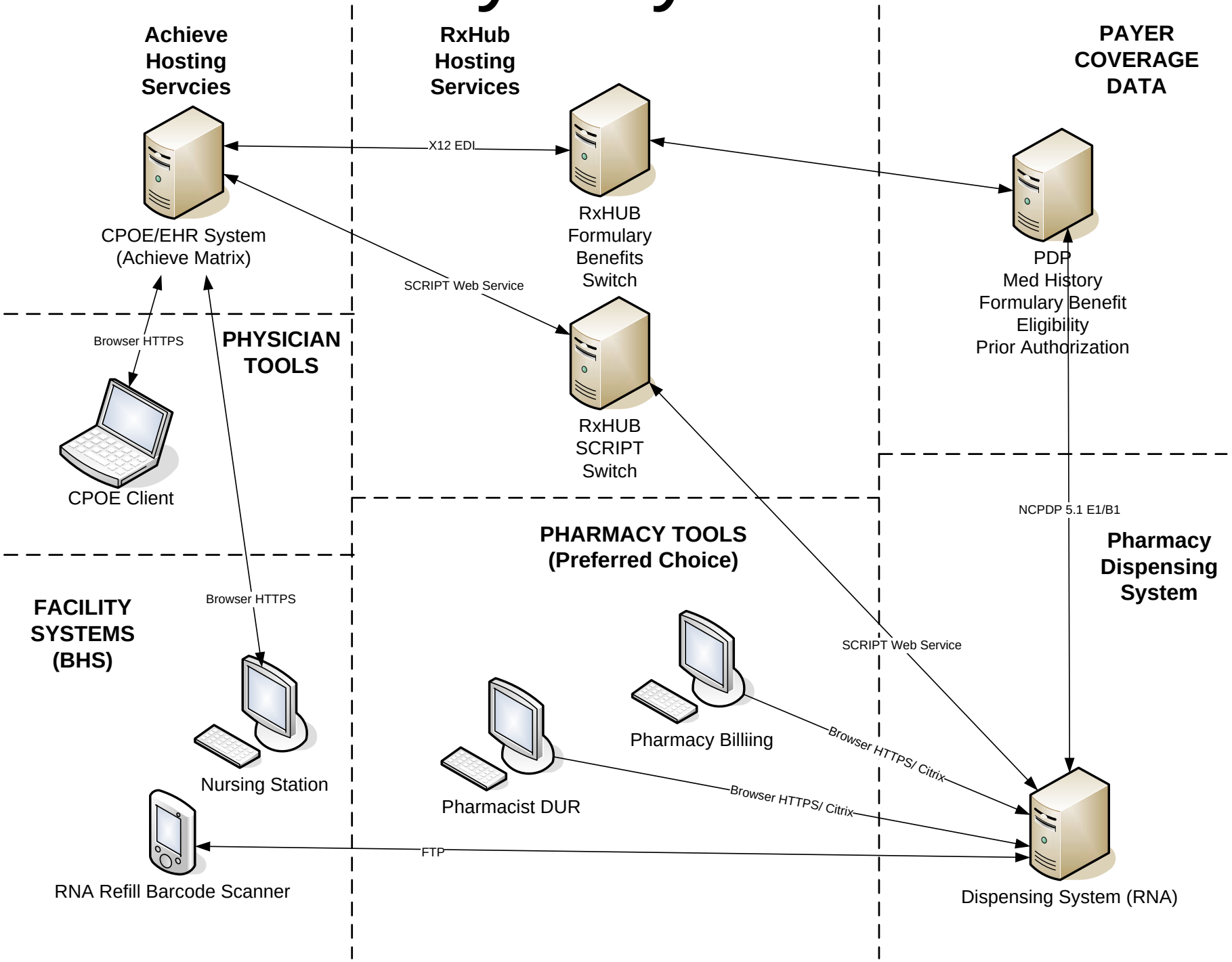
(NCPDP WG11 Process Work Product)



Unique Nuances of LTC e-Rx

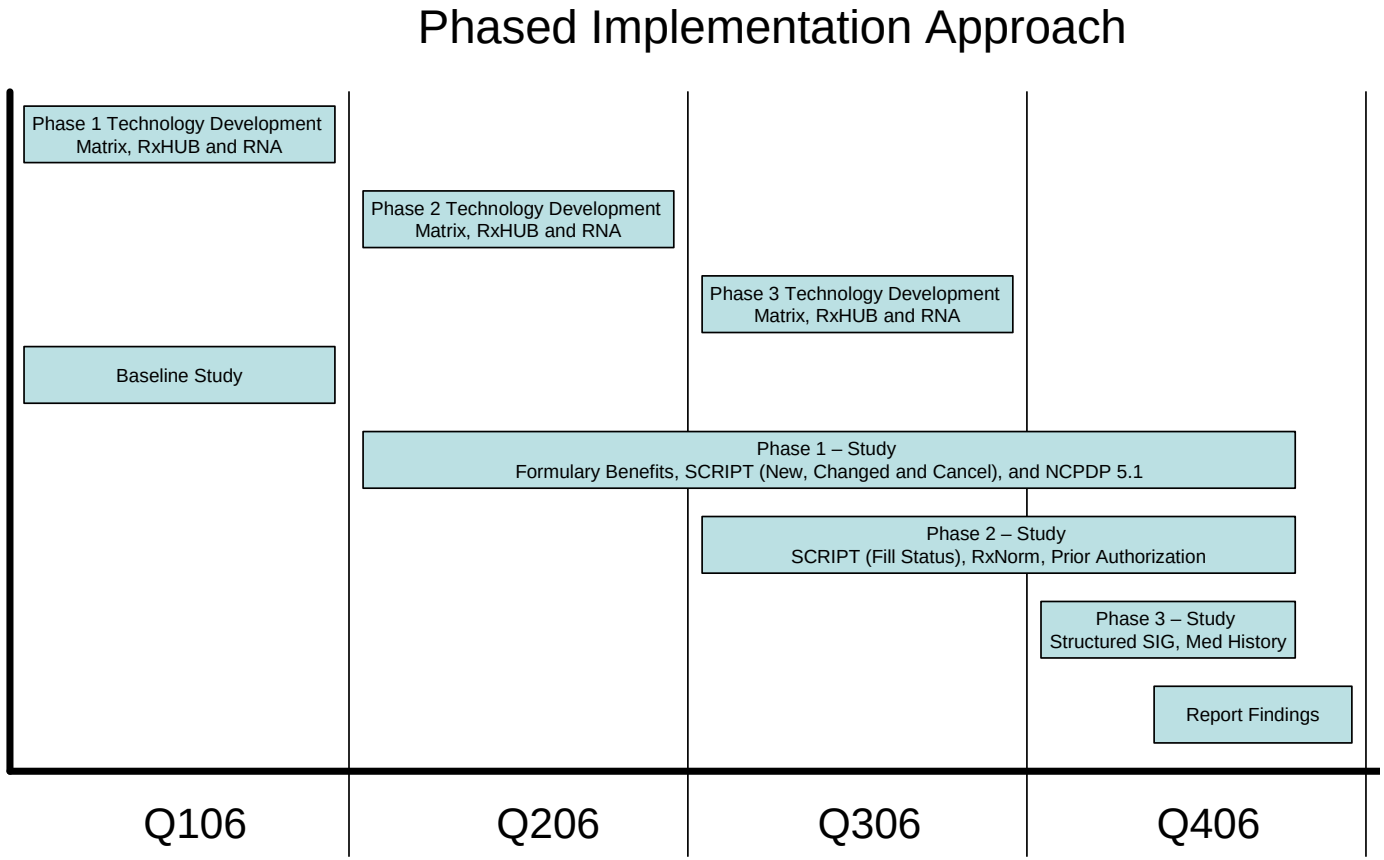
- Medication History less valuable than ambulatory setting
- SCRIPT changes needed
- SCRIPT Renewal not applicable
- No standard for LTC Refill (80% of order requests)
- Little or no “connected” LTC pharmacies
- Medicaid formularies for Dual-Eligible Residents

e-Rx Study Physical Model



Phased Implementation

- Baseline Study – Q1
- Phase I Q2
  - SCRIPT – New and Cancel
  - Formulary Benefits
  - Patient Safety
  - Renewal Signatures
  - RNA Refill Tool
- Phase II in Q3
  - SCRIPT – Fill Status and Change
  - Prior Authorization 278
  - eMAR?
- Phase III in Q4?
  - RxNorm
  - Codified SIG
  - Med History
- Report Finding End of Q4



Project Stretch Goals

- Automated Refill Request Tool
- Patient Safety Checks using FDB
- Prescriber electronic signatures for new and monthly renewal authorizations
- Study the benefits of an eMAR tied to e-Rx
- Prior Authorization Attachments

Research Team

- One Primary Researcher
- Four Research Assistants
- Statistician
- Report developers form Achieve, RxHUB, RNA, and Prime
- BHS clinical research team

Research and Analysis Model

- Four Goals
  - **Functional**: Do the standards work? These outcomes are related to answering the core evaluation questions posed in the RFA.
  - **Financial**: Do the standards yield cost benefits? These are related to costs in processing and refilling prescriptions, data entry, non-formulary prescribing, and prior authorization processing.
  - **Quality**: Do the standards improve quality of care? These are related to reducing transcription errors, right-drug right-time errors, before-and-after measures of 9 or more medications, and contraindication overrides.
  - **Safety**: Do the standards improve patient safety? These are related to identifying, tracking, and reducing drug allergies, adverse drug interactions, and therapeutic duplications.
- Design
  - an interrupted multiple treatment time series design with non-equivalent no-treatment comparison group
  - Baseline Study
  - Phased incremental study

Project Characteristics

- **Methods of Testing**: Augment existing installed infrastructure to test standards in order to accomplish a detailed analysis within the limited period of performance of study.
- **Nature of Prescriber Pool**: LTC physicians and nurse practitioners.
- **Electronic Transmission Testing**: Augment Achieve Matrix®, RxHub, and RNA Eagle systems to send/receive digital prescriptions, using Preferred Choice pharmacy to process the electronic prescriptions.
- **Number and Demographics of Patients**: LTC patients, vast majority over 65 and well over 25% Part D eligible.
- **Prescriber uptake in e-Prescribing**: Measure by tracking number of physicians/nurses that use the system. LTC prescribers are different from the prescribers in the ambulatory setting and it will be difficult to measure in a small duration study.
- **Identification of vendors, systems, payers, and router**: Achieve, RxHub, RNA, BHS, Preferred Choice, Prime Therapeutics, Blue Cross Blue Shield of Minnesota, and Minnesota Department of Human Services.
- **Number of pilot sites and site locations**: Two test facilities with approximately 175 beds total, one in a rural setting and another in an urban/suburban setting. Two comparison facilities of comparable size
- **Proposed data collection and method of analysis**: Combination of quantitative, qualitative, and work flow analysis data will be collected and subsequently analyzed by the pilot study team using both statistical and experimental techniques.

Facility Characteristics

Characteristic	Experimental Facility A	Experimental Facility B	Comparison Facility A	Comparison Facility B
Type of Community	Suburban	Rural	Suburban	Suburban
Number of Beds	75	109	94	160
Preferred Choice Pharmacy	Yes	Yes	Yes	Yes
Electronic Medication Administration/Clinical Documentation System	Yes	Yes	Only MDS – Minimum Data Set	Only MDS – Minimum Data Set
Short Term Rehab Focus	Yes	No	No	Yes
Traditional LTC Focus	No	Yes	Yes	Yes
Extensive MD/Nurse Practitioner Involvement with Residents	Yes	Yes	Yes	Yes

Challenges and Concerns

- Timeframe to implement software and infrastructure
- Breadth of payer participation 30%-40% Coverage
- Non-random and small facility and patient population
- Low Prior Authorization payer support
- New SCRIPT versions if needed