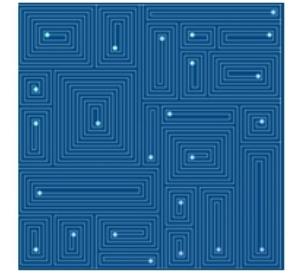


OFFICE OF  
INFORMATION  
AND TECHNOLOGY

**Pharmacy Reengineering (PRE)**

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*PRE Program Manager*



January 2015

## PRE MOCHA – Overview / Current State

- Medication Order Check Healthcare Application (MOCHA) is a major application introducing features to the VistA Inpatient, Outpatient, and Pharmacy Data Management (PDM) packages.
- MOCHA v2.0 completed national deployment on 06/30/2014
  - Creation of a standard medication routes file and a new dose unit file
  - Introduced *Request Change to Dose Unit* & *Request Change to Standard Medication Route* options
  - Enhanced Drug-Drug Interaction (DDI) & Duplicate Therapy (DT) order checks
  - Introduced *Maximum Single Dosage* and *Daily Dosage Range* order checks
- A planned emergency patch completed its deployment on 11/27/2014
  - PSJ\*5\*311 & PSO\*7\*436 refinements

# PRE MOCHA - Forecast

- In the development pipeline for 2015 & 2016:
  - MOCHA Enhancement 2 (ME2) (early 2015)
    - Note: IOC evaluation underway*
    - Added Severity Intervention functionality to Allergy Sign/Symptoms Display
    - Added sign/symptoms to Allergy/ADR order check display (Remote HDR)
    - Fixed Allergy related Patient Safety issues
    - Added functionality to use Clinical Reminder based order checks in pharmacy order entry
    - Added Order Status to Order Checks against a Patient's Active Medication Profile
    - Provided MOCHA 1 CPRS Order Checks on IP Unit Dose Orders when editing the dosage
  - MOCHA v2.1 (late 2015)
    - Dose Range Checking w/Max Daily Dose Limit for Simple Medications Orders
    - Daily Dose Check exclusion for Schedule to Medication Orders
    - Enhanced free text logic for Dosing Ranges & Multi-Ingredient
    - View Detailed Order Check History
  - MOCHA v2.2 (2016)
    - Introduce Max Daily Dose Order Check for complex orders

## PRE PECS – Overview / Current State

- Pharmacy Enterprise Customization System (PECS) is a minor Java application which provides for review of the FDB MedKnowledge (f.k.a. FDB-DIF) standard drug data and VA Customization of the following concepts: Dose Range (DR), Drug-Drug Interaction (DDI), Drug Pairs (DP), Duplicate Therapy (DT), and Professional Monograph (PM).
- PECS v3.0 completed national deployment on 09/05/2014  
*Note: MOCHA Server v2.0, DATUP v2.0, and PPS-N v1.1 included*
  - Upgrade from FDB MedKnowledge 3.2 to 3.3
  - Add history of changes to customized records
  - Add Routed Generic list search
  - Add ability to add Routed Generic drug pairs in batches and have them approved
  - Add report of interactions associated with a given drug
  - Addressed several defects

# PRE PECS - Forecast

- In the development pipeline for 2015 & 2016:
  - PECS v5.0 (early 2015)
    - Provide visibility to export dates
    - Comparison report of updated Dose Range (DR) drug data
    - Redesign of Custom Update page
    - Provide ability to export the results of Drug Pair Lookup queries
    - Provide cross-reference to allow Dose Range records to be traced back to their original FDB record
    - Introduce to the Custom Update page a “once a day” Custom Update limit informational message
  - PECS v6.0 (early 2016)
    - Redesign Drug Pair Customization page and PECS Comparison Reports
    - Introduce a link to the corresponding PECS record from the Easy Search Dose Range Result page
    - Tune the database design with an eye towards maintainability and performance
    - Upgrade technical components (Java 7, WL 12c, sFTP) to align with One-TRM and CRISP

## PRE DATUP & MOCHA Server – Overview

- The Data Update (DATUP) Java utility supports PECS by delivering the weekly incremental First Databank MedKnowledge standard drug data updates to the Oracle database accessed by PECS and subsequently distributing that standard data and any ad-hoc, incremental VA Custom drug data updates to the Cache databases on the Regional Server Clusters (RSCs) accessed by the MOCHA Server Java utility.
- The MOCHA (Vista) order checks are supported by the MOCHA Server Java utility which encapsulates the First Databank MedKnowledge (f.k.a. FDB-DIF) COTS product and serves up both FDB's standard drug data and VA Custom drug data produced by the PECS minor Java application.

## PRE PPS-N Overview

- The Pharmacy Product System /National Drug File (PPS/NDF) system is the largest open source drug file in the USA. The Pharmacy Product System-National (PPS-N) is a Web-based application that provides the ability to manage pharmacy-specific data across the VA enterprise, ensuring that all facilities are using the same base data for their operations. It allows approved national VA personnel to easily, quickly, and safely manage the VA National Formulary which directs which products (such as medications and supplies) are to be purchased and used by the VA hospital system.
- Pharmacy Product System (PPS)/National Drug File Project (PPSN and PPSL), are currently *on hold*. These projects are expected to restart in February 2015.

## PRE PPS/NDF FY14 Accomplishments

- PPS-N v2.0: Near real-time updates and elimination of NDF management system. Process to eliminate be continued in PPS-N v3.0
- PPS-L v1.0: Analysis Tools- Creation of drug file mapping tools and analysis of missing local data elements and files not currently supported in PPS.



## PRE PPS Future State

- PPS-N v3.0:
  - Completely automate the updating of PPS/NDF information at the sites, PPS/NDF updates will occur weekly with the option to do daily updates.
  - Improve VA ability to respond to clinical and market changes.
  - Add support for hazardous waste drugs; length of clinical effect, which will be used to pinpoint duplicate therapy alerts on expired medications
  - Allow RxNorm information to be directly updated in PPS daily.
- PPS-L v1.0 Foundations :
  - Will take the core functionality from PPS-N and create a foundation for a deployable local system where local site data can be imported into.

# PRE Inbound e-Prescribing Future State

## The following areas are included in the scope of this project effort:

- Receiving and processing inbound eRx, where “inbound” refers to the ordering of medication or medical related supplies for a VA patient by a non-VA provider to be filled at a VA pharmacy. Medical related supplies are defined as follows:
  - General and prosthetic medical supplies, determined to be expendable stock items required for outpatient care and treatment, must be dispensed on prescription (CPRS or VA Form 10-257F). Pharmacy Service is not responsible for filling prescriptions for non-expendable medical equipment. Pharmacy Service may dispense refills for expendable supplies upon receipt of requests from patients with continuing eligibility for a period not to exceed 1 year from the date of the last signed order. Expendable stock items may include: catheters, colostomy sets, ileostomy sets and/or supplies, plastic and rubber gloves, skin preparations and powders, urinal bags and drainage supplies, incontinence supplies, etc.
- Electronically receiving and processing outpatient prescriptions only (includes prescriptions created for a VA patient upon discharge from a non-VA hospital to be filled on an outpatient basis by a VA pharmacy).
- Receiving and processing inbound eRx from non-VA providers for controlled substances.
- Receiving and processing inbound eRx from non-VA providers that currently prescribe medications and medical related supplies for Civilian Health and Medical Program of the VA (CHAMPVA) beneficiaries and which are currently handled by the Medications by Mail (MbM) program.
- Electronically receiving and processing cancellations and changes for previously received eRx from non-VA providers.
- Electronically sending refill requests to non-VA providers who previously sent eRx to VA pharmacies, receiving responses from the non-VA providers, and processing those responses (i.e., eRx refill requests initiated from VA Pharmacy to a non-VA provider).
- Electronically receiving and processing refill requests from non-VA providers who previously sent eRx to VA pharmacies.
- Electronically receiving and processing medication history requests initiated by any entity (e.g., non-VA provider or VA provider, Personal Health Record [PHR] system, or from a thorough history of all regular medication use (prescribed and non-prescribed) by an individual Electronic Medical Record [EMR] system, etc.) to a VA Pharmacy, as well as electronically sending medication history requests from a VA Pharmacy to any entity that supports receiving and processing medication history requests.
- Sending outbound electronic notifications from a VA pharmacy (that received an inbound eRx) to the non-VA provider that originally sent the eRx.
- Electronic transfers of prescriptions to VA pharmacies from external pharmacies and to external pharmacies from VA pharmacies:
  - Electronic transfers of prescriptions from any non-VA pharmacy to a VA pharmacy.
  - Electronic transfers of prescriptions from one VA pharmacy location to a different VA pharmacy location.
  - Electronic transfers of prescriptions from a VA pharmacy to a non-VA pharmacy.

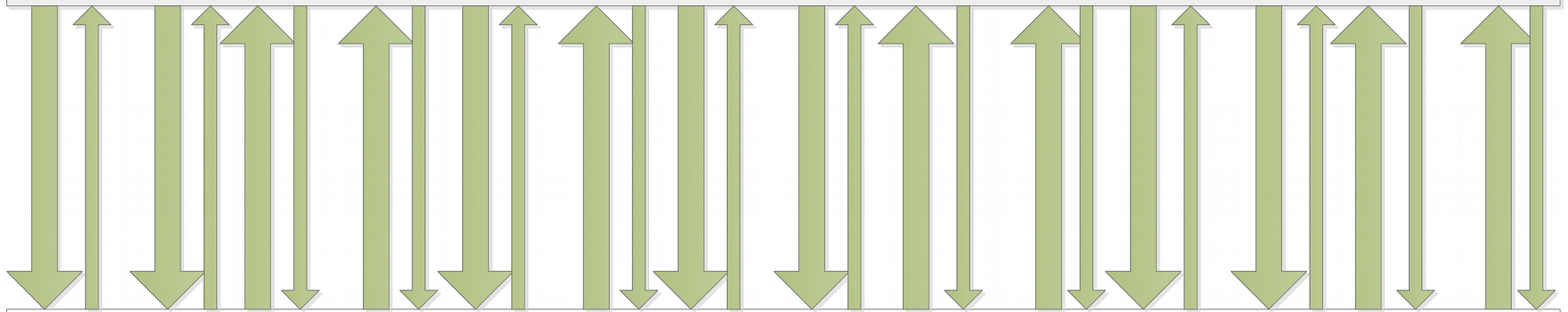
## The following areas are not included in the scope of this project effort:

- VA providers generating eRx at one VAMC location to be electronically transmitted to and processed by (filled, dispensed, etc.) a different VAMC location’s pharmacy.
- Initiating outbound eRx (generation of an eRx by a VA provider to be filled at a non-VA pharmacy).
- Electronic receipt and processing of any VA and non-VA inpatient medication orders.
- Electronic receipt and processing of any VA and non-VA orders for Durable Medical Equipment (DME), such as wheel chairs.
- Electronic receipt and processing of Rx refill requests from a VA patient’s non-VA PHR system.

# Transmissions

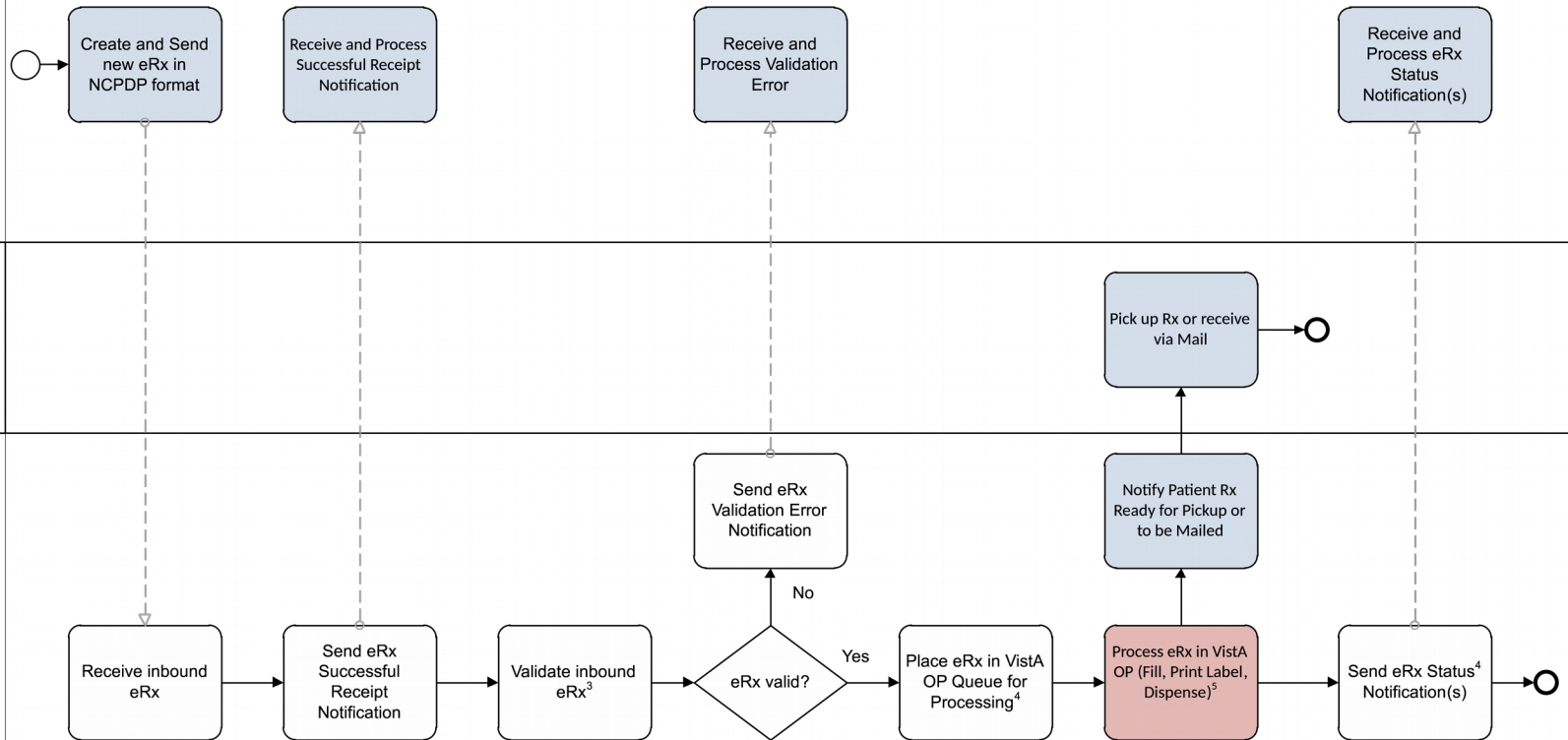
External Provider

VA Pharmacy



NSR 20140401 PRE Inbound ePrescribing  
 Receive New Inbound<sup>1</sup> eRx (To-Be)

Version 0.9



○ = Out of Scope for Inbound eRx Project

● = existing VistA OP functionality available for eRx ; some data and components may be added or changed to accommodate eRx

- 1 – this flow represents process for a new inbound eRx and is presented as generalization for all scenarios in scope , e.g.renewal authorization considered in scope but process may vary from this one
- 2 – Outside Provider – per project BRD Scope, only includes non-VA providers and NOT VA providers using different CPRS /VistA instance to prescribe vs . VistA instance used to dispense
- 3 – Automatically/electronically done by system to check format, from vetted provider/EMR, enrolled VA patient ; later eRx to be further-validated manually by VA Pharmacy personnel assume drug interaction, dosage, duplicate therapy checks (via MOCHA) and allergy checks (via VistA Allergy ) occur as part of “As Is” Vista OP processing
- 4 – This may be a manual step performed by VA Pharmacy personnel to further validate eRx .
- 5 – Statuses could be Dispensed/Filled, Picked up or Not Processed; Not Processed = if VistA OP user or system determines eRx can't be filled because of insufficient supply , drug interaction, drug duplication, duplicate Rx, non-formulary, patient allergy, dosage problem, request for generic, etc.

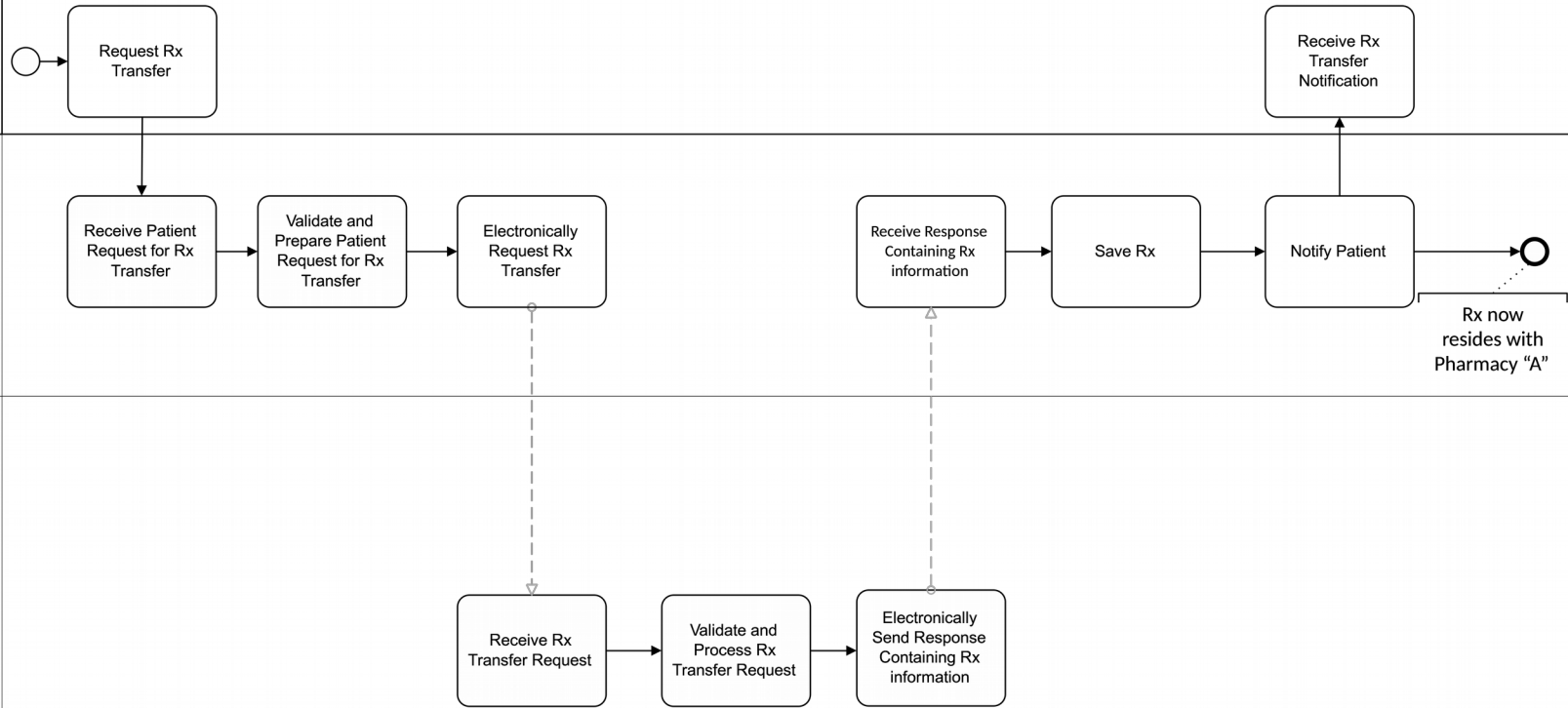
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DATE  
 May 6, 2014

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NSR 20140401 PRE Inbound ePrescribing  
Electronic Rx Transfer Functionality (To-Be)

Version 0.1



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DATE  
May 4, 2014

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# Questions

