Enhancing Access to Prescription Drug Monitoring Programs

Technical Framework for Interoperability

Health in the 21st Century

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Meeting Purpose

- **Briefing of S&I PDMP work to date**

- **Demonstration of EHR-PDMP Integrated Open Source (E-PIOS)**

  – Reference Implementation for PDMP-to-EHR automated exchange of prescription drug information for a patient

Note – Because this meeting is not accessible to the public, no S&I decisions will be made. Relevant points from the discussion will be summarized and posted to the PDMP Google Group so S&I PDMP members can provide input to the S&I process.

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The Team

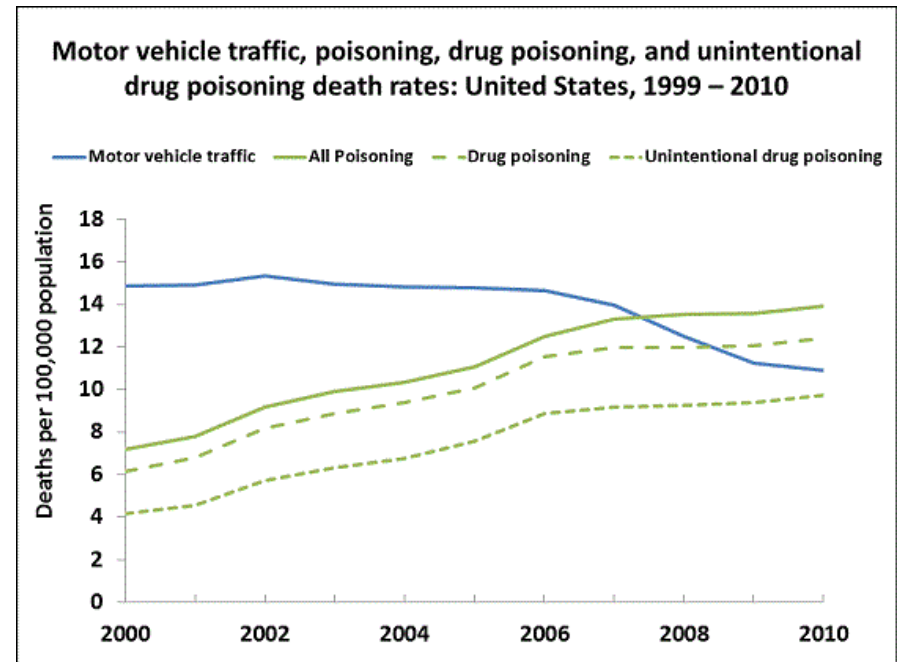|	
The Office of the National Coordinator for Health Information Technology	Jennifer Frazier, ONC, Jennifer.Frazier@hhs.gov
Substance Abuse and Mental Health Services Administration SAMHSA	Jinhee Lee, SAMHSA, Jinhee.Lee@samhsa.hhs.gov Kate Tipping, SAMHSA, Kate.Tipping@samhsa.hhs.gov
CDC	Chris Jones, CDC, cjones@cdc.gov
Office of National Drug Control Policy	Cecelia Spitznas, ONDCP, Cecelia_M_Spitznas@ondcp.eop.gov

MITRE	Lisa Tutterow, MITRE, ltutterow@mitre.org Jeffrey Hammer, MITRE, jmhammer@mitre.org

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The Problem

- **The Centers for Disease Control and Prevention (CDC) declared that deaths from prescription painkillers now outnumber deaths from heroin and cocaine combined**

- **Prescription drug abuse death is one of the fasting growing public health epidemics, outpacing deaths from traffic fatalities**

Motor vehicle traffic, poisoning, drug poisoning, and unintentional drug poisoning death rates: United States, 1999 – 2010

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Prescription Drug Monitoring Programs (PDMPs)

- **Many states established PDMPs to address the prescription drug abuse problem**

- **Purpose: To reduce prescription drug abuse and diversion**

- **What: Statewide electronic databases**
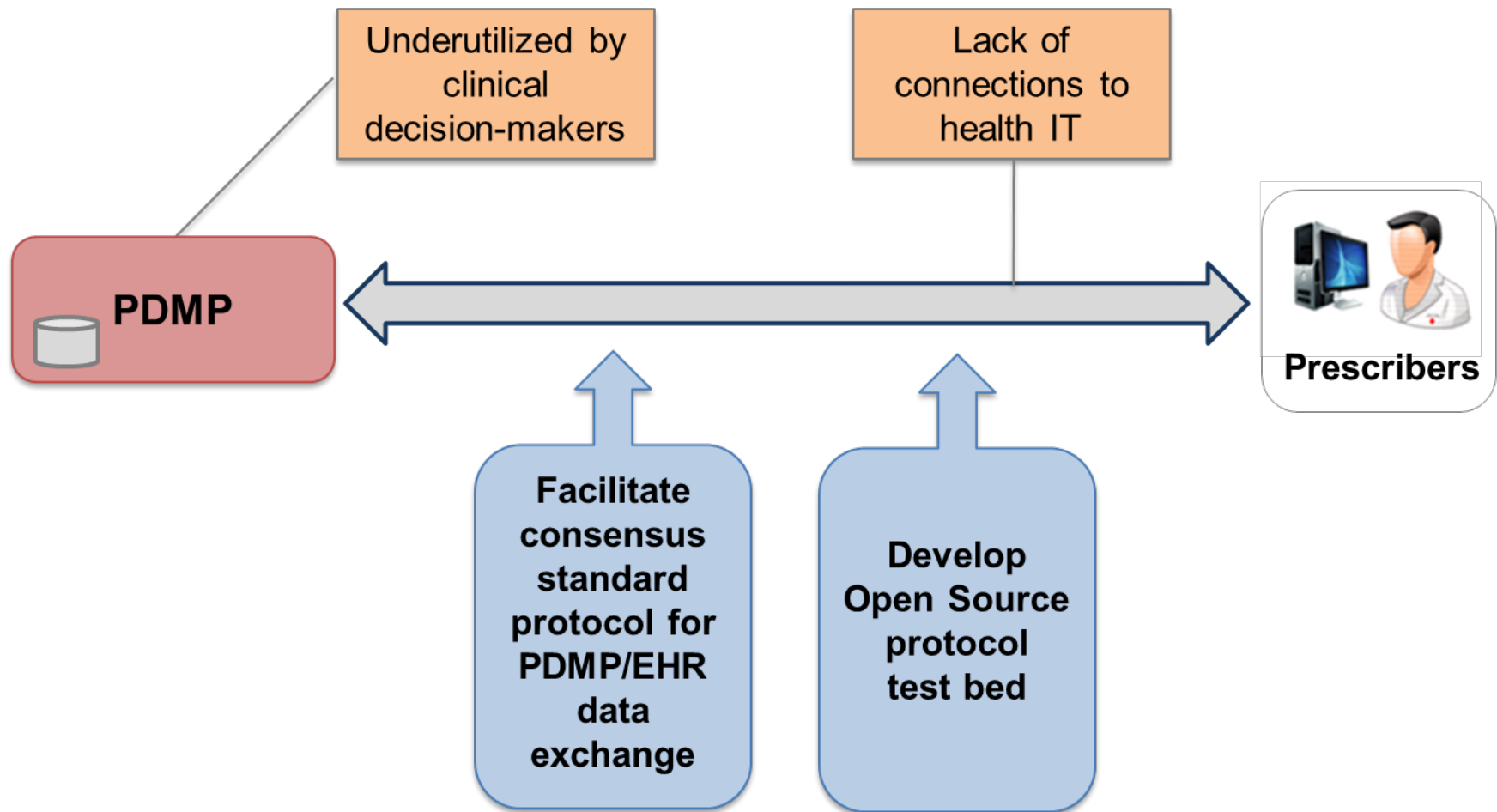 - Collect, monitor, and analyze electronically transmitted dispensing data on controlled substances.

- **Who: Authorized healthcare professionals**
  - Physicians (known as prescribers)
  - Pharmacists (known as dispensers)
  - Other authorized healthcare professionals

Status of State Prescription Drug Monitoring Programs (PDMPs)

States with operational PDMPs

States with enacted PDMP legislation, but program not yet operational
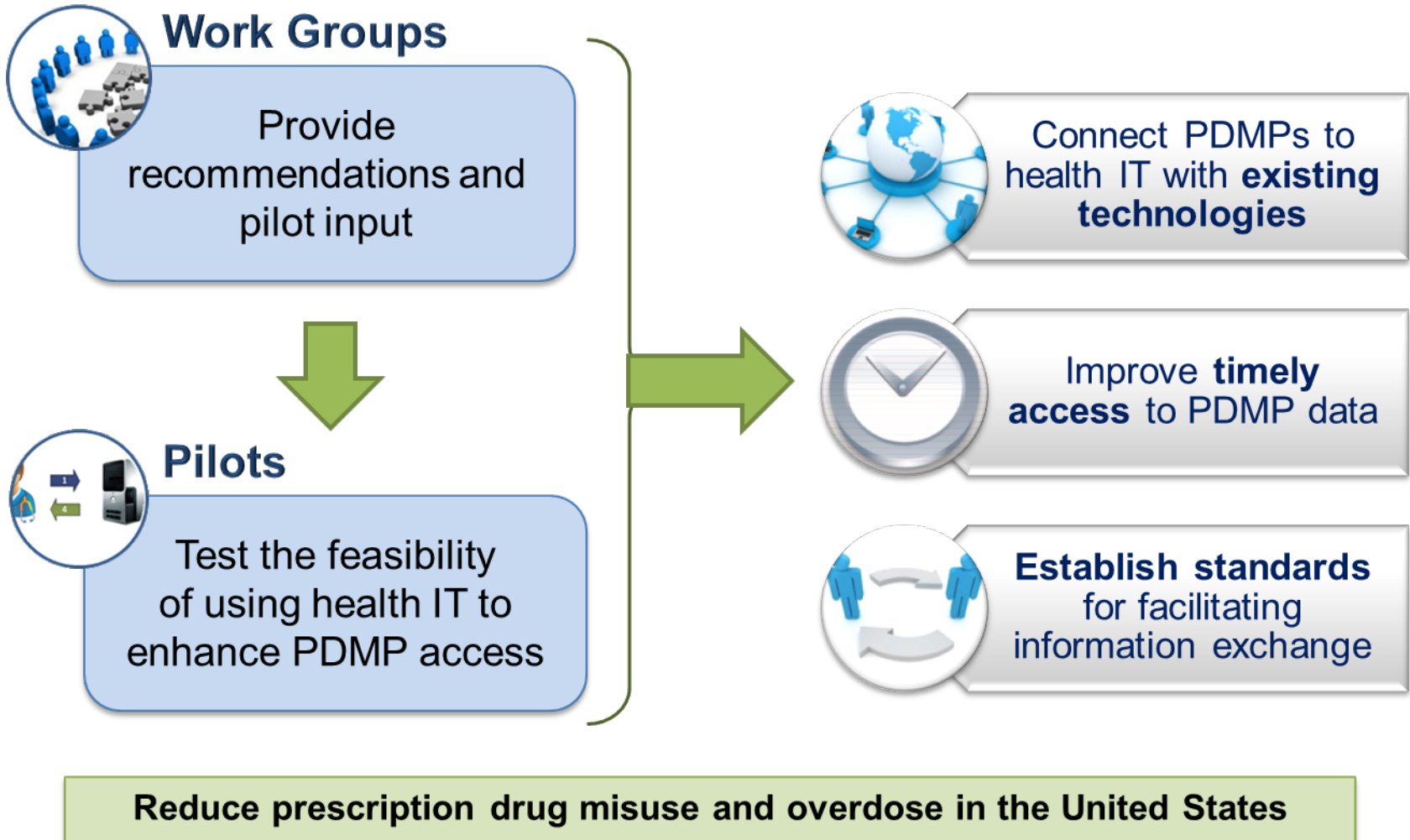
States with legislation pending
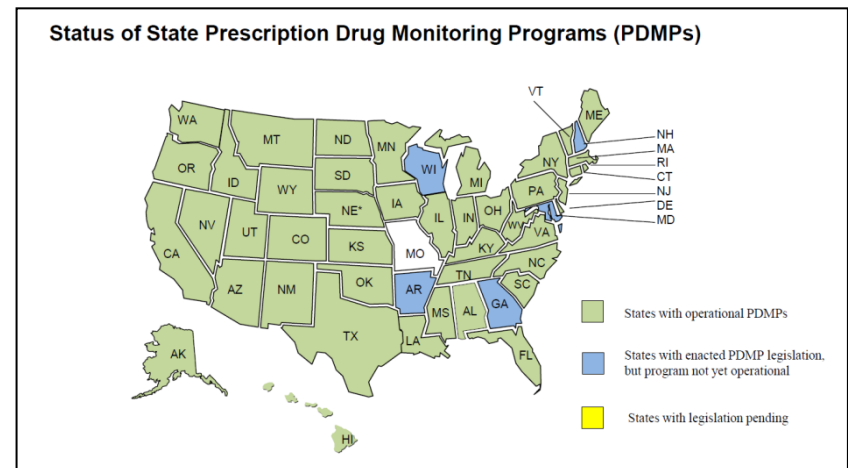
© 2012 The National Alliance for Model State Drug Laws (NAMSDL). Headquarters Office: 215 Lincoln Ave. Suite 201, Santa Fe, NM. 87501
This information was compiled using legal databases, state agency websites and direct communications with state PDMP representatives.

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Focus of This Discussion

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Overall Project Goals

Work Groups

Provide recommendations and pilot input

Pilots

Test the feasibility of using health IT to enhance PDMP access

Connect PDMPs to health IT with **existing technologies**

Improve **timely access** to PDMP data

Establish standards for facilitating information exchange

Reduce prescription drug misuse and overdose in the United States
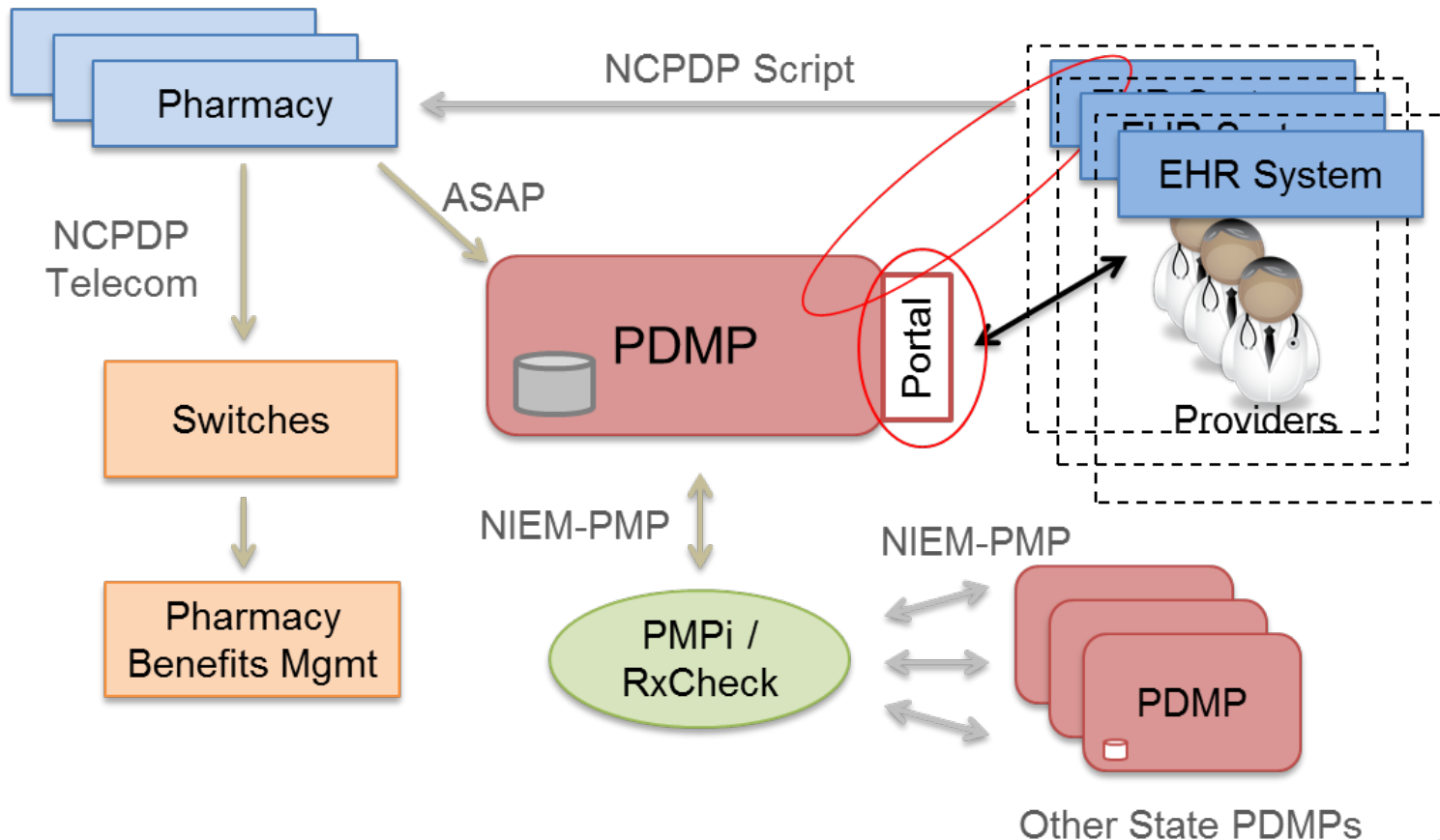
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S&I Framework Initiative

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PDMP S&I Community: Focus/Scope

- **Need for standards:**
  - Data format and content, transport and security protocols

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PDMP S&I Community: First Goal

- **Evaluate data format standard for exchanging patient information between PDMP and provider EHR systems**

- **Standards proposed and evaluated by the group:**
  - ASAP Web Service
  - Consolidated CDA
  - NCPDP Medication History Request/Response
  - PMIX PDMP Schemas (based on NIEM)*

* American Society for Automation in Pharmacy (ASAP), Clinical Document Architecture (CDA), National Council for Prescription Drug Programs (NCDP) and PMP Information Architecture (PMIX) Prescription Drug Monitoring Program (PDMP), National Information Exchange Model (NIEM)

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Qualities for Assessing Data Format Options

Criteria	Weighted Value
Availability of an XML format	3
Ease of adoption and integration by EHRs/HIEs – includes technical complexity	3
Speed of adoption into the EHR/HIE Ecosystem – how widely used is it, plus others	3
Wide use of the XML version of the format	2
Suitability for the PDMP-to-EHR Patient Encounter Use Case – coverage of necessary data elements	2
Separation of transport and content	2
Speed of adoption into the PDMP Ecosystem	1
Available at no cost	1
Accredited standards body	1
Ease of adoption and integration by PDMPs	1

3 = Very Important, 2 = Important, 1 = Less Important

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Standards Assessment per Quality Attribute

Criterion	Weighted Value	ASAP		CCDA		NCPCP		PMIX/NIEM	
XML Spec	3	3	9	3	9	3	9	3	9
XML Use	2	1	2	2	4	2	4	1	2
EHR Ease	3	1	3	3	9	3	9	1	3
PDMP Ease	1	1	1	1	1	2	2	2	2
EHR Speed	3	1	3	2	6	3	9	1	3
PDMP Speed	1	2	2	1	1	2	2	1	1
Suitability	2	3	6	2	4	2	4	3	6
Cost	1	1	1	2	2	1	1	3	3
Accredited	1	1	1	3	3	3	3	1	1
Separation	2	1	2	3	6	3	6	3	6
TOTAL SCORE		30		45		49		36	

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PDMP S&I: Still to Do

- **Develop recommendation on standard for data format and content**

- **Explore transport standards – We need binding for different architectural styles (and implementations)**
  - Push (Direct)
  - Remote Procedure Call [RPC] (SOAP)
  - RESTful
    - FHIR: Fast Healthcare Interoperability Resources
    - hData

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Open Source Reference Implementation

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PDMP/EHR Exchange Reference Implementation

Customized Open Source EHR client
- Submit requests over the web as a natural part of the EHR workflow
- Take in standardized healthcare documents

PDMP Test Bed
- Accepts OpenSearch (like Amazon.com, most web browsers)
- Respond with standardized healthcare documents

OpenMRS Module
- Requests using OpenSearch
- Display prescriptions in custom tab on patient dashboard (in-workflow)
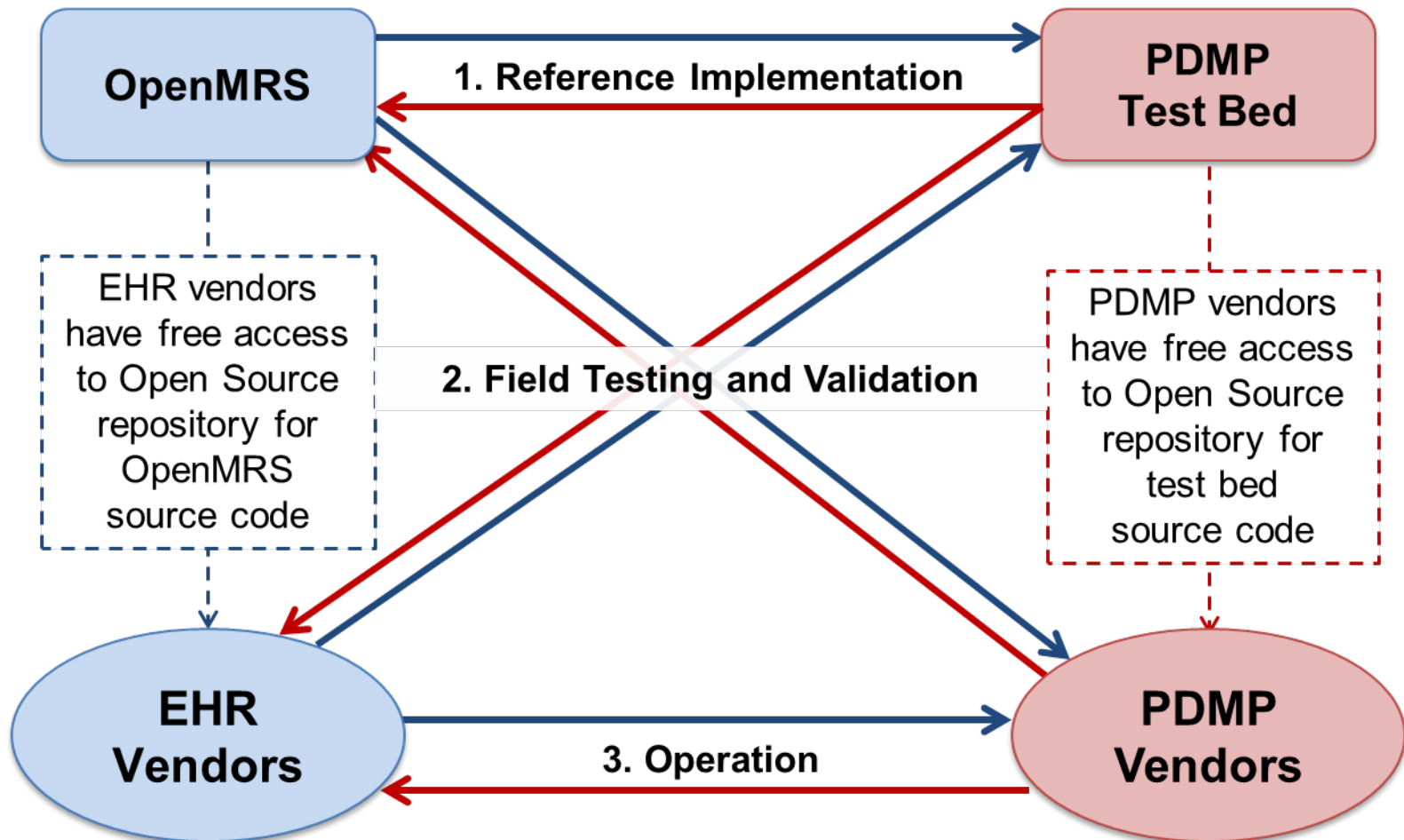
PDMP Test Bed Implementation
- Receive requests over the web
- Respond with standardized healthcare documents

Enable interoperability between EHR and PDMP

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Value to the PDMP Community

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Testbed Demonstration

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Discussion

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