Florida E-FORCSE

Drug Utilization Review and Clinical Alerts Project

July 20, 2022

John Felton Florida PDMP Database Administrator Florida Department of Health



Disclosure

I do not have (nor does any immediate family member have) a vested interest in or affiliation with any corporate organization offering financial support or grant monies for this continuing education activity or any affiliation with an organization whose philosophy could potentially bias our presentation.

The Issue

Background of Issue

Florida law requires a prescriber to consult the Prescription Drug Monitoring Program (PDMP) before prescribing a controlled substance under certain conditions.

Currently, prescribers in the Florida Department of Health's (FDOH) 67 county health departments (CHDs) have a separate sign-in outside the prescribing workflow using the E-FORCSE web portal to review their patient's specific controlled substance dispensing history.

Accessing data through the web portal requires prescribers to interrupt their typical workflow, log into E-FORCSE, and search for a patient using the patient's demographic information. Integration of PDMP information into the CHD's electronic health recordkeeping system (EHR), known as the Health Management System (HMS), will automate the PDMP information presentation in the prescribing workflow to efficiently support clinical decision-making.

Background of Issue (continue)

Additionally, effective January 1, Further, as of January 1, 2022, the 2020, health care practitioners SUPPORT Act requires all authorized to prescribe medicinal controlled substance drugs must electronically prescriptions under Medicare's generate any prescription and Part D drug plan to be transmitted submit it for dispensing. electronically. 1 Jan. 2022 1 Jan. 2020 1 July 2021 This mandate took effect when the prescriber renewed their license or as of July 1, 2021.

The Solution

Phases of a PDMP

Data Collection

PDMP Registration and Utilization

- Web Portal
- Integration within Workflow
- Delegate Utilization

Database Accuracy

- Reporting Compliance
- Data Error Corrections

PDMP Data Insight / Analysis

- E-FORCSE Insight (database warehouse)
- Drug Utilization Review (DUR) / Clinical Alerts

Drug Utilization Review (DUR)

The project's primary goal is to ensure that PDMP information is available to users within their workflow. Currently, no method exists that automates PDMP reports within the e-prescribing workflow, and medication history data sources are reliant on insurance claims and fail to capture the history of self-pay transactions.

As a result, when e-prescribing software initiates the Drug Utilization Review (DUR), the review does not include the patient's complete active medication history. To overcome this challenge, HMS will undergo an additional integration to allow the DUR process to consume PDMP information in a structured way that supports DUR. The PDMP data would be made available to the end-user and the DUR process alongside medication history data obtained by other sources such as Surescripts.[®]

Integrating PDMP information as a new data source into the e-prescribing application will benefit prescribers by providing a comprehensive controlled substance prescription history to reconcile medication use while avoiding errors such as omissions and duplications, dosing errors, or drug interactions. Clinical Alerts Working with PDMP Vendor on features for the Clinical Alert Module within PMP AWARE

Clinical Alerts Reporting:

-<u>View aggregate clinical alert and prescriber information by type of</u> <u>alert</u>. Including but not limited to fields for: alert type, sum of alert by type, grand total counts, distinct prescriber counts with AWARxE account status (active, inactive, no account), prescriber role (e.g. dentist, physician, nurse practitioner), prescriber specialty level 2, and prescriber specialty level 3.

• Desired outcome is to be able to identify aggregate counts of prescribers with various thresholds. The state could possibly publish summary level data from this view.

-View individual clinical alert and patient information by prescriber.

Including but not limited to fields for: alert date, alert type, patient first and last name, patient date of birth, prescriber AWARxE account unique identifier, prescriber first and last name, AWARxE account status (active, inactive, no account), prescriber email address, prescriber work location, prescriber role (e.g. dentist, physician, nurse practitioner), prescriber specialty level 2, prescriber specialty level 3, prescriber DEA from dispensation, prescriber NPI from dispensation, prescriber state license number from dispensation, and prescriber address.

Clinical Alerts (continue)

 Desired outcome is to assist a prescriber who contacts the program regarding a clinical alert received. PMP admin could identify each instance (patient and dates) in which thresholds were met.

-View aggregate clinical alert and patient information by prescriber.

Including but not limited to fields for: alert type, patient first and last name, patient date of birth, prescriber AWARxE account unique identifier, prescriber first and last name, AWARxE account status (active, inactive, no account), prescriber email address, prescriber work location, prescriber role type (e.g. dentist, physician, nurse practitioner), prescriber specialty level 2, prescriber specialty level 3, prescriber DEA from dispensation, prescriber NPI from dispensation, prescriber state license number from dispensation, and prescriber address.

 Aggregate clinical alert level reporting inclusive of patient and prescriber information is geared towards performing mail merges with condensed results for prescribers with inactive accounts or no account. The desired outcome is for patients that meet the clinical alerts threshold criteria to only appear once in the report for each applicable threshold met and the selected timeframe.

E-FORCSE Insight (EFI)

EFI is a multi-tiered, architectural framework designed to empower the Florida PDMP with the <u>capability</u> to implement and sustain a holistic approach to Business Intelligence (BI). The core component of EFI architecture is an elastic, centralized, modern data warehouse (MDW) optimized for data analysis.

EFI will have the ability to accept data sources from multiple agencies across the state of Florida, perform accurate patient matching, and analyze the medical data associated with the patient for key performance metrics.

One of the ultimate goals of the EFI system will be able to perform real time predictive modeling and mining based on the multiple data sources within the system.

E--FORCE Insight (EFI)

E-FORCSE Insight Analytical Maturity Model (AMM)

Analytical Maturity Curve



Data Sophistication

- Raw Data Reporting Database Data Warehouse OLAP Cubes Big Data
 - Snapshot Streaming/Real Time
 - Heterogeneous Datasource Linking





Outcome 2: Reduction of the quantity of pharmaceutical controlled substances obtained by individuals

Performance Measure: Characteristics of controlled substances reported to the PDMS.

* Miami-Dade County *

Data Characteristics	RY21	RY20-21 Change (%)
Prescription (Rs)	1271,825	0.000000
Days Supply	30,532,102	
Patient.	355,998	
Plamacy	1,663	
Prescriber	20,814	
Population 18 years and over	2,188,432	

Table 2. Characteristics of schedule II through schedule V prescriptions dispensed to Florida residents 18 years of age and older.

E FORCSE





Tep 5 Drugs Dispensed By Type



Dispersations Over Time (By Illumits, By Week 4)





Questions





Contact Information

John Felton Database Administrator (850) 245-4548 John.Felton@flhealth.gov www.e-forcse.com

Thank you!

