Summary

CUSTOMER

Rhode Island Quality Institute

CHALLENGE

Provide a single source of actionable information to providers for better management of patients' chronic pain

OUTCOME

A ready-made SMART on FHIR® app uses Rhode Island's HIE data to deliver the enhanced decision support providers want

Rhode Island Quality Institute + InterSystems

RIQI Uses SMART on FHIR® App to Transform HIE Data into Actionable Information for Pain Management

Getting the big picture on a patient's pain management can be frustrating for care providers. They need to search records from multiple care settings for past and current medications, conditions, and complaints. They encounter patients who don't always remember the details of their medical history. In Rhode Island, users of CurrentCare, the Rhode Island Quality Institute's (RIQI) statewide health information exchange, have a solution for this problem.

CurrentCare, based on InterSystems HealthShare®, is connected to 46 data-sharing partners, drawing information from 13 different electronic health record (EHR) systems. The information is aggregated and normalized by HealthShare and presented to clinicians through the CurrentCare Viewer. CurrentCare presents a complete, longitudinal view of patient care no matter where that care is delivered in Rhode Island.

Taking the Pain Out of Pain Management

"One of our CurrentCare users told us that he was tired of 'medical archaeology' when it came to searching for patient information relevant to pain management," said Scott Young, Senior Director of Strategy at RIQI. Digging for information was impeding his ability to help patients. To address this issue, RIQI leveraged InterSystems HealthShare support for SMART on FHIR to plug a ready-made pain management summary

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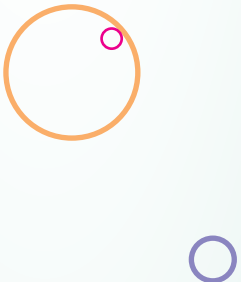
InterSystems® HealthShare

software themselves. SMART on FHIR is a healthcare application programming interface (API) for creating solutions that can access data and run without modification within any EHR, health information exchange (HIE), or other platform that supports it. This write-once, run anywhere capability, based on the HL7® FHIR interoperability standard, has enabled a marketplace for plug-ins that extend the capabilities of EHRs and HIEs.

The freely available SMART on FHIR application adopted by RIQI is [CDS Connect: Pain Management Summary](#), created by the US Agency for Healthcare Research and Quality (AHRQ), and MITRE Corporation. It occupies its own tab in the CurrentCare Viewer, and pulls relevant medications, conditions, and lab results from multiple locations in CurrentCare. It provides a standardized summary, and single location, for factors to consider when managing chronic pain.

"One of the most important things about this SMART on FHIR solution is not just that it does the archeology for pain management," Young said. "It provides the data in a validated, CDC-approved, structured and actionable form for clinical decision support."

An Early-Stage Example of Smart On FHIR in Action

Although CurrentCare's underlying HealthShare platform includes a FHIR server and other capabilities that enabled RIQI to drop in the SMART on FHIR app, getting the app to handle data properly still took some work. "At this early stage of putting FHIR into action, you should expect challenges in dealing with real-world data," said Steve Borek, Principal Solution Architect at RIQI. "Every HIE or other source has different sets of data, and it's not always so clean. It's important to do your discovery up front. Know what data sources you'll be using and what shape they're in," Borek explained. Charles Dansereau, Director of IT at RIQI, added that, "Our partnership with InterSystems really helped us when handling issues we encountered with real-world data."

Longitudinal Data for Better Pain Management

Leveraging statewide, longitudinal data from an HIE such as CurrentCare, with a complete view of each patient's care and medications, is essential for providers and organizations grappling with opioid abuse and other pain management issues. The CDS Connect: Pain Management Summary SMART on FHIR app provided an effective shortcut for CurrentCare to deliver that capability. "The data users need, and how it is displayed, the user interface... was already vetted with care providers by the AHRQ," said Andrea Levesque, RIQI Customer Experience Manager. "This was a huge benefit for us."

CurrentCare users now can make more informed pain management decisions, avoid over prescribing of opioids, and improve shared decision making between providers and patients. "With this app care providers get data that has been enhanced, instead of just getting data that has passed through an EHR," Young said. "They get actionable information they couldn't get with just a query and retrieval of data."

Learn More

Visit **InterSystems.com/FHIR** to learn how InterSystems supports FHIR and a wide rand of other interoperability standards.