CIRG
Clinical Informatics Research Group

COSRI

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Clinical Opioid Summary with Rx Integration

OVERVIEW

- COSRI is a web app, either free-standing or integrated into the electronic health record, connecting directly to the Washington (WA) State Prescription Monitoring Program (PMP) via the WA State Health Information Exchange to provide opioid Clinical Decisions Support (CDS) for providers, using the FHIR standard.
- A partnership development between UW CIRG, WA State Department of Health, and WA Health Care Authority.
- COSRI implements both CDC guidelines and WA rules for opioid prescribing using computable logic.
- Designed with extensive user experience and engagement to address providers' needs and concerns.
- Robust validation of individual drugs and combined total daily milligram morphine equivalent (MME) calculations.
- Pilot tested being Sept 2021 in two primary care clinics in WA clinics serving rural and vulnerable populations.

PROVIDER FEEDBACK

- Following implementation at 2 community clinics COSRI has become the primary method for accessing PMP data even across changes in clinic management.
- COSRI is fast, enabling flexible workflows and is used as a patient education/ shared decision support tool.
- COSRI saves time and simplifies PMP access.

PROVIDER QUOTES

"…it's a pretty straightforward system which is nice…"

"That's the biggest thing, Its just very, very quick. A couple of clicks and you have the information…"

"I really like the patient search. I like how I don't have to have the patient's date of birth, in front of me, like with the PMP."

"What I like is being able to sort through multiple things at one time, without having to open up a patient chart."

"It's really fast when I type in the last name and I love how the patient, just pops up right there…"

"The layout is just very nice and easy to see. It's easier to look at than the [other ways of accessing PMP]"
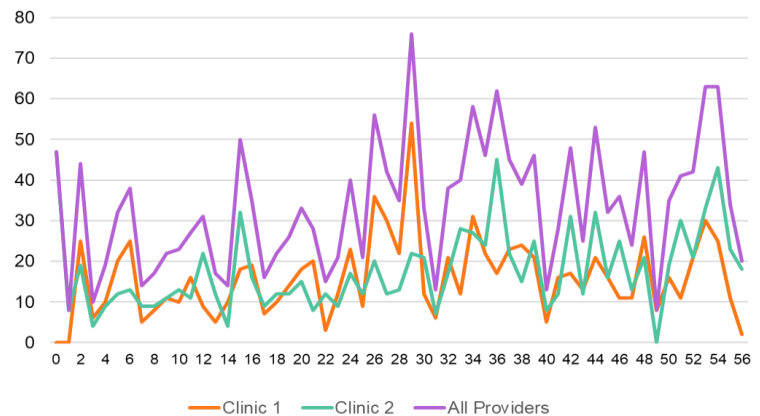
"What I like is being able to sort through multiple things at one time, without having to open up a patient chart."

"It's not uncommon that I'll be writing something for someone else's patient who I don't see and having something that's quick and available is probably the biggest safety check."

USAGE MEASURES

- On average, 34 patients' PMP records are viewed per week among 8 providers using COSRI.
- Login time was reduced from 2 min 17 sec to 8.5 sec.
- Patient search and load time was reduced from 2 minutes to 18.7 seconds.
- >10,000 opioids with MME calculations have been viewed since implementation.

Number of Patient PMP Searches September 2021- October 2022

Legend: Clinic 1 — Clinic 2 — All Providers

	Other PMP Interfaces (seconds)	COSRI (seconds) Mean (median; range)	p-value
Login time Password saved	NA	4 (4; 3-5)	<0.0001
Password not saved	137	8.5 (8; 7-10)	
PMP patient load time	120	18.7 (16; 1-57)	<0.0001

INDEPENDENT REVIEWER FEEDBACK

"Opioid safety remains a significant concern nationwide, and the described application was targeted at not only reasonable but evidence-based behavior changes to improve opioid prescribing.

"Your project meaningfully impacts the problem for the prescribers using it in the production pilot. Your use of FHIR, and FHIR-adjacent technologies is sophisticated."

COSRI is freely available to WA State providers and clinics. Try it out!

COSRI Demo: Freestanding: https://demo.cosri.app EHR-Integrated: https://apps.smarthealthit.org/app/cosri