

Closed Loop Medication Management for Safer Treatment

Department of Radiation Oncology

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UT Southwestern
Medical Center



Background

In 2019, Radiation Oncology's medication management processes required detailed improvement and corrective action. Managing medication is equally both a staff and patient safety issue, especially regarding controlled substances.

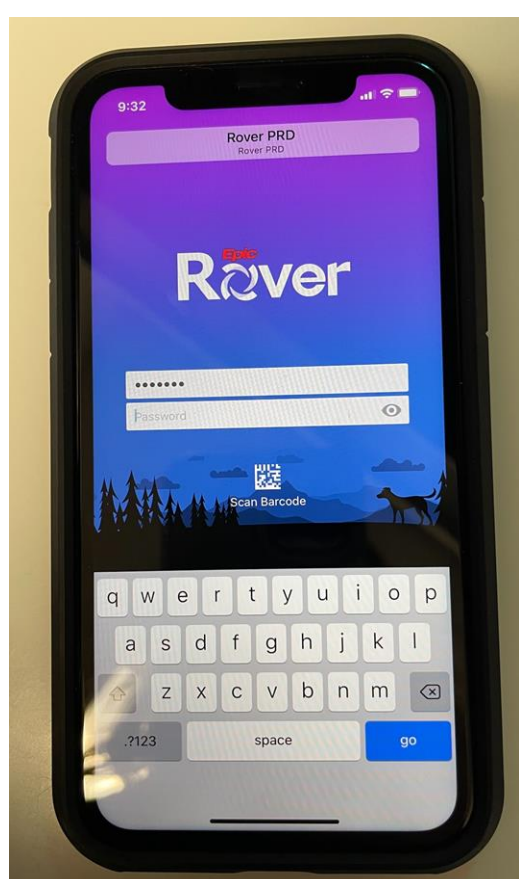
Aim Statement

To ensure that medications administered in radiation oncology are appropriately managed through **a)** at least a 25% decrease in number of controlled substances not scanned and **b)** increasing patient and medication scanning compliance to over 90%

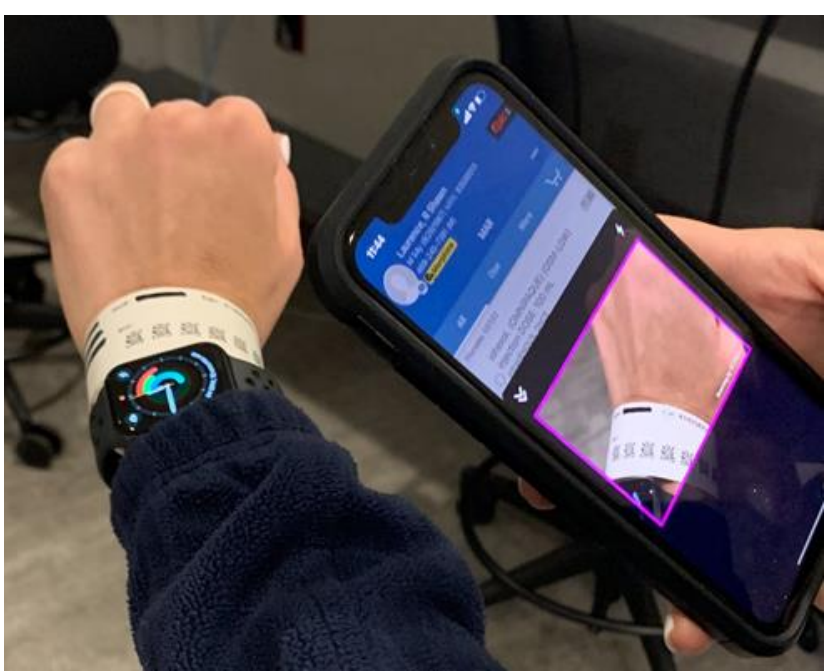
Interventions

2019

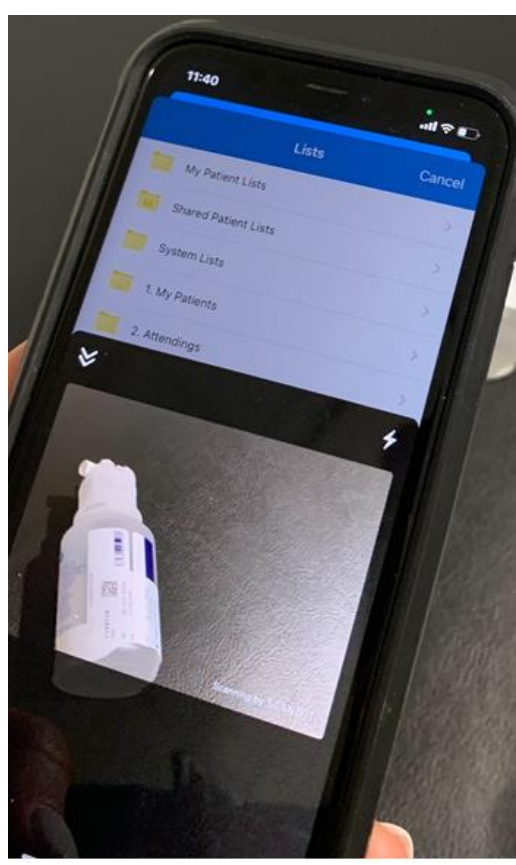
- BCMA (barcode scanning) weekly analysis reviewed
- Pyxis Profiled to ensure orders approved by CUH Pharmacy
- ROVERs installed for barcode scanning (see photos below)



Rover



Patient Scanning

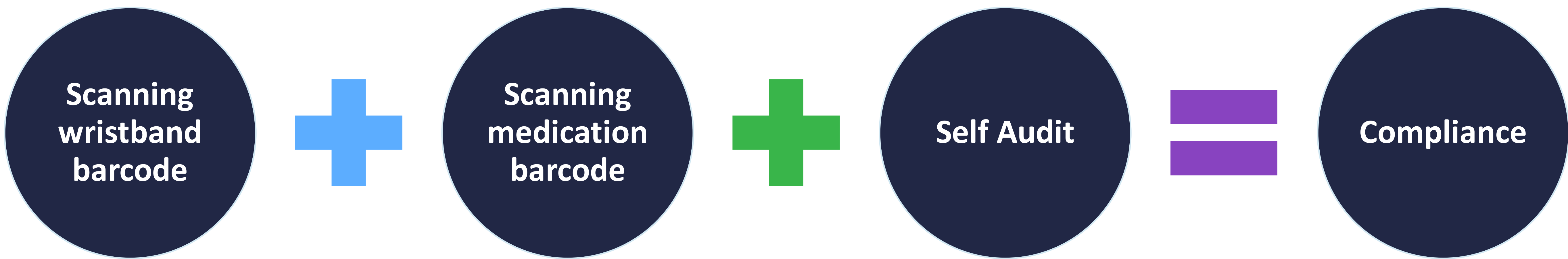


Medication Scanning

2020

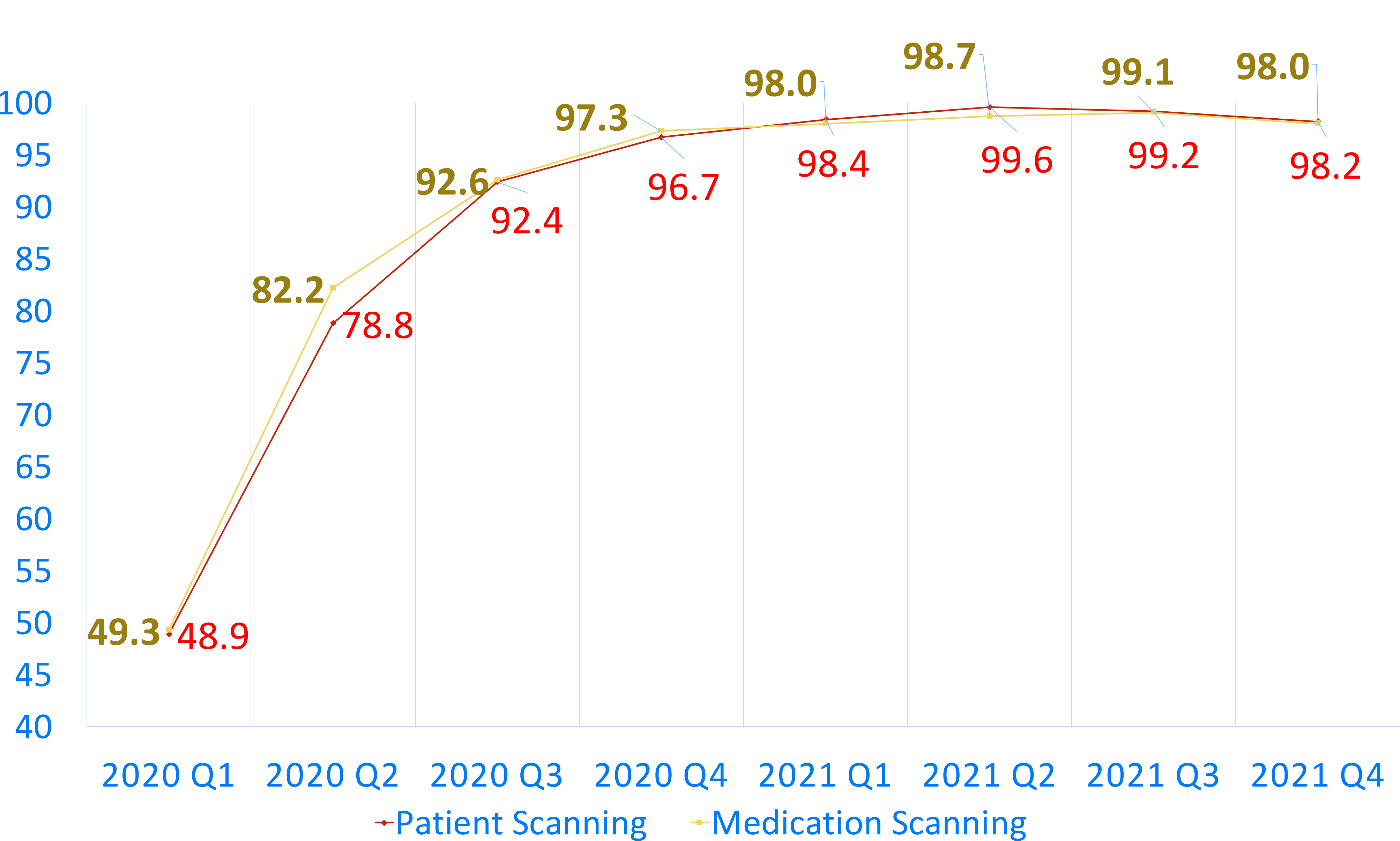
- Department policy addendum to supplement Hospital policy
- Daily self audits submitted to Supervisor (see example below)
- Pyxis daily counts conducted by 2 nurses
- Metrics shared monthly with staff

Controlled Substance RN Daily Audit										
DATE:			RN NAME:							
Patient MRN#	Time Given	Narcotic Name	Dose Ordered	Dose Dispensed	Dose Given	Dose Wasted	Dose Wasting RN	Medication Administration Documented in Epic	Pain Assessment Documented in Epic	Pain Reassessment Documented in Epic
123456789	9:15am	Med example	.5 mg	1 mg	.5 mg	.5 mg	J. Doe	Yes	Yes	Yes

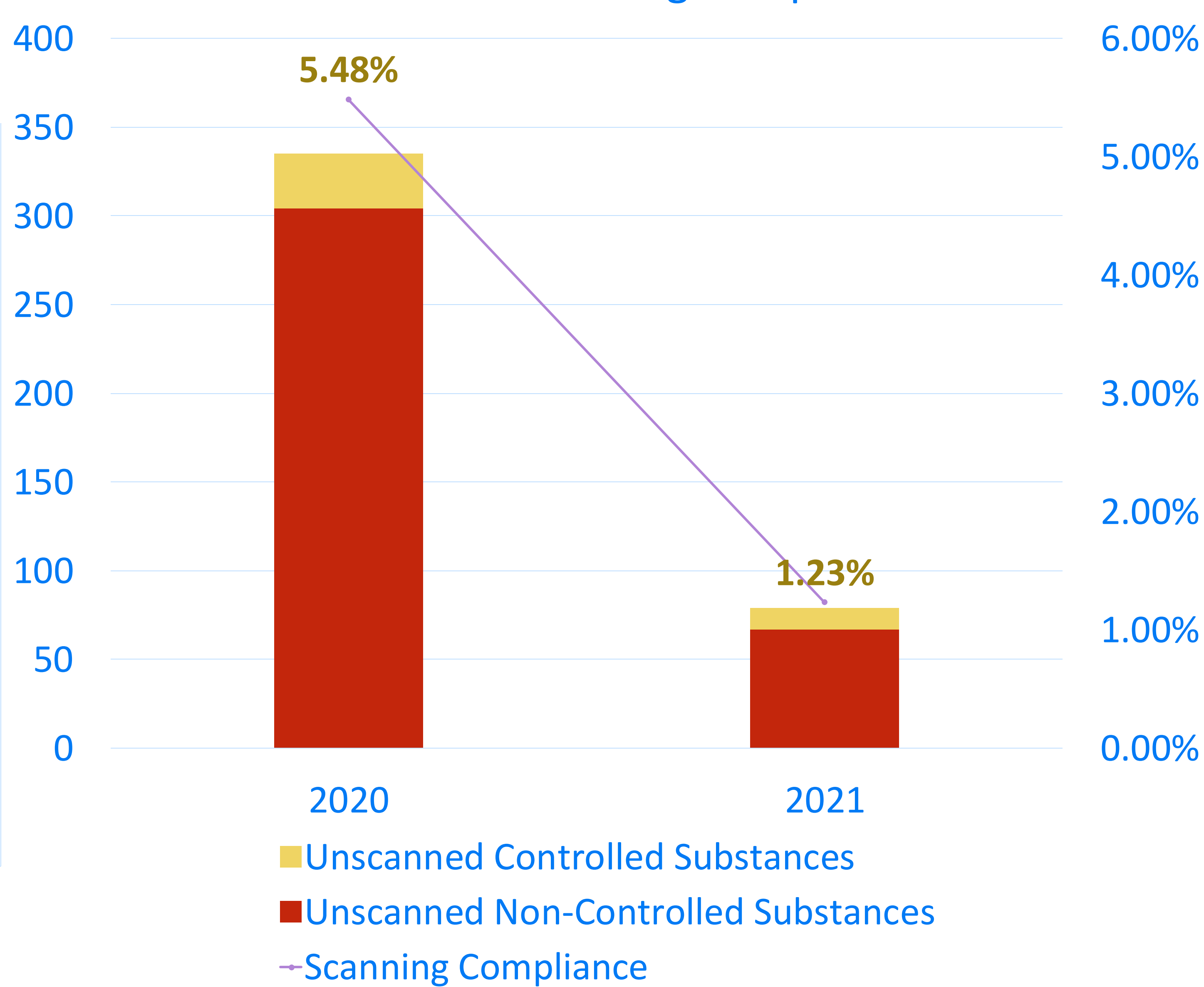


Analysis and Data

BARCODE SCANNING COMPLIANCE



Medication Scanning Compliance



Results and Conclusions

With the detailed improvement plan and program changes, the department saw a **33.7% increase** in patient scanning compliance and a **30.7% increase** in medication scanning compliance.

Furthermore, the department saw a **71.3% decrease** in the number of controlled substances not scanned.

This increases *both* provider and patient safety, as medication delivery is ensured to be accurate and appropriate, while being correctly handled and dispensed.