

# Addressing Pain, Reducing Opioid Therapy Risk: System-Wide Quality Improvement (QI) Primary Care Intervention

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## Introduction

- Implementation of opioid prescribing guidelines can reduce opioid-related harms. A large academic health system rolled out a policy on opioid therapy management in its primary care (PC) clinics. We tested if adding a clinic-level QI intervention to usual rollout increased guideline-concordant care among patients with opioid-treated chronic pain.

## Methods

- Design** Stepped-wedge
- Target population** Adult PC patients with opioid-treated chronic non-cancer pain
- Intervention** 1 academic detailing session; two online educational modules (opioid prescribing; shared decision making); 4-6 practice facilitation sessions delivered over 4-6 months to each clinic's clinicians
- Assessment period** Jan 2016 (baseline) - Dec 2017 (exit)
- Outcome measures** Clinic-level EHR data on % target population with: signed treatment agreement (primary), completed urine drug test, PDMP check, depression and opioid misuse risk screen, co-prescription of benzodiazepines, BZD (secondary); % clinic panel; morphine-equivalent dose (MED)

- Clinics** 9 clinics received the intervention (3 waves of 3 clinics); 17 other health system's clinics did not receive an intervention ('comparison clinics')
- Intervention clinics' clinicians** 219 providers (70 prescribers; 149 other), a subset of the clinics' staff, participated in the intervention.
- At baseline, they reported discomfort with, and the need for more education about, management of target population.
- Post-intervention, they reported satisfaction with, and usefulness of, the intervention.
- Target patient population at baseline:**

Clinic-level data: January 2016	Intervention (N=1,431)	Comparison (N=1,717)
% adult clinic panel	2.0	2.1
% treatment agreement	24.8	29.2
% urine drug test	24.7	31.3
% co-prescribed BZD	19.9	24.7
% MED ≥ 90 mg/day	23.0	15.5
MED/patient/day, mg	82.9	57.5
Total MED/month, mg	3,560,727	2,644,896

Project protocol: Zgierska A et al., BMC Health Serv Res, 2018; 18: 415.0

## Results

- Change from baseline to exit:**
- Both groups of clinics ↑ guideline-concordant practices (Fig.1), ↓ opioid prescribing and ↓ BZD co-prescribing (Fig.2).
- The magnitude of change (Cohen's *d* effect size) favored the intervention clinics on several outcomes, particularly those related to opioid prescribing.

Fig.1: Change in the practices used for the monitoring of opioid therapy.

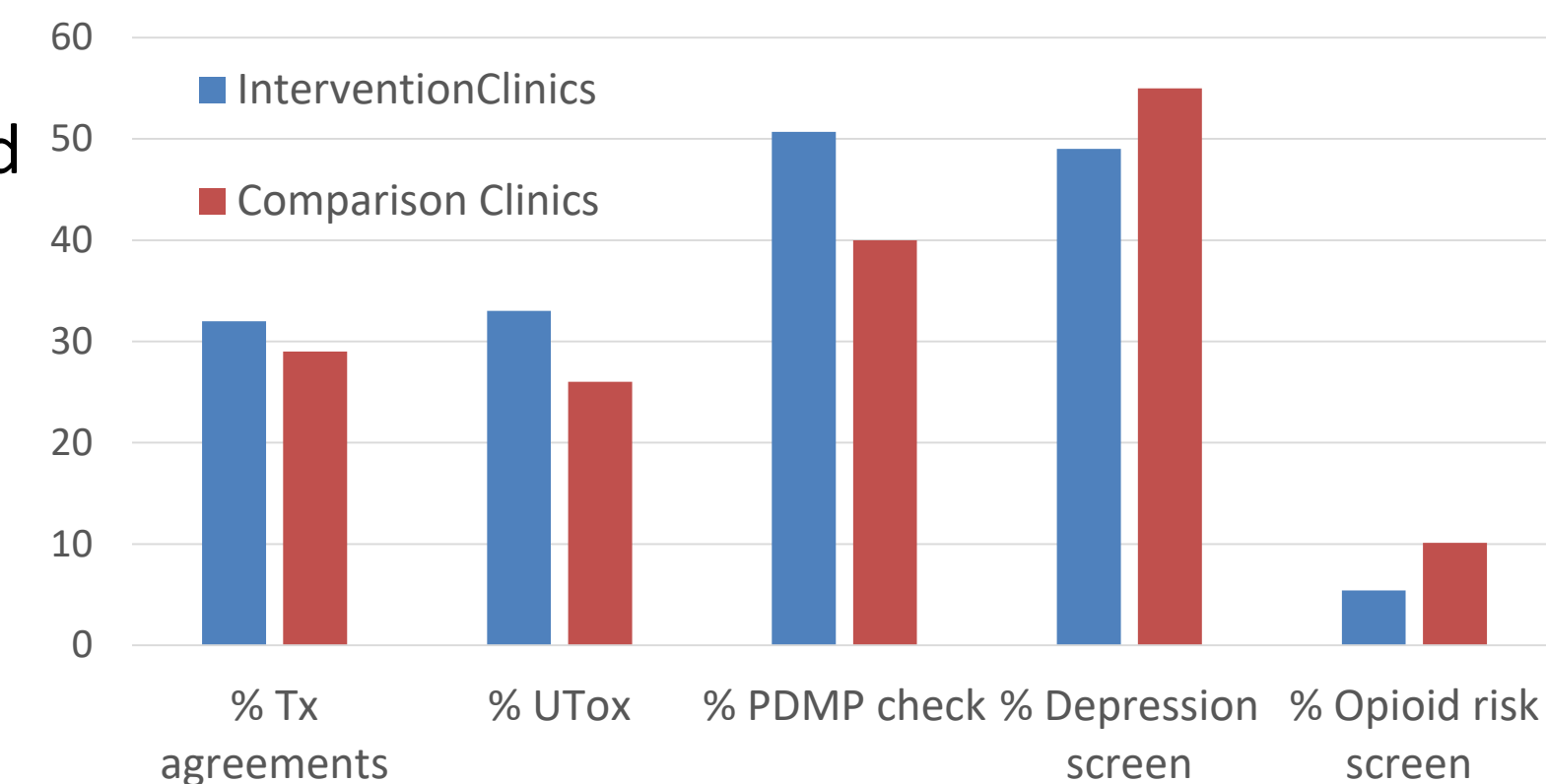
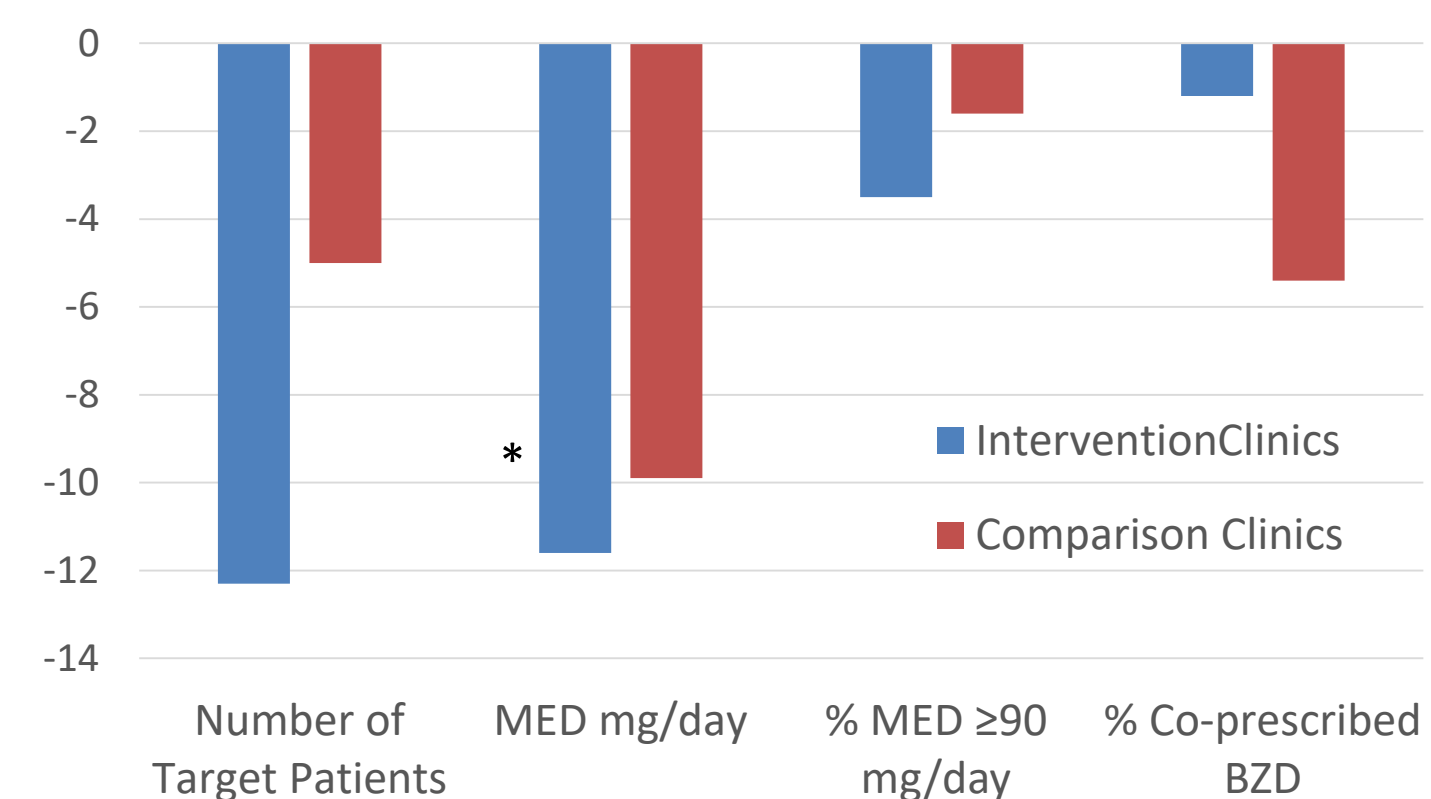


Fig.2: Change in the number of target patients and opioid and benzodiazepine prescribing.



- The total MED/month ↓ by 0.92 kg (25.7%) in the intervention and by 0.55 kg (18.6%) in the comparison clinics from baseline to exit.
- The stepped-wedge analysis did not show a statistically significant change in outcomes in relation to the specific timing of intervention delivery.

## Conclusions

- Usual health system wide rollout of complex policy on opioid prescribing can increase guideline-concordant care.
- Tailored, clinic-level QI intervention was well-received by clinicians and can offer further gains, especially for reducing opioid prescribing.

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