Title Page

Title of Project: Team-Based Safe Opioid Prescribing

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Structured Abstract

Purpose: The overuse of prescription opioids for chronic non-cancer pain has resulted in the largest iatrogenic drug epidemic in the history of the United States. Team-based approaches to managing complex patients produce superior results but are not common for managing patients on long-term opioid therapy.

Scope: This study developed, implemented, and evaluated a team-based best practices intervention (the Six Building Blocks) for safe opioid prescribing for chronic non-cancer pain in six rural primary care health systems with 20 clinic locations.

Methods: This mixed-methods study used a nonrandomized, quasi-experimental design to observe changes in total number of patients continuing on long-term opioids and the proportion of patients on higher-dose opioids in participating clinics compared with a nonequivalent control group. Opioid prescribing data were extracted from electronic health records. Data were analyzed using a difference-in-difference interrupted time series regression analysis. Leader, clinician, and staff experience were assessed using qualitative analysis of semi-structured interviews and focus groups.

Results: System redesign guided by the Six Building Blocks resulted in significant declines in the proportion of patients on high-dose opioids and the total number of patients receiving opioids in these rural clinics compared with controls. Structural changes implemented as part of the intervention improved workplace organizational and emotional aspects for clinicians and staff. Increased confidence, comfort, collaboration, and teamwork improved clinician and staff practice environment perceptions and overall professional satisfaction. Challenges and strategies for population tracking of this patient population were identified.

Key Words: primary healthcare, opioid analgesics, chronic pain, quality improvement.

Purpose

Use of long-term opioid therapy (LtOT) for non-cancer pain doubled in the past decade, after doubling over the previous two decades. Fatal overdoses involving opioid analgesics increased four-fold from 1999 to 2009. Opioid overdose deaths and admissions have increased at a rate three-fold higher in rural counties compared with metropolitan counties. Team-based approaches to managing complex patients, such as those on LtOT, produce superior results but are not commonly used in managing patients on LtOT.

This study developed, implemented, and tested a team-based best practices approach to safe opioid prescribing for chronic non-cancer pain in rural primary care clinics**.** The framework, called the Six Building Blocks, was based on the Group Health Chronic Opioid initiative and findings from the “Primary Care Teams: Learning from Exemplar Ambulatory Practices (LEAP)” project.

We had four specific aims, guided by the RE-AIM framework:

1. Implement a team-based best practices approach to safe opioid prescribing in primary care.
    a. **A**DOPTION: proportion of the intervention clinics that revise their clinic policies.
    b. **R**EACH**:** proportion of all patients on long-term opioid therapy entered into the registry at baseline who have data from at least six clinic visits entered into the registry after implementation.
2. Examine the effectiveness of the intervention.
    a. **I**MPLEMENTATION: LtOT-Best Practices self-assessment survey completed at baseline and 1 year after the start of implementation.
    b. **E**FFECTIVENESS: change in the monthly average daily Morphine Equivalent Dose (MED) in patients before and 1 year after the start of implementation.
3. Assess the sustainability of the team-based best practices approach.
    a. **M**AINTENANCE: change in average daily MED 6-12 months after completion of the 1-year intervention phase.
4. Develop and launch a robust dissemination of this approach along with tools, resources, and training support.

Scope

A. Background

The overuse of prescription opioids for chronic non-cancer pain has resulted in the largest iatrogenic drug epidemic in the history of the United States. An increasing body of evidence points to serious safety concerns with continued LtOT, without clear evidence of benefit.[1-3] Professional societies, public health agencies, and healthcare systems have raised the alarm, and recent data point to a small decline in the number and dose of opioids prescribed between 2010 and 2015. However, they remain at a level that is three times higher than 1999, prior to the current opioid epidemic,[4, 5] and the data suggest that these trends may reflect fewer patients initiated on opioid therapy after 2012, while patients who were already on LtOT continued to receive them.

Most prescriptions for long-term opioid use are provided in the primary care setting,[6] and rural settings have borne the brunt of this epidemic.[4, 7] Opioid overdose deaths and admissions increased at a rate three-fold higher in rural counties compared with metropolitan counties.[8, 9] Drug-related deaths involving opioid analgesics are higher in these rural areas even after adjusting for population density. The ratio of nonmedical opioid users to medical users is higher in rural areas as well.[9]

As evidence accumulates to support more judicious use of LtOT for chronic pain, guidelines supporting more judicious use of opioids for chronic pain, such as those recently released by the Center for Disease Control and Prevention, have been disseminated.[10] It has long been recognized that provider education alone is not sufficient for providing guideline-concordant care.[11, 12] Implementing recommendations embedded in clinical guidelines requires changes to clinic systems and workflows of healthcare teams across the entire clinic. Changing systems of care is different from changing provider prescribing habits, but experience suggests that system change in primary care settings is a critical component to sustained change in provider behaviors.[13] There have been some limited evaluations of systemwide initiatives to address opioid overuse, mostly in large, integrated healthcare delivery systems.[14, 15] Less is known about systems approaches to address the overuse of LtOT in primary care settings with fewer resources, especially in rural settings.

B. Participants

Participants were six rural-serving healthcare organizations in Eastern Washington State and Central Idaho. Five of those organizations were designated as critical access hospitals. Characteristics of these organizations and their clinics are shown in Table 1, on the next page.

Table 1: Characteristics of Clinics and their Overall Patient Population

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	**TOTAL**
Organization-level data							
Clinics (n)	3	5	2	2	5	3	**20**
MDs/DOs (FTE)	7	8.5	6	3.8	30.75	6	**61.15**
PAs/NPs (FTE)	3	4.75	4.5	3.2	6	2.25	**22.67**
Providers combined (FTE)	10	13.25	10.5	7	36.75	8.25	**83.82**
Avg # patient visits per month	1676	2083	1270	2277	9397	1908	**18,611**
Patient-level data							
Age							
% <18	15	21	20	20	15.5	22	
% 18-44	13	27	29	35	22.9	19	
% 45-64	14	28	29	28	29.5	30	
% >64	58	24	22	17	32.1	29	
Gender							
% Male	51	49.8	40	49	43.5	50	
% Female	49	50.2	60	51	56.5	50	
Race							
% White	95	92	45	95.4	81.6	97	
% Black/African American	0	0	0	0.4	0.9	0	
% Amer. Indian/Alaska Native	0	2	45	1.5	1.1	1	
% Native Hawaiian/Other PI	0	0	0	0.2	0.2	0	
% Asian	0	2	0	0.4	1.1	0	
% Other	0	3	10	1.8	9.5	0	
% Unknown	5	1	0	0.3	5.5	2	
Ethnicity[1]							
% Non-Hispanic/Latino	99	99	90	98.1	89.7	99	
% Hispanic/Latino	1	1	10	1.9	10.3	1	
Payment							
% Medicare	36	33	36	27	28.8	30	
% Medicaid	15	16	29	35	11.3	30	
% Private insurance	42	45	30	16	39.7	20	
% Tricare/CHAMPUS	0	2	1	0.1	2.8	5	
% No insurance (self-pay)	7	4	3	21.9	4.4	3	
% Other	0	0	1	0	12.9	12	

Individuals from the sites who participated in the study were members of the quality improvement teams, clinic leaders, providers and frontline staff, and patients who have been prescribed chronic opioid therapy.

[1] Of those known.

Methods

A. Study Design

This study originally proposed to use a stepped wedge design to evaluate the effectiveness and sustainability of implementing a team-based best practice approach to improving safe opioid prescribing. Using organization as the unit of assignment, we proposed to randomly assign participating organizations to intervention "waves," in which implementation would be staggered over time. Implementation for wave 5 was planned to begin approximately five calendar quarters later than implementation for wave 1.

We discovered that this was not feasible. As noted in our Background, rural communities have been especially impacted by the epidemic of opioid use and misuse. None of our participating organizations were willing to be randomized to the later implementation waves. If so randomized, they reported that they would need to begin separate self-generated improvement activities, effectively introducing uncontrolled co-interventions for organizations assigned to a later wave.

In response and with AHRQ approval, we modified our design. All participating organizations were given the same basic team-based LtOT "change package," named the Six Building Blocks, and implemented it at all sites at approximately the same time. *In addition*, half of the organizations received an "enhanced intervention" that included extra support for provider-provider conversations regarding norm-setting and additional training and resources for patient communication and patient engagement. Treatment assignments for the enhanced component were balanced across region (Idaho vs. Washington) and approximate organizational size. Control organizations were offered access to the enhanced materials after data collection was complete.

We assessed, using a difference-in-difference interrupted times series regression analysis, the effect of the LtOT change package on all participating organizations and compared those who received the enhanced intervention with those who did not. We also collected data for the same time period for a nonequivalent control group of patients using pharmacy claims data from a large regional health plan to examine temporal trends among patients who resided in approximately the same primary care service areas but who were not involved in the project.

We collected quantitative and qualitative data, including Electronic Health Record (EHR) data for opioid prescriptions; practice assessment surveys; and data from semi-structured interviews and focus groups with organizational leaders, LtOT registry managers, providers, and staff members. We also kept extensive field notes and collected implementation documents, such as the policies, work flows, and patient agreements developed and adopted by the sites. We describe the interventions and our data sources and study methods in more detail below.

B. Interventions

AIM 1: To develop and implement a team-based best practices approach to safe opioid prescribing in primary care.

1. Basic Change Package: The "Six Building Blocks":

In a study of high-functioning teams across 30 exemplar primary care practices, we previously reported on six common components of how these clinics redesigned opioid medication management systems to address the challenges of managing their chronic pain patients on LtOT.[16] Based on these findings, we developed the Six Building Blocks, a structured, systems-based approach for improving management of patients on chronic opioid therapy. This program may be found in our dissemination website: https://depts.washington.edu/fammed/improvingopioidcare

The program has six components:

1) Providing leadership support;
2) Revising and aligning clinic policies, patient agreements (contracts), and workflows;
3) Tracking the population;
4) Having planned, patient-centered visits;
5) Identifying resources for complex patients; and
6) Measuring success.

All organizations received an in-person study kickoff visit by members of the study team. These visits occurred between October 2015 and February 2016. Each organization had a monthly check-in visit by telephone with a practice facilitator, participated in monthly shared learning opportunity phone calls and webinars with the other study sites, and had access to a monthly telepain case presentation with consultation from a pain specialist at the University of Washington. The study website (now converted to the dissemination site) provided examples of clinic policies, workflows, patient agreements, and other documents that sites could adapt or model for their own organization. The total duration of this support was 15 months across the sites. Study sites were also offered support from an online registry to track their patients on COT. Four sites used the study registry as a learning tool for how to build their own tracking and monitoring approach. One of those sites also used it to track and monitor their patients during the study period.

2. Enhanced Intervention:

Three of the six clinic organizations were randomly assigned to receive enhanced support. One of the most challenging aspects of working with LtOT patients is how to have conversations with patients about the risks of opioid use and/or about titrating off or reducing medications. The enhanced intervention provided additional training and materials to support providers, staff, and patients to have these difficult but *sense-making* conversations. The additional training and resources included:

1) Engaging Patients: Enhanced intervention sites were asked to collect patient survey data to understand their patients' willingness to have these conversations.
2) Engaging Providers: One study team member (MLP) conducted an additional site visit to enhanced intervention sites to facilitate a provider-to-provider discussion and norm-setting around opioid prescribing. During a dinner meeting with all prescribers at the site, the team member showed providers de-identified site-specific trends in opioid prescribing and the results of the patient survey concerning their patients' attitudes and willingness to try pain management strategies other than their current medications.
3) Having Difficult Conversations: Using a study-produced video and a follow-up webinar, enhanced intervention sites were provided with additional skills training, tools, and resources that support providers and staff in having these difficult conversations with patients.

C. Data Sources/Data Collection and Measures

AIM 2: To examine the effectiveness of the intervention; and
AIM 3: To assess the sustainability of the team-based best practices approach.

Our data sources were:

1. Electronic Health Record (EHR) data extracted from all participating sites, including all opioid prescriptions from 12 months prior to each site's initiation through May 31, 2017. We have data for site 6 only for the 6 months prior to site initiation due to the conversion of their EHR.
2. For the comparison group of control patients, prescription fill data were pulled from a regional health plan's pharmacy claims data over the same time period as the study intervention. The LtOT criteria used for identifying patients at the intervention sites were applied to the pharmacy claims data to identify this comparison group. All health plan patients who met LtOT criteria and resided in the same primary care service area as one of the intervention sites comprised this comparison group.
3. Practice assessment surveys regarding the current state of the clinic regarding opioid prescribing practices, the "Six Building Blocks assessments," which were conducted:
    a. Prior to site initiation by the leader of the opioid improvement team;
    b. During a small-group activity during the study kickoff visit at each site;
    c. Quarterly by the leader of the opioid improvement team in each clinic.
4. Field notes from throughout project, including those taken at the site initiation visit, during shared learning calls, at quarterly check-ins, as well as records of questions asked by the sites and relevant working documents, including site action plans, policies, workflows, and patient agreements.

5. Post-intervention formal qualitative data gathering, including:
    a. Interviews with leadership;
    b. Interviews with LtOT registry managers;
    c. Focus groups with clinicians;
    d. Focus groups with staff.

The primary outcomes for the study were opioid prescribing behaviors, as measured by proportion of patients on higher-dose opioids (>100 MED), and total number of patients who continued on opioids long-term for chronic pain. Secondary outcomes included clinician and staff perceptions of the impact of implementing the Six Building Blocks on their work life in the clinic.

D. Limitations

The quantitative findings on opioid prescribing for this study are limited by the potential for differences in the sociodemographics of the study group versus the comparison group, especially the proportion on public insurance. However, this difference should have biased the results toward a lower effect size, so detecting a significant difference between interventions and controls is notable. We were also limited by relying on data from the electronic health record, instead of pharmacy claims data, from each clinic for prescribing data. Missing days supply was common and, although methods for imputation used are widely accepted, the accuracy of the MED calculation is difficult to ascertain.

The qualitative results of the study are limited by their reliance on self-reported outcomes of those clinicians and staff members who self-selected to participate in interviews and focus groups. We did not actively recruit participants with disparate views about the program. In addition, we did not check the findings reported here with members of the clinics who participated in the interviews. Although perceived improvements to work life and decreased stress are clear, the data reflect clinician and staff perceptions and may not represent “reality.” Finally, our study is limited by not including the patient perspective.

Results

A. Principal Findings

Here, we highlight principal findings in two areas: the impact of the intervention on opioid prescribing and the impact of implementation of the intervention on providers and staff who work in primary care clinics. First, there were no significant differences in opioid prescribing outcomes between those randomized to the enhanced intervention group and those randomized to the standard intervention. However, as described in our Annals of Family Medicine manuscript, compared with the nonequivalent control group, among patients in clinics that implemented the intervention, there were significant declines in both the total number of patients who continued on long-term opioids for their chronic pain and the proportion of patients on higher-dose opioids. Second, as described in a pending publication in the Journal of the American Board of Family Medicine, our qualitative analysis of interviews and focus group data from staff and providers in the clinics revealed that implementing the Six Building Blocks program had a positive impact on their work life, including increased confidence and comfort in care provided to patients with LtOT, increased collaboration among clinicians and staff, improved relationships with patients using LtOT, and an overall decrease in stress. Finally, we report learnings related to the factors that influenced tracking and monitoring of patients on long-term opioid therapy in primary care practices, a key challenge for healthcare systems undertaking this work.

B. Outcomes

1. Opioid Prescribing Outcomes:

The Tables and Figures below provide results from the quantitative analysis of prescribing data from the six enrolled rural-serving organizations.

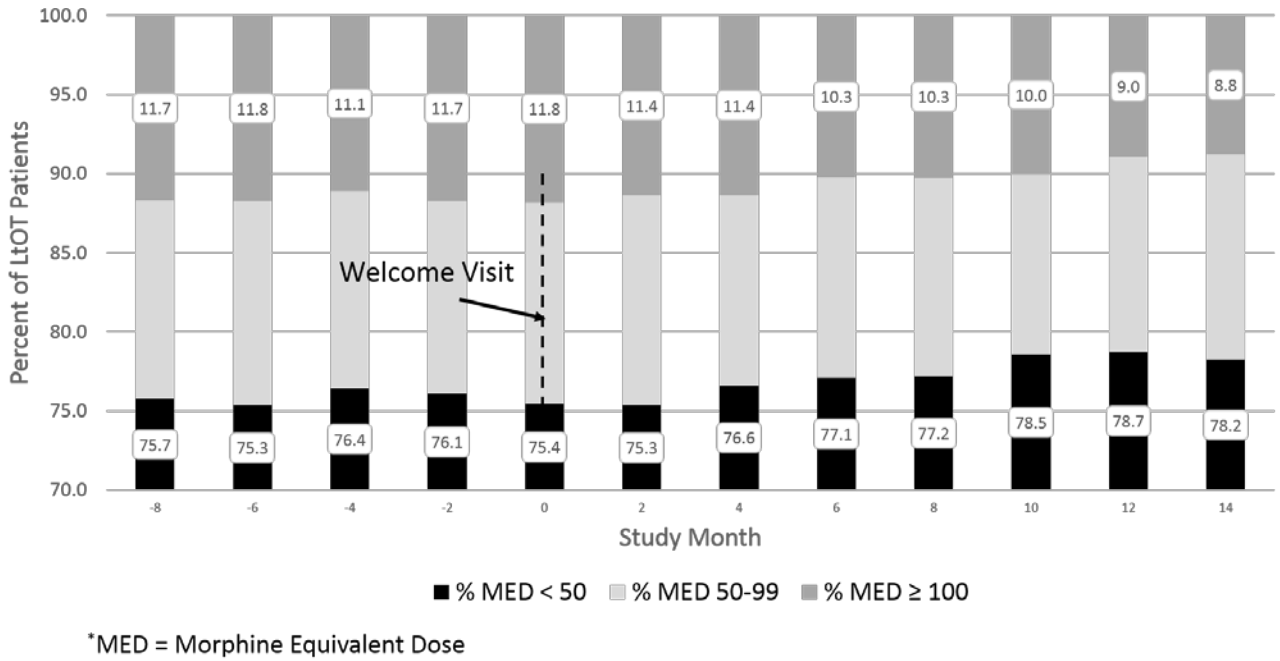
First, we show results of the proportion of patients on higher-dose opioids. When one compares the rate of decline between the study group and the comparison group, this translates into approximately four patients on higher-dose opioids decreasing their dose to <100 MED per month within the intervention sites but only 2.4 higher-dose opioid patients per month doing so within the comparison group.

Table 2: Trend in Proportion of Patients ≥ 100 Morphine Equivalent Dose (MED)

Interrupted Time Series within Study Sites					
Variable	**DF**	**Coefficient**	**S.E.**	**t-value**	**p-value**
Intercept	1	11.929	0.329	36.3	<0.0001
Time (secular trend)	1	0.358	0.351	1.02	0.320
Change in level	1	-0.054	0.065	-0.82	0.420
Change in slope	1	-0.138	0.069	-2	0.060
Interrupted Time Series Study Sites versus Comparison Group Controls					
Variable	**DF**	**Coefficient**	**S.E.**	**t-value**	**p-value**
Intercept	1	3.943	0.448	8.8	<0.0001
Time (secular trend)	1	-0.226	0.089	-2.55	0.019
Change in level	1	1.592	0.478	3.33	0.003
Change in slope	1	0.242	0.094	2.58	0.018

Figure 1 below shows overall trends in opioid dose among patients in the intervention clinics by dividing patients into three groups: <50 MED, 50-99 MED, and 100 or more MED by month during the 15 months of active intervention.

Figure 1: Intervention Clinic Trend in Proportion of Patients by MED* Category



*MED = Morphine Equivalent Dose

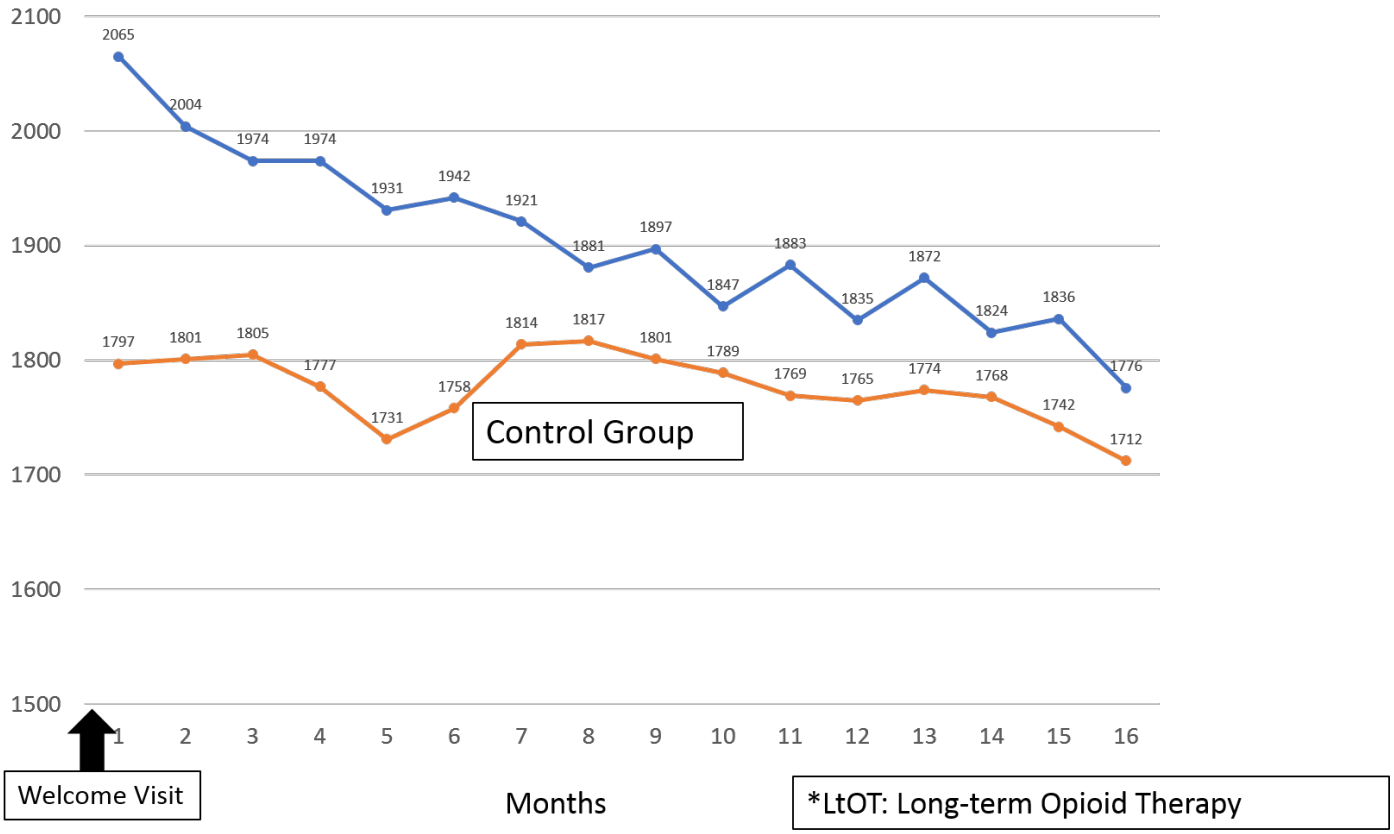
Next, we report on the trend in the number of patients who continue to receive monthly refills for opioids before and after the start of the intervention. The interrupted time series analysis reveals a significant difference in the slope of the trend before and after the start of the intervention:

Table 3: Trend in Number of Patients on Long-term Opioid Therapy (LtOT)

Interrupted Time Series within Study Sites					
Variable	**DF**	**Estimate**	**S.E.**	**t-value**	**p-value**
Intercept	1	1680	38.1	44.1	<0.0001
Time (secular trend)	1	-133.0	40.7	-3.27	0.004
Change in level	1	60.7	7.5	8.04	<.0001
Change in slope	1	-75.8	8.0	-9.48	<0.0001

Figure 2 below shows the trend in the number who continued to receive refills for opioids in both the intervention and control group of patients. The number of LtOT patients in the intervention group declined by 14.0% compared with a 4.8% decline in the control group.

Figure 2: Number of LtOT* Patients by Month



2. Impact on Staff and Clinicians in Rural-serving Clinics

Key findings from our qualitative interviews and focus groups with the leaders, clinicians, and staff of participating organizations were as follows:

- Clinicians and staff described an increase in confidence and comfort in three areas: the quality of care they provided, the work processes, and their role in caring for patients using LtOT. One clinician stated: "*a framework for managing these patients makes me feel a lot more comfortable about managing chronic pain patients than I ever did before*."
- Staff reported functioning more confidently as independent members of the team. One staff member

said, "*You don't feel like you have to go find a provider to say, 'Is it okay if I order a urine drug screen?' You know it's okay*."

- Site participants credited consistency and clear communication across the clinic with helping patients accept changes, thereby decreasing some of the negative emotional interactions at the start of the intervention. As one clinic manager described, "*There's no more throwing fits out in the lobby and all the craziness that happens on the phone*…."
- After implementation, both clinicians and staff reported a decrease in stress. As one clinician succinctly put it, "*emotional stress is 100 percent better*."

3. Challenges and approaches to population management

We examined qualitative data (field notes and post-intervention interview and focus group transcripts) and used content analysis to categorize data into key themes and sub-themes to develop an understanding of factors that influenced tracking and monitoring of patients on LtOT in primary care practices. In our pending publication in the Journal of the American Board of Family Medicine, we describe four factors critical to developing a tracking and management system. Three factors occurred sequentially: 1) cohort identification – finding the right patients, 2) data collection and extraction – tracking the right data, and 3) data use – monitoring patients and adjusting care processes. The fourth factor, buy-in and participation, was essential for the success of the other three. In addition to identifying common challenges and approaches to tracking and monitoring patients using LtOT for chronic non-cancer pain in primary care, we make recommendations for a set of steps to take when building capacity for tracking and monitoring among organizations targeting improvements for safe opioid prescribing practices for chronic non-cancer pain in primary care.

C. Discussion

Clinic system redesign guided by the Six Building Blocks resulted in significant declines in both the proportion of patients on high-dose opioids and the total number of patients receiving opioids in these rural health clinics. Although the observed declines in opioid prescribing are modest, they only reflect the initial 15-month phase of implementing new clinic systems for opioid medication management in the study settings. For example, we observed that revision and approval of new clinic policies across the sites required an average of 6 months out of the 15 months of support. In addition, the structural changes put in place as a part of the Six Building Blocks program improved both organizational and emotional aspects of the workplace. Increased confidence, comfort, collaboration, and teamwork improved clinician and staff perceptions of the practice environment and overall professional satisfaction.

D. Conclusions

This mixed-methods study was substantial in scope, with many types of data presented about successes and challenges of primary care clinic redesign targeting the care of patients for chronic pain who are on opioids. An in-depth discussion of all facets of the implementation of the Six Building Blocks program is beyond the space limitations of this final report. Thus, in this section, we limit ourselves to bulleting the main study findings. Readers are referred to our published manuscripts, and those we hope to soon have published, for in-depth discussions of these topics.

E. Significance

With adequate implementation support, the Six Building Blocks program provides an evidence-based roadmap or guide for primary care clinics to provide guideline concordant prescribing of opioids long term for chronic pain in a manner that improves patient safety and the work life of primary care clinicians and staff.

F. Implications

It is also worth noting that, like other studies of changing opioid prescribing in primary care, we employed a blended implementation support strategy that combined practice facilitation with shared learning opportunities, the use of a clinical champion, and an implementation blueprint, the Six Building Blocks. The consistency of these findings across studies strongly suggest that external technical assistance, support, and resources are necessary for primary care clinics to make the clinic redesign required to provide guideline concordant care for patients on long-term opioids. One possible approach is a partnered "train-the-trainer" model, similar to that

tested with Veterans Affairs, in which an external expert trains and then provides support to an internal facilitator, such as a Quality Improvement lead within each rural clinic organization. It is also of critical importance to follow the impact of this program on patient disposition and patient-reported outcomes.

List of Publications and Products

ELECTRONIC RESOURCES:

Our public-facing ongoing education and resource website, “Six Building Blocks: A Team-Based Approach to Improving Opioid Management in Primary Care,” contains the Six Building Blocks framework developed as part of this study as well as all tools and resources.

URL: https://depts.washington.edu/fammed/improvingopioidcare

MANUSCRIPTS:

Published:

Parchman ML, Von Korff M, Baldwin LM, et al. Primary care clinic redesign for prescription opioid management. J Am Board Fam Med 2017 1/2;30(1):44-51. PMID 28062816.

In Press:

Parchman ML, Penfold RB, Ike, B et al. Team-based clinic redesign of opioid medication manager in primary care: Effect on opioid prescribing. Ann Fam Med. 2019 (In Press).

Ike B, Baldwin LM, Sutton S, et al. Staff and clinician work wife perceptions after implementing system-based improvements to opioid management. J Am Board Fam Med. 2019 (In Press).

Stephens KA, Ike B, Baldwin LM, et al. Challenges and approaches to population management of long-term opioid therapy patients in primary care. J Am Board Fam Med. 2019 (In Press).

Under preparation:

Baldwin LM, et al. Variation across Six Clinical Organizations in the Implementation and Outcomes of the Six Building Blocks program to improve Opioid Management in Primary Care Practice.

Parchman ML, et al. Barriers and Facilitators to Implementing Changes in Opioid Prescribing in Rural Clinics.

PRESENTATIONS/OTHER DISSEMINATION:

Our work has been presented or reported in the following venues:

Authors/ Presenters	Topic or Title	Meeting/Location	Notes
Tauben, Parchman, Baldwin, Ike, Stephens, Von Korff	The Six Building Blocks of Team-Based Opioid Management	Northwest Regional Primary Care Association Fall 2016 Conference	Presentation
Parchman, Baldwin, Ike, Stephens, Von Korff	Clinic Support for Safe Opioid Prescribing Predicts Clinician Confidence in Opioid Prescribing Management	NAPCRG 2016	Poster
Parchman, Baldwin, Ike	Six Building Blocks to Safer Opioid Prescribing: A Structured De-Implementation Framework	Dissemination and Implementation Conference 2016	Poster and a special session
Baldwin	Improving Team-Based Chronic Opioid Management: A Pragmatic Randomized Cluster Trial in Rural-Serving Primary Care Clinics. Success Built on Collaboration and Adaptation	NIDA Clinical Trials Network Annual Meeting 2017	Presentation
Baldwin	Six Building Blocks to Safer Opioid Prescribing: A Structured De-Implementation Framework	April 2017 UW Dept of Family Medicine Fair	Presentation
Parchman, Gehring	How to Create Systems Change within a Clinical Setting	2017 Southern Oregon Pain Conference	Presentation
Tauben, Parchman	Practical Pain Management in the Office	2017 Southern Oregon Pain Conference	Presentation
Baldwin, Parchman, Ike	Team-Based Management of Chronic Opioid Therapy	UW Department of Family Medicine Annual September CME Conference, September 2017	CME conducted by team
	Addressing the Opioid Epidemic in Rural Washington and Idaho	Migrant Clinicians Network website	Published January 2017: http://www.migrantclinician.org/streamline-2016-fall/addressing-the-opioid-epidemic
	Possible 'Building Blocks" for Better Opioid Prescription Management Identified	Healio.com	Published February 2017: http://www.healio.com/family-medicine/practice-management/news/online/%7Bc57e935c-ca10-4fe2-97ce-891999217d31%7D/possible-building-blocks-for-better-opioid-prescription-management-identified

PRESENTATIONS/ OTHER DISSEMINATION continued

Authors/ Presenters	Topic or Title	Meeting/Location	Notes
	Fighting the Opioid Epidemic One Patient at a Time	Yakima Herald	Published March 2017: http://www.yakimaherald.com/news/fighting-the-opioid-epidemic-one-patient-at-a-time/article_f9daa6e0-055b-11e7-9bc6-93f3bce15693.html
Parchman	Six Building Blocks for Team-Based Chronic Opioid Management	Washington Academy of Family Physicians (WAPF) Annual Scientific Assembly Committee, May 2017	Presentation
Parchman	Team-Based Opioid Management in Rural Primary Care	AHRQ Webinar, December 2017	Webinar
Baldwin	Team-Based Opioid Management in Rural Primary Care	WhidbeyHealth Medical Center, January 2018	Presentation
Baldwin	Opioid abuse prevention session	2018 Western Forum for Migrant and Community Health, February 2018	Panel Discussion
Baldwin, Tauben, Mark Stephens, Jessica Merlin	Six Building Blocks Workshop: Implementing Team-Based management of Chronic Opioid Therapy	American Pain Society Scientific Summit, March 2018	Presentation
Parchman	Team-based approaches to opioid medication management	Community Healthcenters Incorporated: HRSA workforce, March 2018	Webinar presentation
Parchman	Six Building Blocks	Oregon Pain Guidance leadership, March 2018	Presentation
Parchman	Implementing Team-Based Opioid Management in Primary Care	Washington Academy of Family Physicians (WAPF) Annual Scientific Assembly Committee, May 2018	Presentation
Baldwin	Implementing a Team-Based Approach to Improving Opioid Management in Primary Care: The Six Building Blocks Program	Walla Walla Opioid Summit, June 2018	Presentation
Parchman	Implementing a Team-Based Approach to Improving Opioid Management in Primary Care: The Six Building Blocks Program	AHRQ Patient Safety Organization meeting, November 2018	Presentation
Parchman	Implementing a Team-Based Approach to Improving Opioid Management in Primary Care: The Six Building Blocks Program	Washington State Opioid Task Force, January 2019	Presentation

PRESENTATIONS/ OTHER DISSEMINATION continued

Authors/ Presenters	Topic or Title	Meeting/Location	Notes
Parchman	Implementing a Team-Based Approach to Improving Opioid Management in Primary Care: The Six Building Blocks Program	Migrant Clinicians Network (MCN) National Webinar; HRSA-supported community health centers, April 2019	Webinar
Baldwin	Opioid Use Disorder & Trauma Informed Care Summit: The Six Building Blocks	Greater Columbia ACH regional summit in Yakima, WA, June 2019	Presentation

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