# Growing an Opioid Stewardship Program: Implementation of an Opioid Stewardship Pharmacist and an Interdisciplinary Oversight Committee

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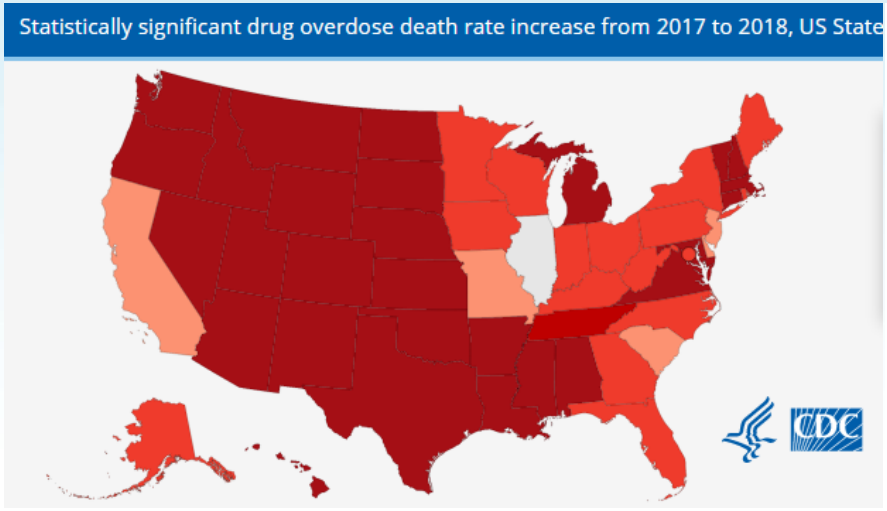
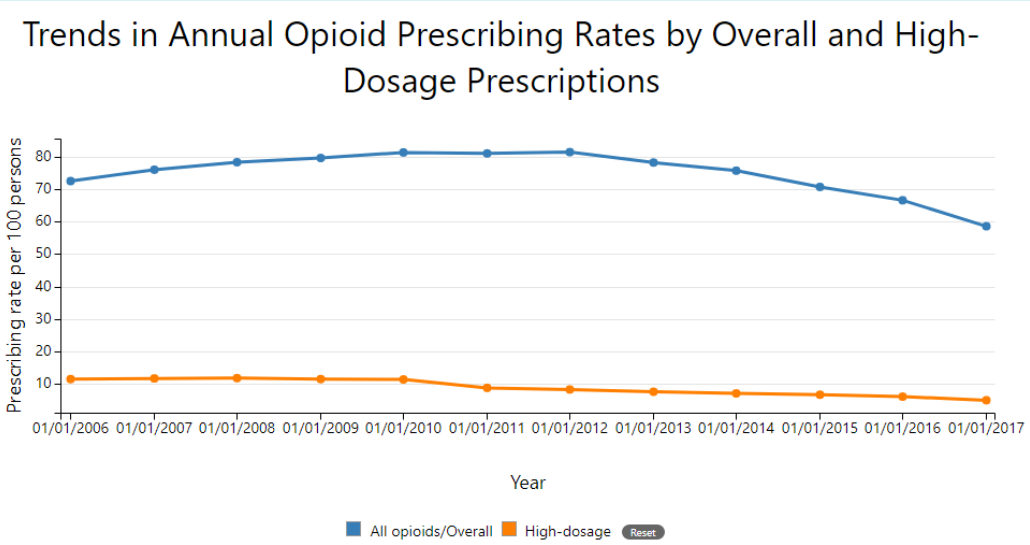
Eskenazi Health

# Learning Objectives

1. Define opioid stewardship and its role in meeting regulatory requirements across the continuum of care
2. Describe the role of an opioid stewardship clinical pharmacist in combatting the opioid epidemic
3. Summarize the goals, responsibilities, and metrics of an interdisciplinary opioid and pain oversight committee

# How Does Your State Stack Up?

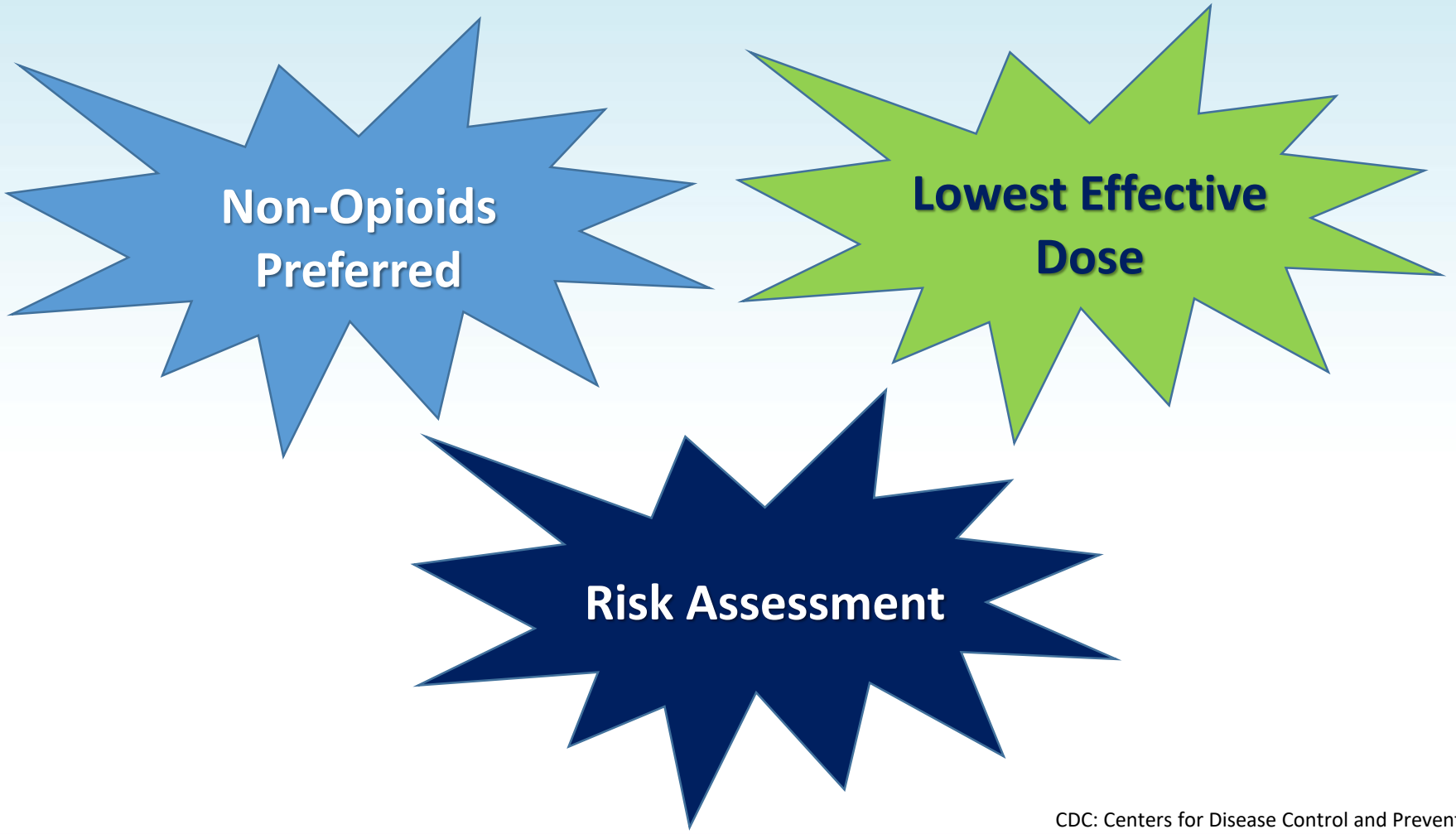



https://www.cdc.gov/drugoverdose/data/statedeaths/drug-overdose-death-rate-increase-map-2017-2018.html Accessed September 14, 2020

https://www.cdc.gov/drugoverdose/data/prescribing/prescribing-practices.html Accessed September 14, 2020

# CDC Chronic Pain Guidelines




CDC: Centers for Disease Control and Prevention

https://www.cdc.gov/drugoverdose/pdf/guidelines_at-a-glance-a.pdf. Accessed August 1, 2019.

# CDC Quality Measures

## New Opioid Prescriptions

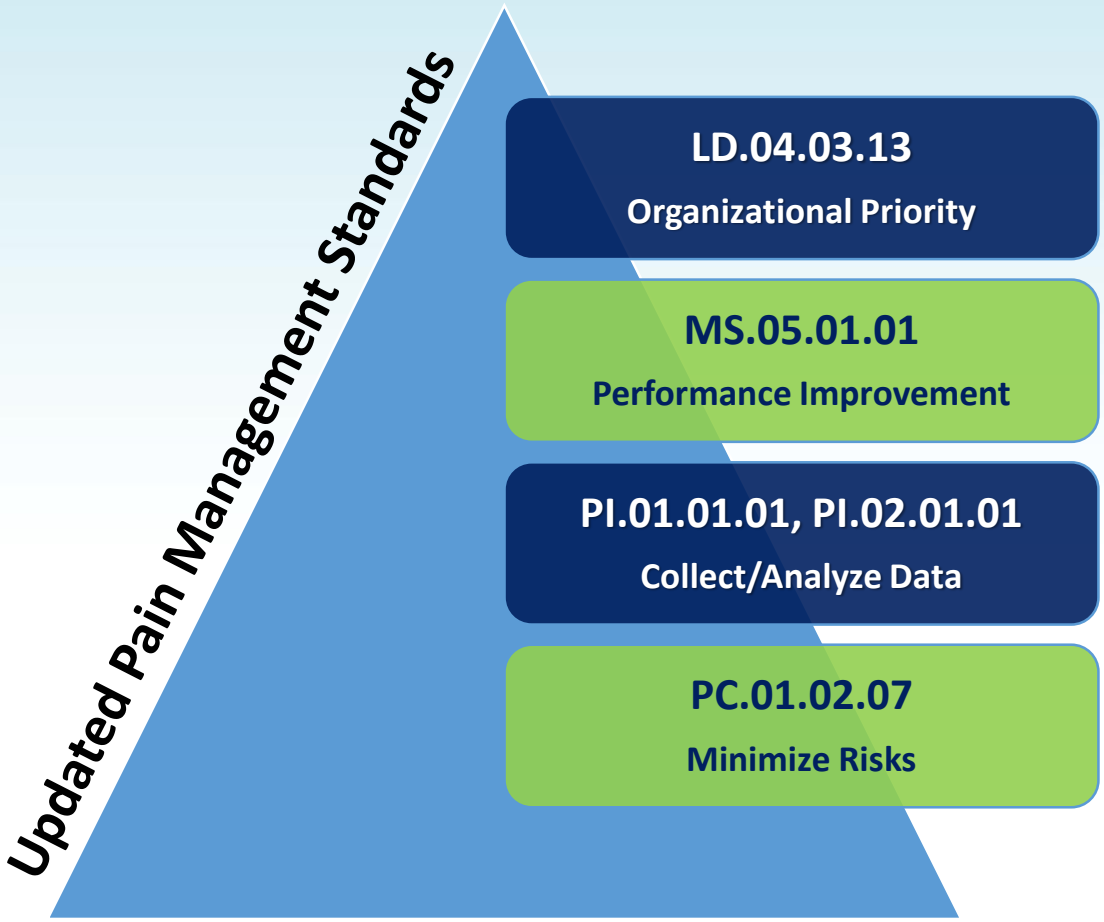
- % of patients with:
  - new opioid prescription for immediate-release opioid
  - new opioid prescription for chronic pain with PDMP documentation
  - new opioid prescription for chronic pain with UDS prior to prescribing
  - follow-up within 4 weeks of starting opioid for chronic pain
  - new opioid prescription for acute pain for ≤ 3 day supply

## Long-Term Opioid Therapy

- % of patients:
  - taking ≥ 50 MME/day
  - taking ≥ 90 MME/day
  - receiving concurrent prescription for benzodiazepine
  - with follow-up visit at least quarterly
  - with quarterly pain and functional assessments
  - with PDMP documentation being checked at least quarterly
  - counseled on risks/benefits of opioids at least annually
  - with documentation that UDS performed at least annually
  - with referral or visit to non-pharmacologic therapy as treatment for pain
  - counseled on purpose/use of naloxone
  - with opioid use disorder referred to/prescribed MAT

The Centers for Disease Control and Prevention (CDC). Clinical Quality Improvement Opioid Measures. Available at: https://www.cdc.gov/drugoverdose/pdf/prescribing/CDC-DUIP-FactSheet-At-A-Glance_Opioid-Measures-508.pdf. Accessed August 13, 2019

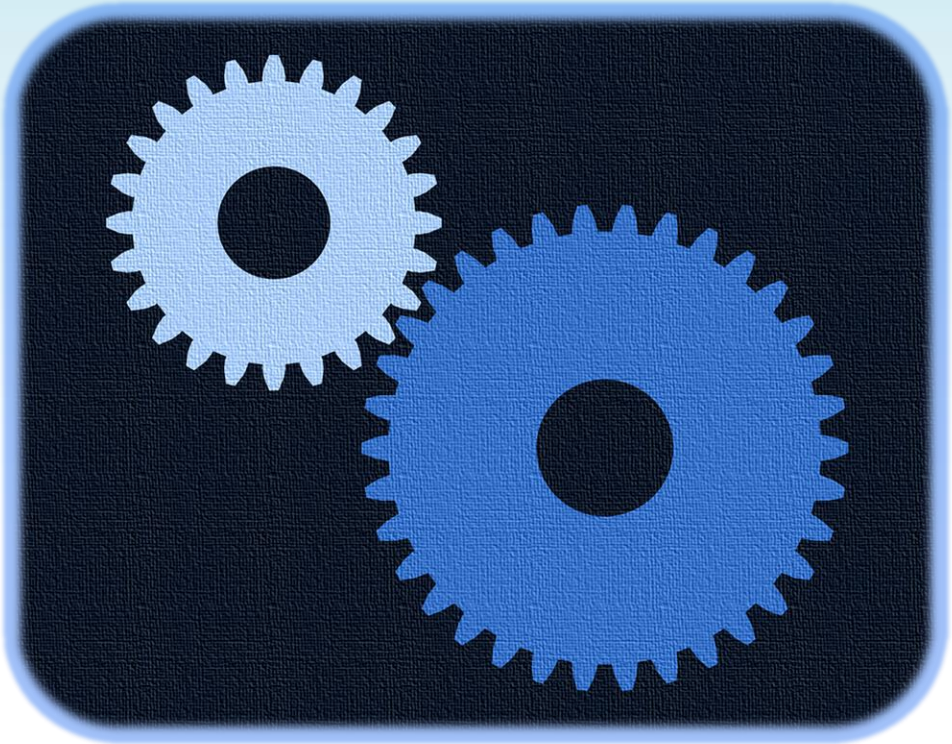
# TJC Standards Inpatient




TJC: The Joint Commission

The Joint Commission. Joint Commission enhances pain assessment and management requirements for accredited hospitals. Available at: https://www.jointcommission.org. Accessed May 27, 2020. Pain Management Standards for Accredited Organizations. Available at: https://www.jointcommission.org. Accessed May 27, 2020

# Interactive Activity #1



- **Task:** Complete the opioid stewardship regulatory requirement checklist for your health-system
- **Time limit:** 2 minutes

ESKENAZI HEALTH

# Health-System Opioid Stewardship Checklist: Regulatory Requirements

| Yes! Fully implemented here. | Somewhat! Still working on it. | Nope! Something to consider. | My health-system... |
|---|---|---|---|
| ☐ | ☐ | ☐ | ...has identified pain assessment/management as an organizational priority. |
| ☐ | ☐ | ☐ | ...has identified a leader/leadership team to be responsible for pain management and safe opioid prescribing. |
| ☐ | ☐ | ☐ | ...involves medical staff in performance improvement activities related to safe opioid prescribing. |
| ☐ | ☐ | ☐ | ...collects and analyzes data regarding pain and the safe use of opioids. |
| ☐ | ☐ | ☐ | ...has put systems in place to minimize risks associated with pain management. |
| ☐ | ☐ | ☐ | ...has formal opioid stewardship practices in place |
| ☐ | ☐ | ☐ | ...has a pharmacist participate on a pain consult team. |
| ☐ | ☐ | ☐ | ...has a pharmacist monitor surgery and post-operative opioid prescribing. |
| ☐ | ☐ | ☐ | ...has an opioid stewardship program. |
| ☐ | ☐ | ☐ | ...has an oversight committee for opioid and pain management practices. |

# …What now?

## Implementation of a pain medication stewardship program

ferent types of pain management, there was no accountability for any one service to address the needs of the patient popu lation as a whole. The committee cha

ain med tant to p its impact medication recently pu *Event Alert* su ting

The Joint Commission Journal on Quality and Patient Safety 2019; 45:3–13

## A Health System–Wide Initiative to Decrease Opioid-Related Morbidity and Mortality

*Scott G. Weiner*
*Erika A. Pabo,*
*Stanley W. Ashl*

**Background:**

The Joint Commission Journal on Quality and Patient Safety 2019; 45:1–2

## The Time for Opioid Stewardship Is Now

*Friedhelm Sandbri*

On October 2 and Human crisis affecting the gency.[1] This public increase in lives l 1990s and the end ciety as a whole c use disorder (OU

JOURNAL OF PAIN & PALLIATIVE CARE PHARMACOTHERAPY
https://doi.org/10.1080/15360288.2020.1765066

EDITORIAL

## Opioid Stewardship: Building on Antibiotic Stewardship Principles

**ABSTRACT**
The opioid stewardship model is born out of the antimicrobial stewardship model, and thus there are many shared characteristics. Both opioid stewardship and antimicrobial stewardship are based on the principle that there is an indication for a particular medication in the right patient, at the right [illegible] antimicrobial st[illegible]ship [illegible] a later [illegible] of develop

**KEYWO**
Opioid; stewardsh

Ghafoor VL, et al. *Am J Health-Syst Pharm*. 2013;70:2070-2075. Weiner SG, et al. *Jt Comm J Qual Patient Sf.* 2019;45:3-13.
Sandbrink F and Uppal R. *Jt Comm J Qual Patient Sf.* 2019;45:1-2. Uritsky TJ, et al. *J Pain Palliat Care Pharmacother* 2020

# What is Stewardship?

**"The responsible overseeing and protection of something worth caring for and preserving"**

Brenn BR, et al. *Hospital Pediatrics*. 2016;6(9).

# Literature Review: Opioid Stewardship Programs

| University of Minnesota Medical Center | Penn State Milton S. Hershey Medical Center |
|---|---|
| 2011: development of interdisciplinary pain steering committee that restructured pain management services | 2016: launched interdepartmental opioid stewardship team |
| Membership: anesthesia, physical medicine and rehabilitation, surgical services, inpatient pain management consultation team, palliative medicine, pharmacy, nursing | Membership: chronic pain attending physicians, nurse practitioners, pharmacist |
| Role of Pharmacist:<br>• Provide medication reconciliation upon admission<br>• Attend rounds to evaluate pain management<br>• Collaborate on perioperative pain management<br>• Recommend regimens for complex cases<br>• Implement medication safety programs to address opioid-induced over-sedation<br>• Provide expertise for formulary management for analgesic medications | Roles of Team Members:<br>• Pharmacist: reviews profiles to identify harmful orders<br>• Attending Physicians: available for peer-to-peer discussions<br>• Nurse Practitioners: provide primary contact with patients in consult service and interact with patients, nurses, and prescribers to provide education about safe and effective analgesia |

Ghafoor VL, et al. Implementation of a Pain Stewardship Program. *Am J Health-Syst Pharm*. 2013; 70(23):2070-5.

Vissering T. Implement an Opioid Stewardship Program. *Pharmacy Purchasing and Products*. 2019;16(1):26.

# Literature Review: Opioid Stewardship Programs

| University of Minnesota Medical Center | Penn State Milton S. Hershey Medical Center |
|---|---|
| Program initiative consisted of pharmacist reviewing opioid orders for 1 year period<br>• June 2010-June 2011<br><br>Reviewed a total of 2499 patients<br>• 1099 patients (44%) required an intervention related to pain medication reconciliation<br>• 154 patients (16%) had pain medication stewardship consultations requested by physicians<br><br>Pharmacist screens patients throughout hospital for opioid therapy problems and provides proactive plan for patients with complex opioid regimens | |

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Ghafoor VL, et al. Implementation of a Pain Stewardship Program. *Am J Health-Syst Pharm*. 2013; 70(23):2070-5.

Vissering T. Implement an Opioid Stewardship Program. *Pharmacy Purchasing and Products*. 2019;16(1):26.

# Literature Review: Stewardship Survey Results

| Vizient University Health System Consortium Pharmacy Network Survey | |
|---|---|
| **Purpose** | Discover and describe current practices for opioid stewardship |
| **Methods** | Academic medical centers within Vizient University Health System Consortium Pharmacy Network completed a survey of 30 questions about current opioid stewardship practices among hospitals and health systems in October 2016 |
| **Results** | 27 respondents<br>• 42.3% have opioid stewardship activities in place (either formal consult services or role of clinical pharmacy specialist) . Very few have opioid stewardship embedded into daily practice of clinical pharmacists.<br>  • Of those respondents, > 50% have pharmacists as part of a pain consult team. Principle roles of these pharmacists: provider education, patient education, and optimization of therapy outside of collaborative practice or prescribing role.<br>  • Also, >50% have a pharmacist monitor surgery and post-operative opioid prescribing<br>• Most have opioid medication policies in place to address range orders, smart pump programming of opioids, limits on meperidine use, and cumulative limits on acetaminophen dosing. |

Phelps P, et al. A Survey of Opioid Medication Stewardship Practices at Academic Medical Centers. *Hosp Pharm*. 2019; 54(1):57-62.

# Literature Review: Stewardship Survey Results

| The Johns Hopkins Hospital Opioid Stewardship Survey | |
|---|---|
| **Purpose** | Identify prevalence of current hospital practices to improve opioid use |
| **Methods** | Cross-sectional survey of hospital best practices in March 2018 examining presence of opioid stewardship programs and related practices |
| **Results** | 133 hospitals<br>• 23% reported opioid stewardship programs<br>• 14% reported prospective screening processes to identify patients at high risk of opioid-related adverse events (ORAEs)<br>• 90% reported having pain management services<br>• 67% reported having palliative care service providing pain management services |

Ardeljan DL, et al. Current state of opioid stewardship. *Am J Health-Syst Pharm.* 2020;77:636-43.

# NQF Opioid Stewardship


Friedhelm S and Uppal R. The Time for Opioid Stewardship Is Now. *The Joint Commission Journal on Quality and Patient Safety*. 2019;45:1-2.

# Available Literature

JOURNAL OF PAIN & PALLIATIVE CARE PHARMACOTHERAPY
https://doi.org/10.1080/15360288.2020.1765066

Taylor & Francis
Taylor & Francis Group



EDITORIAL

## Opioid Stewardship: Building on Antibiotic Stewardship Principles

**ABSTRACT**
The opioid stewardship model is born out of the antimicrobial stewardship model, and thus there are many shared characteristics. Both opioid stewardship and antimicrobial stewardship are based on the principle that there is an indication for a particular medication in the right patient at the right time. As antimicrobial stewardship is in a later stage of development, looking at the two in parallel can lead to interesting learning and development opportunities for opioid stewardship. Two requirements of antimicrobial stewardship that need to be applied to opioid stewardship for optimum outcomes are the requirement for dedicated resources, more specifically a trained pharmacist, and a declaration that opioid stewardship is essential for health-system accreditation.

**KEYWORDS**
Opioid; antimicrobial; stewardship; pharmacist

### Introduction

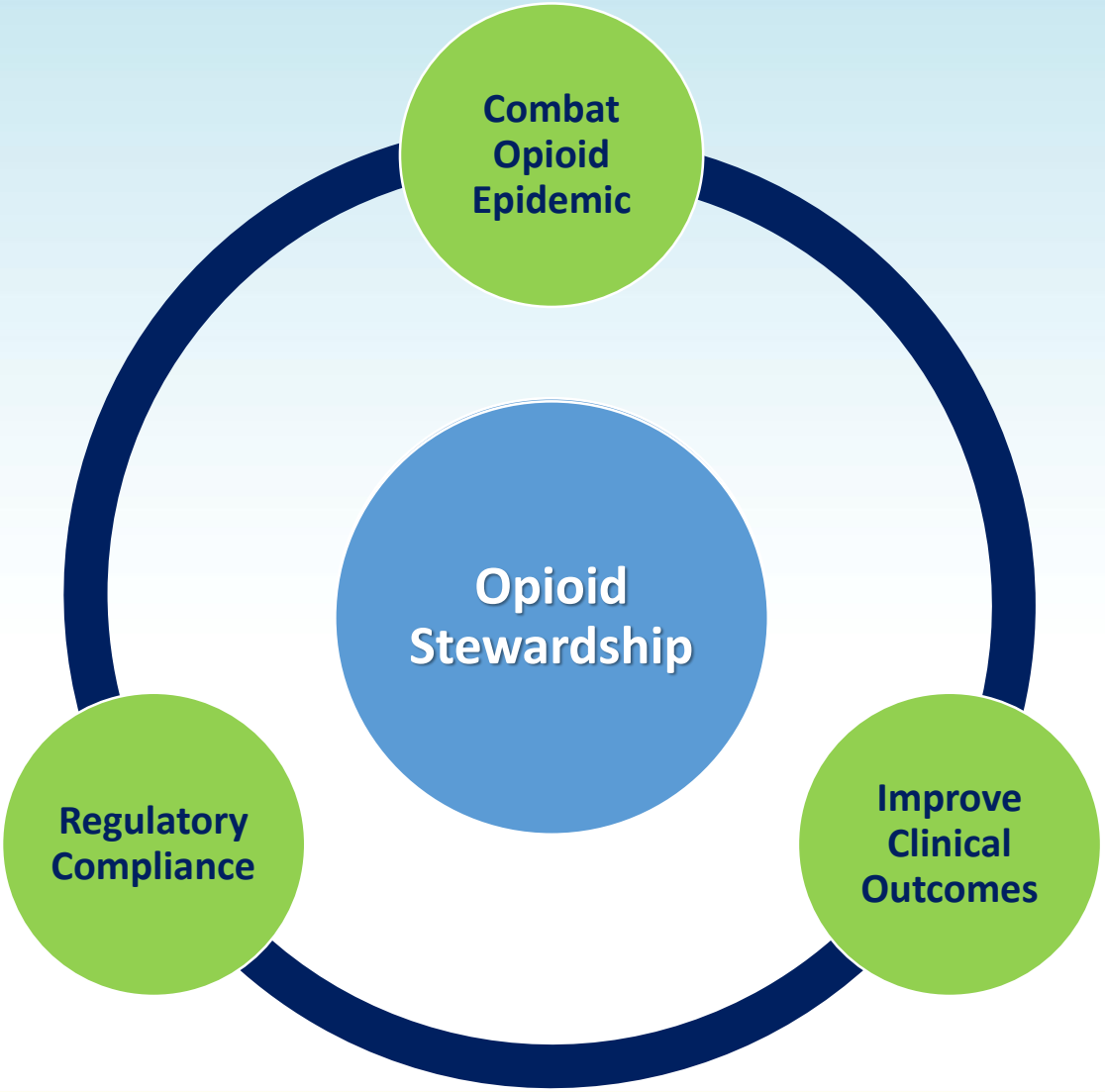
The term "stewardship" is defined as the job of supervising or taking care of something. It is a term found in [illegible] aspects of healthcare and [illegible] specifically in

### Opioid stewardship history

In 2017, the US Department of Health and Human Services declared the opioid crisis a national emergency. Hospitals and healthcare systems are searching for and

Uritsky TJ, Busch ME, Chae SG, and Genord C. *J Pain Palliat Care Pharmacother* 2020.

# Goals of Opioid Stewardship




Friedhelm S and Uppal R. The Time for Opioid Stewardship Is Now. *The Joint Commission Journal on Quality and Patient Safety.* 2019;45:1-2.

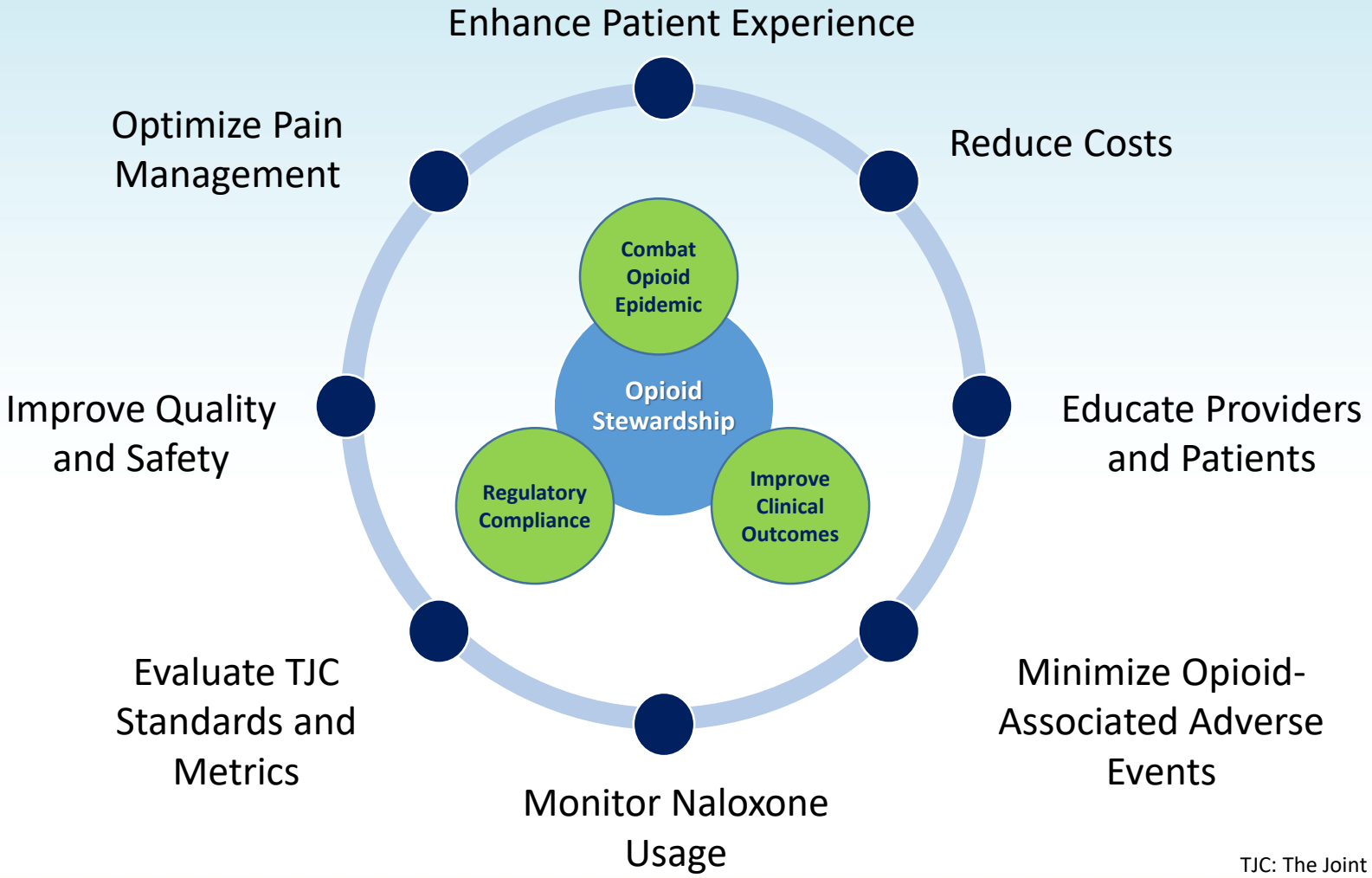
# Opioid Stewardship Position

## Opioid Stewardship Program across inpatient and outpatient services

- PI activities related to opioids
- Track/report metrics
- Co-chair interdisciplinary oversight committee
- Policy/procedure development
- Leverage EHR to support pain management and opioid use
- Development of controlled substance diversion detection and prevention program

EHR: electronic health record
PI: process improvement

# Opioid Stewardship at Eskenazi Health




TJC: The Joint Commission

# Opioid and Pain Management Oversight Committee (OPOC)


ICPS: Indianapolis Coalition for Patient Safety

# OPOC Goals

1. Actively engage and educate medical staff, hospital staff, and hospital leadership in improving pain assessment and management, including strategies to ensure appropriate opioid use, minimize risks associated with opioid use, and decrease associated stigma
2. Incorporate non-pharmacological pain treatment modality into patient care
3. Facilitate access to prescription drug monitoring programs
4. Analyze opioid prescribing data including monitoring use of opioids and determine if they are used safely and oversee process improvement activities
5. Improve pain assessment by concentrating more on how pain is affecting patients' physical function

# OPOC Goals (continued)

6. Engage patients in treatment decisions about their pain management and incorporate patient feedback and contribution into system-level initiatives related to pain management and addiction management
7. Address patient education and engagement, including storage and disposal of opioids to prevent these medications from being stolen or misused by others
8. Facilitate awareness of and referral of patients with complex pain management needs to treatment programs
9. Establish mechanism to address and evaluate pain management disparities amongst various patient types
10. Identify and acquire the equipment needed to monitor patients who are at high-risk for adverse outcomes from opioid treatment

# Routine OPOC Agenda Items

## Yearly

- Opioidgram featuring:
  - Naloxone use
  - MED / MME
  - Evaluation of opioid prescriptions
  - PDMP utilization
- Charter review

## Quarterly

- ADR and outcomes
- Buprenorphine to opioid prescription comparison
- Track filled/unfilled Rx
- Patient/Provider satisfaction
- Compliance to protocols and order sets
- Metric review

## Monthly

- Patient safety incidents
- ICPS updates
- FDA/DEA alerts
- Review polices and procedures
- Education initiatives

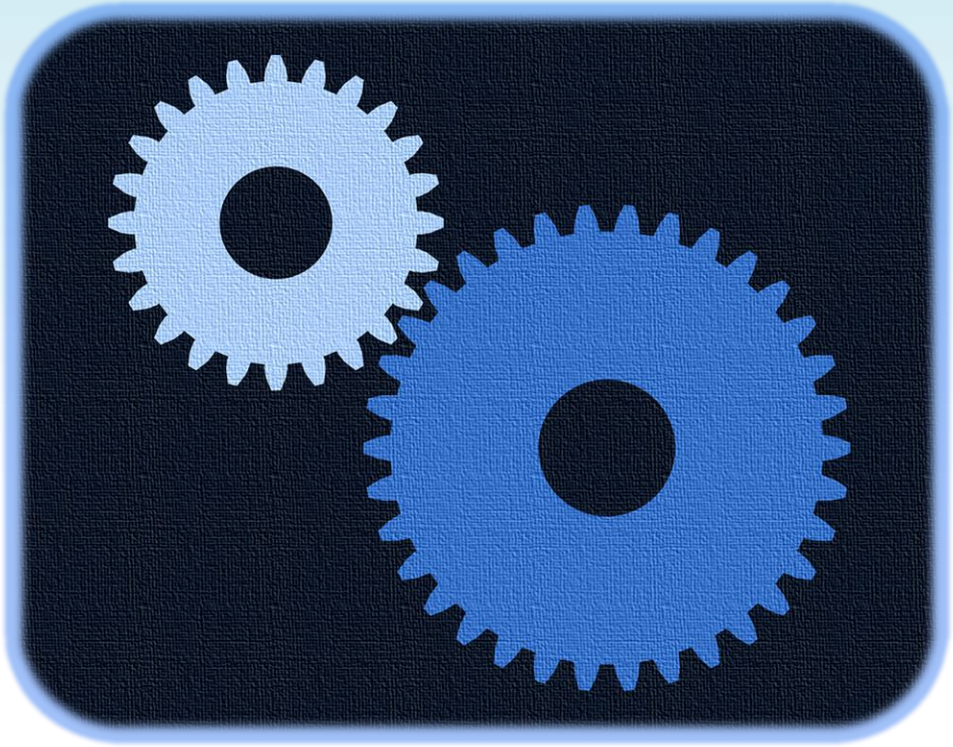
## Ad Hoc

- ISMP surveys
- Regulatory compliance
- Patient complaints
- Relevant EHR updates
- Additional items as needed

ADR = adverse drug reaction
MED = medication equivalent dosing
MME = morphine milligram equivalents
PDMP = prescription drug monitoring programs

# OPOC Membership

# Interactive Activity #2



- **Task:** Identify opioid stewardship initiatives that have been implemented at your health-system
- **Time limit:** 3 minutes

# Completed and Ongoing Projects

- Pain management policy review

# Pain Management Policies

**No Follow-Up Action Needed:**

| Policy Number and Title | Owner |
|---|---|
| Labor and Delivery Standards of Care and Documentation Expectations | Deborah Evert |
| OB Exp | |
| 701 | |
| 701 | |
| 701 | |
| 741 | |
| 206 | |
| NIC | |
| Ne | |
| 528 Me | |
| E.2 | |
| OB | |
| Em Pri | |
| 700 | |
| FB 33 Manage Hypertension | |

**Policies to be Merged:**

| Policy Number and Title | Owner | Next Review | Merger Recommendation |
|---|---|---|---|
| 801-0 Nalox Overd | | | |
| 850-0 Contr Presc | | | |
| FB 60 Morp Prese Obste Pain | | | |
| 645-0 Leave | | | |

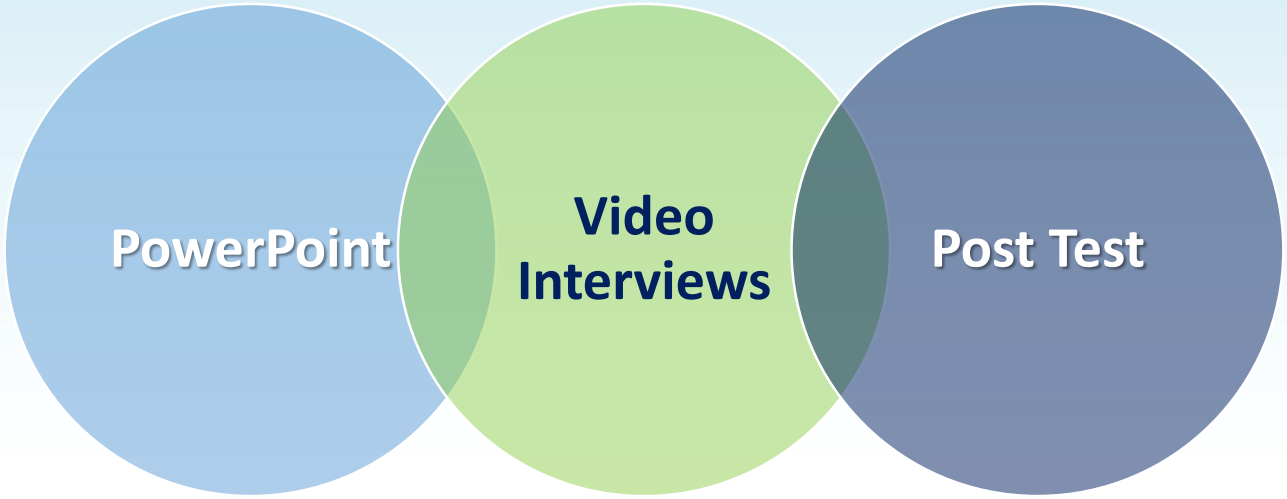
**Follow-Up Action Needed:**

| Policy Number and Title | Owner | Recommendation |
|---|---|---|
| 800-008 Documentation | Brigetta Ober | Send to Crissy for evaluation |
| 850-025 Nursing Protocol for Narcotic Prescription Refills for Chronic Opioid Therapy | Kenneth Klotz | Convert to 950 level policy by expanding to all outpatient sites, combine with 850-018 |
| Antenatal Standards of Care and Documentation Expectations | Deborah Evert | Scope of practice, but past due for review and p as 5th vital sign? |
| 850-039 Dental Documentation | Melinda Rosa | Need review for TJC compliance. Cross reference pain assessment policy (700-118) and/or state p scale utilized. |
| 850-048 Dental Program Intoxicated Persons | Melinda Rosa | Needs ethical and legal review. Patients and pain should be treated. Potential 950 policy instead o dental specific? |
| 850-018 Opioid Prescribing Guidelines | Seth Rinderknecht | Recommend converting to 950 level policy and combining with 850-025 (RN protocol for opioid ...criptions) |

# Completed and Ongoing Projects

- Pain management policy review
- Anti-stigma all-staff education

# Anti-Stigma Education



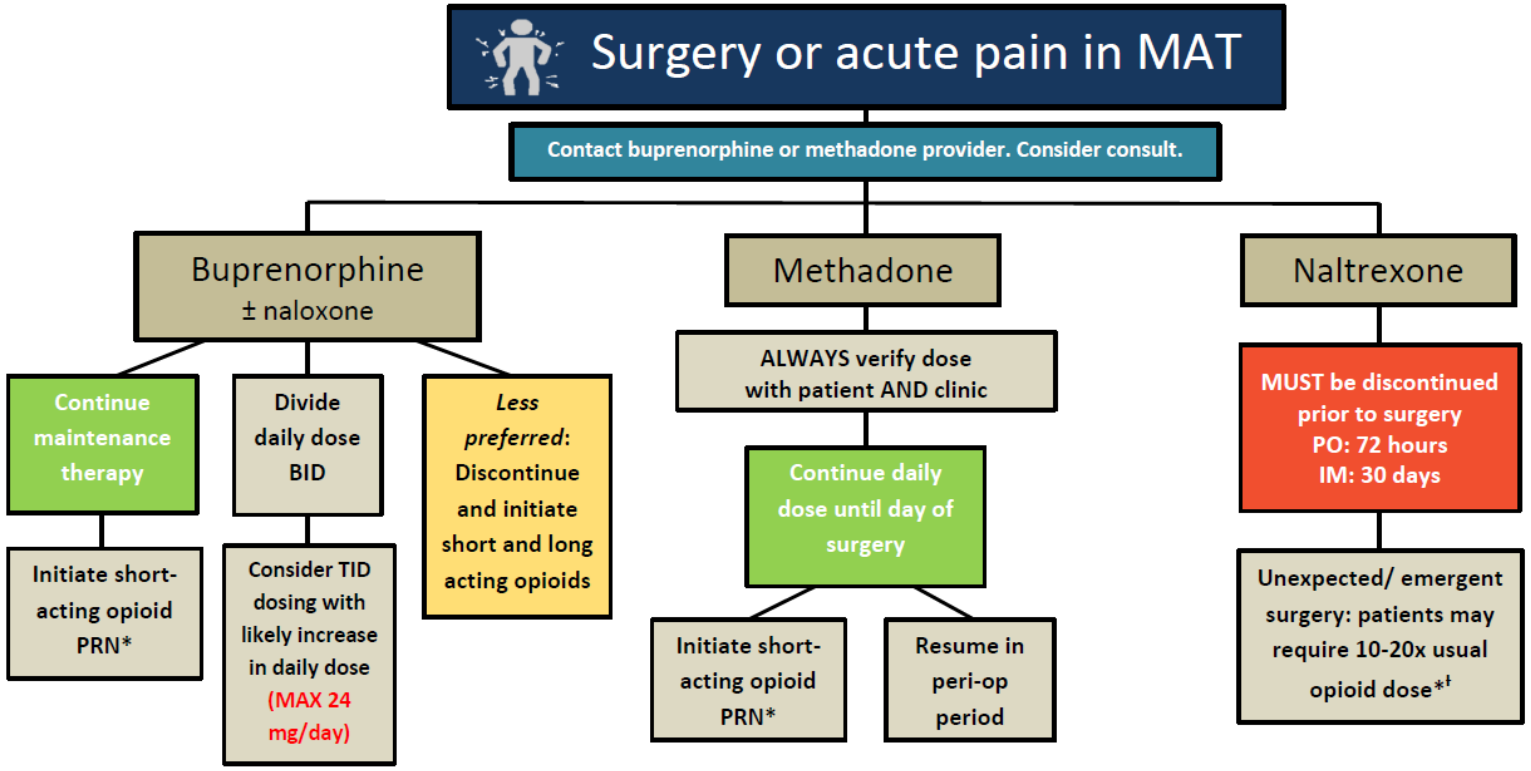
# Completed and Ongoing Projects

- Pain management policy review
- Anti-stigma all-staff education
- MAT education for providers

# MAT Education

# Medication Assisted Treatment (MAT)
## Surgery and Acute Pain Algorithm

**Summary:**
Buprenorphine and methadone MAT should be continued during surgery or acute pain, and must be combined with multimodal analgesia (in accordance with ERAS protocols). Naltrexone must be discontinued, and in cases when this is not possible, extremely high doses of opioids may be necessary. *This algorithm does not apply to patients receiving these agents for anything other than substance use disorder.*




* If significant short-acting opioids are required, consider ICU or step-down observation
ǂ For exceptional pain requirements, consider consulting Acute Pain Service (APS)
^ Refer to Policy 701-3040 – *Guidelines for the Inpatient Use of Buprenorphine-Based Medications and Methadone in Patients with Opioid Use Disorder* for prescribing guidance

JG/MEB 09.2020

# Completed and Ongoing Projects

- Pain management policy review
- Anti-stigma all-staff education
- MAT education for providers
- Post-operative opioid prescribing evaluation

# An Evaluation of Post-Operative Opioid Prescribing Patterns Compared to Recent Procedure-Specific Recommendations

Michelle E. Busch, PharmD, BCPS[1]; Palmer MacKie, MD, MS; Christopher Bollinger, PharmD Candidate[1,2]; Rebecca Gerske, PharmD Candidate[1,2]; Morgan Ragsdale, PharmD Candidate[1,2]; Todd A. Walroth, PharmD, BCPS, BCCCP, FCCM[1]

[1]Eskenazi Health, Indianapolis, IN; [2]Butler University College of Pharmacy and Health Sciences, Indianapolis, IN

## INTRODUCTION

- *JAMA Surgery* published a retrospective, multi-site, population-based analysis in 2019 that evaluated opioid prescribing and consumption patterns for patients undergoing 12 different surgical procedures.[1]
- Results prompted the Opioid Prescribing Engagement Network (OPEN) to publish a set of recommendations on the number of opioid tablets to be prescribed after specific surgical procedures for opioid-naive patients.
- OPEN recommends up to 20 tablets after cesarean section (C-section), 30 tablets after total hip arthroplasty (THA), and 50 tablets after total knee arthroplasty (TKA), 10 tablets after appendectomy, hernia repair, and cholecystectomy, 15 tablets after hysterectomy, 5 tablets after lumpectomy, and 20 tablets after mastectomy,[2] which are common surgical procedures at Eskenazi Health.

## OBJECTIVE

- The purpose of this study was to evaluate Eskenazi Health's opioid prescribing patterns following these nine surgical procedures (C-section, THA, TKA, appendectomy, hernia repair, cholecystectomy, hysterectomy, lumpectomy, and mastectomy) compared to the published recommendations.

## METHODS

Study Design

- Retrospective chart review utilizing electronic health record (EHR)
- Patients identified based on surgery type and date of surgery

**Table 1. Study Period**

| Type of Surgery | Date of Surgery |
|---|---|
| C-section | 03/01/2019 – 06/06/2019 |
| THA and TKA | 12/01/2018 – 06/06/2019 |
| Appendectomy | 11/01/2018 – 06/30/2019 |
| Hernia repair | 10/01/2018 – 05/01/2019 |
| Cholecystectomy | 12/01/2018 – 04/01/2019 |
| Hysterectomy | 06/01/2018 – 05/31/2019 |
| Simple mastectomy | 06/01/2018 – 05/31/2019 |
| Lumpectomy | 10/01/2018 – 08/31/2019 |

Data Collection

- Patient medical record numbers used to search EHR for demographic information and opioid prescription
- INSPECT (Indiana's prescription drug monitoring program) used to obtain fill data and determine if opioid tolerant (defined as patient who filled an opioid within last 90 days) or opioid naive

Statistical Analysis (using MiniTab 16.0)

- Continuous, non-parametric data analyzed using Mann-Whitney U
- Dichotomous variables analyzed using Fisher's exact or Chi-square

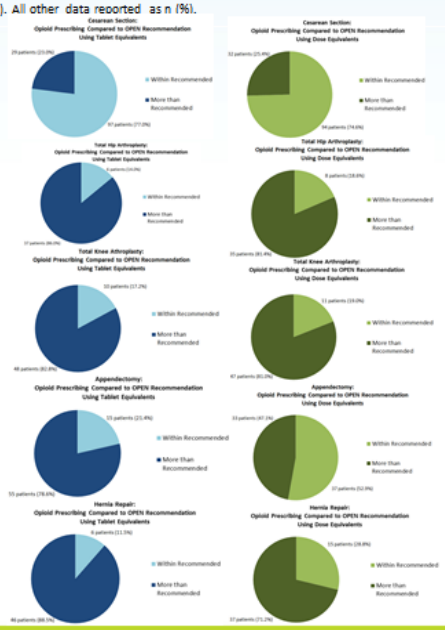
## RESULTS

- Primary outcome was number of tablet equivalents prescribed over OPEN recommendations.
- Secondary outcomes included dose equivalents prescribed over OPEN recommendations and dose equivalents prescribed per day over 5 days.
- Subset analysis conducted comparing prescribing differences between opioid-naive and opioid-tolerant patients.

**Table 2. Patient Characteristics**

| | n | Age* | Male | History of substance abuse | Concurrent benzo use |
|---|---|---|---|---|---|
| C-section | 126 | 31 (25-35) | 0 (0.0%) | 9 (7.1%) | 0 (0.0%) |
| THA | 43 | 60 (56-68) | 18 (41.9%) | 3 (7.0%) | 4 (9.3%) |
| TKA | 58 | 58 (54-66) | 16 (27.6%) | 8 (13.8%) | 6 (10.3%) |
| Appendectomy | 70 | 33 (25-45) | 44 (62.0 %) | 3 (4.2 %) | 0 (0.0 %) |
| Hernia repair | 52 | 53 (37-59) | 48 (92.3%) | 7 (7.7%) | 0 (0.0%) |
| Cholecystectomy | 68 | 38 (30-47) | 16 (23.5%) | 7 (10.2%) | 1 (1.5%) |
| Hysterectomy | 63 | 43 (40-49) | 0 (0.0%) | 4 (6.3%) | 0 (0.0%) |
| Simple mastectomy | 42 | 49 (34-59) | 4 (9.5%) | 4 (9.5%) | 1 (2.3%) |
| Lumpectomy | 42 | 64 (55-68) | 0 (0.0%) | 1 (2.3%) | 0 (0.0%) |

*Median (IQR). All other data reported as n (%).



## RESULTS (cont.)

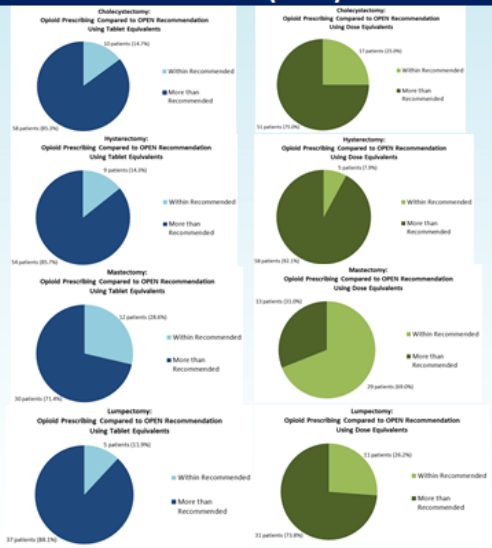


**Table 3. Subset Analysis Comparing Opioid Tolerant versus Naïve Patients All Surgeries**

| | Opioid Naïve (n = 444) | Opioid Tolerant (n = 120) | p value |
|---|---|---|---|
| Median tablet equivalents (IQR) | 20 (2,20) | 42 (5,42) | < 0.001 |
| Median MME equivalents (IQR) | 100 (10,100) | 315 (30,315) | < 0.001 |
| Median MME/day (IQR) | 20 (2,20) | 63 (6,63) | < 0.001 |

## CONCLUSIONS

- Majority of patients were over-prescribed opioid tablets in all surgeries assessed and dose equivalents in all surgeries except appendectomy and mastectomy compared to OPEN recommendations.
- Opioid naïve and opioid tolerant patient comparisons showed a statistically significant difference between the total number of tablet equivalents prescribed.
- Our results support the need for internal opioid prescribing guidelines. We plan to use these results to guide interventions and educational initiatives to improve our prescribing practices and follow published recommendations.

## REFERENCES

1. Howard R, Fry B, Gunaseelan V, et al. Opioid prescribing and consumption after surgery in Michigan. *JAMA Surg*. 2019;154(1):1-8.
2. Prescribing recommendations. Opioid Prescribing Recommendations for Opioid-naive Patients website. https://www.opioidprescribing.info/. Accessed April 19, 2020.

## DISCLOSURES

Authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of the presentation.

# An Evaluation of Post-Operative Opioid Prescribing Patterns Compared to Recent Procedure-Specific Recommendations

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## INTRODUCTION

- *JAMA Surgery* published a retrospective, multi-site, population-based analysis in 2019 that evaluated opioid prescribing and consumption patterns for patients undergoing 12 different surgical procedures.[1]
- Results prompted the Opioid Prescribing Engagement Network (OPEN) to publish a set of recommendations on the number of opioid tablets to be prescribed after specific surgical procedures for opioid-naive patients.
- OPEN recommends up to 20 tablets after cesarean section (C-section), 30 tablets after total hip arthroplasty (THA), and 50 tablets after total knee arthroplasty (TKA), 10 tablets hysterecto… are comm…

- The purpo… patterns fo… appendect… mastecton…

Study Design
- Retrospect…
- Patients id…

| | |
|---|---|
| T… | |
| A… | |
| Cholecystectomy | 12/01/2018 – 04/01/2019 |
| Hysterectomy | 06/01/2018 – 05/31/2019 |
| Simple mastectomy | 06/01/2018 – 05/31/2019 |
| Lumpectomy | 10/01/2018 – 08/31/2019 |

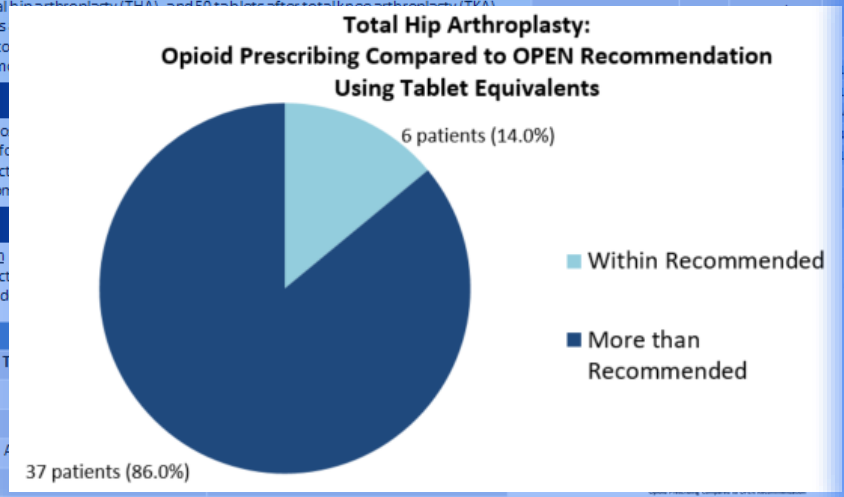
Data Collection
- Patient medical record numbers used to search EHR for demographic information and opioid prescription
- INSPECT (Indiana's prescription drug monitoring program) used to obtain fill data and determine if opioid tolerant (defined as patient who filled an opioid within last 90 days) or opioid naive

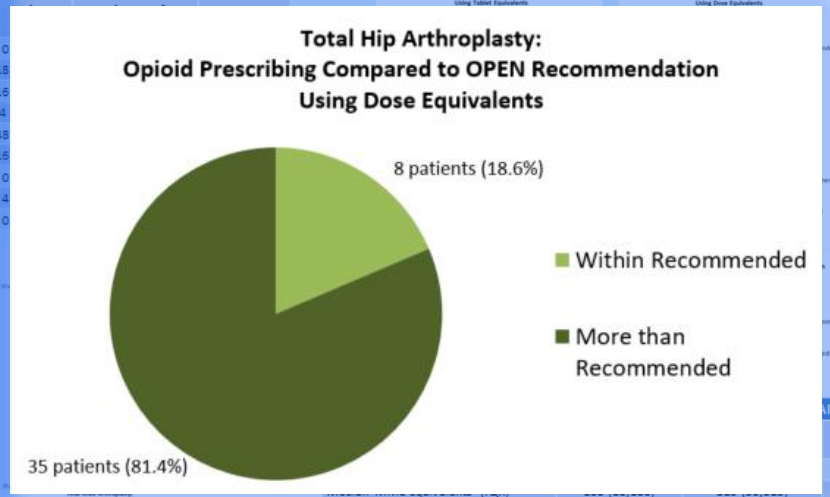
Statistical Analysis (using MiniTab 16.0)
- Continuous, non-parametric data analyzed using Mann-Whitney U
- Dichotomous variables analyzed using Fisher's exact or Chi-square

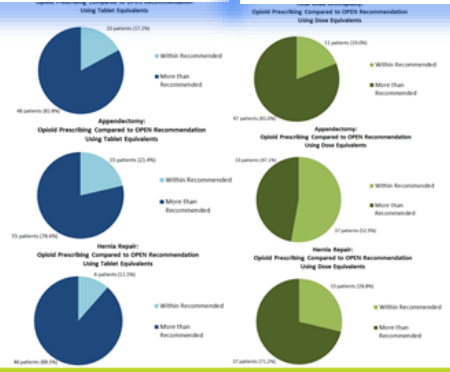
## RESULTS

- Primary outcome was number of tablet equivalents prescribed over OPEN recommendations.
- Secondary outcomes included dose equivalents prescribed over OPEN recommendations and dose equivalents prescribed per day over 5 days.
- Subset analysis conducted comparing prescribing differences between opioid-naive and opioid-tolerant patients.

Table 2. Patient Characteristics



## RESULTS (cont.)

| All Surgeries | | | p value |
|---|---|---|---|
| | | | < 0.001 |
| | | | < 0.001 |
| Median MME/day (IQR) | 20 (2,20) | 63 (6,63) | < 0.001 |

## CONCLUSIONS

- Majority of patients were over-prescribed opioid tablets in all surgeries assessed and dose equivalents in all surgeries except appendectomy and mastectomy compared to OPEN recommendations.
- Opioid naïve and opioid tolerant patient comparisons showed a statistically significant difference between the total number of tablet equivalents prescribed.
- Our results support the need for internal opioid prescribing guidelines. We plan to use these results to guide interventions and educational initiatives to improve our prescribing practices and follow published recommendations.

## REFERENCES

1. Howard R, Fry B, Guneseelan V, et al. Opioid prescribing and consumption after surgery in Michigan. *JAMA Surg*. 2019;154(1):1-8.
2. Prescribing recommendations. Opioid Prescribing Recommendations for Opioid-naive Patients website. https://www.opioidprescribing.info/. Accessed April 19, 2020.

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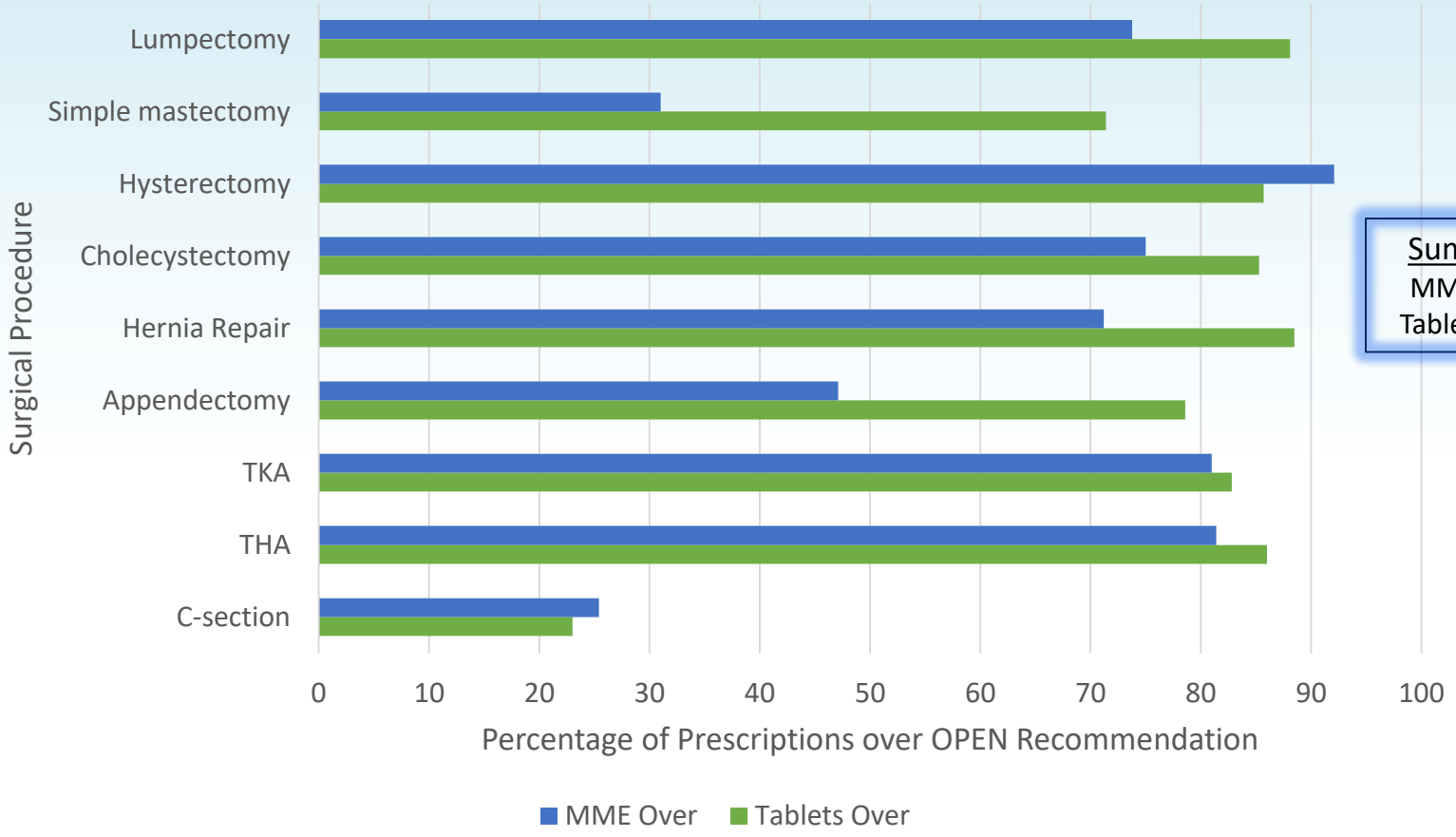
# OPEN Evaluation at Eskenazi

Figure 1: Percentage of Eskenazi Health Surgery Prescriptions over OPEN Recommendations




Summative Totals
MME Over: **59.75%**
Tablets Over: **69.86%**

# Completed and Ongoing Projects

- Pain management policy review
- Anti-stigma all-staff education
- MAT education for providers
- Post-operative opioid prescribing evaluation
- Opioid and pain management metrics

# Identified Metrics

| Outpatient Metric | Organizational Goal |
|---|---|
| **Patients prescribed any opioid (per quarter)** | No benchmark exists, but we could aim to reduce by a certain percentage each quarter? |
| **Average MME per day (per quarter)** | </= 50 MME (per CDC recommendations)<br></= 90 MME (per CDC recommendations) |
| **Number of naloxone outpatient prescriptions (per quarter)** | Ideally one naloxone prescription for every patient receiving an opioid |
| **Inpatient Metric** | **Organizational Goal** |
| **Naloxone use (per month)** | No benchmark exists, but we could aim to reduce by a certain percentage over time? |
| **Patients written a prescription of any opioid at discharge (per quarter)** | No benchmark exists, but we could aim to reduce by a certain percentage each quarter? |
| **Number of naloxone kits dispensed from ED (per quarter)** | Ideally one naloxone kit for every patient with an overdose diagnosis at discharge |

# OPOC Dashboard

## Opioid and Pain Management Oversight Committee

| Setting | Measures | Jan-19 | Feb-19 | Mar-19 | 1Q2019 | Apr-19 | May-19 | Jun-19 | 2Q2019 | Jul-19 | Aug-19 | Sep-19 | 3Q20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Inpatient* | Number of naloxone administrations/1000 opioid administrations | 1.3 | 1 | 0.9 | 1.066666667 | 0.6 | 0.2 | 0.7 | 0.5 | 0.6 | 0.7 | 1.2 | 0.83333 |
| | Number of patients written a prescription for any opioid at discharge (%) | 6.51 | 6.08 | 5.86 | 6.14 | 6.2 | 6.29 | 5.72 | 6.07 | 5.93 | 6.24 | 6.25 | 6.1 |
| *Outpatient* | Number of patients prescribed any opioid (%) | 14.21 | 12.7 | 14.23 | 13.69 | 12.77 | 13.11 | 13.42 | 13.09 | 13.15 | 12.81 | 13.28 | 13.0 |
| | Number of patients prescribed a chronic opioid (%) | 8.1 | 8.65 | 8.87 | 8.53 | 9.24 | 9.83 | 9.67 | 9.58 | 8.4 | 7.17 | 5.93 | 7.1 |
| | Average MME per day | | | | | | | | | | | | |
| | Number of patients prescribed naloxone (%) | 8.42 | 8.68 | 8.41 | 8.5 | 8.55 | 8.5 | 8.63 | 8.56 | 9.09 | 8.63 | 9.69 | 9.12 |
| *ED* | Number of naloxone prescriptions or kits dispensed to patients with an overdose diagnosis from the ED | | | | | | | | | | | | |

| *Goals* | **At or Better Than Target** (within goal) | **Area of Concern** (within goal, but in danger of not meeting goal next quarter) | **Not Meeting Target** (not within goal) |
|---|---|---|---|

OPOC: Opioid and Pain Management Oversight Committee

# Completed and Ongoing Projects

- Pain management policy review
- Anti-stigma all-staff education
- MAT education for providers
- Post-operative opioid prescribing evaluation
- Opioid and pain management metrics
- COWS assessment and implementation

# Order Sets

Opioid Withdrawal and Medication Assisted Treatment

Suggestions

Pneumonia

Pulmonary Embolism Treatment

Open Order Sets | Clear Selection | Remove Open

## Orders

Order Sets

Clear All Orders

Opioid Withdrawal and Medication Assisted Treatment Personalize

### Nursing

#### Clinical Opioid Withdrawal Assessment

- Clinical Opioid Withdrawal Scale Assessment (screening)
  Once for 1 occurrence
- Clinical Opioid Withdrawal Scale Assessment
  Every 4 hours for 48 hours

#### Notify Provider

- Notify physician for Clinical Opioid Withdrawl Scale of greater to or or equal to 8
  Until discontinued, starting today at 1037, Until Specified
  For Clinical Opioid Withdrawal Scale of: greater to or or equal to 8
- Notify physician
  Until discontinued, starting today at 1037, Until Specified
  Specify: RR < 8

### Medications

#### MAT Initiation (test dose)

Recommend initiating buprenorphine/naloxone once COWS ≥ 8 to avoid precipitating withdrawal.

- buprenorphine-naloxone (SUBOXONE) 2-0.5 mg dose ($$)
  1 tablet, sublingual, Once
- buprenorphine-naloxone (SUBOXONE) 4-1 mg dose ($$)
  2 tablet, sublingual, Once

#### MAT Titration

- MAT Day 1 - May repeat doses up to a total of 8 mg max on Day 1
  - buprenorphine-naloxone (SUBOXONE) 2-0.5 mg dose ($$)
    1 tablet, sublingual, Once
  - buprenorphine-naloxone (SUBOXONE) 4-1 mg dose ($$)
    2 tablet, sublingual, Once
- MAT Day 2 - May repeat doses up to a total of 16 mg max on Day 2

#### MAT Maintenance

Click for more

#### Opioid Detox

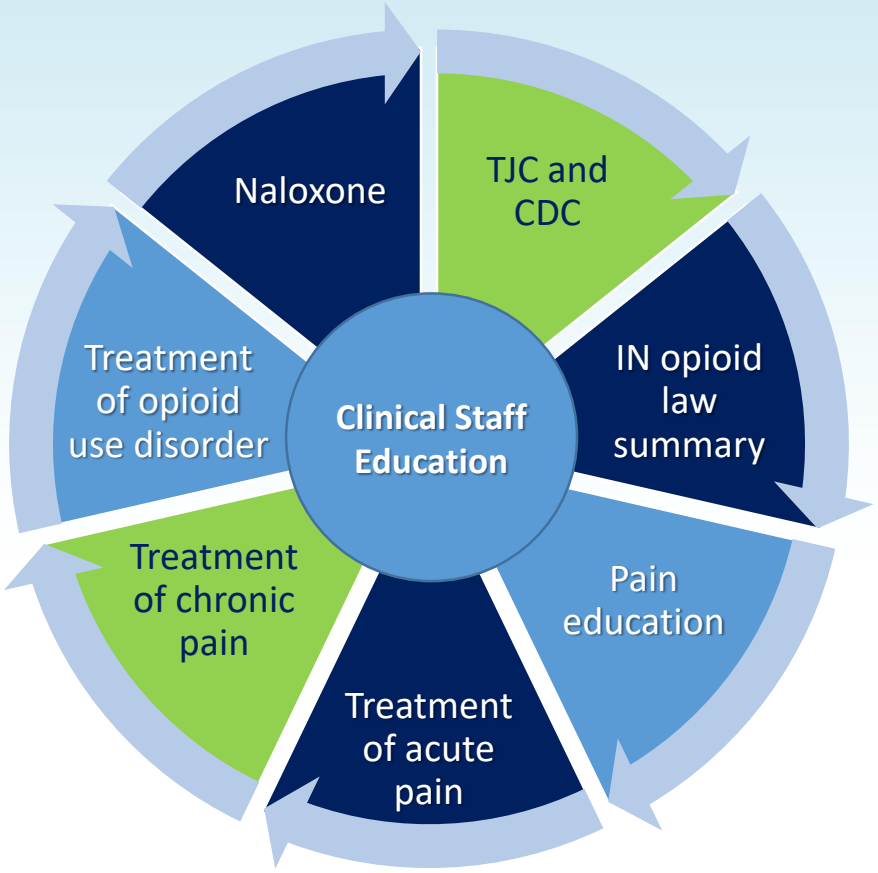
Click for more

### Additional SmartSet Orders

# Completed and Ongoing Projects

- Pain management policy review
- Anti-stigma all-staff education
- MAT education for providers
- Post-operative opioid prescribing evaluation
- Opioid and pain management metrics
- COWS assessment and implementation
- Pilot outpatient opioid stewardship service

# Outpatient Stewardship Pilot




**Group Patient Education Classes and Clinical Pharmacist Consult**

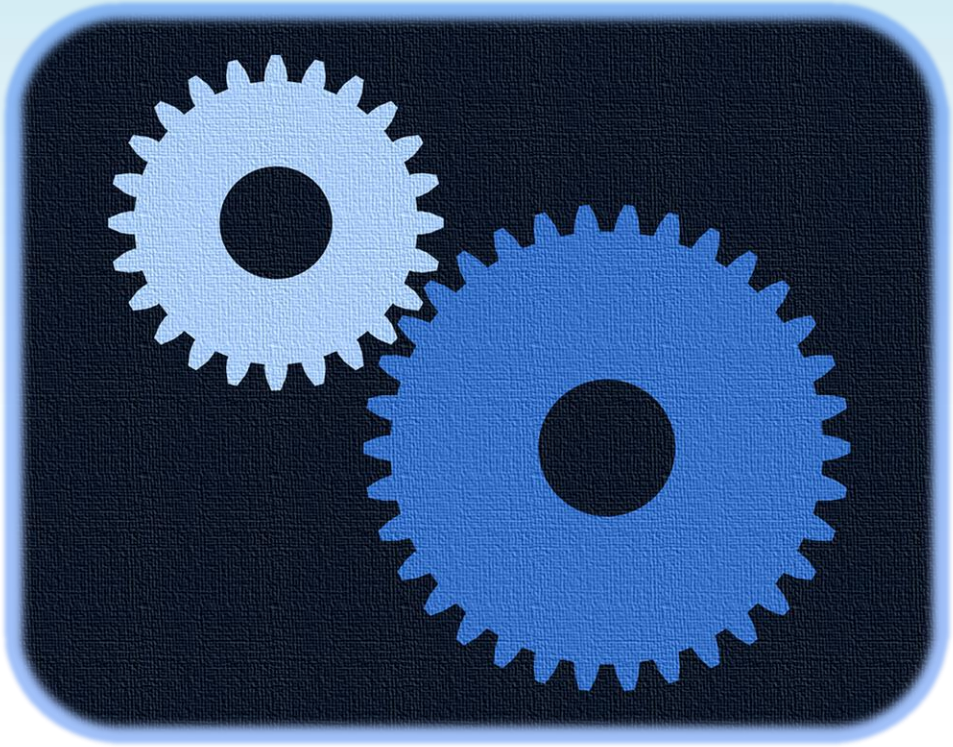
***versus***

**Group Patient Education Classes and Shared Provider Visits**

# Additional Projects

| | | |
|---|---|---|
| Prescriber level data and reports | Dashboard development | EHR changes to provide support/guidance |
| Targeted education to providers/staff | Patient education | Prospective naloxone and MAT evaluation |
| Treatment agreement alignment | OUD process solutions | QI group formation |

# Interactive Activity #3



**Group Discussion**

- Any additional projects or initiatives at your organizations related to Opioid Stewardship that you would like to share that haven't been discussed here today?
- Any questions about what we have been working on at Eskenazi Health?

# The Future is Stewardship

- Opioid stewardship programs can ensure pain management is an organizational priority while supporting the alignment of measures and regulatory standards
- Addition of an opioid stewardship pharmacist focused on process improvement can advance practices, support provider and patient engagement and education, and improve outcomes
- A governing opioid and pain management oversight committee for the institution can encourage collaboration with key players, prioritize initiatives, and eliminate barriers

# Growing an Opioid Stewardship Program: Implementation of an Opioid Stewardship Pharmacist and an Interdisciplinary Oversight Committee

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