A Public, Private Payer Partnership to Prevent Opioid Abuse and Transform Acute Care Pain Management

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Chris Priest, MPP, Vice President, Medicaid Solutions, Centene Corporation Deputy

Pre-Summit Workshop

Moderator: Greg Hamlin, Director of Claims, Kentucky Employers’ Mutual Insurance
Disclosures

- Tom Leyden, MBA; Chad Brummett, MD; Jennifer Waljee, MD, MS; and Greg Hamlin have disclosed no relevant, real, or apparent personal or professional financial relationships with proprietary entities that produce healthcare goods and services.

- Chris Priest, MPP – Salary: Centene
Disclosures

- All planners/managers hereby state that they or their spouse/life partner do not have any financial relationships or relationships to products or devices with any commercial interest related to the content of this activity of any amount during the past 12 months.

- The following planners/managers have the following to disclose:
  - Kelly J. Clark, MD, MBA, FASAM, DFAPA – Consulting fees: Braeburn, Indivior
Learning Objectives

- Describe Michigan OPEN, a partnership that is targeting opioid naïve surgical and dental patients prior to opioid dependence.
- Explain the Michigan OPEN model for creating change and disseminating best practices in opioid prescribing and disposal for application in other communities across the country.
- Describe the effect of specific Michigan OPEN initiatives on clinical care and healthcare policy for opioid prescribing in the acute care setting, and understand their role in mitigating against the opioid epidemic in the United States.
A Public, Private Payer Partnership to Prevent Opioid Abuse and Transform Acute Care Pain Management

Thomas Leyden, MBA
Director II, Value Partnerships
Blue Cross Blue Shield Michigan
Michigan

- Michigan is the 9th largest state as far as population with approximately 10 Million Michiganders
- Michigan is 490 miles long and 240 miles wide at its most distant points
- Per capita health expenditures: $8,055 (2014)
- As of February 21st, Michigan State Men’s Basketball was ranked #1 in the nation (USA Today poll)
Michigan and the Opioid Epidemic

- Michigan ranks **10th for rates of prescribing opioids**
- Michigan ranks **18th for overdose deaths** according to recent BCBS Association *Health of America* report
- Overdose deaths in Michigan involving prescription opioids **have tripled since 2012**. In 2016, **1,365 Michiganders have died from opioid overdoses**
- In 2016, Michigan health-care providers wrote **11 million prescriptions for opioid drugs** -- enough to provide every Michigan resident with his or her own bottle of narcotics (about 84 opioid pills, patches or other types of doses of opioid drugs)
BCBSM Utilizes Variety of Strategies to Fight Abuse and Overuse of Opioids

- Leverage Pharmacy and Utilization Management Programs
- Empower Provider Community Through Innovative Partnership Programs
- Work with State and National Public Policy Leaders
- Provide Financial Support to Build Community Efforts
Innovative Pharmacy Programs to Address Overuse and Abuse

Pharmacy Initiatives to Identify fraud and abuse. Designed to empower pharmacists and physicians to protect members and build a safe, strong and accountable network. Includes:

- **Doctor Shopper Initiative**: IDs individuals attempting to utilize multiple doctors to obtain prescriptions. Members must meet ALL three criteria within 60 days
  - Opioid prescriptions written by 3 or more prescribers
  - Opioid Rx dispensed from 3 or more pharmacies
  - 5 or more opioid prescriptions were dispensed

- Monthly communications go out to all Michigan physicians that show up on our internal report
<Prescriber First Name> <Prescriber Last Name> <Prescriber Credentials>
<Prescriber Street>
<Prescriber City> <Prescriber State> <Prescriber Zip Code>

Subject: <Member First Name> <Member Last Name> [DOB <Member DoB>]

<Month XX, XXXX>

Dear Dr. <Prescriber Last Name>

As part of BCBSM’s efforts to maintain patient safety, you are receiving this fax because the member above has been identified as meeting the criteria below during the time period <<Month day, 20xx to Month day, 20xx>>. Your name has been associated with at least ONE of the prescriptions.

- Opioid prescriptions written from 3 or more prescribers
- Opioid prescriptions were dispensed from 3 or more pharmacies
- 5 or more opioid prescriptions were dispensed

If you did not write an opioid prescription for this member, you should contact the Michigan Blues Anti-Fraud Hot Line at 1-800-482-3787.

In addition, you may use the Michigan Automated Prescription System to review patients’ Schedules 2-5 controlled substance prescription records. You can access the MAPS website and register to submit requests online at: https://michigan.pmpaware.net*

If you reside outside of Michigan, please use your state’s prescription drug monitoring program (PDPM) to run a claims report on your patient.

If you have questions or comments, please call toll-free 1-877-295-2997 or email BCBSM_Pharma_ FWA@bcbsm.com.

Sincerely
Pharmacy Services
Blue Cross Blue Shield of Michigan and Blue Care Network

*Blue Cross Blue Shield of Michigan and Blue Care Network do not control this website or endorse its
Innovative Pharmacy Programs to Address Overuse and Abuse

Pharmacy Initiatives to Identify fraud and abuse.

- **Triple Threat Initiative**: Prevents unnecessary prescribing of deadly/highly addictive combination of drugs. Members must have filled at least TWO prescriptions from each category within 90 days
  - Analgesics — opiate agonists (ex. Vicodin, Fentanyl, OxyContin)
  - Benzodiazepines (ex. Xanax)
  - Carisoprodol (ex. Soma)
- Monthly communications go out to all Michigan physicians that show up on our internal report

Successes:
- More than 250,000 fewer opioid pills dispensed
- In 2.5 years, 76% less members receiving triple threat combo of drugs

Last six years:
- 42% reduction in fentanyl use
- 27% reduction in opioid expenditures
If you reside outside of Michigan, please use your state’s prescription drug monitoring program (PDMP) to run a claims report on your patient.

If you did not write a prescription for this member please email BCBSM.Pharmacy.FWA@bcbsm.com.

Sincerely,

Pharmacy Services
Blue Cross Blue Shield of Michigan and Blue Care Network

Additional information:


*Blue Cross Blue Shield of Michigan and Blue Care Network do not control this website or endorse its general content.
Innovative Pharmacy Programs to Address Overuse and Abuse

Changes to Benefit and Coverage Limits designed to protect members and build a safe, strong and accountable network

- Morphine-equivalent dose (MED) limits Medicare Advantage
  - 1/1/2017: 250 MED → 1/1/2018: 200 MED
- Expand MED limits to commercial in 2018
- First fill day supply limits for short acting opioids (2/1/2018):
  - HMO: 15 → 5 days
  - Extend the 5-day limit and 30-day max per fill to PPO

Utilization Management programs (prior authorizations, refill restrictions and quantity limits) prevent stockpiling of controlled substance

### Engaging Providers on Best Practices: Choosing Wisely® Opioid Related Recommendations

<table>
<thead>
<tr>
<th>Recommending Organization</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>American Academy of Neurology</strong></td>
<td>- Don’t use opioids or butalbital for migraine except as a last resort.</td>
</tr>
<tr>
<td><strong>American Academy of Physical Medicine and Rehabilitation</strong> (AAPM&amp;R)</td>
<td>- Don’t prescribe opioids for acute, disabling low back pain before evaluation and a trial of other alternatives is considered.</td>
</tr>
<tr>
<td><strong>American College of Occupational and Environmental Medicine</strong> (ACOEM)</td>
<td>- Don’t prescribe opioids for chronic or acute pain in workers who perform safety-sensitive jobs such as operating motor vehicles, forklifts, cranes or other heavy equipment.</td>
</tr>
<tr>
<td><strong>American Headache Society</strong></td>
<td>- Don’t prescribe medications that contain opioids or butalbital as first-line treatment for recurrent headache disorders.</td>
</tr>
</tbody>
</table>
| **American Society of Anesthesiologists - Pain Medicine** | - Don’t prescribe opioid analgesics as first-line therapy for chronic noncancer pain.  
- Don’t prescribe opioid analgesics as long-term therapy for chronic noncancer pain until the risks are considered and discussed with the patient. |

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Philanthropic Efforts Continue Core Social Mission of a Healthier Michigan

- Addressing the Epidemic through Grant Funding: *Taking Action on Opioid and Prescription Drug Abuse in Michigan*
  - BCBSM partnering with Michigan Health Endowment Fund, Community Foundation for Southeast Michigan and Superior Health Foundation to provide $455,000 for projects across Michigan aimed at reducing opioid and prescription drug abuse

- BCBSM/BCN Community Engagement through “Community Advisory Councils”
  - Share best practices and potential solutions with community groups
  - Examples of participants: Families Against Narcotics, Hope Not Handcuffs
BCBSM Works Collaboratively with Federal and State Leaders to Make Policy Improvements

State policy efforts

- Supporting an opioid abuse prevention legislative package that:
  - Encourages an established prescriber-patient relationships for opioid prescriptions
  - Limits opioids prescriptions
  - Advances utilization of electronic prescribing, including Michigan Automated Prescription System (MAPS)
  - Increases education through providers, schools and parents
  - Regulates pain management clinics to combat “pill mills”

- Partnered with the state to find solutions, serving on both the Governor’s Prescription Drug and Opioid Abuse Task Force and the Michigan Prescription Drug and Opioid Abuse Commission
BCBSM Works Collaboratively with Federal and State Leaders to Make Policy Improvements

Federal policy efforts

- Succeeded in having a Medicare Part D “Lock-in” program included in the passage of the Comprehensive Addiction and Recovery Act (CARA)
  - Prevents inappropriate prescribing of controlled substances by allowing Part D plans to require those at-risk of abusing prescription drugs to work with their plan to choose a single pharmacy to dispense medications, such as opioids

- Advocating for adequate federal funding for Medicaid, which covers a significant portion of all substance use disorder treatment.
  - Federal funding cuts to Medicaid are estimated to have dramatic effects on the growing public health crisis.
Blue Cross Blue Shield Michigan’s Partnering for Value Philosophy

- Focus on investments in **transformation of care processes**, rather than just “top of mind” behavior
- Recognize and reward performance of **hospitals and physician organizations**
- **Reward improvement**, not just highest performance to create meaningful incentives for all
- Focus on **population-based cost measures**, rather than per-episode cost to avoid stimulating overuse
- Design and execute programs in **a customized and collaborative** manner rather than "one size fits all"
Value Partnerships incentivizes providers to alter the delivery of care by encouraging responsible and proactive physician behavior, ultimately driving better health outcomes and financial impact.
Michigan’s Value Partnerships: Collaboration is Key

- Michigan Physicians and Hospitals
- Value Partnerships Programs
- Blue Cross Blue Shield Michigan
- BCBSM-supported Coordinating Centers

Role of Payer
- Offer neutral ground for competitive hospitals/physicians to collaborate
- Program funding and incentive payment design
- BCBSM provides clinical and administrative support
Key Value Partnerships Efforts to Address the Opioid Epidemic

- Patient Centered Medical Home (PCMH)
- Electronic Prescribing of Controlled Substances (EPCS)
- Clinical Quality Initiative (CLQI)
- Partnership Reports with Pharmacy Services
- Michigan Health Information Network (MiHIN) and Health Information Exchange (HIE)
- Hospital Collaborative Quality Initiatives (CQIs)
- Michigan Opioid Prescribing Engagement Network (Michigan OPEN which highly leverages the CQI platform)
Provider Engagement in Value Partnerships
Ambulatory Programs

Physician Group Incentive Program (PGIP)

<table>
<thead>
<tr>
<th>Participating Physician Organizations</th>
<th>Participating Practice Units</th>
<th>Participating Practitioners</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>6,000</td>
<td>19,700</td>
</tr>
</tbody>
</table>

- Over 5,500 PCPs
- Over 14,200 specialists

- Over 5,500 PCPs
- Over 14,200 specialists

Nearly 70% of Blue Cross network PCPs and over 55% of network specialists

- PGIP formed in 2005 – pay for performance program for Commercial PPO
- PGIP includes 21 initiatives, including our longstanding Patient Centered Medical Home (PCMH) transformation and designation program.
- 84% of PGIP PCPs are PCMH designated by BCBSM and receiving differential payment tied to demonstrating higher quality and more appropriate utilization.
- Electronic prescribing of controlled substances has increased more than 300% over 2 years since initiating a provider incentive.
PCMH Program Goals

Transformation Program:
Reward POs for Practice
Transformation/implementation of PCMH

PCMH Domains of Function and Associated Number of Capabilities

<table>
<thead>
<tr>
<th>Domain</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-provider partnership</td>
<td>10</td>
</tr>
<tr>
<td>Patient registry</td>
<td>21</td>
</tr>
<tr>
<td>Performance reporting</td>
<td>16</td>
</tr>
<tr>
<td>Individual care management</td>
<td>21</td>
</tr>
<tr>
<td>Extended access</td>
<td>10</td>
</tr>
<tr>
<td>Test tracking and follow-up</td>
<td>9</td>
</tr>
<tr>
<td>Electronic prescribing</td>
<td></td>
</tr>
<tr>
<td>Preventive services</td>
<td>9</td>
</tr>
<tr>
<td>Linkage to community services</td>
<td>8</td>
</tr>
<tr>
<td>Self-management support</td>
<td>8</td>
</tr>
<tr>
<td>Patient web portal</td>
<td>13</td>
</tr>
<tr>
<td>Coordination of care</td>
<td>12</td>
</tr>
<tr>
<td>Specialist referral process</td>
<td>11</td>
</tr>
</tbody>
</table>

PCMH Designation Program:
Reward PCPs (through Value Based Reimbursement) for Improved Performance

Quality

- Evidence Based Care and Preventive Services – reflects use of patient registries and proactive practice teams.

Use

- Emergency Department (ED) Visits for Primary Care Sensitive Conditions – reflects improved patient access to care.
- Imaging Use – reflects judicious use of ancillary services.
Key Statewide Provider Initiatives that Target Opioids

- **Patient Centered Medical Home (PCMH)**
  - PCMH model emphasizes coordination of care across all aspects of patient’s care experience.
  - PCPs and Specialists are rewarded for transforming their practice through implementation of ~140 PCMH capabilities aimed at improving population health.

- PCMH designation is built around 12 PCMH transformation initiatives, each with their own goals and objectives. One initiative, *Electronic Prescribing and Management of Controlled Substance Prescriptions*, includes recently added capabilities directly aimed to improve opioid prescribing in the following ways:
  - Adopt and utilize certified ePrescribing systems
  - Utilize MAPS reporting prior to prescribing controlled substances
  - Ensure criteria is in place that identifies and engages patients with chronic conditions that may require on-going pain management, such as controlled substance agreements
Michigan Practice Level Capabilities Tied to Opioid Prescribing

8.7 Full e-Prescribing in place and actively used by all physicians

8.9 MAPS reports are routinely run prior to prescribing controlled substances

8.10 Controlled substance agreements are in place for all patients with long term controlled substance prescriptions

<table>
<thead>
<tr>
<th></th>
<th>PCMH</th>
<th>Non-PCMH</th>
</tr>
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<tbody>
<tr>
<td>8.7 Full e-Prescribing in place and actively used by all physicians</td>
<td>97%</td>
<td>71%</td>
</tr>
<tr>
<td>8.9 MAPS reports are routinely run prior to prescribing controlled substances</td>
<td>18%</td>
<td>8%</td>
</tr>
<tr>
<td>8.10 Controlled substance agreements are in place for all patients with long term controlled substance prescriptions</td>
<td>12%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Key Statewide Provider Initiatives that Target Opioids

- **Electronic Prescribing of Controlled Substances (EPCS)**
  - EPCS initiative is modeled after our successful e-prescribing initiative
  - EPCS initiative launched in 2015, in absence of state mandate.
  - Provides funding opportunities to all PGIP physician organizations (POs) and rewards them for implementing EPCS in their physician practices
  - Goal is to increase EPCS (schedule II-V controlled substances), to improve patient health and safety, reduce costs, prevent drug diversion and abuse
  - EPCS aligns with the CMS electronic health record (EHR) incentive measure of >50% electronic prescribing
  - Rate at baseline in Q4 2015 was 6.5%
  - Current rate as of December 2017 was 31.7%
  - All POs have shown increases in utilization of EPCS since the program began and now range in utilization between 0.7% and 84.7%
  - Seven of the 41 POs have rates above 50% utilization. Two of those POs have utilization rates in the 80’s
Total Overall ePrescribing (eRx) Utilization – PGIP Physician Organizations

PGIP Electronic Prescribing Experience
Original Baseline (Q4 2015) through 2017 Q4

- EPCS % - Percentage of controlled substance claims submitted with POC 3 indicator reflecting electronic submission
- eRx % - Percentage of claims submitted with POC 3 indicator reflecting electronic submission

Source: ESI Book of business claims experience (inclusive of BCBSM/BCN claims)
EPCS Utilization Increasing Across the Board

31.7% overall average, up from 6.5% at the start of the initiative in Q4 2015
Quality Rewards Incentives Overview for PCP Measures

- Clinical Quality Initiative (the PGIP HEDIS initiative)
  - Healthcare Effectiveness Data and Information Set (HEDIS) is one of the most widely used sets of health care performance measure in the United States
  - HEDIS is used by more than 90 percent of America's health plans to measure performance on important dimensions of care and service, including opioid use
  - Began reporting to POs in 2018 on two new opioid measures
    • Use of Opioids at High Dosage (UOD)
    • Use of Opioids from Multiple Providers (UOP)
  - Exploring the incorporate of opioid measure performance in our Value Based Reimbursement opportunities for individual physicians
Providing the Provider Community Reports on Opioid Prescribing

- Value Partnerships and BCBSM’s Pharmacy Services department collaborated in 4Q2017 to begin providing PGIP POs with two opioid reports on prescription history of BCBSM members attributed to their physician members.
- Reports based on longstanding communications that had been going solely to our network physicians:
  - Doctor Shopper
  - Triple Threat
- Network physicians have been receiving faxes since 2013 (DS) and 2014 (TT) and BCBSM has seen notable declines to date.
- By including POs, this “push-pull” strategy works to effectuate change from both sides (the PO and the individual physician).
- New reports provide POs an opportunity for outreach to their providers to encourage use of Michigan Automated Prescription System (MAPS).
- First reports sent to POs in December 2017.
BCBSM Payment Program to Reduce Opioid Exposure Associated with Surgery

- Starting in mid 2017, BCBSM will enhance surgical fees for the following procedures when the surgery is not associated with a post-operative opioid prescription:
  - Laparoscopic Cholecystectomy
  - Thyroidectomy
  - Inguinal Hernia Repair
  - Sinus Surgery
  - Bariatric Surgery
  - Prostatectomy
- For eligible procedures, the provider uses modifier -22. The enhanced fees (+35%) will be in place from July 1, 2018 through June 30, 2019.
MiHIN Statewide HIE Service

- Providers and payers transmit data through the Michigan Health Information Network.
- MiHIN uses its Active Care Relationship Service (ACRS) to match patient’s to caregivers and payers.
- MiHIN routes the data to appropriate recipients.

- Participants access the service through their own infrastructure or through an HIE qualified organization.
- Agreements are in place to ensure all parties transmitting data adhere to necessary HIPAA and legal requirements.
- Each category of data sharing governed by a Use Case - a legal agreement defining data specifications and other requirements.
MiHIN Statewide HIE Service

**Admission, Discharge, Transfer (ADT) and ED Visit Notifications**
- Participating hospitals are sending ADT notifications for over 95% of all admissions statewide
- Thirty-nine physician organizations participate in the statewide service
- **Real-time alerts help POs and providers identify doctor-shopping behavior**

**Medication Reconciliation CCDA**
- Participating hospitals are sending discharge information for 83% of discharges statewide
- Provides patient care summary data at the point of discharge via a CCDA, including: pre-admission and discharge medications, problem list, and allergies
- Typically follows an ADT notification within 3 hours of discharge
- **Enhances the ability of providers and payers to better monitor adherence, and help identify and minimize misuse of prescription opioids**

**Tackling Opioid Abuse and Overdose**
- Coordinate use of the statewide infrastructure to enhance data exchange
- Facilitate EHR integration to MAPS
- Increase provider access to EPCS tools with MAPS integration
- Developing pilot for statewide opioid-related event notifications
- Explore use of ADT and Med Rec data for risk stratification, identifying utilization patterns, wellness and adherence programs and other intervention and analytic opportunities
Provider Engagement in Value Partnerships Hospital Programs

Hospital Collaborative Quality Initiatives (CQIs)

14 Statewide Collaboratives
88 Participating Hospitals
22,000+ Associated Physicians
400,000+ Cases Abstracted Annually

- Largest health-plan led collection of statewide hospital QI programs
- Statewide clinical registries that (for the most part) collect information on every case including patient risk factors, procedural and outcome information
- Internationally recognized CQI program is built on concept that traditional performance measures don’t address areas of care which are highly technical, rapidly-evolving and associated with scientific uncertainty. These areas best addressed through collaborative, inter-institutional, clinical data registries, with coordinated QI programs
- CQIs address wide variety of hospital and surgical care
Collaborative Quality Initiatives

CQIs Transform Care Processes, Improve Outcomes, Save Money, Enhance Community Well Being and Position BCBSM as an Essential Partner to Hospitals and Physicians

- 17 Statewide quality improvement initiatives, developed and executed by Michigan physicians and hospital partners with funding and support from BCBSM
- In most cases, a CQI project relies on a comprehensive clinical registry which includes patient risk factors, processes of care, and outcomes of care
- Physicians, hospitals, and health systems collaborate to measure and improve the standard of care in Michigan by focusing on reduction of errors, prevention of complications, and improvement of patient outcomes
- Many CQIs address opioid prescribing following surgery and are partnering with the Michigan Opioid Prescribing Engagement Network (OPEN)
Michigan CQIs – Largest Collection of Statewide Clinical Registry Programs

Value Partnerships currently administers 17 CQIs, covering various areas of care with high costs or high variation in treatment. Over 3.1 Million Michigan cases currently captured!

- ASPIRE (Anesthesiology)
- BMC2 (Angioplasty and Vascular surgery)
- HMS (Hospital Medicine)
- I-MPACT (Care Transitions)
- MAQI2 (Blood Clot Prevention)
- MARCQI (Knee and Hip)
- MBSC (Bariatric Surgery)
- MEDIC (Emergency)
- MOQC (Oncology) Practice based
- MPTQC (Pharmacy) Practice based
- MROQC (Radiation Oncology)
- MSQC (General Surgery)
- MSSIC (Spine Surgery)
- MSTCVS (Cardio and Thoracic)
- MTQIP (Trauma)
- MUSIC (Prostate Cancer) Practice based
- MVC (Value Collaborative)
CQI Model

1. Data collection
2. Data analysis
3. Collaborative Quality Initiatives
4. Development of best practices
5. Data reporting
Our Partnership: Collaboration is Key

Role of Coordinating Center
- Clinical Leadership – develop and executes the quality improvement agenda
- Explore links between process and outcomes
- Provide analytic and QI support
- Convene quarterly meetings
Our Partnership: Collaboration is Key

Role of Hospitals/Physicians
- Attend quarterly meetings
- Contribute to All-Payer registry
- Share and learn best practices
- Implement Quality Improvement opportunities

Participating Hospitals and Physicians

Coordinating Center

Blue Cross Blue Shield Michigan
Identifying Unnecessary Use of a Device that was Found to Cause Avoidable Complications and Death

MBSC Analysis and Intervention:
In 2008, MBSC reviewed all the deaths of Michigan patients after bariatric surgery and found that some of these deaths were due to the IVC filter, either because the filter migrated to the heart, or filter may have caused blood clots to form. MBSC demonstrated variation in use of filters across hospitals, and showed worse outcomes were associated with patients who received an IVC filter.

Dissemination of Results:
IVC filter use dropped 30% in first quarter after being presented to consortium. Declined nearly 90% in next 12 months.

Background: After bariatric surgery, patients are at a heightened risk of an artery blockage in the lungs (i.e. pulmonary embolism). This is often caused by a blood clot that moves from legs to lungs. At times, an inferior vena cava (IVC) filter was used, in order to catch a blood clot before it migrated to lungs.
Identifying Unnecessary Use of a Device that was Found to Cause Avoidable Complications and Death

**Patient Impact:** Due to this discovery and the collaborative’s quick response to the identified problem, 3,464 patients did not receive an IVC filter (from 2008 – 8/2015). Yearly, an average of 433 Michiganders are positively impacted by this initiative.

These patients avoided a preventable procedure, spent less time in the hospital, and had a reduced risk of loss of life or a dangerous event from a blood clot.

**National Impact:**
The findings have been extensively published in peer reviewed literature, and changed surgical practice nationally, resulting in reduced morbidity and mortality, reduced unnecessary procedures to place filters, and reduced overall costs.

MBSC was able to accomplish in one year what typically takes 15 years (per literature on evidence based medicine).
MARCQI’s Journey to Addressing Opioid Crisis
Michigan Arthroplasty Registry Collaborative for Quality Improvement

Founded on the belief that health care quality is best improved by data driven collaboration, Michigan Arthroplasty Registry Collaborative for Quality Improvement (MARCQI) launched in 2012. The collaborative is dedicated to improving the quality of care for hip and knee replacement patients in Michigan. Approximately 55,000 inpatient knee/hip surgeries are performed annually in Michigan.

Due to the nationwide opioid crisis, MARCQI has taken on several projects to help them better understand the physician prescribing practices and patient use of narcotics post joint replacement.
What are the Orthopedic Surgeons Doing?

- Devoted a quarterly meeting to discussion of opioids (May 2016)
  - Guest speakers focused on Acute Pain in the Opioid Tolerate Patient; panel on post-operative pain management

- Issued Opioid Use guidelines and protocol for weaning patients to lower narcotic doses pre-operatively in 2016

- Developed opioid weaning program.
  - UM anesthesiologists are available to consult with any MARCQI physicians about difficult patients' pain issues

- Opioid Project
  - Added a registry data element on oral morphine equivalent (OME) prescribed at discharge (will be used for a 2019 quality initiative and/or P4P measure)
  - Added pre-op and post-op narcotic related questions to all Patient related Outcomes (PROS) surveys
  - Resident Research project – in conjunction with Michigan OPEN, medical residents call patients 3 months post-operative asking about narcotic use
What Should Orthopedic Surgeons Do?

- Assess patient’s narcotic use pre-operatively and wean the patient down to a lower dose if possible*
- Open dialogue
  - Discuss post-op pain management (should not expect to be pain free at all times)
    - Ice, elevation and acetaminophen should be adjunct measures
  - Long term pain management need
- Work in conjunction with anesthesia and primary care providers to manage patient needs

* Better post-op pain response if not on a high pre-op doses
CQIs Addressing Opioids

Physicians participating in CQIs are working to address pain management and the overprescribing/overuse/abuse of opioids through a variety of approaches.

- **Radiation Oncologists**: Focus on treating pain while reducing treatment time and cost
- **Oncologists**: Focus on palliative care and advanced care planning, which is inclusive of symptom/pain relief
- **General Surgeons**: Collects data relative to opioid use and has presented findings, best practices, and tools
- **Spine Surgeons**: Collecting data – both from the chart and patient reported outcomes (after surgery) for use to develop QI efforts and best practices
- 11 CQIs are working on a 5 year project working with BCBSM, the Michigan Department of Health and Human Services (MDHHS) and Michigan Medicine (University of Michigan) on a program called Michigan OPEN. Intent is to reduce amount of opioids prescribed post-surgery to surgical patients by 50% and reduce new chronic post surgical opioid use by 50%
The half lives for the short acting products are 3-4 hours. The longer-acting opioids have half lives that are ~12h +/- 4h. Important rule of thumb for almost any drug: it takes about 5 half lives for the drug to be cleared from your system (99%+ cleared), assuming it’s at steady state in your system beforehand.

Short acting opioids like Norco, Oxycodone, are dosed every 4, 6, or 8 hours. Long acting opioids are dosed every 12 hours, 24 hours, or in the case of the fentanyl patch, every 72 hours. Fentanyl patch is used for around the clock analgesia – underlying pain which needs to be treated.

“oxycodone 10 mg q4h prn pain”
“Oxycontin 20 mg q12h ATC”
q = every
h = hour
prn = as needed
ATC = around the clock
1. Fentanyl patch half life is ~ 20-27 hours. The patch is left on for 72 hours (3 days) and then replaced with a new patch

### Table: Half Lives and Dosing

<table>
<thead>
<tr>
<th></th>
<th>Short Acting</th>
<th>Long Acting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Half lives</strong> ($t_{1/2}$)</td>
<td>3-4 h</td>
<td>~12h(^1)</td>
</tr>
<tr>
<td><strong>How often dosed</strong></td>
<td>4, 6, or 8 hours</td>
<td>12 or 24 hours, every 72 hours in the case of fentanyl patch(^1)</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>Morphine, Oxycodone, Hydrocodone-acetaminophen (Norco, Vicdon), Hydromorphone (Dilaudid)</td>
<td>Fentanyl patch (Duragesic), Morphine Sulfate ER (MS Contin), Oxycodone ER (Oxycontin)</td>
</tr>
</tbody>
</table>

\(^1\) EXT = extended release
The Role of Acute Care Prescribing in the Opioid Epidemic

Chad M. Brummett, M.D.
Associate Professor
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Division of Pain Medicine
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- **Funding**
  - NIAMS/NIH: R01 AR060392; P50 AR070600
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  - Michigan Department of Health and Human Services
  - SAMHSA
  - CDC
  - Michigan Genomics Initiative
  - Department of Anesthesiology
  - Neuros Medical, Inc

- **Disclosures**
  - Patent for the use of peripheral perineural dexmedetomidine alone and in combination with local anesthetics. Application number 12/791,506; Issue Date 4/2/13; Patent Number 8410140
  - Consultant- Recro Pharma, Heron Therapeutics
Opioid overdose kills more individuals than those involved in fatal motor vehicle accidents.

115 Americans die every day from an opioid overdose (that includes prescription opioids and heroin).
Faces of the opioid epidemic
How did we get here?
For Whom Do We Prescribe?
Opioid naive

Chronic 8%

Intermittent 30%
Pre-Operative Opioid Use and Associated Outcomes after Major Abdominal Surgery

For opioid naïve patients, the relative contribution of acute care prescribing is increasing, and surgeons prescribe the highest amount.
Preventing Chronic Opioid Use and Abuse Before it Starts

Current Strategic Efforts
Most Opioids Prescribed for Outpatient General Surgery Procedures Go Unused

72% of Prescribed Pills Went Unused

Opioid Recovery Drive – September 30

- Escanaba – OSF St. Francis Hospital
- **Gladwin** - MidMichigan
- **Traverse City** – Traverse City Police/Munson Medical
- **Grand Rapids** – Dettmann Center
- **Saginaw** – Saginaw Twp Police/CMU Health
- **Pontiac** – Oakland Sheriff/USJM-Oakland/WS
- **Livonia** – New Oakland Family
- **Ann Arbor** – Ann Arbor Police/University of Michigan
- **Jackson** – Jackson City Police/Henry Ford Allegiance
Total number of people: 766

Weight of pills: 900

Estimated total number of medications of interest: 130,000

Opioid pills: 17,500

Benzodiazepines and sedatives: 18,000

Anti-depressants: 10,000

Stimulants: 1,800

Oldest opioid from all drives: 1976

Oldest opioid from this event: 1984

Most common reason for opioid: Surgery
A preventative approach to the opioid epidemic.

**Areas of Impact**

- Engaging providers
- Education
- Informing policy
- Payment reform
- Local quality improvement
- Innovative interventions
- Community outreach
- At-risk populations
- Arts and humanities
COMING SOON: Ability to customize all brochures with your organization’s logo!

Opioid Facts Brochure
Learn the facts about opioid pain medications including:
- What is an opioid
- Using opioids safely
- Opioid addiction
- Safe disposal of opioids

0 DOWNLOAD BROCHURE

Recent Articles
- Dr. Brummett Awarded the 2017 James E. Cottrell Presidential Scholar Award
- For 1 in 10 Cancer Patients, Surgery Means Opioid Dependence
- Statewide drug takeback event nets 900 pounds of opioids & more
- Dr. Brummett Speaks at U-M Wolverine Caucus
Do you know the facts about opioid pain medications?
Talking to Your Doctor about Pain Control Brochure
Ask questions and know the facts before using opioids for your pain.
- What is an opioid
- Questions to ask your provider
- Things to remember after your surgery
- Safe disposal of opioids

Pain Management Techniques Brochure
Learn about strategies for managing pain and anxiety after surgery including:
- Mindful breathing
- Positive daily reflection
Patient Resources

Medication Disposal Map Brochure
Learn how to safely dispose of medication using:
- Our interactive online map of Michigan disposal sites
- Other environmentally-friendly alternatives

Download Brochure

Recent Articles
- Michigan OPEN sponsors "Navigating the New and Improved MAPS"
  July 19, 2017
- Dr. Waljee featured at PULSE: On the Front Lines of Health Care
  June 16, 2017
- Four hours. Six locations. 18,000 opioids out of circulation.
  May 23, 2017
- Michigan OPEN receives funding as part of State Taught Opioid Education

The Role of Acute Care Prescribing in the Opioid Epidemic

Jennifer Waljee, MD, MPH, MS
Associate Professor
Department of Surgery
University of Michigan Medical School
Email: filip@med.umich.edu
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Twitter: @waljeejenn
Our Role
Why do surgeons prescribe too much?
The amount of opioid prescribed after surgery was not associated with patient satisfaction.

Lee JS, Hu HM, Brummett CM, Syrjamaki JD, Dupree JM, Englesbe MJ, Waljee JF. *JAMA* May 16, 2017
Refills?
Quantity Does Not Predict Refill

Opioid naive

Chronic 8%

Intermittent 30%

New Persistent Use
New Persistent Opioid Use

6%  Brummett CM et al. JAMA Surg. 2017; 152(6).
Opioid prescription fill after extraction of wisdom teeth is independently associated with new chronic opioid use

Harbaugh C et al, unpublished data
6 tabs/day of Norco 5/325
6 tabs/day of Norco 5/325
Who Prescribes for New Persistent Users?

![Graph showing the percentage of opioid prescriptions by specialty over months from surgery. The graph compares different specialties such as Surgery, Primary Care, Physical Medicine & Rehabilitation, Pain Medicine, Emergency Medicine, and Cardiology, Gastroenterology, Oncology, Neurology, & Other. The x-axis represents months from surgery, ranging from -12 to 12 months, and the y-axis represents the percentage of opioid prescriptions. The graph is divided into two sections: Preoperative and Postoperative.]
Can we improve prescribing?

Yes
Opioids Prescribed After Surgery

Guidelines

15 Oxycodone 5 mg 1q4-6 PRN

15 Norco 5/325 mg 1q4-6 PRN

+ Tylenol AND Motrin

+ Patient Education
370 Patients \times \downarrow 35 \text{ pills per patient} = 13,000 \text{ pills kept out of the community}
No change in calls for refills (3-4%)

No change in patient-reported pain scores

Patients consumed fewer pills
Supersize it!

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Hydrocodone (Norco)</th>
<th>Hydromorphone (Dilaudid)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>5 mg tablets</td>
<td>2 mg tablets</td>
</tr>
<tr>
<td></td>
<td>Codeine (Tylenol #3) 30 mg tablets</td>
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</tr>
<tr>
<td></td>
<td>Tramadol 50 mg tablets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oxycodone 5 mg tablets</td>
<td></td>
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<tr>
<td>Laparoscopic Cholecystectomy</td>
<td>15</td>
<td>10</td>
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<tr>
<td>Laparoscopic Appendectomy</td>
<td>15</td>
<td>10</td>
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<tr>
<td>Inguinal/Femoral Hernia Repair (open/laparoscopic)</td>
<td>15</td>
<td>10</td>
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<td>20</td>
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<td>30</td>
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<tr>
<td>Ileostomy/Colostomy Creation, Re-siting, or Closure</td>
<td>40</td>
<td>25</td>
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<tr>
<td>Open Small Bowel Resection or Enterolysis</td>
<td>30</td>
<td>20</td>
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<tr>
<td>Thyroidectomy</td>
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<tr>
<td>Hysterectomy</td>
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<tr>
<td>Vaginal</td>
<td>20</td>
<td>10</td>
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<tr>
<td>Laparoscopic &amp; Robotic</td>
<td>25</td>
<td>15</td>
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<tr>
<td>Abdominal</td>
<td>35</td>
<td>25</td>
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<tr>
<td>Wide Local Excision ± Sentinel Lymph Node Biopsy</td>
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</tr>
<tr>
<td>Simple Mastectomy ± Sentinel Lymph Node Biopsy</td>
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<td>Lumpectomy ± Sentinel Lymph Node Biopsy</td>
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<td>Breast Biopsy</td>
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<td>Sentinel Lymph Node Biopsy Alone</td>
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<table>
<thead>
<tr>
<th>Procedure</th>
<th>Old Recs</th>
<th>New Recs</th>
<th>% Change</th>
<th>Data for Recommendation</th>
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<td>Howard[1], Hill[2]</td>
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<td>37.5</td>
<td>-50%</td>
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</table>
New prescribing recommendations based on patient consumption

Monitor Satisfaction, PROs

Reductions in patient opioid consumption

Reductions in opioid prescribing
A Public, Private Payer Partnership to Prevent Opioid Abuse and Transform Acute Care Pain Management

Tom Leyden, MBA, Director II, Value Partnerships Program, Blue Cross Blue Shield of Michigan

Chad Brummett, MD, Associate Professor of Anesthesiology and Director of the Division of Pain Research, University of Michigan

Jennifer Waljee, MD, MS, Associate Professor of Plastic and Reconstructive Surgery, University of Michigan

Chris Priest, MPP, Vice President, Medicaid Solutions, Centene Corporation Deputy

Pre-Summit Workshop

Moderator: Greg Hamlin, Director of Claims, Kentucky Employers’ Mutual Insurance