Agenda

- What are the risks facing health systems related to the opioid epidemic
- Present the changing regulatory environment
- Share what is at risk for hospitals and health systems
- Leading practices for health systems on implementing a holistic diversion and abuse monitoring program
- Future state of the hospital opioid stewardship program
Health System Risks?

- Medication Errors
- Employee Diversions
- DEA Investigations
- Negative Publicity
- Patient Harm
- INFECT PATIENTS

DEA Investigations

- University of Michigan Health to pay $4.3-million penalty in opioids case
- DEA raids some West Coast Kaiser Permanente pharmacies
- Georgia health system paying $40.3M to settle opioid diversion claims
Nurse Diversions – Patient Safety

Former Utah nurse indicted for allegedly diverting narcotics, infecting patients with Hepatitis C

Employee Diversions

UPMC pharmacy tech accused of stealing $52K worth of painkillers

Ex-pharmacy head gets 5 years for stealing $5.6M in painkillers

The former chief pharmacist at Beth Israel Hospital, accused of stealing $5.6 million in painkillers, took a plea deal in a Manhattan court Wednesday that will send him to prison for five years.
Provider Arrested

'Drug dealers with stethoscopes:' Feds warn of more doctor arrests in opioid crackdown

Ohio hospital where doctor accused of opioid murders worked settles lawsuits

Ultimate Risk: New Addicts / Overdoses

| 6% | Per JAMA 6% of patients prescribed opioids after surgery (minor and major) are still taking them 3-6 months later, having become dependent = 1 million new addicts annually |
| 80% | With 22 million Americans undergoing hospital surgeries in 2014 * and at least 80% received opioids after surgery (18 million) ** = |
| 200 | Each hospital creates around 200 new opioid addicts per year! |
| 130 | 130 people die each day from Opioids! *** |

* Agency for Healthcare Research and Quality  
** Per US national library of medicine national institute of health  
*** National Institute of Drug Abuse
Child / Youth Opioid Deaths 2017

<table>
<thead>
<tr>
<th>States</th>
<th>Age (0-24 years)</th>
<th>Age (25-34 years)</th>
<th>Total Deaths (all ages)</th>
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</thead>
<tbody>
<tr>
<td>California</td>
<td>208</td>
<td>536</td>
<td>2,199</td>
</tr>
<tr>
<td>Virginia</td>
<td>103</td>
<td>366</td>
<td>1,241</td>
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<tr>
<td>Pennsylvania</td>
<td>272</td>
<td>819</td>
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<tr>
<td>Ohio</td>
<td>336</td>
<td>1,263</td>
<td>4,293</td>
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Hospitals Creating New Opioid Use Disorder Patients

- Post surgery opioid scripts from 2011-2016
- 5% of surgeons prescribed 40-70 pill average
- Lumpectomy = 26 pill average in 2016

Patient

Target Focus: Post Surgical Opioid Prescribing Practices

John Hopkins studies

2018 – New Prescribing guidelines – Reduced quantities

76-92% of patients did not use their entire opioid prescriptions
OUD Leads to New Standards

Opioid Prescribing
- Diversion Monitoring
- Pain Management
- Opioid Prescribing
- Medication Assisted Treatment (MAT)

Hospital / Health System Risks

- DEA Investigation / Fines
- Pharmacy Diversion
- Provider Diversion
- Nurse Diversion
  - Patient care
    - Errors due to altered state
    - Patients in pain – nurse diverted patient med
    - Infect patients
- Overdosing patients from opioids
- Administering high levels of opioids not necessary
- Provider arrested
- Not compliance with BOP scripts writing
Beyond The Risk – Opioid Stewardship

- Educate patient on destroying controlled substance
- Educate patient on opioid use / Narcan (naloxone)
- MAT program
- Educate OUD patients

It’s the Right Thing to Do!

Opioid Stewardship – Holistic Program

Standard of Care
Administrating to Patients
Pharmacy Inventory
Pharmacy Compounding
Pharmacy Stooling
Provider Rx to Patients
Wholesaler
Diversion Points
Nursing Floor Dispensing, Waste, Returns
Anesthesia & Kits
Pharmacy Diversion Controls

Fundamentals
- Reconcile orders to stockings
- Oversight of compounding waste
- Oversight of kit replenishment
- Reconcile transfers

Leading Practice
- Pharmacy CII-CV counted monthly
- Discrepancy in Pharmacy part of hospital wide discrepancy report
- Compounding recipe and waste in ADM
- All pharmacy ADM transactions are separated so all transactions reviewed

Future State
- Continuous reconciliations so any variance is immediately identified
- Using technology to match vendor purchases and reconcile all transactions through block chain technology

Fundamentals – Cornerstone of Management

• Reconcile Wholesaler Report to Automated Dispensing Cabinets (ADC) Stocking Report
Fundamentals – Cornerstone of Management

• Review and Reconcile Daily Transfers To and From the Nursing Units

Opioid Continuous Accountability Audits / Reconciliation

• Quarterly Reconciliation of hospital opioid inventory accounting of drugs from wholesaler through distribution to identify variances
Opioid Continuous Accountability - Example

- Lead sheet example:

<table>
<thead>
<tr>
<th>Fund #</th>
<th>BEGINNING CYCLE COUNT</th>
<th>TRANSACTION CODES</th>
<th>TRANSACTION COUNT</th>
<th>Beginning Count</th>
<th>Actual Count</th>
<th>Differences</th>
<th>Percent of Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>1000</td>
<td>200</td>
<td>1000</td>
<td>1000</td>
<td>999</td>
<td>1</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Nursing Diversion Controls

### Fundamentals
- High user audits
- Discrepancy review (resolved and unresolved)

### Leading Practices
- Waste patterns by nurse
- Pain score analysis
- Track and trend documentation or discrepancy issues (honest error or not)

### Future State
- Machine learning to identify diverters using nurse patterns, pain scores, etc.
Standard of Care & Prescriptions

Standard of Care

- Pain Committee
- Recovery Controlled Substance Protocols
- Checks for opioid naïve
- Clinical pharmacist involvement
- Sedation scales
- Multimodal Therapy

Prescriptions

- Analyze Opioid Scripts
- Educate on destruction of controlled substances
- Educate on overdose risks especially if benzo/opioid comb
- Comply with BOP (review PDMP)

Beyond Prescriptions – Helping Opioid Use Disorder Patients

MAT

Medication-Assisted Treatment (MAT) includes counseling and behavior therapies to provide a “whole patient” approach

50% of MAT patients are drug free 18 months after treatment
(National Institute for Drug Abuse)
Treatment Algorithm

- Uncomplicated opioid withdrawal?
  - NO
    - Start Bup after withdrawal
    - Supportive meds prn, stop other opioids
  - YES (stop other opioids)
    - Administer 8mg Bup SL
      - Withdrawal symptoms improved?
        - NO
          - No Improvement
            - Differential Diagnosis:
              - Withdrawal mimic: Influenza, DKA, sepsis, thyrotoxicosis, etc., Treat underlying illness.
              - Incompletely treated withdrawal: Occurs with lower starting doses; improves with more Bup.
              - Bup side-effect: Nausea, headache, dysphoria. Continue Bup, treat symptoms with supportive medications.
        - YES
          - Administer 2nd dose
            - Inpatient: 8mg. Subsequent days, titrate from 16mg with additional 8-mg pin cravings.
            - IED: 8-24mg. Consider discharge with higher loading dose.
Prescription Regulatory Environment

23 states and D.C. require or recommend transactions, obtain continuing education related to prescribing CS, pain management, or substance abuse/misuse.

36 states require or command practitioners to have a treatment agreement.

32 require or recommend an informed consent or agreement for treatment document.

10 states that limit days supply of Schedule II prescriptions.

States obtaining access to DEA 80million prescriptions.

CDC Opioid Prescribing Guidelines

- >90 Morphine Milligram Equivalents (MME) >90 should be avoided.
- Avoid concurrent opioids with benzodiazepines.
- Utilize Immediate release opioids.
- Prescribe Lowest Possible Dose.
- Provide non-opioid therapy for chronic pain (outside of cancer and palliative care).
- Ideal script up to 3 days and rarely over 7 days.
ED Prescribing Practices – Improvements

February – July 2019

**Hospital A**

- 4-6 Days: 2019 vs. 2019, decrease by 30%
- 7-14 Days: 2019 vs. 2019, decrease by 76%

**Healthcare B**

- 4-6 Days: 2019 vs. 2019, decrease by 9%
- 7-14 Days: 2019 vs. 2019, decrease by 65%
Thank You

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