Pain Management in the Midst of An Opioid Epidemic: One Medical Center’s Response

Janell Cecil, MSN, RN, NEA-BC
Chief Nursing Officer
J. L. Epps, MD
Chief Medical Officer
Who We Are

• Area’s only academic medical center with the following programs:
  – 228 physician residents and fellows
  – 14 fellowship programs
  – 11 pharmacy residents
  – 130 pharmacy students
  – 150+ medical students
  – 800+ nursing and ancillary healthcare students
  – Radiology technology program
  – Laboratory technology program
  – Chaplain residency program

• Knoxville’s only Magnet hospital
• TNCPE Excellence Award – Baldrige Criteria
• Area’s only Level I Trauma Center
• Area’s only hospital based Aeromedical Service
• Regional Perinatal Center
• Level III Neonatal Intensive Care Unit (private rooms)
• Regional Hemophilia Program
• Regional Kidney and Pancreas Transplant Center

Colleges:
  - Graduate School of Medicine
  - Pharmacy
• 1791 - Alexander Hamilton proposed a tax on liquor to pay the states debts from the Revolutionary War, igniting the Whiskey Rebellion of 1794.

• The suppression of the Whiskey Rebellion had the unintended consequences of encouraging small whiskey producers in Kentucky and Tennessee, which remained outside the sphere of Federal control for years.

• In these frontier areas, they also found good corn-growing country as well as limestone-filtered water and therefore began making whiskey from corn.
• On May 9, 1923, during prohibition, District Judge John C. Knox of the Manhattan Southern District ruled that as long as liquor was legal for medicinal purposes congress could not restrict doctor’s judgment in prescribing it.

• It is estimated that 10 million prescriptions were issued each year during Prohibition.
Effect of the Tax

• The important effect was Appalachian mountain people accepted markets offered by popular culture but rejected its legal and political institutions.

• By the 1950s, some 25,000 gallons of white lightning reached the market each week from the counties of eastern Tennessee alone.

Sanders. University of Texas. Folk Geography Pt II
at: http://www.utexas.edu/depts/grg/sanders/GRG305/folk_geography.htm
Knoxville Foothills of the Smoky Mountains

- 2008 - Church Shooting - Killing 2; injuring 6
- 2010 - School Shooting - Injuring the principal and the assistant principle
- 2010 - Hospital Shooting - Killing 1; injuring 2
Drug Distributors Shipped 20.8 Million Painkillers To West Virginia Town Of 3,000

Drug wholesalers sent more than 20.8 million prescription painkillers to the town from 2008 and 2015, according to an investigation by the House Committee on Energy and Commerce. The opioids — hydrocodone and oxycodone pills — were provided to two pharmacies just four blocks apart.

Schedule II Drugs

Days Supply per 1,000 Members

- 0 to 1259
- 1259 to 1763
- 1763 to 2376
- 2376 to 4855
Patient Care Pathways

A patient-centered, evidence-based care plan developed through a multi-disciplinary collaborative process, containing milestones that communicate and standardize the care of the patient across the entire healthcare continuum.
## Pathways Vs. Order Sets

<table>
<thead>
<tr>
<th>Order Set</th>
<th>Clinical Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batches related orders together</td>
<td>Disease-Specific and Procedure-Specific Pathways of Care / Orders-based</td>
</tr>
<tr>
<td>Physician convenience is major driver</td>
<td>Patient-Centered: Optimizing the patient experience and outcomes are the primary goal</td>
</tr>
<tr>
<td>Orders structured at the individual physician level</td>
<td>Healthcare provider efficiency: Makes right care the easiest care</td>
</tr>
<tr>
<td>Variation in care allowed</td>
<td>Evidence-based and meet Best Practice Standards</td>
</tr>
<tr>
<td>Inconsistently evidenced-based</td>
<td>Patient Care Pathways support continuum of care:</td>
</tr>
<tr>
<td>Admission and procedural order sets designed to get the patient “in the door” or through the procedure</td>
<td>• Disease-specific Plans of Care</td>
</tr>
<tr>
<td>Limited to one or part of one episode of care</td>
<td>• Standards of care</td>
</tr>
<tr>
<td>Process lacks tracking of outcomes metrics</td>
<td>• Transitions in care</td>
</tr>
<tr>
<td>Incorporates Chronic Disease Management Planning</td>
<td>Regulatory standards and quality measures met</td>
</tr>
<tr>
<td>Inclusive of the entire continuum of care</td>
<td>Improved Cost and Efficiency is a natural by-product</td>
</tr>
<tr>
<td>Outcomes tracked by global and condition-specific metrics</td>
<td></td>
</tr>
</tbody>
</table>
Pathways: Impact in Cerner
– For pain orders imbedded in Disease/Procedural Pathway: Minimal Change
– Guidance established for inexperienced clinicians via two new Pain Pathways
– Experienced Clinicians (Hospitalists) using General Medicine Pathways essentially unaffected
– Multi-modal (Non-narcotic Options) easier to access in Computerized Physician Order Entry
– Pain Flow Sheet

Pain Scale
– Emphasis on function

“3 Strikes…You’re Out (Evaluate)”
– Guidance for expected responses for both nursing and physicians established

Red Flags
– Prompt to identify the Accurate Diagnosis and treat the CAUSE of the pain

Use of Sedation Scales
Escalation of Nursing or Patient Concerns
– “Something’s not right!”

Mandatory Attending Evaluation
Morphine Milligram Equivalents
– Common language of “how much”

On-Site Drug Disposal Receptacle
– Secure and Responsible Drug Disposal Act 2014

Decreasing the Number of Opioid Pills Prescribed
Standardized Management of IV Drug Use – Associated Infections
– Plan of Care
– Withdrawal Management
– Addiction treatment

Pain Management: Standardization in the Midst of an Opioid Epidemic
1. Pain Non-Narcotic Pathway
2. Pain Low Narcotic Pathway
3. Pain High Narcotic Pathway
4. Pain Individualized Pathway
5. Pain Orders in Procedural / Disease Pathways
Pain Management Strategy

• Have pain controlled within 3 hours (3 Strikes)

• Identify any underlying complication (Red-Flags) that may be resulting in pain.

• Prevent over sedation by using the UT Opioid Sedation Scale (UTOSS)

• Improve communication between nurses and providers to promote an effective pain management strategy for each patient
Pain Scale

- The Pain Scale incorporates **patient functional abilities**
- This will ideally help the patient to score their pain more accurately with a reference point
**Sedation Scale: UTOSS**

- Prevention of respiratory arrest from excessive opioid administration or patient sensitivity is best predicted by the degree of sedation

<table>
<thead>
<tr>
<th>Level</th>
<th>State</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Sleeping, easy to arouse</td>
<td>No action; increase opioid if needed</td>
</tr>
<tr>
<td>1</td>
<td>Awake &amp; alert</td>
<td>No action; increase opioid if needed</td>
</tr>
<tr>
<td>2</td>
<td>Drowsy, easy to arouse</td>
<td>No action; increase opioid if needed</td>
</tr>
<tr>
<td>3</td>
<td>Frequently drowsy</td>
<td>Unacceptable; Decrease opioid 25 – 50%; notify MD; consider non-narcotics until SS improves</td>
</tr>
<tr>
<td>4</td>
<td>Somnolent; minimal response to stimuli</td>
<td>Unacceptable; stop opioid; consider naloxone; notify MD</td>
</tr>
</tbody>
</table>
• If pain management therapies are unsuccessful, there may be an underlying complication which is resulting in their pain

• Don’t just treat the pain score, treat the CAUSE of the pain

• Consider the following questions (Red-Flags) when evaluating the patient’s pain
  - Is pain outside the expected location?
  - Is pain out of proportion to the diagnosis?
  - Is something ‘just not right?’
The communication script outlines the information the provider will need in order to determine an appropriate escalation strategy for the patient in the event previous therapies have been unsuccessful.

1. This is [45 yo male] admitted with [kidney stones].
2. Now complaining of [abdominal pain].
3. Pain score is [7]
4. He has received [Lyrica] and [4 mg morphine] with [no] relief.
5. Sedation score is [2]. Vital Signs are [xxxxx]
7. How would you like me to proceed?
Three Strikes!!!: An Example

72 y.o. female with a fractured femur awaiting surgery tomorrow morning after a fall following admission for syncope evaluation

• Provider selects Drug and Dose from Pathway.
• Nurse tries Prescribed Therapy ✗
• Not Effective (no PAIN RED FLAG present) = STRIKE 1 → RETRY
  – Nurse re-tries next available ordered dose ✗
• Not Effective (or PAIN RED FLAG present) = STRIKE 2 → ESCALATE
  • Nurse escalates to provider using script
  • Provider determines proper escalation strategy
• Not Effective (or PAIN RED FLAG present) = STRIKE 3 → EVALUATE
  – Nurse calls provider to evaluate using script
  – Provider further evaluates the situation
  • Additional Hx, repeat PE, review or order new Dx Testing
Pathway: Pain Meds Summary

Common language for how much narcotics are administered!
At The University of Tennessee Medical Center, patient safety and quality care are our top priorities. If you have concerns about your care or the care of your loved one, the PACT offers an additional safety net to ensure you receive compassionate and excellent care.
Why PACT?

• Josie’s Story
  – On February 22, 2001, eighteen-month old Josie King died from medical errors at Johns Hopkins where the questions and concerns raised by Josie’s mother were ignored.

• Michael’s Story (UTMC)
  – September 30, 2014, errors in communication have lead to patient harm and delayed interventions.
Patient-family Activated Concern/Safety Team is a way to provide additional support if:

- You find there is a noticeable medical change that your team is not addressing
- You feel there is a breakdown in care being given
- You feel there is confusion over what needs to be done
- Dial ext. 7228 (PACT Line) a trained professional will create a plan to address your concern
What Kind of Calls Are Received?

% by Category
Rolling 12 Months

- Pain Control/Meds: 34.0%
- Delay in Care: 14.0%
- Dissatisfied w Staff: 13.7%
- Med/Nsg Mgmt: 13.3%
- Other: 13.3%
- DC Planning: 4.0%
- Clarify Orders: 2.7%
- Service Issues: 2.0%
- Diet Related: 1.3%
- Allergy Related: 0.7%
- Psychosocial Issues: 0.7%
- Call Cancelled: 0.3%
One Medical Center’s Response to Combat the Opioid Epidemic

J. L. Epps, MD
Chief Medical Officer
A ROADMAP FOR STRENGTHENING LAWS & REGULATIONS

1. Mandatory Prescriber Education
2. Opioid Prescribing Guidelines
3. Eliminating Pill Mills
4. Prescription Drug Monitoring Programs (PDMPs)
5. Increased Access to Naloxone
6. Availability of Opioid Use Disorder (OUD) Treatment

47 STATES NEED TO IMPROVE!
28 STATES are “FAILING”
4 STATES are “MAKING PROGRESS”
# Overdose Data in the State of Tennessee

**Tennessee Drug Overdose Data**

1. **1,186**
   - Opioid Overdose Deaths, 2016

2. **13,034**
   - Nonfatal Overdose Outpatient Visits, 2015

3. **7,092**
   - Nonfatal Overdose Inpatient Stays, 2015

4. **7,636,112**
   - Painkiller Prescriptions, 2016

5. **1,631**
   - All Overdose Deaths, 2016

Knox County Overdose Data

In 2016, Knox County had 174 all drug overdose deaths. (38/100,000 persons)

147

In 2016, Knox County had 147 opioid overdose deaths. (32/100,000 persons)

In 2016, Knox County had 17 heroin overdose deaths. (4/100,000 persons)
Drug Overdose Deaths Continue to Rise
2011 - 2016

<table>
<thead>
<tr>
<th>Year</th>
<th>Death Count</th>
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<tbody>
<tr>
<td>2011</td>
<td>1062</td>
</tr>
<tr>
<td>2012</td>
<td>1094</td>
</tr>
<tr>
<td>2013</td>
<td>1166</td>
</tr>
<tr>
<td>2014</td>
<td>1263</td>
</tr>
<tr>
<td>2015</td>
<td>1451</td>
</tr>
<tr>
<td>2016</td>
<td>1631</td>
</tr>
</tbody>
</table>
Overdose Deaths in TN

• American Medical Response
  – Knox County
    • 51X in September 2016
    • 173X in January 2017
    • If breathing, AMR does not administer

• Knoxville Fire Department
  – Overdose calls @ 25,000 per year (@ 70 per day)
  – 17X in 2013 Naloxone
  – 129X 2016
  – @ 70X in January & February 2017
The number of prescription drugs prescribed annually:

51 PILLS OF HYDROCODONE for EVERY Tennessean above the age of 12

21 PILLS OF OXYCODONE for EVERY Tennessean above the age of 12

Why Do Physicians Overprescribe?

• How Physicians Were Trained
• Lack of knowledge
  – How many pills most patients actually take to relieve postoperative pain
  – Percentage of opioid naïve patients who remain on narcotics 1 year after surgery
• Inconvenience
  – Patient
  – Provider
A Lost Middle Ground: Pain Management Has Evolved From Undertreatment to Overreliance and Overtreatment

References:

1980s

Published studies and letters posit that opioids do not carry significant risks for adverse events or addiction.

1998

Pain is established as a “fifth vital sign.” Consistent pain management guidelines that rely on opioids are created.

2016

“Today, more Americans die because of drug overdoses than because of car crashes, and most of these overdoses involve some form of opioid.”

-US Surgeon General

Doctor’s Do Not Treat Pain Effectively
Common Surgeries Create a Surplus of Opioids That Flood the “Market”

Proportion of patients taking half or less of prescribed opioid pills

- C-SECTION: 83%
- THORACIC SURGERY: 71%

Outpatient upper extremity surgery

- ~ 300 patients, with 92% reporting adequate pain control
- Usually received 30 narcotic pills
- >50% took pain pills for 2 days or less
- Consumed an average of 11 pills per patient

- Almost 5000 leftover tablets

Initiation of short-term opioid therapy may lead to long-term use

Patients 1 year after surgery¹

- 33% of all patients were still using opioids
- 18% of opioid-naïve patients were still using narcotics

Patient aged ≥65 years with an opioid prescription 7 days postsurgery²

- 10% remained on opioids 1 year later
- 44% increased chance of becoming a long-term opioid user

Drug Source

WHERE ABUSERS GET THEIR DRUGS IN TN

- Family or Friend: 55%
- Prescription: 17%
- Bought or Stolen from Family or Friend: 16%
- Drug Dealer: 5%
- Other: 7%
NASHVILLE, Tenn. (WKRN) October 27, 2016 – Seven people now face federal charges after an “extraordinary” number of drug overdoses earlier this year in the Murfreesboro area.

The outbreak happened in July when over a dozen overdoses were reported in a 24-hour period. At least two people died while at least six others were hospitalized.

The overdoses were the result of people ingesting a dangerous synthetic opioid called fentanyl. It’s commonly prescribed for pain management and is known for being 50 times more powerful than heroin and 100 times more powerful than morphine.
Opioids Present In Overdose Deaths*

* Percentages for fentanyl and heroin are included in the opioid category.
Carfentanil – The most potent opioid used commercially – 10,000 times stronger than morphine – Elephant tranquilizer to blame for at least 8 Ohio deaths in Sept 2016

Moscow Theater Hostage Crisis (2002)

After the murder of two female hostages, Spetsnaz operators pumped an undisclosed chemical agent into the building's ventilation system.

All 40 of the terrorists were killed, about 130 hostages died, including nine foreigners, due to poisoning by the gas.

Fentanyl & Carfentanil
Chasing the Dragon

https://www.youtube.com/watch?v=lqdmWRExOkQ
Dopamine and Addiction
PET Scan in Addicts

Normal levels of brain activity in PET scans show up in yellow to red.

Reduced brain activity after regular use can be seen even after 10 days of abstinence.

After 100 days of abstinence, we can see brain activity “starting” to recover.

SPECT Brain Scan

Normal Brain

7 years Methadone use, some prior Heroin

(SPECT Brain scan from Brainplace.com, Dr. Daniel Amen)
Pain Management: Standardization in the Midst of an Opioid Epidemic

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**Decreasing the Number of Opioid Pills Prescribed**

**Standardized Management of IV Drug Use – Associated Infections**
- Plan of Care
- Withdrawal Management
- Addiction treatment
Drug Associated Infections: The Mandate

• Standardized approach to the management of patients hospitalized with drug use associated infections

• Focus on:
  – Safety
    • The Patient
    • Other Patients
    • Visitors
    • Team Members
  – Pain Management
  – Addiction Treatment
• The admitting physician orders that the IVDU Plan of Care be instituted
• Search performed by security
• All patients will be placed in a specific and identifiable gown
• Personal property including clothing removed
• No access to personal cellular phone
• Patients are restricted to the floor
• Conversion of tablet medication (especially pain & sedative medications) to liquid form when feasible with proof of swallowing
• No visitors
The admitting physician orders that the IVDU Plan of Care be instituted

The physician (APN/PA) and the Nurse Manager of the floor where the patients resides discuss the need for the plan based on patient safety

The physician usually leaves after the introduction of the plan

The nurse manager with security present goes over the plan of care in detail

The patient signs the POC to acknowledge the tenets

A signed copy is left in the room
### Demographics

<table>
<thead>
<tr>
<th>Gender</th>
<th>%</th>
<th>Race</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>46%</td>
<td>White</td>
<td>99%</td>
</tr>
<tr>
<td>Females</td>
<td>54%</td>
<td>Black</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>0%</td>
</tr>
</tbody>
</table>

- Of all deaths in 2015 from opioid and heroin overdoses in Tennessee and nationwide, about 90 percent of the people were white.
- African Americans accounted for little more than 6 percent in Tennessee and 8 percent across the country (CDC)
# IVDU Contraband

## Search Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Contraband</td>
<td>58%</td>
</tr>
<tr>
<td>Contraband Found</td>
<td>28%</td>
</tr>
<tr>
<td>Refused Search</td>
<td>14%</td>
</tr>
</tbody>
</table>

## Contraband Found

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescription Pills/Medications</td>
<td>52%</td>
</tr>
<tr>
<td>Syringes/Needles</td>
<td>18%</td>
</tr>
<tr>
<td>Other Drug Paraphernalia</td>
<td>5%</td>
</tr>
<tr>
<td>Tobacco Products</td>
<td>5%</td>
</tr>
<tr>
<td>Unknown Substance/Residue</td>
<td>5%</td>
</tr>
<tr>
<td>Burnt Spoon/Cans</td>
<td>4%</td>
</tr>
<tr>
<td>Heroin</td>
<td>2%</td>
</tr>
<tr>
<td>Cut Straws</td>
<td>2%</td>
</tr>
<tr>
<td>Rubber Tourniquets</td>
<td>2%</td>
</tr>
<tr>
<td>Pipes</td>
<td>2%</td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-------</td>
</tr>
<tr>
<td>Medicare</td>
<td>6%</td>
</tr>
<tr>
<td>Commercial</td>
<td>7%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>55%</td>
</tr>
<tr>
<td>Self Pay</td>
<td>27%</td>
</tr>
<tr>
<td>Other Agency</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medicaid</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amerigroup</td>
<td>18%</td>
</tr>
<tr>
<td>BlueCare</td>
<td>31%</td>
</tr>
<tr>
<td>Medicaid Out of State</td>
<td>3%</td>
</tr>
<tr>
<td>TennCare UHC</td>
<td>22%</td>
</tr>
<tr>
<td>TennCare Pending</td>
<td>26%</td>
</tr>
</tbody>
</table>
### Project Results

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osteomyelitis</td>
<td>17%</td>
</tr>
<tr>
<td>Infective Endocarditis</td>
<td>25%</td>
</tr>
<tr>
<td>Soft Tissue Infection</td>
<td>35%</td>
</tr>
<tr>
<td>Sepsis</td>
<td>17%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
<tr>
<td>No Infection</td>
<td>3%</td>
</tr>
</tbody>
</table>

- Pilot length: 254 days
- # of Patients: 284
- Addiction RX at D/C: 12%
- Readmission: 18%
## Pilot Results: LAMA

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Total #</th>
<th>LAMA</th>
<th>%LAMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osteomyelitis</td>
<td>49</td>
<td>14</td>
<td>29%</td>
</tr>
<tr>
<td>Infective Endocarditis</td>
<td>70</td>
<td>18</td>
<td>26%</td>
</tr>
<tr>
<td>Sepsis</td>
<td>49</td>
<td>34</td>
<td>69%</td>
</tr>
<tr>
<td>Epidural Abscess</td>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Soft Tissue Infection</td>
<td>98</td>
<td>35</td>
<td>36%</td>
</tr>
<tr>
<td>Endophthalmitis</td>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Empyema</td>
<td>2</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>No Infection</td>
<td>12</td>
<td>4</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>284</strong></td>
<td><strong>106</strong></td>
<td><strong>37%</strong></td>
</tr>
</tbody>
</table>

LAMA = Left Against Medical Advice
• Failure to enforce the POC
  
  – as …….told Ms. XXXX that she had violated her patient care plane by not wearing her IVDA gown, having drug paraphernalia, drugs, leaving the floor, and having personal clothing items
  
  – …asked if she has used Opana during her stay in the hospital and Ms. XXXX said “yes”
Pilot Results: The Bad

Brittany Dawn reviewed UT Medical Center —

1 ★

5 hrs · 🌍

After the way I was treated tonight at UT, I will be contacting a medical malpractice attorney. I am sick of being judged because of my history & will not stand for it any longer! In this world you have to stand and fight for what you believe in. I will speak out for myself & all recovering addicts! If anyone else has been treated poorly please message me as I will be contacting the lawyers on Monday. Our local news has been contacted already also.
<table>
<thead>
<tr>
<th></th>
<th>Physicians</th>
<th>Security</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Management</td>
<td>80% Significant Improvement 20% Some Improvement</td>
<td>50% Significant Improvement 50% Some Improvement</td>
<td>62% Significant Improvement 28% Some Improvement 8% No Change 3% Slightly Worse</td>
</tr>
<tr>
<td></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>90%</strong></td>
</tr>
<tr>
<td>Patient Satisfaction</td>
<td>25% Significant Improvement 25% Some Improvement</td>
<td>17% Significant Improvement 50% Some Improvement 33% No Change</td>
<td>23% Significant Improvement 31% Some Improvement 15% No Change 23% Slightly Worse 8% Significantly Worse</td>
</tr>
<tr>
<td></td>
<td>25% No Change 25% Significantly Worse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Member Satisfaction</td>
<td>80% Significant Improvement 20% Some Improvement</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician Satisfaction</td>
<td>80% Significant Improvement 20% Some Improvement</td>
<td>50% Significant Improvement 33% Some Improvement 17% No Change</td>
<td>41% Significant Improvement 23% Some Improvement 28% No Change 8% Slightly Worse</td>
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</tr>
</tbody>
</table>
## Positive Trends

<table>
<thead>
<tr>
<th>Type of Call</th>
<th>June 2017</th>
<th>July 2017</th>
<th>August 2017</th>
<th>September 2017</th>
<th>October 2017</th>
<th>November 2017</th>
<th>December 2017</th>
<th>January 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Drugs Encountered</td>
<td>1,901</td>
<td>1,598</td>
<td>817</td>
<td>501</td>
<td>505</td>
<td>591</td>
<td>229</td>
<td>171</td>
</tr>
<tr>
<td>Administrative Searches</td>
<td>26</td>
<td>20</td>
<td>27</td>
<td>63</td>
<td>78</td>
<td>52</td>
<td>68</td>
<td>65</td>
</tr>
<tr>
<td>Proactive Drug Patrols</td>
<td>225</td>
<td>253</td>
<td>362</td>
<td>705</td>
<td>691</td>
<td>477</td>
<td>906</td>
<td>1,185</td>
</tr>
<tr>
<td>K9 Usage</td>
<td>583</td>
<td>559</td>
<td>549</td>
<td>1,035</td>
<td>704</td>
<td>735</td>
<td>706</td>
<td>687</td>
</tr>
</tbody>
</table>

### Drugs Encountered
- Prescription Pills
- Marijuana
- Cocaine
- Heroin
- Meth
- LSD
Monthly Total Number of Drugs Encountered by UTMC Security (2016-2018)

*Red indicates the month that the IVDA Pilot began
K9 Handlers and K9s (Pictured Left to Right)
Matthew Bennett (King), Chase McLain (Kolt), Adam Byrne (Kimber), Gene Worsham (Kane), Tom Potts (Knox), Tyler Hollingsworth (Khaos), David Moore (Koda), Ian Cleveland - K9 Sergeant
## Positive Trends: Relationships

<table>
<thead>
<tr>
<th>PERSONAL ISSUES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Staff concern for your privacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. How well your pain was controlled</td>
<td></td>
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<tr>
<td>3. Degree to which hospital staff addressed your emotional needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Response to concerns/complaints made during your stay</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Staff effort to include you in decisions about your treatment</td>
<td></td>
<td></td>
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<tr>
<td>6. Staff sensitivity to the inconvenience that health problems and hospitalization can cause</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7. Extent to which staff checked your ID bracelet before giving you medications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments (describe good or bad experience): _______________________________________

<table>
<thead>
<tr>
<th>OVERALL ASSESSMENT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How well staff worked together to care for you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Likelihood of your recommending this hospital to others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Overall rating of care given at hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Answers given to your billing questions (if you had any)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments (describe good or bad experience): _______________________________________

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