Beyond the Opioids:
What Matters Most to People who Visit Emergency Departments for Pain-related Complaints

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Conflict of Interest Disclosure

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Marian Wilson, No Conflict of Interest

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U.S. Opioid Overdose Deaths 1999-2010

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<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>2,900</td>
</tr>
<tr>
<td>2007</td>
<td>11,500</td>
</tr>
<tr>
<td>2010</td>
<td>15,500</td>
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</tbody>
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33,091 U.S. Opioid Overdose Deaths in 2015

2017: Headed in the wrong direction

91 Americans die every day from an opioid overdose (that includes prescription opioids and heroin).
Trends in ED Pain Care

Coinciding with national efforts to improve the quality of pain care, the percentage of ED visits resulting in a prescription for an opioid analgesic for home use increased from 23% in 1993 to 42% in 2005.

Pletcher et al., 2008

2010 ED Pain Care Management Program considered a success!

ED visits for chronic pain reduced 77%:
- 3,689 frequent user visits pre-enrollment
- 852 post-enrollment


Heroin use rising as opioid scrutiny increases

National Overdose Deaths
- Prescription Opiates (left) and Heroin (right)
2011 ED pilot study: Pain & depression persist after ED encounters

Major Depressive Disorder
- symptoms - 54%

Unresolved Pain
- Pain Intensity mean 6.0 (SD 1.6)
- Pain Interference mean 7.5 (SD 1.8)

2013 Emergency Departments struggle with pain practices

Rural Idaho to Dallas

How to provide appropriate care and meet patient expectations in a brief ED encounter?

Frequent ED visitors requesting opioids may have undertreated chronic pain, substance abuse, psychiatric, or psychosocial problems. Grover & Close, 2009
Setting
• Texas Health Harris Methodist Hospital
  • 720 bed
  • Non-profit, urban
  • 100-bed ED
  • 22 ED physicians

Texas Health Resources
• 14 hospitals
• Nursing leadership vision to engage nurses in EBP & research

Ongoing efforts based on exemplars

ED physician perspectives on pain satisfaction scores

“I’m scared to not give out those opioids because my patient satisfaction scores will come back poorly.”

“Part of my paycheck comes from satisfaction scores.”

“So I pay for not giving narcotics with a smaller paycheck.”

Internal data does not support concerns

External evidence

- ED practitioners are among the most frequent prescribers of opioids – primary care prescribe most. Volkow, 2009
- ED providers vary considerably in attitudes regarding opioid guidelines and prescribing practices. Kilaru et al., 2014
- Press Ganey pain satisfaction not related to administration of opioids or non-opioid analgesics in 2 New England hospitals. Schwartz et al., 2014
  - New data not available at time of study
  - Needed site-specific data, more convincing evidence

Study purpose

Assess relationships between opioid prescribing practices, patient and ED attributes, and patient satisfaction scores among patients with high utilization of the emergency department for pain relief
Data collected

- De-identified physician information provided by the physician group serving the study ED
- Hospital electronic medical record (EMR), opioid dose, patient data
- Press Ganey surveys of patients visiting the study ED in 2013 - linked to physician

Patient satisfaction survey general procedures

- Used Press Ganey proprietary survey
- Paper survey mailed to patients within a week of their visit
- Sent to patients who discharged home only
- Excluded patients included:
  - Left Without Being Seen or Against Medical Advice
  - No publicity patients
  - Patients that had already received a survey in last 90 days
- Sampling in 2015 averaged 48%
- Returned surveys in 2015 = 4,448

Population of interest for study cohort

High ED Users:
1. Three visits in 1 month
2. Four visits in 2 consecutive months (Or 2 in 2 months)
3. Seven visits in 12 months

Patients with a pain score greater than 0

Excluded: children, OB, cognitively impaired, unable to communicate
Persistent pain data

<table>
<thead>
<tr>
<th>Encounters</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>109,280</td>
<td>68,145</td>
</tr>
<tr>
<td>106,421</td>
<td>67,971</td>
</tr>
<tr>
<td>94,317</td>
<td>59,557</td>
</tr>
<tr>
<td>38,968</td>
<td>12,224</td>
</tr>
<tr>
<td>32,890</td>
<td>11,526</td>
</tr>
</tbody>
</table>

- Full ED Population for 2013 by Admit Date
- Next step, remove admitted patients

- Discharged patients (ED Only)
- Next step, remove patients under 18

- Discharged adult patients
- Next step, remove low utilizers (less than 2 ED visits)

- High utilizer, discharged adult patients
- Next step, remove encounters with an initial Pain Score of 0

- High Utilizer, discharge adult patients with positive pain score

Methods

- Groups compared
  - Frequent ED users with pain complaints who returned Press Ganey surveys (N=304)
  - Age-matched control group, random sample of adult ED patients not frequent-ED users with any presenting complaint who returned Press Ganey surveys (N = 304)

- Manual chart audits confirmed:
  - Pain as significant role in multiple ED encounters
  - Patients met the frequency-related definitions of high ED utilization

Data Analysis

- Multivariable analysis modeled variables expected to influence pain satisfaction including nurse/physician items:
  - Concern for privacy/comfort
  - Courtesy
  - Took time to listen
  - Attention to needs
  - Took problem seriously
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total participants analyzed</th>
<th>ED Over-users with recurrent pain complaints</th>
<th>Infrequent ED users (general adult ED patient population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>608 (100%)</td>
<td>304 (50%)</td>
<td>304 (50%)</td>
</tr>
<tr>
<td>Male</td>
<td>195 (32%)</td>
<td>87 (28.6%)</td>
<td>108 (35.3%)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>94 (16%)</td>
<td>52 (17%)</td>
<td>42 (14%)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>416 (60%)</td>
<td>179 (59%)</td>
<td>185 (61%)</td>
</tr>
<tr>
<td>Black</td>
<td>139 (22%)</td>
<td>97 (32%)</td>
<td>39 (13%)</td>
</tr>
<tr>
<td>Other</td>
<td>53 (18%)</td>
<td>28 (9%)</td>
<td>80 (26%)</td>
</tr>
<tr>
<td>Received Rx for scheduled drug at ED discharge</td>
<td>154 (25%)</td>
<td>140 (46%)</td>
<td>14 (5%)</td>
</tr>
<tr>
<td>Age</td>
<td>Mean 52 (SD = 17.6); range 18-92 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Main findings: Few frequent ED users return surveys

- Satisfaction survey yield was 5% of all encounters. Surveys from ED frequent-users represent about 6% of total ED surveys returned, 0.3% of all ED encounters.
- ED frequent-users with pain complaints were 75% less likely to yield a PG survey return than other patients (OR = 0.2488), ($\chi^2 = 615$, $p < 0.0001$).

Black & urban poor are frequent ED users

- Black patients were more likely to be identified as ED frequent-users than white patients ($\chi^2 = 29.8$, $p < 0.0001$).
- Patients identified as frequent-users with pain were more likely to report residential addresses in one of the 8 poorest zip codes in the city ($\chi^2 = 50.5$, $p = 0.0001$).
No relationship between receiving an opioid prescription and satisfaction ratings

Frequent-users with recurrent pain were more likely to leave the ED with a prescription of a scheduled drug than other patients ($\chi^2 = 138, p = 0.0001$).

Receipt of a prescription for a scheduled drug was not significantly associated with Press Ganey ratings of physician behaviors.

Opioid prescription did not determine patient satisfaction

66% of the variance in patient satisfaction with physician behavior was accounted for by 5 variables.

Variables that did not contribute significantly to predicting patient satisfaction with physician behavior included status as a frequent-user of the ED, or receipt of a prescription for scheduled drugs.

<table>
<thead>
<tr>
<th>Predictive Variable</th>
<th>Standardized Beta Coefficient</th>
<th>95% CI</th>
<th>t-value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient satisfaction with ED nursing care</td>
<td>.159</td>
<td>.067 - .261</td>
<td>3.317</td>
<td>.001</td>
</tr>
<tr>
<td>(composite score)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waiting time for physician</td>
<td>.122</td>
<td>.038 - .181</td>
<td>3.006</td>
<td>.003</td>
</tr>
<tr>
<td>Perception that staff cared about</td>
<td>.353</td>
<td>.228 - .415</td>
<td>6.784</td>
<td>.0001</td>
</tr>
<tr>
<td>respondent as a person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well pain was controlled</td>
<td>.146</td>
<td>.063 - .190</td>
<td>3.918</td>
<td>.0001</td>
</tr>
<tr>
<td>Cleanliness of ED</td>
<td>.154</td>
<td>.090 - .211</td>
<td>4.054</td>
<td>.0001</td>
</tr>
</tbody>
</table>
Study strengths and weaknesses

- Blinded data extractors
- Inter-rater reliability 96% on 95 randomly selected chart audits
- Low survey yield
- One site

Design

Limits

Correlational

Retrospective

Clinical implications

Nurses can promote a clean, caring environment, prioritize work flow and pain management.

Providers can withhold opioids when appropriate without fear of significant impact on patient satisfaction.

Kindness and compassion matter.

Moving forward

Educated all ED physicians and Advanced Practice Clinicians about results of study.

System CNO shared results with nursing leadership.

Ongoing work to improve ED pain management.
"...striking the right balance of not contributing to addiction woes...while also not under treating those who have genuine pain...remains one of the most difficult tasks in medicine."

**Role of ED team**
- Be well-informed providers
- Help educate patients, family, community
- Non-judgmental, compassionate care
- Be aware of best evidence-based practices

**ED specific improvements**
- Review Prescription Drug Monitoring Program at initiation and periodically
- Arrange for medication-assisted therapies for opioid use disorder
- Acute pain can often be managed without opioids – 3 days or less if prescribed
- Ongoing monitoring part of any opioid plan
American Academy of Emergency Medicine
Model ED Chronic Pain Treatment Guidelines

- One provider, not multiple
- Discourage opioid injections and long-acting agents
- Do not replace lost/stolen prescriptions
  - For acute illness or injury - not more than 7 days worth
- Be aware of high abuse potential
  - Oxycodone, Hydrocodone, Hydromorphone
- Use state prescription monitoring systems

This document is a guideline and is not meant to replace the individual judgment of the treating physician who is in the best position to determine the needs of the individual patient.

Best practices for ED pain care

Screen and Refer

- Depression/Anxiety
  - PHQ-9, GAD
- Substance use/misuse
  - SOAPP, COMM, Hx
- Pain interference
  - PEG, BPI

Screenings can be incorporated into ED waiting areas

https://www.mdcalc.com
EDs should partner with communities

- Naloxone programs
- "Lock-in" programs: one provider/pharmacy
- Drug take back programs
- Referrals and warm hand-offs
  - Case Manager/Social Work
  - PCPs
  - Pain Management Specialists
  - Addiction Medicine Specialists
  - Rehab facilities
  - Chaplain

Alternatives to opioids


THFW Chronic Pain/Opiate Abuse Team
Guiding Philosophy

Not “Just Say No”

- Get patients the help they need (not necessarily the help they want)
- Deliver message with compassion, empathy and respect
- Tough love
It looks like you have received a number of narcotic prescriptions from a number of different providers, which concerns me. I want to help you today, but I do not feel comfortable treating you with Dilaudid. I want to make you feel better and can offer you a number of different treatment options, but none of them will involve giving you Dilaudid. Usually, it is not possible to completely eliminate persistent pain, so our goal today is to reduce it to a more tolerable level.

The emergency department is not the best place to receive treatment for persistent pain—it’s not what we do best here.

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**Scripting/Key Words**

- It looks like you have received a number of narcotic prescriptions from a number of different providers, which concerns me.
- I want to help you today, but I do not feel comfortable treating you with Dilaudid. I want to make you feel better and can offer you a number of different treatment options, but none of them will involve giving you Dilaudid.
- Usually, it is not possible to completely eliminate persistent pain, so our goal today is to reduce it to a more tolerable level.
- The emergency department is not the best place to receive treatment for persistent pain—it’s not what we do best here.

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**Thinking outside the box with ED care**


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**Apply, educate & research non-pharmacological interventions**

- Ice/Heat
- Diversion/Distraction
- Osteopathic Manipulative Medicine
- Massage/Therapeutic touch
- Physical therapy, exercise, stretching, yoga, Pilates
- Ergonomics/posture
- Biofeedback
- Cognitive behavioral therapies/self-management
- Aromatherapy
- Support groups

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**If you can’t find a good role model, be one.**

-Cobi Anne Wirtz

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**Your Ideas?**