

Canary in the Coal Mine: The Role of the Emergency Department in the Opioid Epidemic



Scott G. Weiner, MD, MPH

Assistant Professor, Harvard Medical School
Department of EM, Brigham and Women's Hospital

Disclosures

- **Treasurer, Massachusetts College of Emergency Physicians**
- **No financial COI**

Tragedy of the Commons



Tragedy of the Commons



Tragedy of the Commons



Tragedy of the Commons



The Year was 2005

- 6 years before the PDMP was available
- 9 years before Gov. Patrick declares a public health emergency
- 10 years before MHA and MMS create prescribing guidelines
- 10 years before Gov. Baker convenes opioid task force

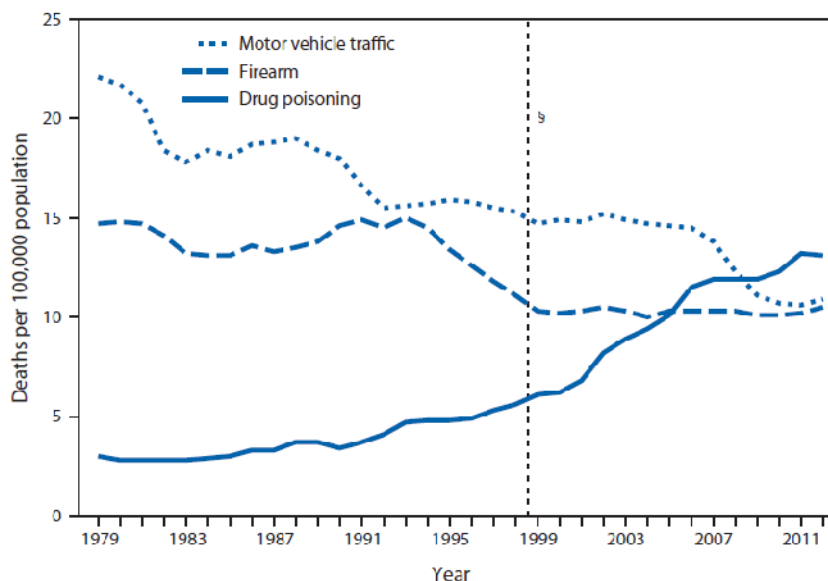
Canary in the Coal Mine



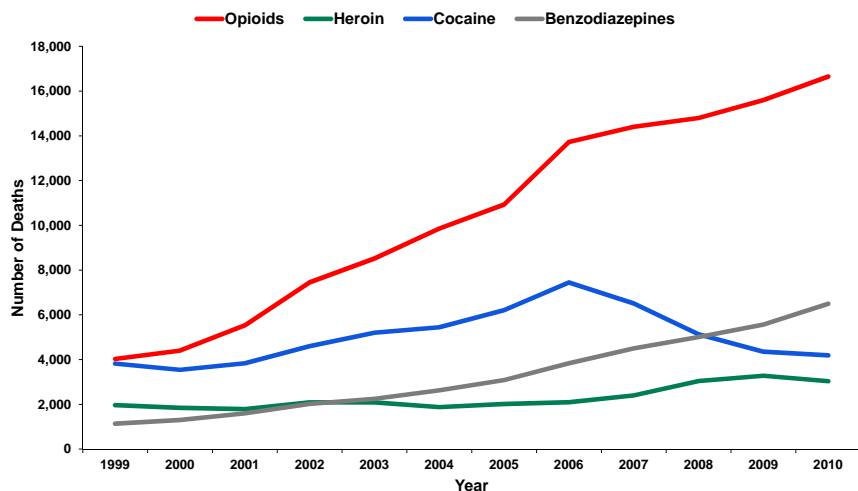
Objectives

- Define how the ED is on the leading edge to both detect opioid-related problems and create its solutions
- But first:
 - Describe the epidemic
 - Discuss prescribing and “burden vs. cause”
- And then: Guidelines, SBIRT, Suboxone and Naloxone

Accidental Death in the US

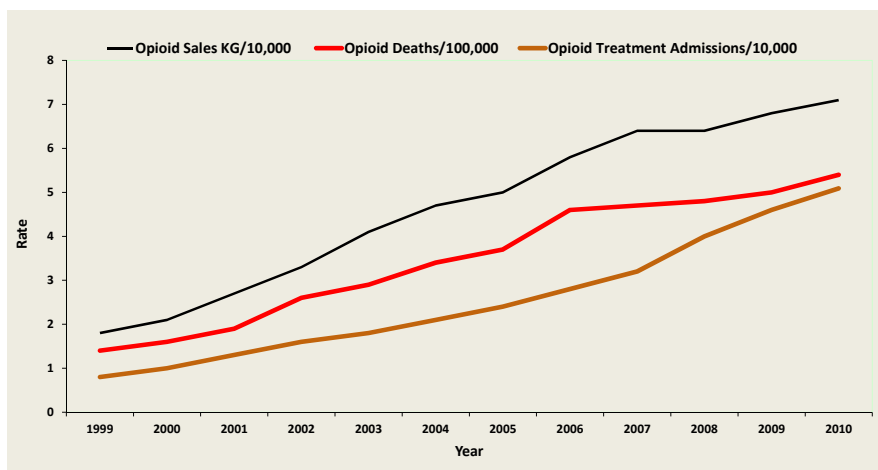


Drug Overdose Deaths by Major Drug Type, United States, 1999–2010

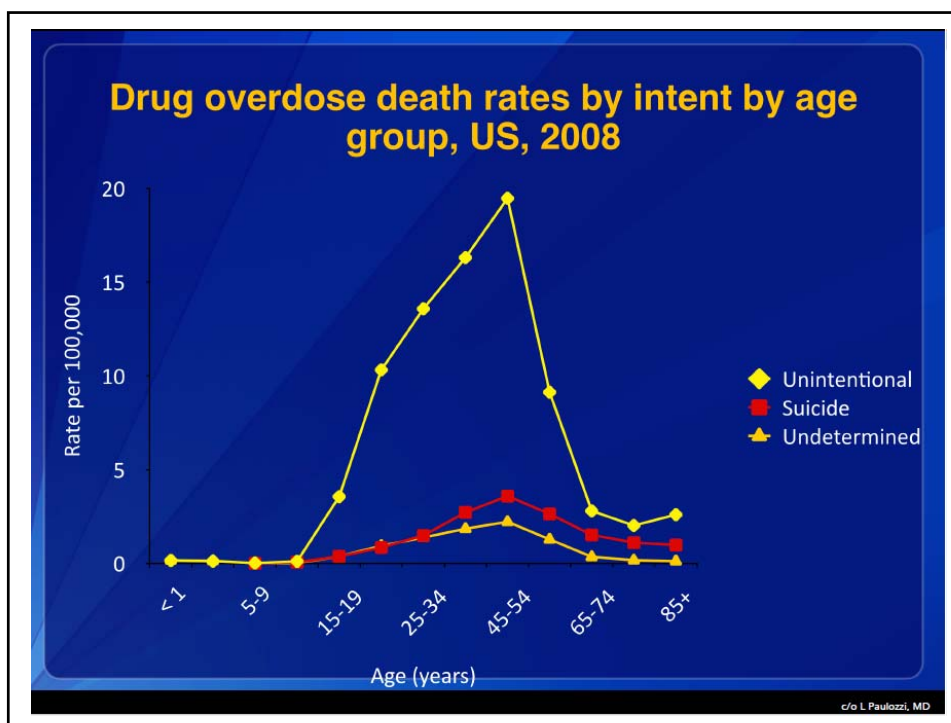


CDC, National Center for Health Statistics, National Vital Statistics System, CDC Wonder. Updated with 2010 mortality data.

Rates of opioid overdose deaths, sales and treatment admissions increased in parallel (US, 1999-2010)



CDC/National Vital Statistics System, DEA ARCOS System, SAMHSA's TEDS System



MMWR / January 13, 2012 / Vol. 61 / No. 1

CDC Grand Rounds: Prescription Drug Overdoses – a U.S. Epidemic

In 2007, approximately 27,000 unintentional drug overdose deaths occurred in the United States, one death every 19 minutes. Prescription drug abuse is the fastest growing drug problem in the United States. The increase in unintentional drug overdose death rates in recent years (Figure 1) has been driven by increased use of a class of prescription drugs called opioid analgesics (1). Since 2003, more overdose deaths have involved opioid analgesics than heroin and cocaine combined (Figure 2) (1). In addition, for every unintentional overdose death related to an opioid analgesic, nine persons are admitted for substance abuse treatment (2), 35 visit emergency departments (3), 161 report drug abuse or dependence, and 461 report nonmedical uses of opioid analgesics (4). Implementing strategies that target those persons at greatest risk will require strong coordination and collaboration at the federal, state, local, and tribal levels, as well as engagement of parents, youth influencers, health-care professionals, and policy-makers.

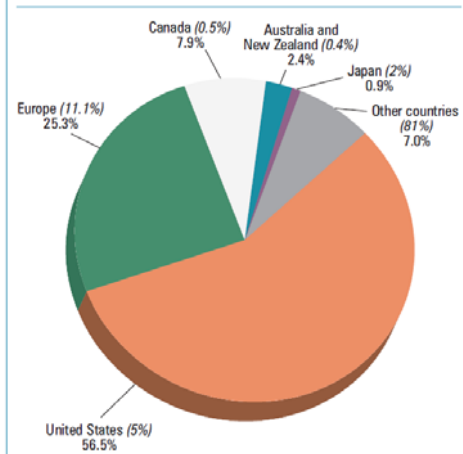
Overall, rates of opioid analgesic misuse and overdose death are highest among men, persons aged 20–64 years, non-Hispanic whites, and poor and rural populations. Persons who have

Among patients who are prescribed opioids, an estimated 80% are prescribed low doses (<100 mg morphine equivalent dose per day) by a single practitioner (7,8), and these patients account for an estimated 20% of all prescription drug overdoses (Figure 3). Another 10% of patients are prescribed high doses (≥100 mg morphine equivalent dose per day) of opioids by single prescribers and account for an estimated 40% of prescription opioid overdoses (9,10). The remaining 10% of patients are of greatest concern. These are patients who seek care from multiple doctors and are prescribed high daily doses, and account for another 40% of opioid overdoses (11). Persons in this third group not only are at high risk for overdose themselves but are likely diverting or providing drugs to others who are using them without prescriptions. In fact, 76% of nonmedical users report getting drugs that had been prescribed to someone else, and only 20% report that they acquired the drug from their own doctor (4). Furthermore, among persons who died of opioid overdoses, a significant proportion did not have a prescription in their records for the opioid that killed them; in West Virginia, Utah, and Ohio, 25%–66% of those

Enough for a 5 mg dose of Vicodin to each American adult every 6 hours for 1 month...

International Narcotics Control Board 2013

Figure 13. Morphine: distribution of consumption, 2012

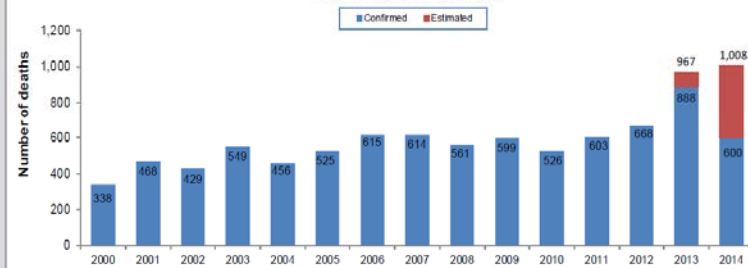


Note: Percentages in parentheses refer to share of the world population (i.e. total population of all reporting countries).



COMMONWEALTH OF MASSACHUSETTS

Opioid-Related Deaths, Unintentional/Undetermined
Massachusetts: 2000-2014

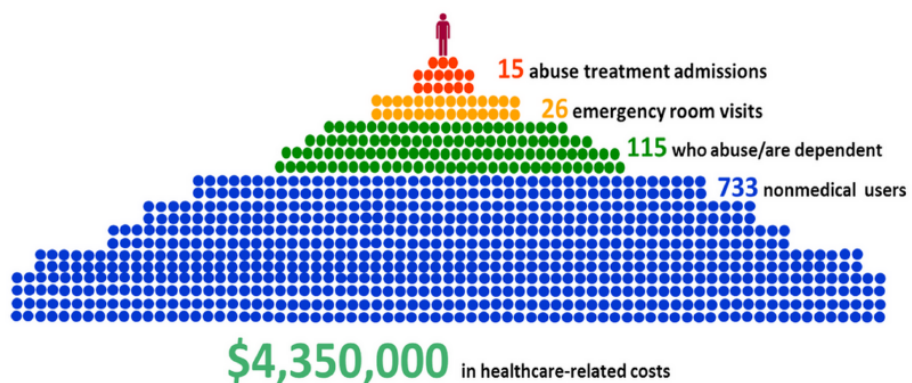


MA Department of Public Health Data Brief, April 2015
<http://www.mass.gov/eohhs/docs/dph/quality/drugcontrol/country-level-gmp/data-brief-apr-2013-overdose-country.pdf>

RECOMMENDATIONS OF THE OPIOID WORKING GROUP

5

For every 1 opioid overdose death in 2010 there were...



www.CDC.gov

What is the Role of the ED?



ORIGINAL REPORTS

The Journal of Pain, Vol 8, No 6 (June), 2007; pp 460-466
Available online at www.sciencedirect.com

Pain in the Emergency Department: Results of the Pain and Emergency Medicine Initiative (PEMI) Multicenter Study

Knox H. Todd,* James Ducharme,[†] Manon Choiniere,[‡] Cameron S. Crandall,[§] David E. Fosnocht,[¶] Peter Homel,^{**} and Paula Tanabe,^{***} for the PEMI Study Group

*Pain and Emergency Medicine Institute, Beth Israel Medical Center, New York, New York.
†Department of Emergency Medicine, Atlantic Health Sciences Corporation, St. John, New Brunswick, Canada.
‡Department of Anesthesiology, Faculty of Medicine, University of Montreal, Montreal, Canada.
§Department of Emergency Medicine, University of New Mexico School of Medicine, Albuquerque, New Mexico.
¶Department of Emergency Medicine, University of Utah School of Medicine, Salt Lake City, Utah.
**Department of Pain Medicine and Palliative Care, Beth Israel Medical Center, New York, New York.
***Department of Emergency Medicine, Northwestern School of Medicine, Chicago, Illinois.

Abstract: Pain is the most common reason for emergency department (ED) use, and oligoanalgesia in this setting is known to be common. The Joint Commission on Accreditation of Healthcare Organizations has revised standards for pain management; however, the impact of these regulatory changes on ED pain management practice is unknown. This prospective, multicenter study assessed the current state of ED pain management practice. After informed consent, patients aged 8 years and older with presenting pain intensity scores of 4 or greater on an 11-point numerical rating scale completed structured interviews, and their medical records were abstracted. Eight hundred forty-two patients at 20 US and Canadian hospitals participated. On arrival, pain intensity was severe (median, 8/10). Pain assessments were noted in 83% of cases; however, reassessments were uncommon. Only 60% of patients received analgesics that were administered after lengthy delays (median, 90 minutes; range, 0 to 962 minutes), and 74% of patients were discharged in moderate to severe pain. Of patients not receiving analgesics, 42% desired them; however, only 31% of these patients voiced such requests. We conclude that ED pain intensity is high, analgesics are underutilized, and delays to treatment are common. Despite efforts to improve pain management practice, oligoanalgesia remains a problem for emergency medicine.

Perspective: Despite the frequency of pain in the emergency department, few studies have examined this phenomenon. This study documents high pain intensity and suboptimal pain management practices in a large multicenter ED network in the United States and Canada. These findings suggest that there is much room for improvement in this area.

We conclude that ED pain intensity is high, analgesics are underutilized, and delays to treatment are common.

Despite efforts to improve pain management practice, oligoanalgesia remains a problem for emergency medicine.



The Fifth "Vital Sign"

Complying with Pain Management Standard PC.01.02.07

Pain is an inevitable part of health care. Some patients arrive at an organization in pain, while others may experience pain during care, treatment, or services—such as patients undergoing surgery. Regardless of how his or her pain manifests, every patient hopes his or her health care experience will include interventions that will eliminate or reduce pain.

Unlike other physical indicators like blood pressure and temperature, pain cannot be quantitatively measured. The duration and intensity of pain vary from person to person. Therefore, organizations must have effective and interactive pain assessment and reassessment processes that help identify pain, point to effective treatment, and verify that implemented interventions work.

Provision of Care, Treatment, and Services (PC) Standard PC.01.02.07 directly addresses the "who, what, when, and how" of the pain assessment and reassessment processes. (See Sidebar 1 on page 8). "Organizations often struggle to completely comply with this standard," says Jane Schetter, R.N., M.S.N., senior consultant for Continuous Service Readiness at Joint Commission Resources. "In particular, they have difficulty with reassessment and establishing appropriate

(Continued on page 8)

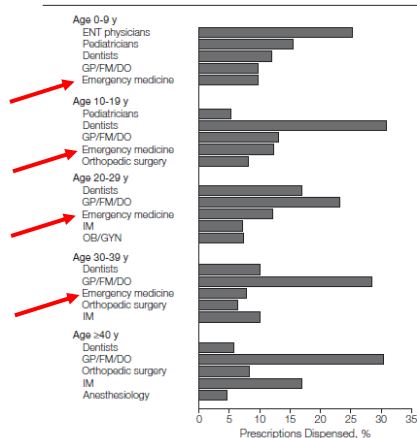


HR
Temp
BP
RR
 O_2 -sat
Pain

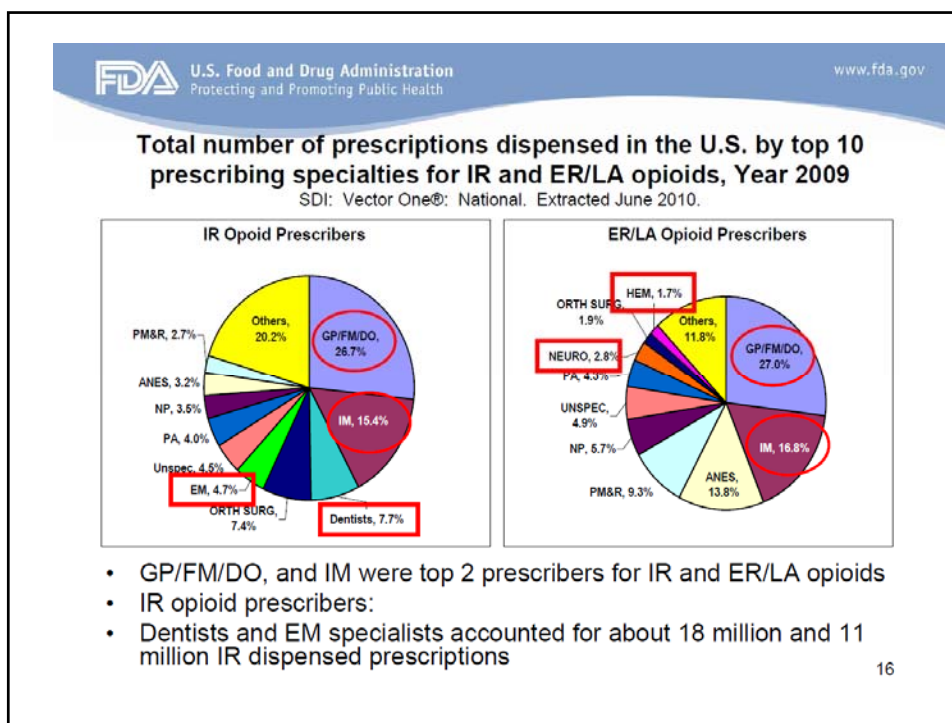
Mazer-Amirshahi – Academic Emergency Medicine 2014; 21:236-243

- **NHAMCS - Between 2001-2010:**
 - Non-opioids 26.2% to 27.3%
 - Painful conditions 47.1% to 51.1%
 - Opioid use increased from 20.8% to 31.0% of all visits
 - Use of schedule II 7.6% to 14.5%

Figure 1. Percentage of Prescriptions Dispensed for Opioid Analgesics From Outpatient US Retail Pharmacies by Age and Physician Specialty, 2009



- **Volkow ND, et al. Characteristics of opioid prescriptions in 2009. JAMA. 2011 6;305(13):1299-301.**



Menchine, et al

- ACEP Research Forum 2014
- Medical Expenditure Panel Survey
- Compared with office settings, EDs had 17% less MMEs
- Only 0.3% ED Rx were for >100 MME per day vs. 2.6% in office setting

Menchine, et al

- “Given the very low rate of high-dose prescribing from the ED, policy efforts to reduce risky opioid prescribing should not focus on ED settings.”

POSED Study

- 19 Hospitals, national sample
- 12% of all adult patient visits result in an opioid prescription
- Vast majority were oxycodone and hydrocodone, immediate release, 5 mg
- Mean number of pills was 17/prescription

Some Math

- 136 million ED visits per year
- 12% discharged with 17 pills for oxy/hydrocodone 5
- 1,387,200 grams of oxy/hydrocodone from ED at discharge
- In 2010, US consumed 38,000,000 grams of hydrocodone and 92,500,000 grams of oxycodone
- ED discharge = 1.5% of all US opioids

Attack of the Guidelines!



HOUSE DOCKET, NO. 2440 FILED ON: 1/15/2015

HOUSE No. 1969

By Mr. Golden of Lowell, a petition (accompanied by bill, House, No. 1969) of Thomas A. Golden, Jr. and others relative to the dispensing of controlled substances by emergency room physicians. Public Health.

[SIMILAR MATTER FILED IN PREVIOUS SESSION
SEE HOUSE, NO. 3359 OF 2013-2014.]

The Commonwealth of Massachusetts

In the One Hundred and Eighty-Ninth General Court
(2015-2016)

An Act relative to 72 hour emergency prescribing.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

Chapter 94C of the General Laws is hereby amended by adding the following section:-

Section 50. A physician practicing in an emergency room shall not be permitted to provide to a patient seeking emergency care more than 72 hours worth of a controlled substance as defined by this chapter.



Burden of Unintentional Opioid-Related Overdoses Massachusetts, 2013


In addition to **978** opioid overdose deaths, there were more than **2,000** hospital stays and more than **4,500** emergency department visits for non-fatal overdoses in 2013.




Yokell MA. Presentation of Prescription and Nonprescription Opioid Overdoses to US Emergency Departments. JAMA Intern Med. 2014 Dec 1;174(12):2034-7

Table 2. Charges for Admitted and Nonadmitted Patients by Opioid Type^a

	All Overdoses	Prescription Drug	Methadone	Heroin	Unspecified Opioid or Multiple Types of Opioid ^a
No. of ED visits	135 971	80 095	12 114	21 955	21 807
No. of ED visits resulting in hospitalization ^b	68 749	42 622	8187	5303	12 637
Mean charges for ED visit for nonadmitted patients, \$	3397	3640	3692	2421	4121
Total ED charges for nonadmitted patients, \$	234 542 324	137 843 391	14 100 201	42 898 617	39 700 115
Mean length of inpatient stay, d	3.8	3.8	4.0	3.4	3.8
Total No. of hospital days	262 075	161 670	33 127	18 352	48 927
Mean charges of inpatient stay, \$	29 807	29 497	32 647	28 255	29 669
Total inpatient charges (includes ED charges of admitted patients), \$	2 048 368 264	1 255 625 508	766 551 887	150 758 788	375 432 081



H-CUP
HEALTHCARE COST AND
UTILIZATION PROJECT



AHRQ
Agency for Healthcare
Research and Quality

STATISTICAL BRIEF #177

August 2014

Hospital Inpatient Utilization Related to Opioid Overuse Among Adults, 1993–2012

Pamela L. Owens, Ph.D., Marguerite L. Barnett, M.S., Audrey J. Weiss, Ph.D., Raynard E. Washington, Ph.D., and Richard Kronick, Ph.D.

Introduction

Opioids, or pain medications, are commonly used to manage pain associated with injury, illness, or following surgery. Opioids include both prescription pain medications, such as morphine, codeine, fentanyl, oxycodone, and hydrocodone, as well as illegal drugs such as heroin.¹ A variety of negative side effects can occur from opioid use, including vomiting, severe allergic reactions, and overdose.² In 2010, opioids, predominantly prescription medications, were estimated to be nonmedically used by more than 12 million people,³ resulted in 425,000 emergency department visits,⁴ and were related to approximately 17,000 deaths.^{5,6}

Opioid overdose can occur for a variety of reasons, including accidental and deliberate misuse of a prescription (e.g., taking more doses than prescribed), taking medication prescribed for someone else, and combining opioids with other substances such as alcohol.⁷ The U.S. Department of Health and Human Services has recognized opioid misuse and abuse as a significant public health issue.^{8,9,10}

¹ Substance Abuse and Mental Health Services Administration (SAMHSA). SAMHSA Opioid Overdose Prevention Toolkit. HHS Publication No. (SMA) 13-4742. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2013.
² Ibid.
³ SAMHSA. Results from the 2010 National Survey on Drug Use and Health: volume 1: summary of national findings. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2011. http://oas.samhsa.gov/2k10/NSDUH/2k10Results.htm#2_10. Accessed July 11, 2014.
⁴ SAMHSA. The DAWN Report: Highlights of the 2011 Drug Abuse Warning Network (DAWN) Findings on Drug-Related Emergency Department Visits. February 22, 2013. Rockville, MD: Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. <http://www.samhsa.gov/data/2k13/DAWN127ar127-DAWN-highlights.pdf>. Accessed July 15, 2014.
⁵ Jones CM, Mack KA, Paulozzi LJ. Pharmaceutical overdose deaths, United States, 2010. *N Engl J Med*. 2013;369:1318–1323.

Highlights

- The rate of hospital stays involving opioid overuse among adults increased more than 150 percent between 1993 and 2012. By 2012, there were 709,500 total opioid-related hospital stays representing a rate of 295.6 stays per 100,000 population.
- In 1993, the national rate of hospital stays involving opioid overuse among adults was 116.7 per 100,000 population, with the highest rates in select subgroups: men (144.0 per 100,000 population), people aged 25–44 years (188.6 per 100,000 population), and people living in the Northeast (264.0 per 100,000 population).
- By 2012, hospital stays involving opioid overuse had increased by approximately 150 percent, with the largest rates of increase among subgroups with relatively lower rates in 1993 (women, people aged 65 years and older, and people living in the Midwest).
- In 2012, rates for various age groups were much more similar, the Northeast was no longer a notable outlier, and rates for men and women were nearly equal.
- Medicaid had the largest proportion of stays involving opioid overuse (43 percent) in 1993, but Medicare had the largest annual increase over time. By 2012, Medicaid and Medicare each were billed about one-third of all opioid-related stays.

However...

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OH HENRY

What's Your Pain Care Philosophy?

by Greg Henry, MD on March 9, 2009

“Whenever I wonder whether I should or shouldn’t be giving a dose of pain medication, I always remember this: I’ve never created an addict by giving one shot of pain meds, and I’ve never cured an addict by withholding it. These are complex issues and I can’t always sort them out in the emergency department.”

ED Prescription Opioids are a Frequent Initial Exposure Preceding Addiction

Rachel M. Ancona¹, Megan M. Butler¹,
Gillian A. Beauchamp², Cyrus K. Yamin¹, Erin
L. Winstanley¹, Kim Ward Hart¹, Andrew H.
Ruffner¹, Shawn W. Ryan¹, Richard J. Ryan¹,
Christopher J. Lindsell¹, and Michael S.
Lyons¹

¹University of Cincinnati, Cincinnati, OH;

²Oregon Health Sciences University, Portland,
OR

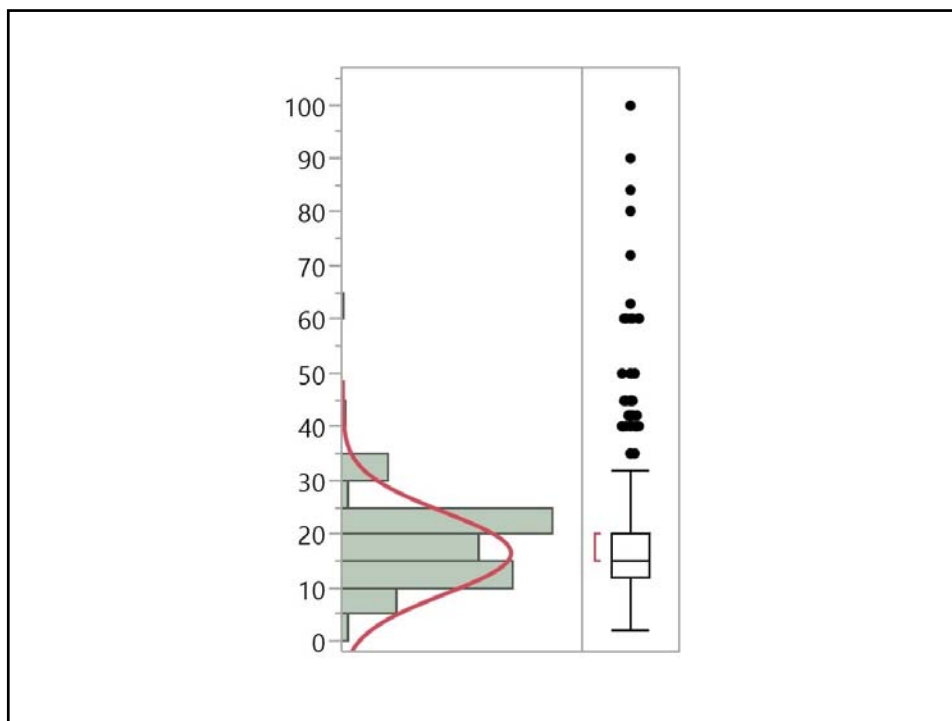
Background: Pharmaceutical opioids are the primary driver behind dramatic increases in drug overdose deaths. Although this health crisis coincides with an increase in opioid prescribing, we do not know to what extent opioid prescribing plays a role by supplying those already suffering from addiction or by prompting new addiction after medical exposure (iatrogenic addiction).

Objectives: This exploratory study aimed primarily to estimate the proportion of persons abusing opioids whose self-reported initial exposure to opioids was medical and derived from ED care, and secondarily to estimate the proportion of such patients with increased risk for addiction prior to their first opioid exposure.

Methods: This cross-sectional pilot study enrolled a convenience sample of patients in an urban, academic ED from April 2014 to July 2014. Eligible patients had self-reported or physician-identified opioid abuse, defined as opioid use for a non-medical purpose. Surveys were administered to identify self-reported: 1) circumstances of initial opioid exposure, 2) timing and nature of subsequent opioid use, and 3) risk factors for developing addiction that were present prior to initial exposure, such as illicit substance use and alcohol or drug abuse treatment. Analysis was descriptive.

Results: Of 84 eligible patients, 59 (70%) consented. Mean age was 34 (SD 11), 56 (95%) were white, and 33 (56%) were male. Medical opioids were reported as the initial exposure by 35/59 respondents (59%, 95% CI 47%-71%), and for 10/35 (29%, 95% CI 16%-46%), the prescription came from an ED. At least one risk factor was present in 28/35 (80%) of medically exposed patients, 27/35 (77%) reported illicit substance use and 4/35 (11%) reported alcohol/drug abuse treatment prior to initial opioid exposure.

Conclusion: In this preliminary study, over one-half of patients with opioid abuse reported an initial medical exposure, many of which were from emergency providers. Elevated risk for addiction may be identifiable at the time of initial exposure. These findings indicate the need for urgent study of how frequently and under what circumstances iatrogenic addiction occurs.



Opioid Prescribing in Emergency Departments The Prevalence of Potentially Inappropriate Prescribing and Misuse

Joseph Logan, PhD, MHS, Ying Liu, PhD, Leonard Paulozzi, MD, MPH,
Kun Zhang, MS, and Christopher Jones, PharmD, MPH

Objective: Emergency departments (EDs) routinely provide care for patients seeking treatment for painful conditions; however, they are also targeted by people seeking opioid analgesics for nonmedical use. This study determined the prevalence of potentially inappropriate ED opioid prescribing and misuse by ED providers in a large, commercial health market.

Research Design and Setting: We analyzed data from the Health MarketsScan database, a large, commercial health market. We identified 400,288 enrollees aged 18 years and older who received at least one ED opioid prescription. At least one indicator applied to 10.3% of enrollees: 7.7% had high daily doses; 2.0% had opioid overlap; 1.0% had opioid-benzodiazepine overlap. Among LA/ER opioid prescriptions, 21.7% were for acute pain, and 14.6% were overlapping. Females were more likely to have at least one indicator.

Results: We identified 400,288 enrollees who received at least one ED opioid prescription. At least one indicator applied to 10.3% of enrollees: 7.7% had high daily doses; 2.0% had opioid overlap; 1.0% had opioid-benzodiazepine overlap. Among LA/ER opioid prescriptions, 21.7% were for acute pain, and 14.6% were overlapping. Females were more likely to have at least one indicator.

Key Words: opioid analgesics; emergency department; misuse; prescribing; pain management.

Opioid analgesics, along with benzodiazepines, accounts for a large proportion of prescription drug overdose fatalities in the United States,¹⁻⁴ and overdose deaths involving these drugs are increasing annually.^{2,5-8} Common opioid analgesics involved in these deaths include methadone, hydrocodone, oxycodone, morphine, and fentanyl^{1,3,9-11}; these drugs are prescribed for the management of acute or chronic pain. Benzodiazepines, such as diazepam and alprazolam, commonly involved in overdoses, are used as antianxiety agents, sedatives, hypnotics, muscle relaxants, and anticonvulsants.

A Logan J, Liu Y, Paulozzi L, Zhang K, Jones C. Opioid prescribing in emergency departments: the prevalence of potentially inappropriate prescribing and misuse. *Med Care*. 2013 Aug;51(8):646-652.

In some instances, the prescribing of opioid analgesics in EDs might not be optimal in terms of minimizing the risk of their misuse. Guidelines for the cautious use of opioid analgesics in EDs and timely data from prescription drug monitoring programs could help EDs treat patients with pain while reducing the risk of nonmedical use.

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Own It

- Be the experts at opioid prescribing
- Use screening tools
- Counsel on risks of opioids
- Use guidelines
- Set the example for other specialities
- Be the safety net

PAIN MANAGEMENT/CLINICAL POLICY

Clinical Policy: Critical Issues in the Prescribing of Opioid Adult Patients in the Emergency Department

Clinical Practice Statement

Emergency Department Opioid Prescribing Guidelines for the Treatment of Non-Cancer Related Pain (11/12/2013)

Chair: Steven Rosenbaum, MD FAAEM

Authors: David Cheng, MD FAAEM
Nima Majlesi, DO FAAEM

Co-Authors: Mitchell Heller, MD FAAEM
Steve Rosenbaum, MD FAAEM
Michael Winters, MD FAAEM

Reviewed and approved by the AAEM Board of Directors 11/12/2013.

Executive summary

Pain is one of the most common chief complaints among emergency department patients with a reported rate of over 50%.¹ There is great variability among emergency clinicians in the management of pain, especially with respect to the use of opioid medications.² Importantly, morbidity and mortality have increased as the frequency of opioid use for the treatment of pain has increased.³ This includes a significant increase in non-medical opioid use, addiction, drug-related emergency department visits, and death.^{4,5} The dangers of prescribing opioid medications extend beyond the individual patient and may adversely impact public health.⁶ Approximately 13% of high school seniors have reported non-medical use of prescription opioids. Despite emergency departments prescribing only a fraction of those prescriptions written nationally, ED prescriptions for opioids are reported to account for approximately 45% of those opioids diverted for non-medical use.⁷

New York City Emergency Department Discharge Opioid Prescribing Guidelines

Note: These guidelines do not replace clinical judgment in the appropriate care of patients nor are they intended to provide guidance on the management of patients while they are in the ED.

In the management of patients with acute or chronic non-cancer pain discharged from an emergency department,

1. Consider short-acting opioid analgesics for the treatment of acute pain only when the severity of the pain is reasonably assumed to warrant their use.
2. Start with the lowest possible effective dose if opioid analgesics are considered for the management of pain.
3. Prescribe no more than a short course of opioid analgesics for acute pain. Most patients require no more than three days.
4. To assess for opioid misuse or addiction, use targeted history or validated screening tools. Prescribers can also access the New York State Controlled Substance Information (CSI) on Dispensed Prescriptions Program for information on patients' controlled substance prescription history.
5. Avoid initiating treatment with long-acting or extended-release opioid analgesics.
6. Address exacerbations of chronic or recurrent pain conditions with non-opioid analgesics, non-pharmacological therapies, and/or referral to specialists for follow-up, all as clinically appropriate.
7. Avoid when possible prescribing opioid analgesics to patients currently taking benzodiazepines and/or other opioids. Consider other risk factors for consequential respiratory depression.
8. Attempt to confirm with the treating physician the validity of lost, stolen, or destroyed prescriptions. If considered appropriate, replace the prescription only with a one-to two-day supply.
9. Provide information about opioid analgesics to patients receiving a prescription, such as the risks of overdose and dependence/addiction, as well as safe storage and proper disposal of unused medications.

ion than
our own
to stem
re, opioid
ual issue.

department as a leading source of opioid prescriptions," and argued that limiting prescriptions in EDs "will not solve the problem of opioid misuse." That, he wrote, will require the participation of law enforcement, pharmaceutical companies, and

MHA Guidelines

- Hospitals, in conjunction with ED personnel, should develop a process to screen for substance misuse.
- When possible, consult the PMP before writing an opioid prescription.
- Hospitals should develop a process to share the ED visit history of patients with other providers and hospitals that are treating the patients in the Emergency Department by using a health information exchange system.

MHA Guidelines

- Hospitals should develop a process to coordinate the care of patients who frequently visit EDs.
- For acute exacerbations of chronic pain, the ED provider should notify the patient's primary opioid prescriber or PCP of the visit and the medication prescribed.

MHA Guidelines

- ED providers should not provide prescriptions for controlled substances that were lost, destroyed, or stolen (and no methadone unless confirmed)
- Unless otherwise clinically indicated, ED providers should not prescribe long-acting or controlled-release opioids.

MHA Guidelines

- When opioid medications are prescribed, counsel:
 - to store the medications securely, not share them with others, and dispose of them properly when their pain has resolved
 - to avoid using the medications for non-medical purposes
 - to avoid using opioids and concomitant sedating substances due to the risk of overdose.
- No more than a short course and minimal amount of opioid analgesics for serious acute pain, lasting no more than five days.

Scott's Guidelines

- Just say no (unless really, really, really needed)
- Acetaminophen 1 gram q6
- Ibuprofen 400-600 mg q6
- The only pain level of 0 is death
- If you do give, 3 days and flush (or properly dispose)

Table 2. Sources of diverted prescription pain medication among Ontario students in grades 7 to 12 who used opioids nonmedically in the past year: *N* = 624.

SOURCE	%
From home	72.4
From a friend	6.0
From someone I know	2.9
From the "street"	<0.5
Other sources not listed	8.8
Do not remember	9.7

Adapted from Reuben Strayer, SMACCUS 2015

The Opioid Prescription Epidemic and the Role of Emergency Medicine

Sabrina J. Poon, MD*; Margaret B. Greenwood-Erickson, MD, MPH

*Corresponding Author. E-mail: sjpoon@partners.org, Twitter: @sjpoon.

0196-0644/\$-see front matter
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<http://dx.doi.org/10.1016/j.annemergmed.2014.06.016>

[Ann Emerg Med. 2014;■■■.]

INTRODUCTION

Prescription medication overdoses are now the leading cause of death because of injury, with deaths from drug overdose increasing consecutively from 1999 to 2010.^{1,2} During this time, the sale of opioid analgesics increased 4-fold, and it is estimated that 6.8 to more than 12 million Americans receive prescription drugs every year nonmedically, namely, either without a prescription or the intent of relieving pain.¹⁻³ Opioid abuse is of particular concern in the practice of emergency medicine, but there are competing concerns for providers in the emergency department (ED). Guidelines can play a critical role in reducing adverse events and rates of addiction with respect to opioid prescribing. Other useful tools are prescription drug monitoring programs, which are databases that track patients' controlled substance prescriptions and may help reduce inappropriate prescribing; however, legal and technological reforms to increase access to and efficacy of the databases are needed. Finally, although there is some education in pain management at both the medical school and residency level, the current epidemic calls for an urgent enhancement over what currently exists. We hypothesize that a combination of policy and education reforms will result in decreased rates of opioid abuse, misuse, and death.

terminal, resulting in a perhaps now-outdated distinction between cancer and noncancer pain. Nevertheless, it is now known that there were strong financial ties between some of the pharmaceutical makers and groups that advocated broader use of opioids, and Purdue Pharma has since been fined more than \$600 million for misbranding.^{3,8,9}

This revelation notwithstanding, the emphasis on pain management with opioids caught the attention of the regulatory bodies of medicine. In 2001, The Joint Commission mandated that hospitals focus on the treatment and monitoring of pain as the fifth vital sign.^{10,11} The push has continued into recent years, with the Institute of Medicine publication *Relieving Pain in America*, which stated that "effective pain management is a moral imperative, a professional responsibility, and the duty of people in the healing professions," and that "relieving pain should be a national priority."^{10,12-15} Accordingly, there has been a strong mandate to improve pain management for both cancer and noncancer pain, impure as this distinction may be now.

The unintended consequences of this mandate are real. In 2010, 60% (22,134 of 38,329) of drug overdose deaths were caused by prescription drugs, with 75% of those caused by opioid analgesics.¹⁶ There has also been an increase in heroin use and related deaths, and it is hard to argue that the increase in prescription drug use has not also resulted in an increase in heroin use.¹⁷⁻¹⁹ Almost 80% of new heroin users in the United States aged between 12 and 49 years had previously used prescription pain relievers nonmedically, and individuals in this

Alternatives to Opioids

- Local/regional anesthesia
- Non-opioids:
 - Acetaminophen + ibuprofen
 - Droperidol, ketamine, dexmedetomidine, propofol
 - Anticonvulsants, gabapentin
- RICE, heat, weight loss, yoga, acupuncture, TENS

Adapted from Reuben Strayer, SMACCUS 2015

ED Screening

PAIN MEDICINE
VOLUME 17 NUMBER 4-2008



The Journal of Pain, Vol 8, No 4 (April), 2008; pp 360-372
Available online at www.sciencedirect.com

RESEARCH ARTICLES

Predicting Aberrant Behaviors in Opioid-Treated Patients: Preliminary Validation of the Opioid Risk Tool

Lynn R. Webster, MD, and Rebecca M. Webster
Lidex Pain Clinic and Clinical Research, Salt Lake City, Utah, USA

ABSTRACT

Objective: To provide clinicians with a brief screening tool to predict accurately which individuals may develop aberrant behaviors when prescribed opioids for chronic pain.

Design: One hundred and eighty-five consecutive new patients treated in one pain clinic took the self-administered Opioid Risk Tool (ORT). The ORT measured the following risk factors associated in scientific literature with substance abuse: personal and family history of substance abuse; age; history of preadolescent sexual abuse; and certain psychological diseases. Patients received scores of 0-3 (low risk), 4-7 (moderate risk), or ≥8 (high risk), indicating the probability of their displaying opioid-related aberrant behaviors. All patients were monitored for aberrant behaviors for 12 months after their initial visits.

Results: For those patients with a risk category of low, 17 out of 18 (94.4%) did not display an aberrant behavior. For those patients with a risk category of high, 40 out of 44 (90.9%) did display an aberrant behavior. The authors used the κ statistic to validate the ORT, because it simultaneously assesses sensitivity and specificity. The ORT displayed excellent discrimination for both the male ($\kappa = 0.82$) and the female ($\kappa = 0.85$) prognostic models.

Conclusion: In a preliminary study, among patients prescribed opioids for chronic pain, the ORT exhibited a high degree of sensitivity and specificity for determining which individuals are at risk for opioid-related, aberrant behaviors. Further studies in a variety of pain and nonpain settings are needed to determine the ORT's universal applicability.

Key Words: Assessment; Screening; Chronic Pain; Opioids; Abuse; Addiction

Validation of the Revised Screener and Opioid Assessment for Patients With Pain (SOAPP-R)

Stephen F. Butler,* Kathrine Fernandez,* Christine Benoit,* Simon H. Budman,* and Robert N. Jamison†

*Inflexion, Inc., Newton, Massachusetts;
†Pain Management Center, Departments of Anesthesia and Psychiatry, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts.

Abstract: The original Screener and Opioid Assessment for Patients with Pain (SOAPP) is a conceptually derived self-report questionnaire designed to predict aberrant medication-related behaviors among chronic pain patients considered for long-term opioid therapy. The purpose of this study was to develop and validate an empirically derived version of the SOAPP (SOAPP-R) that addresses some limitations of the original SOAPP. In successive steps, items were reduced from an initial pool of 142 to a 97-item beta version. The beta version was administered to 283 chronic pain patients receiving long-term opioid therapy. Items were evaluated based on data collected at follow-up, including correlation with the Aberrant Drug Behavior Index (ADBI), derived from interview data, physician ratings, and urine toxicology screens. Twenty-four items were retained and comprise the final SOAPP-R. Coefficient α was .88, and receiver operating characteristics curve analysis yielded an area under the curve of .81 ($P < .001$). A cutoff score of 18 showed adequate sensitivity (.81) and specificity (.68). The obtained psychometrics, along with the use of a predictive criterion that goes beyond self-report, suggest that the SOAPP-R is an improvement over the original version in screening risk potential for aberrant medication-related behavior among persons with chronic pain.

Perspective: There is a need for a screener for abuse risk in patients prescribed opioids for pain. This study presents a revised version of the SOAPP-R that is empirically derived with good reliability and validity but is less susceptible to overt deception than the original SOAPP version 1.

© 2008 by the American Pain Society

Key words: Substance abuse, chronic pain, opioids, addiction, aberrant drug behaviors.

ED Screening

- SOAPP-R on an Android Tablet...

ED Screening Study - SOAPP-R

How often do you have mood swings?

Never

Seldom

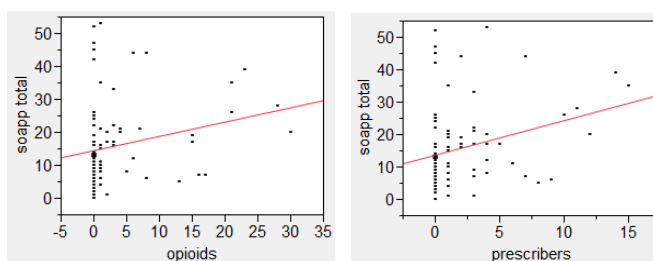
Sometimes

Often

Very Often

ED Screening

- 93 patients approached, 82 patients consented (88%)
- Total SOAPP-R score: Mean 16.0 (95% CI 13.2-18.8), median 12.5
- 33% scored 18 or higher



ED Screening

- Time to completion of SOAPP-R:
 - 164.0 (95% CI 147.7-180.4) seconds =
2 min 44 sec
 - How difficult:
 - 93% “very easy”
 - 1% “somewhat easy”
 - 5% “neutral”
 - 1% “somewhat difficult”

ED SBIRT

By Steven L. Bernstein and Gail D'Onofrio

DOI: 10.1377/hlthaff.2013.0664
HEALTH AFFAIRS 32,
NO. 12 (2013): 2122-2128
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The People-to-People Health
Foundation, Inc.

A Promising Approach For Emergency Departments To Care For Patients With Substance Use And Behavioral Disorders

Steven L. Bernstein (Steven.bernstein@yale.edu) is a professor in the Department of Emergency Medicine, Yale University School of Medicine, in New Haven, Connecticut.

Gail D'Onofrio is a professor in and chair of the Department of Emergency Medicine, Yale University School of Medicine.

ABSTRACT Millions of patients visit US emergency departments (EDs) each year because of substance use and behavioral disorders. Caring for these people is daunting, given the high patient volumes and increasing acuity of illness that EDs are experiencing. The nation's primary care system has limited capacity to treat these individuals, who are often uninsured, poor, and sick. A growing body of evidence suggests that screening, providing a brief intervention, and referring these patients to treatment—an approach known as SBIRT—can be effective in the ED. Typically requiring just five to ten minutes, SBIRT incorporates principles of motivational interviewing, an evidence-based counseling technique that uses empathy, positive framing, reflective listening, and gentle education to encourage people to change risky behavior. This article describes what is known about the clinical and cost-effectiveness of SBIRT when applied to ED patients with substance use and behavioral disorders. The article recommends adopting SBIRT broadly to help EDs become a coordinated part of the health care system, offering opportunities to improve the health of millions of Americans.

Boston University School of Public Health The BNI ART Institute

WHAT WE DO TRAINING & CONSULTING EXPERIENCE ABOUT US RESOURCES CHANGE TALK BLOG

Project ASSERT: SBIRT in Emergency Care

Project ASSERT (Alcohol & Substance Abuse Services, Education, and Referral to Treatment) is a team of peer educators performing "in-reach" at the Boston Medical Center Emergency Department. By collaborating with hospital staff, the health promotion advocates (HPAs) offer screening, brief intervention, information and health resources at the point of service in the hospital environment, rather than conducting "out-reach" in the community setting. Project ASSERT provides comprehensive care and prevention by putting substance abuse in the context of other health and safety needs.

Project ASSERT HPAs affirm the dignity of patients and their cultural backgrounds, beliefs, and values during their hospital visit by establishing a relationship with patients based on emotional support and advocacy. The encounter with HPAs provides patients with the opportunity to explore change through a non-judgmental conversation combined with increased access to various health and treatment services if desired.



Project ASSERT

- Hours: 8am to 12:30 am,
7 days a week and holidays.
- Contact: [617-414-4388](tel:617-414-4388)

[Project ASSERT brochure](#)

SBIRT Programs

Project ASSERT

[Project ASSERT Celebrates 20 Years](#)

[Background](#)

[Massachusetts ED SBIRT Initiative](#)

Partners & Clients

[BNI in Health Promotion](#)

Opioid Education and Nasal Naloxone Rescue Kits in the Emergency Department

Kristin Dwyer, MD^{*}
Alexander Y. Walley, MD, MSc[†]
Breanne K. Langlois, MPH[†]
Patricia M. Mitchell, RN[†]
Kerrie P. Nelson, PhD, MS[‡]
John Cromwell[§]
Edward Bernstein, MD[¶]

^{*}Boston University School of Medicine, Boston Medical Center, Department of Emergency Medicine, Boston, Massachusetts
[†]Boston University School of Medicine, Boston Medical Center, Department of Medicine, Boston, Massachusetts
[‡]Boston University School of Public Health, Department of Biostatistics, Boston, Massachusetts
[§]Boston University School of Public Health, Department of Community Health Sciences, Boston, Massachusetts
[¶]Boston University School of Medicine, Boston Medical Center, Department of Emergency Medicine, Boston, Massachusetts

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DOI: 10.5811/westjem.2015.2.24909

Introduction: Emergency departments (EDs) may be high-yield venues to address opioid deaths with education on both overdose prevention and appropriate actions in a witnessed overdose. In addition, the ED has the potential to equip patients with nasal naloxone kits as part of this effort. We evaluated the feasibility of an ED-based overdose prevention program and described the overdose risk knowledge, opioid use, overdoses, and overdose responses among participants who received overdose education and naloxone rescue kits (OEN) and participants who received overdose education only (OE).

Methods: Program participants were surveyed by telephone after their ED visit about their substance use, overdose risk knowledge, history of witnessed and personal overdoses, and actions in a witnessed overdose including use of naloxone.

Results: A total of 415 ED patients received OE or OEN between January 1, 2011 and February 28, 2012. Among those, 51 (12%) completed the survey, 37 (73%) of those received a naloxone kit, and 14 (27%) received OE only. Past 30-day opioid use was reported by 35% OEN and 50% OE, and an overdose was reported by 19% OEN and 29% OE. Among 53% (27/51) of participants who witnessed another individual experiencing an overdose, 95% OEN and 88% OE stayed with victim, 74% OEN and 38% OE called 911, 26% OEN and 25% OE performed rescue breathing, and 32% OEN (n=6) used a naloxone kit to reverse the overdose. We did not detect statistically significant differences between OEN and OE-only groups in opioid use, overdose or response to a witnessed overdose.

Conclusion: This is the first study to demonstrate the feasibility of ED-based opioid overdose prevention education and naloxone distribution to trained laypersons, patients and their social network. The program reached a high-risk population that commonly witnessed overdoses and that called for help and used naloxone, when available, to rescue people. While the study was retrospective with a low response rate, it provides preliminary data for larger, prospective studies of ED-based overdose prevention programs. [West J Emerg Med. 2015;16(3):381-384.]

Original Investigation

Emergency Department-Initiated Buprenorphine/Naloxone Treatment for Opioid Dependence A Randomized Clinical Trial

Gail D'Onofrio, MD, MS; Patrick G. O'Connor, MD, MPH; Michael V. Pantalon, PhD; Marek C. Chawarski, PhD; Susan H. Busch, PhD; Patricia H. Owens, MS; Steven L. Bernstein, MD; David A. Fiellin, MD

IMPORTANCE Opioid-dependent patients often use the emergency department (ED) for medical care.

OBJECTIVE To test the efficacy of 3 interventions for opioid dependence: (1) screening and referral to treatment (referral); (2) screening, brief intervention, and facilitated referral to community-based treatment services (brief intervention); and (3) screening, brief intervention, ED-initiated treatment with buprenorphine/naloxone, and referral to primary care for 10-week follow-up (buprenorphine).

DESIGN, SETTING, AND PARTICIPANTS A randomized clinical trial involving 329 opioid-dependent patients who were treated at an urban teaching hospital ED from April 7, 2009, through June 25, 2013.

INTERVENTIONS After screening, 104 patients were randomized to the referral group, 111 to the brief intervention group, and 114 to the buprenorphine treatment group.

MAIN OUTCOMES AND MEASURES Enrollment in and receiving addiction treatment 30 days after randomization was the primary outcome. Self-reported days of illicit opioid use, urine testing for illicit opioids, human immunodeficiency virus (HIV) risk, and use of addiction treatment services were the secondary outcomes.

RESULTS Seventy-eight percent of patients in the buprenorphine group (90 of 114) (95% CI

JAMA Report Video and Author Video Interview at
jama.com

CME Quiz at
jamanetworkcme.com and
CME Questions page 1670

ED Suboxone

- Mini-International Neuropsychiatric Interview (3 or higher) + Positive Utox
- Referral Group
 - Handout
- Brief Intervention Group
 - 10-15 min brief negotiation interview
 - Active help getting into a program
- Buprenorphine Group
 - The above + buprenorphine (up to 72 hrs)

ED Suboxone

- At 30 days:
 - 78% buprenorphine patients vs.
 - 37% referral patients vs.
 - 45% BNI patients
- Engaged in addiction treatment
- Reduced self-reported illicit opioid use
- Reduction of use of inpatient treatment services

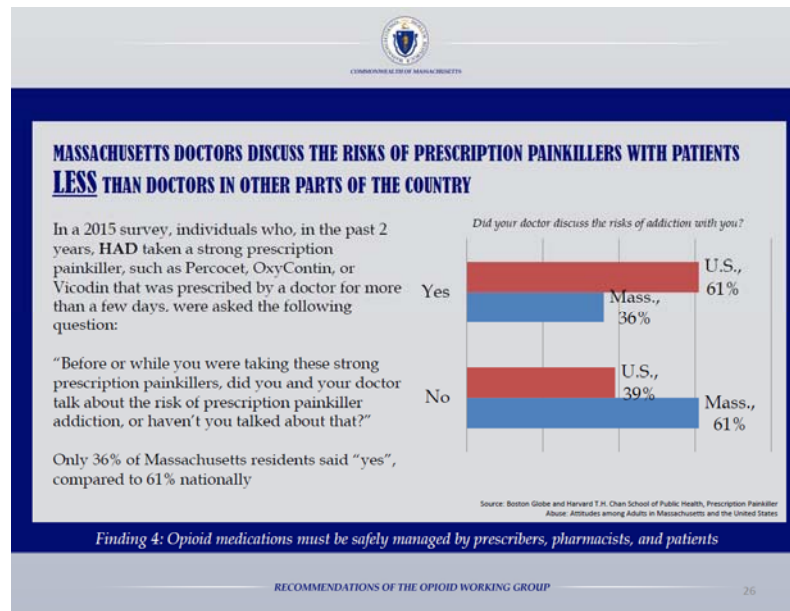
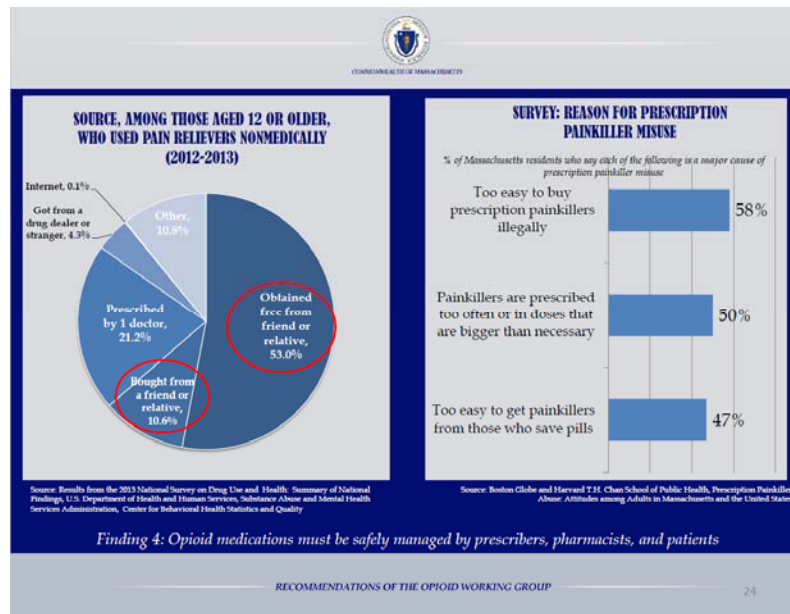
Own It


 Commonwealth of Massachusetts
 Department of Public Health
 Helping People Lead Healthy Lives In Healthy Communities

MA Online PMP: Highest Quartile Physicians by Specialties

Specialties of MDs	2011 N (%) total n=146	2012 N (%) total n=349
Emergency Medicine	86 (59.7)	168 (48.3)
Internal Medicine	28 (19.4)	75 (21.6)
Family Medicine	13 (9.0)	38 (10.9)
Psychiatry	8 (5.6)	26 (7.5)
Others	9 (6.2)	41 (11.7)
Missing	2 (1.4)	1 (0.2)

50



On the (f)utility of pain

- Scott Stonington, BWH
- Lancet 4/11/2015
- I no longer ask “Is this patient in pain?”
Instead, I ask “How do I relieve this
person’s suffering?”

The art of medicine
On the (f)utility of pain

Questions and Discussion

- sweiner@bwh.harvard.edu





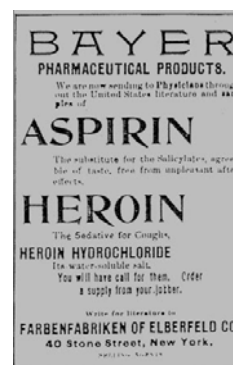
Beth Israel Deaconess Hospital
Plymouth

OPIOID ADDICTION: *Daily overdoses. Weekly deaths.*

*Ludi Jagminas, MD, FACEP
Chief of Emergency Medicine
Beth Israel Deaconess Hospital-Plymouth
Harvard Medical School Faculty Physician*

OPIOIDS AND THEIR ORIGIN

- Origins date back to ancient Egypt with opium used to treat internal diseases
- Opium was used widely in Asia as a narcotic
- In the 1800s Morphine and Codeine were developed from Opium
- In 1874, Heroin was created from morphine and produced by Bayer Pharmaceuticals
- 19th Century medicine used opioids to relieve pain



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WHY THE EPIDEMIC TODAY?

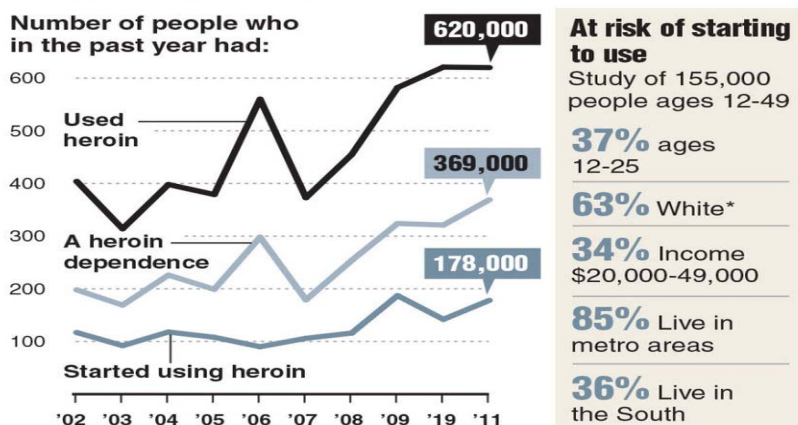
- Heroin is glamorized in Hollywood and is seen a “chic”.
- Celebrities continue to use and continue to die
- It's cheap, widely-available, and highly-addictive.



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Heroin use in the U.S.

Heroin use is growing as the addictive drug becomes cheaper and easier to buy all over the country. A look at the trend in use among those ages 12-49, in thousands:



*Non-Hispanic

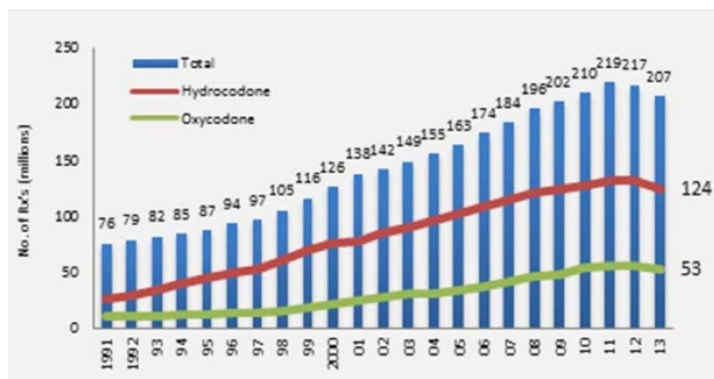
Source: Substance Abuse and Mental Health Services Administration
Graphic: Judy Treible

© 2014 MCT



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Prescriptions



Beth Israel Deaconess Hospital
Plymouth

Global Perspective



- United States uses 99% of the world's supply of hydrocodone and 83% of the world's oxycodone.
- Gram for gram, U.S. consume more narcotic medication than any other nation worldwide.
- The International Narcotics Board reports that U.S. demand for hydrocodone is about 27.4 million grams annually compared to 3,237 grams for Britain, France, Germany, and Italy combined.
- 316 million vs. 280 million populations



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EARLY ADDICTION

Prescription Painkillers

Prescription painkiller abuse
is one of the most difficult
addictions to treat.

-doctors and rehabilitation therapists.

40 U.S. DEATHS
per day due to
prescription painkiller abuse
according to the CDC.



1 in 20
people in U.S.
(12 and over)
admit to non-medical use
of prescription painkillers
in the past year.



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For every **1** death there are...

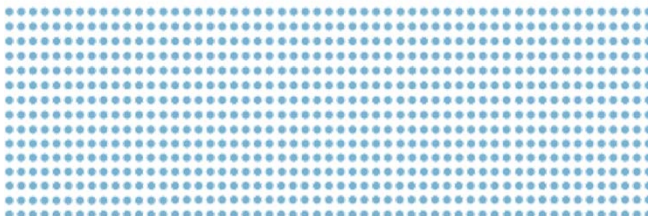


10 treatment admissions for abuse⁹

32 emergency dept visits for misuse or abuse⁶



130 people who abuse
or are dependent⁷



825
nonmedical
users⁷



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FACTS & FIGURES: Plymouth

- **45% Heroin/Opioids** vs. 40% Alcohol for those admitted to substance abuse treatment in Plymouth
- At the state level, it's **48% for heroin/opioids** v. 35% for alcohol.
- 10 years ago **77% reported alcohol** as their drug of choice v. 40% for heroin/opioids.
- More are using heroin today than 10 years ago.
- More children, teenagers, and adults are dying.

Massachusetts Department of Public Health, Bureau of Substance Abuse Services (June 2013)



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BID-PLYMOUTH

- Steady stream of patients coming to the ED with some form of drug overdose
- 2014: 18 overdose deaths; 13 from heroin
- Plymouth County: 72 Overdose deaths in 2014*
 - More than double the number of Overdose deaths in 2009.
- 2015 average one overdose a day

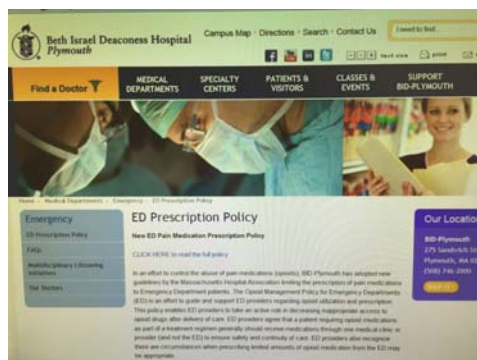
**Plymouth County District Attorney Tim Cruz's Office*



Beth Israel Deaconess Hospital
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BID-Plymouth

- Judge Minehan reviewed Drug Court experience
- Performed audit of narcotic Rx and # pills
- ED MD feedback & PMP use
- Endorsed MHA Opioid Guidelines
- Prescription opioid talking points handout & d/c instructions



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BID-PLYMOUTH

- Removed all Rx pads from ED
- All discharge Rx via CPOE and secure printing
- Move to e-prescribing over next 6-8 weeks
- Provide ongoing monitoring & feedback



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Plymouth

Thank you

- Questions



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Plymouth

Long-Acting Opioids: Pitfalls from the ED

Kavita Babu, MD

Massachusetts Hospital Association

July 17, 2015

I have no conflicts to disclose. I provide medicolegal review for CRICO and Traveler's Insurance.

In this talk, we will discuss the pharmacology of extended-release and long-acting opioids, with representative cases from Emergency Medicine.

Generic	Brand
Buprenorphine	Suboxone, Butrans
Fentanyl	Duragesic
Hydrocodone	Zohydro
Hydromorphone	Exalgo, Palladone
Methadone	Dolophine, Methadose
Morphine	Avinza, Embeda, Kadian, MSContin
Oxycodone	OxyContin
Oxymorphone	Opana
Tapentadol	Nucynta

In 2012, the FDA disseminated a Risk Evaluation and Mitigation Strategy (REMS) for Extended Release (ER) and Long Acting (LA) opioids.

REMS developed due to risks of addiction, abuse and misuse, as well as the greater risks of overdose and death.

Why Choose An ER/LA Opioid?

Why Avoid ER/LA Opioids from the ED?

1. Patient selection is essential.

2. Patient counseling is critical.

3. It is difficult to find a role for starting ER/LA opioids in our practice.

Illustrative Cases*

* Details changed for privacy

A 20 yo woman presents to the ED for a non-displaced tibial plateau fracture. Outpatient orthopedics follow-up arranged. Percocet fails control her pain. MS-Contin 100mg prescribed at second visit.

She is found dead in bed the following day. What happened?

Rapid Dose Escalation
Inappropriate Choice of Formulation
Discharge Instructions

A 40-year-old woman remains in the ED awaiting an inpatient psychiatric bed. She reports that her current methadone maintenance is 80 mg per day. This dose is administered.

She is found apneic in bed. She has a complete return to baseline with naloxone administration, and is admitted to the intensive care unit for recurrent respiratory depression.

No corroboration obtained
Loss of tolerance

A 65 yo woman with spinal stenosis presents to the ED where she complains of worsening back pain. She is prescribed a 50 mcg/hour fentanyl transdermal patch.

She is found dead in bed,
wearing two patches. A heating
pad is found in bed with her.

Inadequate counseling
Inappropriate dose

In summary, there is essentially
no place for the prescribing of
ER/LA opioids from the Emergency
Department.

kavitambabu@gmail.com

Nasal Naloxone as an ED Based Opioid Harm Reduction Intervention

Massachusetts Hospital Association Opioid Panel
July 2015



Kristin H Dwyer, MD
Brigham and Women's Hospital



Agenda

- *The Opioid Epidemic and the Role of the ED*
- Experience with Nasal Naloxone To Date
- ED Options for Opioid Harm Reduction Interventions

The Opioid Epidemic

Why did the Governor Declare A Public Health Emergency?



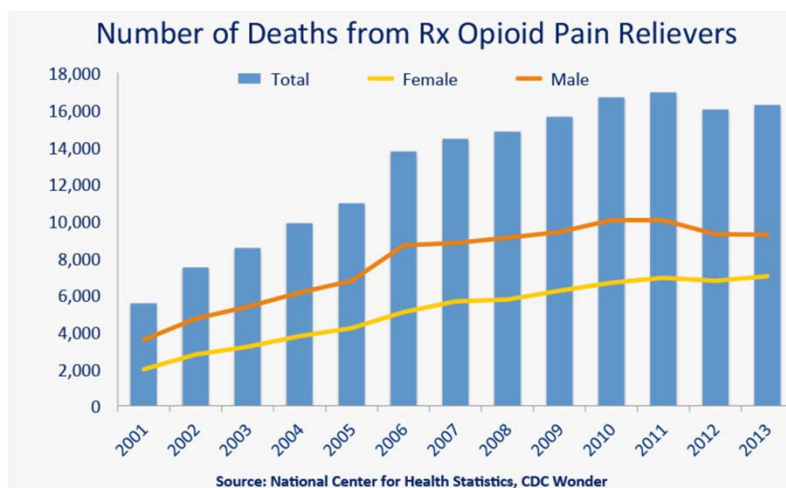
Actions Suggested

- Access to naloxone
- Safe prescribing
- Improve access to treatment



The Opioid Epidemic

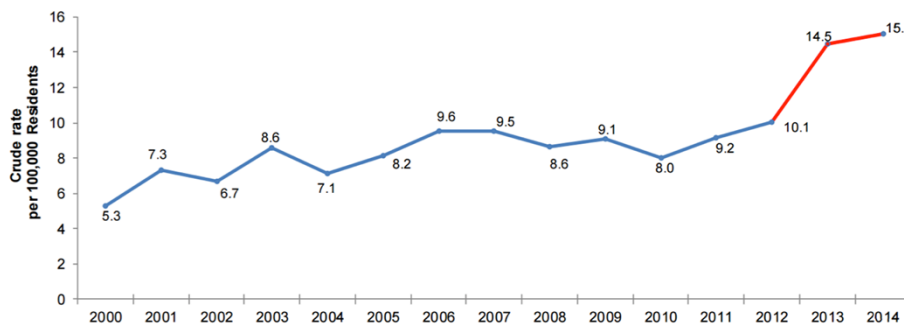
Deaths from opioid Rx in the US increased 3X between 2001 and 2013.



The Opioid Epidemic

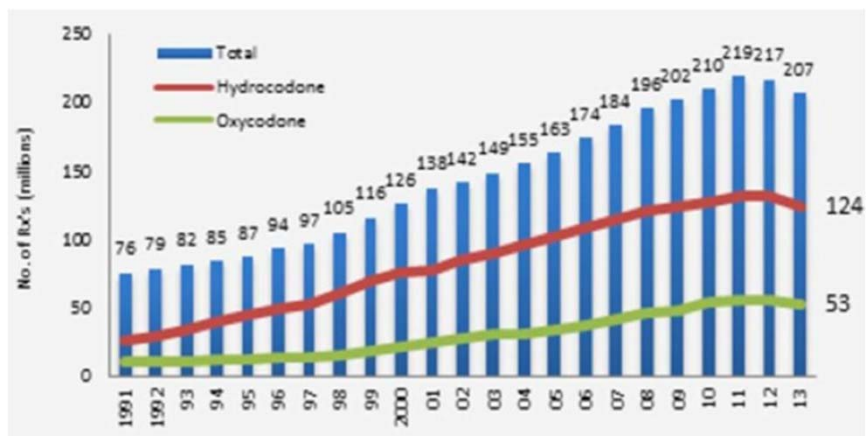
Since 2005, opioid related deaths in Massachusetts have exceeded deaths from MVC.

**Rate of Unintentional¹ Opioid Overdose Deaths
Massachusetts Residents: 2000-2014**



The Opioid Epidemic

Prescriptions dispensed for opioids climbed from 138MM to 207MM during that same time.



The Opioid Epidemic

Emergency medicine physicians are not the driver of deaths from opioid prescriptions.

Table 1 Opioid prescribing and incidence of fatalities by medical specialty of prescribers, Utah, 2002–2010

Specialty	Opioid Prescribing		Fatality	
	# of Prescriptions	% of All Opioid Prescriptions	Prescriptions Associated with Fatalities	% of All Fatalities Associated
Pain medicine	232,246	1.0	2,735	2.0
Physical medicine and rehabilitation	607,594	2.6	6,105	4.6
Psychiatry and neurology	221,394	1.0	2,015	1.5
Anesthesiology	245,629	1.0	1,961	1.5
Family medicine	5,626,869	24.1	40,107	30.2
Missing specialty	1,927,060	9.8	14,341	10.8
Emergency medicine	1,498,069	6.4	7,575	5.7
Podiatrist	278,571	1.2	1,384	1.0
Internal medicine	2,508,085	10.8	11,775	8.8
Orthopedic surgery	1,502,771	6.4	7,015	5.3
Dentist	2,038,377	8.7	6,534	4.9
Obstetrics and gynecology	644,763	2.8	1,532	1.2

The Opioid Epidemic

However, Emergency Medicine physicians have the opportunity to be part of the solution.

Common CC in ED

- In 2011 420K prescription opioid and 258K heroin related ED visits in the US

Increasing in Frequency

- ED visits for pharmaceutical misuse increased 98.4 percent between 2004 and 2009.
- Boston EMS transported 1,518 opioid overdose patients to local hospitals in 2013
 - Increased to 2,037 in 2014

Source: DAWN, SAMHSA, Boston Public Health Commission.

The Opioid Epidemic

EMS Transports to Boston Hospitals for Opioid Overdose

EMS Patients Transports	2013	2014	Increase 2013-2014
BMC	527 (35%)	640 (31%)	113
MGH	244	388	144
NEMC	224	323	99
Carney	181	219	38
Faulkner	115	150	35
BIDMC	83	73	-10
BWH	52	97	45
St Elizabeth	34	69	35
City of Boston	1518	2037	519 (34%)

Agenda

- The Opioid Epidemic and the Role of the ED
- ***Experience with Nasal Naloxone To Date***
- ED Options for Opioid Harm Reduction Interventions

Naloxone as a Harm Reduction Intervention

Intranasal Naloxone



- Opioid antagonist, reverses potentially life threatening respiratory depression
- Mass Health covers kit 100%
- Walgreens and CVS carry kits, also have a standing order

Naloxone as a Harm Reduction Intervention

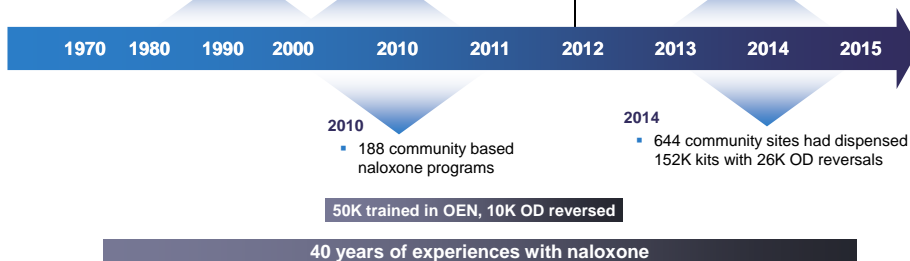
Naloxone Timeline

- 2012 UN Commission on Narcotics
- OD is global public health issue
 - Use of naloxone for overdose prevention

- 1996
- First community based naloxone programs

- 2007
- MDPH pilot program authorizes OEND distribution

- ACEP 2014 Resolutions
- Equip first responders with naloxone
 - Expand pharmacy access to naloxone



Naloxone as a Harm Reduction Intervention

Naloxone Feasibility Studies

- 2008 Piper et al: Injection drug users (IDUs) in NYC were trained in naloxone administration and SKOOP. 82/122 kits were used to reverse an OD
- 2009 Doe-Simkins et al: Boston based program trained and distributed naloxone kits to 385 participants with 74 OD reversals in 15 mos
- 2010 Enteen et al: Of 1,900 IDUs in San Francisco who received OEND, 24% returned to request a refill and 11% used naloxone to reverse an OD.
- Bennett et al: 2011 OEND to 426 in Pittsburgh, 89 individuals used the naloxone to reverse an overdose.

Naloxone as a Harm Reduction Intervention

Overdose Education Retention

- 2008 Strang et al: IDUs trained in knowledge of risk, recognition and appropriate behavior in a witnessed overdose. Good retention of knowledge at 3 months
- 2008 Green et al: Naloxone training programs improve participants' ability to recognize and respond to opioid overdoses.
- 2009 Tobin et al: Baltimore Staying Alive Program showed an increase in overdose knowledge retention, use of resuscitation skills and successful naloxone administration.
- 2010 Wagner et al: OD prevention and response training programs may be associated with improved OD response behavior such as staying with the victim, administering naloxone, administering rescue breathing and calling 911.

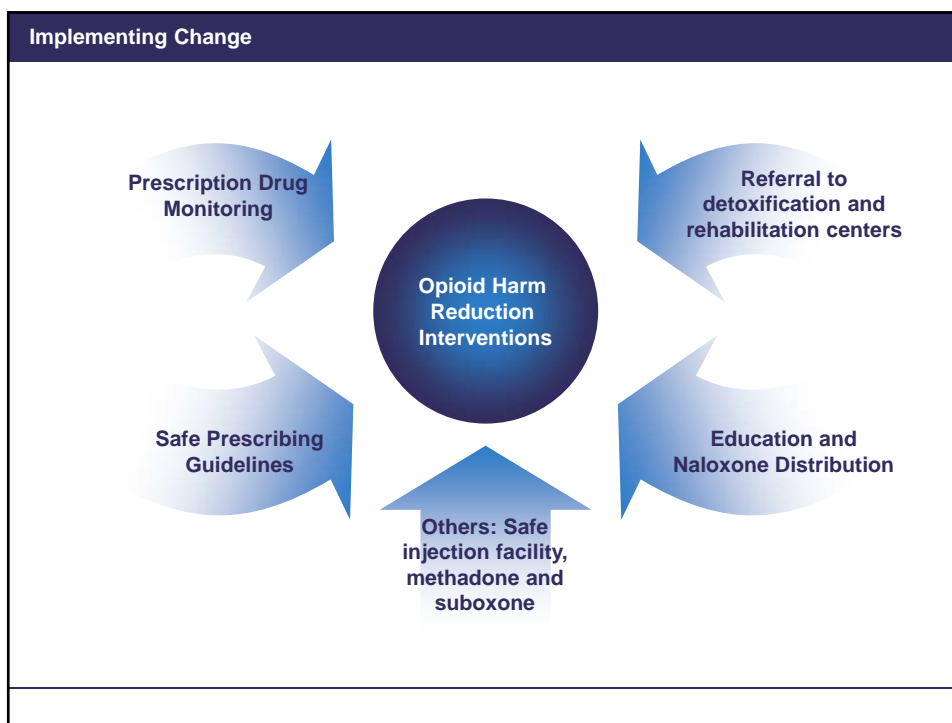
Naloxone as a Harm Reduction Intervention

Naloxone Mortality Data

- 2006 Maxwell et al: Large scale implementation of OEND (3,500) in Chicago resulted in 20% decrease in heroin overdose deaths the following year (and 10% continued dec the subsequent two years)
- 2013 Walley et al: A decrease in opioid related death rates in communities in Massachusetts who received OEND compared to similar communities who did not receive OEND in the same time frame

Agenda

- The Opioid Epidemic and the Role of the ED
- Experience with Nasal Naloxone To Date
- ***ED Options for Opioid Harm Reduction Interventions***



Implementing Change

BMC Program Description

- OEND program began in September 2009 as a partnership between Project ASSERT and the BPHC, MA DPH and the South End Healthy Boston Coalition
- 480 naloxone kits distributed in the ED in the past two years
- Placed 1200 patients in detox this past year
- BMC is the first hospital to pioneer a policy and program to ensure that patients at risk for opioid overdose are offered education and naloxone free of charge in the ED
- Dedicated LADC in the ED, Project Assert
- Contact: Ed Bernstein, MD or Alex Walley, MD

BOSTON MEDICAL CENTER

EXCEPTIONAL CARE. WITHOUT EXCEPTION.

Implementing Change

Brown Program Description

- Lifespan Opioid Overdose Program started in 2014 in response to surge in OD deaths: 238 Deaths in 2014
- Partnership between EDs, Anchor Community Recovery Center, and the Department of Health
- Three components:
 - Intranasal naloxone
 - Anchor recovery coach consultation: naloxone teaching, referral to tx, and outpt f/u, available on the weekends. (are PAID folks in long term recovery)
 - Educational video on naloxone use when recovery coach not available
- Liz Samuels, MD



Rhode Island Hospital
Lifespan. Delivering health with care.™



BROWN
Alpert Medical School

Implementing Change

Distribute Nasal Naloxone Rescue Kit in the Emergency Department

ED Naloxone Options

Provide a Prescription for a Nasal Naloxone Rescue Kit

Stock Nasal Naloxone Rescue Kits in your Hospital Outpatient Pharmacy

Implementing Change

Prescribetoprevent.org

Naloxone for Overdose Prevention

patient name _____

date of birth _____

patient address _____

patient city, state, ZIP code _____

Rx prescriber name _____

prescriber address _____

prescriber city, state, ZIP code _____

prescriber phone number _____

Naloxone HCl 1 mg/mL
2 x 2 mL as pre-filled Luer-Lock needleless syringe
(NDC 78329-3369-1)

Refills: _____

2 x Intranasal Mucosal Atomizing Device (MAD 300)

Refills: _____

For suspected opioid overdose, spray 1mL in each nostril.
Repeat after 3 minutes if no or minimal response.

Pharmacist: Call 1-800-788-7999 to order MAD 300.

prescriber signature _____

date _____

How to Avoid Overdose

- Only take medicine prescribed to you
- Don't take more than instructed

Call a doctor if

- your pain gets worse
- Never mix pain meds with alcohol
- Avoid sleeping pills when taking pain meds

Dispose of unused

- medications
- Store your medicine in a secure place
- Learn how to use naloxone

Teach your family +

- friends how to respond to an overdose
- Learn how to use naloxone



Are they breathing?

- Signs of an overdose:
 - Slow or shallow breathing
 - Gurgling for air when sleeping or weird snoring
 - Pale or bluish skin
 - Slow heartbeat, low blood pressure
 - Won't wake up or respond (ask questions on stomach)



Airway

Make sure nothing is inside the person's mouth.



Prepare Naloxone

Are they any better? Can you get naloxone and prepare it quickly enough that they won't go for too long without your breathing assistance?



1

1 Pull on any of yellow caps



Evaluate + support

- Continue rescue breathing
- Give another 2 sprays of naloxone in 3 minutes if no or minimal breathing or responsiveness
- Naloxone wears off in 30-90 minutes
- Comfort them; withdrawal can be unpleasant
- Get them medical care and help them not use more opiate right away
- Encourage survivors to seek treatment if they feel they have a problem

PrescribeToPrevent.org



v03.12.11

Implementing Change

Prescribetoprevent.org

POSITION STATEMENTS

American Medical Association (AMA)
American Pharmacists Association (APHA)
American Society of Addiction Medicine (ASAM)
American College of Medical Toxicology & AACT and AAPCC
Office of the National Drug Control Policy (ONDCP)
National Commission on Correctional Health Care



BMC Emergency Department sample policy



Auto-injector prescription instructions



Emergency Department Guidance

Summary

- Deaths from opioid overdose are high and are on the rise
- EM providers have the privilege to take care of these patients at a vulnerable time and the unique opportunity to intervene with opioid harm reduction interventions
 - Motivational interviewing
 - Refer to detox
 - Naloxone kit
- Naloxone has been used in the hospital setting for a long time, and in the community since the mid 1990s- we have a lot of experience with it.
- Consider prescribing a naloxone kit, or setting up a program in your ED
- PrescribetoPrevent.org
- Kristind98@gmail.com

Screening and Referral

Tools, Roles and How to Screen & Refer

Niels K. Rathlev MD, FACEP
Professor and Chair
Department of Emergency Medicine
Baystate Health and Tufts University School of Medicine
July 17, 2015

"How do we decrease the pill count on the street?"

- * Prescription drug monitoring program
- * State-wide prescribing guidelines
- * Care management information exchange

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MHA guidelines

"Screening for substance misuse that includes services for brief intervention and referral to treatment programs for patients who are at risk for developing, or who actively have, substance use disorders."

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SBIRT

- * Alcohol use disorders – significant but fairly modest effects on drinking (12 months follow-up)
- * Decrease in drinking and driving while intoxicated
- * Data on drug use disorders is very limited

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SMART-ED study

Comparison of 3 groups

1. Minimal screening
 2. Screening, assessment & referral to treatment
 3. Brief intervention with phone follow-up
- * self-reported days of using primary drug
 - * days using any drug
 - * rate of hair samples positive for primary drug

* Bogenschütz MP. *JAMA Intern Med* 2014

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Buprenorphine/naloxone

3 interventions tested with 30 day follow-up

1. Screening and referral
 2. Screening, brief intervention and referral
 3. Screening, brief intervention, ED initiated buprenorphine/naloxone and referral
- * Increased engagement in addiction treatment & reduced self-reported illicit opioid use

* D'Onofrio. *JAMA* 2015;313:1636-44
 * Governor's Opioid Working Group

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What are we doing at Baystate?

- * Raising awareness!
- * Screening using network-wide electronic health record
- * Prescription drug monitoring program
- * Multi-disciplinary "High Frequency User" Committee
- * Care plan electronic alerts

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Appendix A: Care Plan Template

Care Plan For: _____
MR # _____ **MRN** _____
DOB _____

Rationale:

----- has presented to the ED on x occasions in the past 12 months for a variety of complaints related to -----. (S)he has received y prescriptions for opiates and benzodiazepines in the past year.

(S)he has a history of -----, (S)he is currently being treated with z.

The patient states that (s)he is allergic to .

Interventions:

The patient will be treated with opiates only for serious acute medical disorders, but not for other presentations. The patient will not receive prescriptions for oral opiate medications for chronic pain from the ED.

Goals and Expected Outcomes:

The goal is to refer the patient for follow-up with a primary care physician. Her(his) care plan will be reviewed every 6 months.

Submitted by: _____

Approved by Task Force: _____

PCP/Group: _____

Discussed/Mailed w/Pt. _____

Due for Review: _____

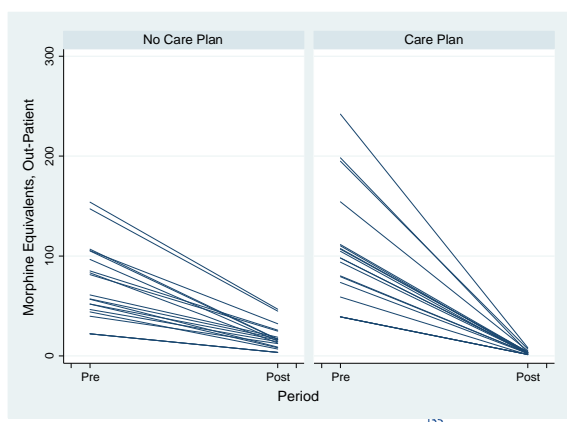
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Effective Date:
Name: _____		Discussed with PCP? <input type="checkbox"/> Yes <input type="checkbox"/> No
Phone #: _____		Date: _____
<input type="checkbox"/> Discussed <input type="checkbox"/> Mailed		

Results

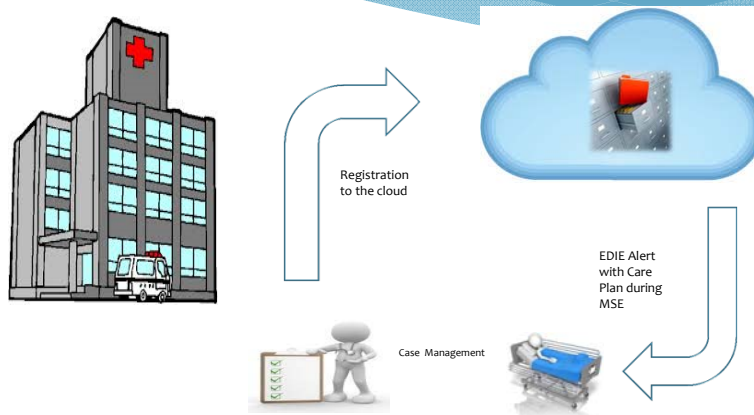
- * Prescribed opioids in morphine mg equivalents reduced to Care Plan (-85.7 mg) vs. Usual Care (-47.1 mg) patients (P=0.04)
- * Opioids administered and total costs were not statistically significantly reduced

* Rathlev NK. Presented at SAEM 2015

One-way plots

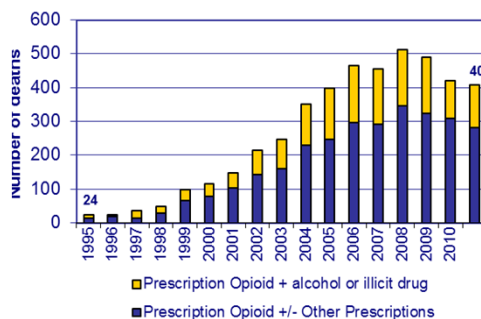


ED Information Exchange (EDIE)



How is WA state doing?

Prescriptions for opioids decreased by 25% in 2012



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Summary

- * Screening, brief intervention & referral to treatment
- * Promise for ED initiated buprenorphine/naloxone
- * Electronic care plans
- * Share information via Health Information Exchange

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