

# Pain Medicine

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## CONTENTS

### Deaths Related to Opioids Prescribed for Chronic Pain: Causes and Solutions

Supplement Editors: Perry G. Fine, MD, Nabarun Dasgupta, MPH, Lynn R. Webster, MD

**COVER:** Potentially Figure 1 from Dr. Wakeland's article

#### SECTION 1: DEFINING THE PROBLEM

##### *Introduction*

Lynn R. Webster, MD

##### **(MS #10-433) Ending unnecessary opioid-related deaths: a national priority**

This overview describes the problem of opioid-related deaths and summarizes possible solutions presented within the supplement.

Christina A. Porucznik, PhD, MSPH, Erin Johnson, MPH, Brian Sauer, PhD, Jacob Crook, MS, Robert T. Rolfs, MD, MPH

##### **(MS # 10-396) Studying adverse events related to prescription opioids: the Utah experience**

In response to a rise in prescription drug-related deaths, epidemiologists at the Utah Department of Health began in 2004 to collect and analyze records from multiple datasets. By linking data from vital statistics, emergency departments, and the state prescription registry, among other sources, the analysts began to find answers about the scope of the problem, the types and sources of implicated drugs, the involvement of legitimate prescriptions, and the individual risk factors for opioid-related death.

Expert panel assembled July 31, 2009, Salt Lake City, Utah, as participants in the LifeSource conference

##### **(MS# 10-398) An analysis of the root causes for opioid-related overdose deaths in the United States**

A panel of experts in pain medicine and public policy convened to examine root causes and risk factors for opioid-related poisoning deaths and to propose recommendations to reduce death rates. This article summarizes the panel's findings, which implicated a disproportionate involvement of methadone in opioid deaths, prescribing errors by medical providers, nonadherence to medical direction by patients, and nonmedical use by nonpatients, among other contributory factors.

Steve D. Passik, PhD; Amy Lowery, PhD

**(MS # 10-426) Psychological variables potentially implicated in opioid-related mortality as observed in clinical practice**

Screening for psychological risk factors is an important first step in safeguarding against nonadherence practices and identifying patients who may be vulnerable to opioid-related overdose death. As a complement to formal screening, we present for discussion and possible future study certain psychological variables observed during years of clinical practice that may be linked to medication nonadherence and accidental overdose. These variables include catastrophizing, fear, impulsivity, attention-deficit disorders, existential distress, and certain personality disorders.

Martin Cheadle, PhD

**(MS# 10-436) Depression, chronic pain, and suicide by overdose: on the edge**

Depression is common in patients suffering from chronic pain and poses a risk for suicide. Suicide by overdose in the pain population is discussed in the context of the rising rate of opioid-related fatal poisonings. Suicide risk assessment and intervention strategies are reviewed.

Wayne Wakeland, PhD, Teresa Schmidt, MA, Aaron M. Gilson, PhD, David Haddox, DDS, MD, Lynn R. Webster, MD

**(MS # 11-011) System dynamics modeling as a potentially useful tool in analyzing mitigation strategies to reduce overdose deaths associated with pharmaceutical opioid treatment of chronic pain**

We examine the potential value of system dynamics modeling in the context of opioid-related mortality by exploring various interventions, including prescriber education programs and tamper-resistant opioid formulations, and reporting on their potential outcomes. Findings indicate that increased tamper resistance would likely reduce deaths as a fraction of patients treated, but overall deaths could increase, underscoring the need to carefully select metrics.

Lynn R. Webster, MD, Ben Rich, PhD, JD

**(MS# 10-407) A review of forensic implications of opioid prescribing with examples from malpractice cases involving opioid-related overdose**

This article provides a forensic overview and traces common threads among malpractice lawsuits involving patients who overdosed while consuming therapeutic opioids. Patient actions contribute, but physician error, particularly regarding prescribing methadone for pain, is apparent as well. A focused effort to determine the types and causes of common physician errors and how they might be avoided may lead to safer, more effective clinical interventions in the management of pain.

## **Section 2: Finding Solutions**

Erin Johnson, MPH, Christina A. Porucznik, PhD, MSPH, Jonathan W. Anderson, MPH, Robert T. Rolfs, MD, MPH

**(MS# 10-424) State-level strategies for reducing prescription-drug overdose deaths: Utah's prescription safety program**

The Utah Department of Health created a program to decrease deaths and other harm from prescription pain medications that included launching a public awareness campaign and developing opioid prescribing guidelines. The state saw a drop in deaths due to overdose from opioids during the time frame of the interventions.

Susan Cochella, MD, MPH, Kim Bateman, MD

**(MS# 10-408) Provider detailing: an intervention to decrease prescription opioid deaths in Utah**

To reverse an epidemic of deaths among patients taking prescription opioids, Utah undertook a multipronged effort, including a provider education arm. This intervention included large-group and clinic-based presentations highlighting six safe prescribing practices. Providers reported safer prescribing behaviors on follow-up surveys, although response rates were low.

Su Albert, MD, MPH, Fred Wells Brason II, Chaplain, Catherine (Kay) Sanford, MSPH, Nabarun Dasgupta, MPH, Jim Graham, Beth Lovette, MPH

**(MS # 11-046) Project Lazarus: community-based overdose prevention in rural North Carolina**

In North Carolina, preliminary results indicate that a project aimed at reducing prescription drug overdose deaths demonstrated a drop in opioid deaths during the period of the intervention. Program components included community activation and coalition building, monitoring and surveillance data, and the provision of naloxone to opioid-treated patients judged to be at high risk for overdose.

Lynn R. Webster, MD, Nabarun Dasgupta, MPH

**(MS# 10-437) Obtaining adequate data to determine causes of opioid-related overdose deaths**

Current data collected by medical examiners and coroners are incomplete and inadequate to evaluate the factors that lead to fatalities involving prescription opioids. We propose two methods to improve consistency and accuracy in the collection and analysis of decedent data: an improved death certificate and expanded opioid toxicology categories used to classify and code cause-of-death data.

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**([www.lsource.org](http://www.lsource.org)).**

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