USING EVIDENCE TO ADDRESS OPIOID MEDICATION DIVERSION IN WISCONSIN

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Main Presentation Points

- Description of national data on prescription pain reliever and heroin problems
  - National Survey on Drug Use and Health (NSDUH)
- Importance of terminology

*Root Cause Analysis* is necessary
  - Public health approach
- Many methods to reduce diversion
- Using existing data and generating additional data
"Abuse" of Pain Relievers 2002-2013

Source: National Survey on Drug Use & Health – Substance Abuse and Mental Health Services Administration

Note: “Pain Relievers” (previously called “Analgesics”) include opioid analgesics as well as non-controlled drugs such as Tramadol, and now comprise almost 30 separate medications.

“Abuse” = “How long has it been since you last used any prescription pain reliever that was not prescribed for you or that you took only for the experience or feeling it caused?” (“Non-medical use”)
Use of Heroin 2002-2013

Percentage

Source: National Survey on Drug Use & Health – Substance Abuse and Mental Health Services Administration
Heroin Use is assessed by the questions “The next questions are about heroin. Have you ever even once used heroin? How long has it been since you last used heroin?”
Establishes a framework to:

1. Prevent abuse and diversion
2. Ensure the availability of drugs for medical purposes

Limit drug use to medical and scientific purposes

Balance
Imperative to Achieve Balance

**International Sources**
- World Health Organization
- International Narcotics Control Board
- UN Commission on Narcotic Drugs
- UN Economic and Social Council
- UN Office on Drugs and Crime

**U.S. Sources**
- Institute of Medicine
- National Cancer Institute
- National Institutes of Health
- American Medical Association
- American Pain Society
- American Cancer Society
- American Academy of Pain Medicine
- Center for Disease Control and Prevention
- White House Office of National Drug Control Policy
- Federation of State Medical Boards
- National Association of Attorneys General
- Drug Enforcement Administration
1. DRUG CONTROL SYSTEM (lawful distribution)

- Manufacturers and Distributors
  (Common Carriers)
  - Pharmacies
  - Hospitals/Clinics
  - Internet w/Rx
  - Practitioners
    - Prescribers
    - Dispensers
  - Nursing homes
  - Hospices

2. PRIMARY DIVERSION (unlawful; supplies some abusers and re-distribution)

- Theft from manufacturers and distributors*
- Theft in transit *
- Theft from hospitals*
  - Pharmacies/robbery*
  - Employee/customer Pilferage *
- Theft of Rx/forgery
- Script docs/pill mills
  - Inappropriate prescribing
  - Doctor shopping
- Patient sells or gives
  - Theft from home
  - Theft from patient
  - Improper disposal
- International smuggling
- Internet sales without Rx

Non-medical use
- Misuse
  - Unintentional
    (sharing with others)
  - Intentional
    (suicide attempt)
- Aberrant behaviors
  (forging/altering Rx)
- “Substance Use Disorders”
  (abuse & addiction)

Patients (Lawful medical use)
("Prescribed")

Medical Use

PPSG, 2007
* = Amounts reported by law on DEA Form 106

Government obligation to establish:

Effective measures against abuse and diversion requiring universal and coordinated action
Definitions. As used in this chapter:

10m “Diversion” means the transfer of any controlled substance from a licit to an illicit channel of distribution or use.
Essential to determine whether valid prescription was involved
Factors to Consider

- Diversion (i.e., no prescription found)
- Doctor-shopping (i.e., diversion)
- Motivations??
- Non-medical routes of administration
- Co-morbidities (e.g., substance use history)
- Poly-pharmacy
- Previous overdose episodes
- Little clinical information
- Not a linear effect
- Not causal

Hall et al. (2008)
Dunn et al. (2010)
Gomes et al. (2011a)
Gomes et al. (2011b)
Bonhert et al. (2011)
Paulozzi et al. (2012)
DEA ARCOS Data

- Represents amounts of medications distributed to the retail level
- Includes amounts diverted?
- Provided to Federal and state governments to identify diversion

http://www.deadiversion.usdoj.gov/arcos/index.html#background

53% of pop.
Unprescribed prescription medications
12,894 incidents
Pharmacies
28 million dosage units

Drug Identification Unit

The drug identification unit analyzes evidence for the presence (or absence) of controlled substances. Controlled substances specifically refer to those compounds listed in the Uniform Controlled Substances Act, Chapter 961 of the Wisconsin statutes. Examples of just a few of the over 200 controlled substances include cocaine, heroin, methamphetamine, LSD, and tetrahydrocannabinol (THC), the active ingredient in marijuana.

Controlled substance evidence may be in many forms. Typical samples include powders, plant material and pharmaceutical preparations, both licit and illicit. Other sample types are occasionally encountered, such as clothing, paper, clandestine labs, and various drug paraphernalia.

Analysis
A combination of different tests are performed on an unknown material until the analyst can identify or eliminate the presence of any controlled substance. To identify the presence of a controlled substance, generally the analyst must perform a combination of preliminary or indicative tests and confirmatory test(s). Some of the more common tests used by the Crime Laboratory are outlined below.
Recent State Responses to Abuse and Diversion

- Prescription Monitoring Programs (PMP)
- Medication Security
- Medication Take Back
- Medication Drop Boxes
- Practitioner, patient, and public awareness
- Joint efforts to investigate prescription medication diversion
States with Operational PDMP

Number of States

Real-Time Data

National Association of State Controlled Substances Authorities. 
The Wisconsin Medical Society’s Statement of Principles for Proper Opioid Prescribing

Safe Opioid Prescribing, Safe Home Medication Storage, and Safe Medication Disposal to Minimize Opioid Diversion and Overdose Deaths, While Assuring Proper Prescribing and Access to Care for Patients with Pain

Opioid analgesics are extremely effective medications for the management of acute pain, especially pain associated with injuries or surgery. They are also extremely effective for managing cancer pain and in palliative care situations. Their use for chronic non-cancer pain remains associated with clinical controversy and, at times, with adverse outcomes. Physicians should receive more education about the problems of prescription drug diversion, misuse, addiction, and overdose deaths, and steps physicians can and should take in the course of their regular daily practice to mitigate the risks of opioid prescribing and minimize the incidence of prescription drug diversion, misuse, addiction, and overdose deaths.

The Wisconsin Medical Society supports the following principles:

- Physicians who prescribe controlled substances should accept the responsibilities they have to educate the patient at the time of issuing a prescription about benefits, risks, and alternatives, and about safe drug storage and disposal practices that should be adhered to by patients.
PhRMA Statement on Support of DEA National Take Back Day

Washington, D.C. (September 23, 2010) — The Pharmaceutical Research and Manufacturers of America (PhRMA) stands behind National Take Back Day, an effort spearheaded by the Drug Enforcement Administration (DEA [http://www.dea.gov/]) that will allow patients to drop off expired, unused, and unwanted prescription drugs – which will be collected and destroyed by local law enforcement officials – at designated sites nationwide.

National Take Back Day takes place on Saturday, September 25, 2010 from 10 a.m. to 2 p.m. local time and is free and anonymous.

"Some take back programs can miss the mark by failing to provide aggressive law enforcement oversight, or by attempting to create programs that don’t work with a community’s existing resources. The DEA’s National Take Back Day takes both of those concerns to heart, building on both the community resources and diversion prevention elements, as well as a strong educational component," said Jeff Bond, Senior Vice President for State Government Affairs at PhRMA.

National Take Back Day combines necessary law enforcement oversight with educational and grassroots community advocacy to create a voluntary program that attempts to prevent prescription medicine diversion. Unlike unsupervised, unregulated take back programs, the DEA’s National Take Back Day offers consumers a voluntary program with guidance on handling unused and expired medications.

PhRMA partners with the Department of Fish and Wildlife and the American Pharmacists Association on the SMARxT Disposal Program. This program informs people how to safely dispose of medicines in the trash, and notes the environmental risk posed by flushing medicines down the toilet. PhRMA recommends that all unused medicines, unless specified otherwise by the Food and Drug Administration, should be mixed with water; sealed in an opaque container safely secure from children, pets, and others; then discarded in household trash to be later incinerated or placed in a government approved solid waste landfill. Consumers may also take part in the DEA’s National Take Back Day as a way to safely dispose of medications in a way that prevents diversion or potential for abuse.
<table>
<thead>
<tr>
<th>Drug name</th>
<th># of prescriptions (%)</th>
<th># of dosage units (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All C-II</td>
<td>229(37.9)</td>
<td>6763.5(46.7)</td>
</tr>
<tr>
<td>fentanyl (trnsdrml)</td>
<td>21(3.5)</td>
<td>133(0.9)</td>
</tr>
<tr>
<td>hydromorphone</td>
<td>1(0.2)</td>
<td>60(0.4)</td>
</tr>
<tr>
<td>meperidine</td>
<td>1(0.2)</td>
<td>4(0.0)</td>
</tr>
<tr>
<td>methadone</td>
<td>10(1.7)</td>
<td>422(2.9)</td>
</tr>
<tr>
<td>morphine</td>
<td>12(2.0)</td>
<td>571(3.9)</td>
</tr>
<tr>
<td>morphine SR</td>
<td>10(1.7)</td>
<td>273(1.9)</td>
</tr>
<tr>
<td>oxycodone</td>
<td>26(4.3)</td>
<td>1254(8.7)</td>
</tr>
<tr>
<td>oxycodone ER</td>
<td>25(4.1)</td>
<td>1117(7.7)</td>
</tr>
<tr>
<td>oxycodone/comb</td>
<td>123(20.3)</td>
<td>2929.5(20.2)</td>
</tr>
<tr>
<td>All C-III</td>
<td>376(62.1)</td>
<td>7713.5(53.3)</td>
</tr>
<tr>
<td>codeine/APAP</td>
<td>103(17.0)</td>
<td>1978.5(13.7)</td>
</tr>
<tr>
<td>hydrocodone/APAP</td>
<td>273(45.1)</td>
<td>5735(39.6)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>605(100)</strong></td>
<td><strong>14477</strong></td>
</tr>
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Welham, Mount, & Gilson (accepted for publication)

Data collected at a 4-hour event in Dane Country in October 2011
MEDDROP

"THE BEST PLACE TO GET RID OF MEDICINES"

A Med Drop box is now available in the lobby at the Middleton Police Department, 7341 Donna Drive. The lobby is open 24 hours a day, every day. Please empty pills into plastic sealed bags and recycle the pill bottles at home. If you are dropping off liquids or creams, they may remain in the original container, but also placed in a sealed plastic bag to avoid spillage. Please see www.ci.middleton.wi.us/police/meddrop/htm for more information about what is accepted.
Memoranda of Cooperation

Joint Investigation Efforts

CHAPTER 961
UNIFORM CONTROLLED SUBSTANCES ACT
Reducing Wisconsin’s Prescription Drug Abuse: A Call to Action

Critical steps toward building a healthier Wisconsin

Comparing Wisconsin’s Approach to ONDCP Strategy

CSW Priority Areas
- Healthcare Policy & Practice
- Surveillance System
- Rx Medication Disposal
- Law Enforcement & Criminal Justice

ONDCP Domains
- Education
- Tracking/Monitoring
- Proper Medication Disposal
- Enforcement
Evidence to Address Diversion

- **Evaluate problem & Target sources**
  - *Available data:* e.g., ARCOS, pharmacy theft, crime lab, PDMP
    - Geographic patterns, trends, per capita rankings

- **Coordinate efforts**
  - Diversion prevention and control program (CSB)
    - Uniform Controlled Substances Act

- **Evaluate outcomes**
  - *Needed data:* e.g., information related to collection and disposal methods, naloxone treatment, characterizing overdose events, practitioner education, involvement of legitimate prescribing and legitimate patients

*Provides an evidence base to guide decision-making and policy development*