Pain as the 5th Vital Sign & the Opiate Epidemic:

The Arizona Experience

Will Humble, MPH
The University of Arizona
Center for Population Science & Discovery

April 28, 2016
Pain Becomes 5th Vital Sign

• Epidemic roots begin on Nov. 11, 1996 when the president of the American Pain Society introduced the phrase, “Pain as the 5th Vital Sign”

• Traditional vital signs: body temperature, blood pressure, heart rate and respiratory rate begin to include pain

• In 1997 the Veteran’s Health Administration includes pain as the 5th Vital Sign in its national pain management strategy

• Two years later, the Joint Commission on Accreditation of Healthcare Organizations released Standards Related to the Assessment and Treatment of Pain
System Adds Incentives

- Reimbursement begins to be tied to patients' perception of how their pain is managed, which can drive doctors to over-prescribe.
- Healthcare institutions begin to be reprimanded when inspectors determine they are not managing pain aggressively enough, incentivizing the over-use of opioids.
- The change in pain management tactics was motivated by a sincere interest in delivering comprehensive and appropriate pain care, but it also sparked an opioid epidemic.
Downstream Effects Begin

• In the years since pain became the 5th Vital Sign, the misuse and abuse of prescription drugs has become the leading cause of injury death in the U.S.

• In 2004 there were approximately 600,000 emergency room visits tied to prescription drugs.

• By 2010 it had more than doubled to 1.4 million. Prescription opioids are now the leading cause of drug overdose deaths in most states, including Arizona.

• A 4 fold increase in the quantity of Rx Pain Relievers sold in the U.S. in the last decade.
Downstream Effects Continue

• The United States currently makes up 4.6% of the world’s population, but consumes 80% of global Rx opioids

• 1 death per day in Arizona due to Rx opioid overdoses

• In Arizona, Rx Pain Reliever deaths are greater than heroin and cocaine combined

• Enough Rx pain relievers were dispensed last year to medicate every adult in Arizona around-the-clock for 2 weeks straight
Public Costs of Opiate Addiction

- AZ hospital charges for poisoning-related inpatient hospitalizations were more than $213 million in 2013
- AZ mean opiate inpatient hospitalization costs $32,000 +
- 27% were charged to AHCCCS (AZ Medicaid)
- Increase in babies born with Neonatal Abstinence Syndrome (NAS): 3 out of every 1,000 babies born between 2008-2013
- In 2013, 645 newborns were identified with the presence of narcotics in AZ
- Average NAS birth costs 12 x more than non-NAS births: $31,000 versus $2,500
AZ Prescribing Practices

• 579 million Class II-IV pills were prescribed in Arizona in 2014

• Pain Relievers had the highest % of scripts, pills and average number of pills per day; accounting for 60.0% of all pills prescribed

• Hydrocodone and Oxycodone accounted for 81.4% of all pain relievers prescribed in Arizona

• Why it matters = probability and access!
Pill Dispensing Rate in AZ: 2009-2013

- Oxycodone: 16.6% Decrease
- Hydrocodone: 5.7% Decrease
- Other Rx Pain Relievers: 8.0% Decrease
- Benzodiazepine: 5.7% Decrease
- Carisoprodol: 4.8% Decrease
Number of Drug Overdose Deaths Involving Selected Drugs in Arizona 2003 - 2014

Year

Number of drug poisoning deaths

- Opioid pain relievers* (T40.2-T40.4)
- Cocaine (T40.5)
- Heroin (T40.1)
- Benzodiazepines (T42.4)
- Other and unspecified narcotics (T40.6)
- Psychostimulants with abuse potential** (T43.6)
- Other and unspecified drugs (T50.9)

*Includes methadone
**Includes methamphetamine
Drug Overdose Mortality Rates Involving Opiates by Age Group, Arizona 2003-2014
Federal Prevention Interventions

- The CDC has recommended a number of prevention strategies for states to implement:
  - Electronic prescription drug monitoring
  - Monitoring prescriptions via state Medicaid programs
  - Implementing health care provider accountability programs
  - Enacting state laws to prevent doctor shopping and "pill mills"
  - New CDC guidelines recommend that doctors avoid starting non-cancer patients on opiates for pain
AZ Prevention Strategy Goals

• Reduce prescription drug overdose deaths in Arizona by 18% by 2018
• Reduce hospitalizations and emergency department visits due to prescription drugs overdoses by 10%
• Reduce Neonatal Abstinence Syndrome by 3%
• Increase rate of queries in the Arizona Controlled Substance Prescription Monitoring Program up to 50%
• Increase PMDP percent of prescribers signed up up to 75%
AZ Strategic Initiatives

• Reduce illicit buying & diversion of Rx drugs
• Promote responsible prescribing and dispensing policies and practices
• Enhance Rx drug practice and policies in law enforcement
• Increase public awareness and patient education about Rx drug misuse
• Enhance assessment and referral to treatment
AZ Strategic Initiatives

- Develop and/or disseminate use of clinical tools and processes that make it easier to adopt the best practices
- Facilitate sharing of best practices among clinicians
- Identify and promote technical assistance and educational opportunities on effective tools and processes
- Work toward linking electronic health records to the CSPMP
- Encourage academic institutions to adopt/enhance curricula regarding appropriate prescribing of controlled substances and pain management alternatives
AZ Strategic Initiatives

• Develop and/or disseminate use of clinical tools and processes that make it easier to adopt the best practices
• Facilitate sharing of best practices among clinicians
• Identify and promote technical assistance and educational opportunities on effective tools and processes
• Work toward linking electronic health records to the CSPMP
• Encourage academic institutions to adopt/enhance curricula regarding appropriate prescribing of controlled substances and pain management alternatives
AZ Resources Developed

- ADHS: Clinicians/Clinical Guidelines and Recommendations:

- Arizona Opioid Prescribing Guidelines:

- Prescribing Guidelines for Acute Pain:
AZ Resources Developed (cont’d)

• Summary: Prescribing Guidelines for Chronic Non-Terminal Pain:

• Arizona Emergency Department (ED) Prescribing Guidelines:

• Arizona Guidelines for ED Controlled Substance Prescribing:

• Arizona Guidelines for Dispensing Controlled Substances:
  • http://www.azcjc.gov/ACJC.Web/Rx/prescribersanddispensers.aspx
New Presidential Initiative

- March 28 President Obama proposed a two-pronged approach to address this epidemic
- Plan proposes $1 billion in new funding over two years to expand access to treatment for prescription drug abuse and heroin use
- Additional funding will expand state-level prescription drug overdose prevention strategies
- Would increase the availability of medication-assisted treatment programs, improve access to the overdose-reversal drug naloxone and support targeted enforcement activities
Incentives to Overprescribe Remain

• Reimbursement still tied patients' perception of how their pain is managed, which can drive doctors to over-prescribe

• Healthcare institutions still reprimanded (via CMS) when inspectors determine they are not managing pain aggressively enough, thus incentivizing the over-use of opioids

• Pain still institutionalized as the “5th Vital Sign”
• The general public is accustomed to expect that pain they are experiencing needs to be managed aggressively.

• This puts a demand for opiate painkillers into our healthcare system, the natural result of which is to drive doctors toward overprescribing opiates.

• We all need to recognize that pain management doesn't need to start with opiates and is often a natural part of healing.