Opioids and Children: Framework for Labeling Drugs to Promote Appropriate Treatment of Pain



INTRODUCTION

- I am Chris Feudtner, MD PhD MPH
- Pediatrician who cares for children with complex chronic conditions, providing when needed palliative care
- I am also a pediatric researcher & ethicist
- AAP Section of Hospice and Palliative Medicine

Two Groups in Desperate Need

- We serve two vulnerable populations of infants, children, adolescents, and young adults at risk of:
 - Group 1: Taking opioids in a prohibited & harmful manner
 - Group 2: Enduring inadequately relieved severe pain

To serve both of these groups, we need a clear-sighted, balanced and forthright policy response

THE OPIOID ADDICTION EPIDEMIC

- From infants born to mothers who took opioids during pregnancy to teenagers taking opioids out of family medicine cabinets
- Illicit use and addiction are a leading cause of death among adolescents and young adults

SEVERE REFRACTORY PAIN

- Medical conditions can create pain so severe that the pain is refractory to lesser interventions
 - Cancer
 - Sickle cell anemia pain crises
 - Deforming musculoskeletal conditions
 - Other rare conditions



BALANCED POLICY AND CLINICAL PRACTICE

Goal

Goal

Stop Misuse,
Prevent & Treat
Addiction

Treat Severe Pain Effectively & Safely



PIECES OF THE SOLUTION: POLICY AND CLINICAL PRACTICE

Drug Non-Drug Science **Drug Studies** Development **Studies** Quality Medication Non-opioid **Clinical Practice** Improvement **Alternatives** Labeling & Payment Excessive Home Over **Illicit Sources Amounts** Medicine Prescribers Prescribed Cabinets Addiction Access to Prevention & Harm Levels of Screening Reduction Treatment Treatment

GOAL: STOP OPIOID MISUSE & HARM

THE NEED FOR EFFECTIVE PEDIATRIC OPIOID MISUSE & ADDITION COUNTERMEASURES

- Substance misuse often starts in adolescence
- Adolescents misusing opioids rarely get them from a doctor
 - Family medicine cabinet
 - Illicit street supply
- Even appropriate opioid use to treat pain may slightly increase risk of later opioid misuse

THE NEED FOR EFFECTIVE PEDIATRIC OPIOID MISUSE & ADDITION COUNTERMEASURES

- AAP Committee on Substance Use and Prevention is working to:
 - Promote use of screening, brief intervention and referral to treatment for adolescent substance use in the primary care setting
 - Develop clinical practice guidelines for the treatment of opioid use disorder specifically for adolescents
- AAP also strongly supported the passage of the Protecting Our Infants Act last year
 - Advance federal government activities to improve treatment and identification of babies with neonatal abstinence syndrome
 - Improve care for pregnant women using opioids

THE NEED FOR EFFECTIVE PEDIATRIC OPIOID MISUSE & ADDITION COUNTERMEASURES

- We also need to develop more effective:
 - Non-opioid pain management techniques
 - Ways to disseminate & pay for these techniques
 - Opioid return practices to empty medicine cabinets
 - Reduce amount of opioid prescribed for <u>ACUTE</u> use*
 - Drug misuse prevention education & training
 - Access to effective, <u>age-appropriate</u> addiction treatment

GOAL: EFFECTIVE TREATMENT OF SEVERE PAIN

THE NEED FOR EFFECTIVE PEDIATRIC REFRACTORY PAIN TREATMENT OPTIONS

- As mentioned, despite tremendous advances in pediatric care, each year just under 50,000 infants, children, and adolescent die
- About a third of deaths are due to progressive underlying conditions that often cause substantial pain
- There are also other children with refractory pain



THE NEED FOR EFFECTIVE PEDIATRIC REFRACTORY PAIN TREATMENT OPTIONS

- We need to develop & implement more effective:
 - Non-pharmacologic techniques (& reimbursement)
 - Regional and non-systemic interventions
 - Non-opioid adjunctive medications
 - Safe opioid prescribing practices
 - Prevent harm and prevent misuse
 - Reimbursement for the time & effort that safe & effective pain management requires



THE NEED FOR EFFECTIVE PEDIATRIC REFRACTORY PAIN TREATMENT OPTIONS

Inevitably, though,
many cases of severe refractory pain
will require
short- and long-acting opioids
as part of the most effective
comprehensive pain management plan

BALANCED PEDIATRIC OPIOID POLICY

Efforts to curtail opioid misuse by restricting prescribing for pediatric patients more than adult patients misunderstands where the illicit supply is coming from & puts children in pain at risk for ongoing pain



PEDIATRIC DRUG STUDIES AND LABELING

LABELING AS EVIDENCE BASED GUIDANCE

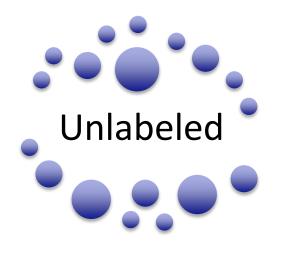
Science

Labeling

Clinical Practice



LABELING TO IMPROVE CLINICAL PRACTICE







Widely Varying Practice

Safe & Effective Practice

LABELING AS A CONFIRMATION & CONSTRAINT ON CLINICAL PRACTICE

Use is appropriate



Use is inappropriate



OXYCONTIN LABELING: CONFIRMATION & CONSTRAINTS

OXYCONTIN is indicated for the management of pain severe enough to require daily, aroundthe-clock, long-term opioid treatment and for which alternative treatment options are inadequate in:

- · Adults; and
- Opioid-tolerant pediatric patients 11 years of age and older who are already receiving and tolerate a minimum daily opioid dose of at least 20 mg oxycodone orally or its equivalent.

Limitations of Use

- Because of the risks of addiction, abuse, and misuse with opioids, even at recommended doses, and because of the greater risks of overdose and death with extended-release opioid formulations [see Warnings and Precautions (5.1)], reserve OXYCONTIN for use in patients for whom alternative treatment options (e.g., non-opioid analgesics or immediate-release opioids) are ineffective, not tolerated, or would be otherwise inadequate to provide sufficient management of pain.
- OXYCONTIN is not indicated as an as-needed (prn) analgesic.

http://www.accessdata.fda.gov/drugsatfda docs/label/2015/022272s027lbl.pdf

THE NEED FOR PEDIATRIC DRUG STUDIES AND LABELING

- Children differ from adults in terms of:
 - How drugs affect their developing bodies
 - The rate at which drugs are absorbed, distributed, metabolized, and eliminated by their bodies
 - The degree to which drugs are effective
 - Side effects and general safety profile of drugs

THE NEED FOR PEDIATRIC DRUG STUDIES AND LABELING

- Congress has recognized the importance of advancing pediatric health and wellbeing through better understanding of medications
 - Best Pharmaceuticals for Children Act (BPCA)
 - Pediatric Research Equity Act (PREA)
- To date, over 615 label changes have been made under BPCA and PREA to add new pediatric information to drug labeling



FROM THE AMERICAN ACADEMY OF PEDIATRICS

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

POLICY STATEMENT

Off-Label Use of Drugs in Children

COMMITTEE ON DRUGS

KEY WORDS

off-label drug use, pharmaceuticals, pediatrics, infants, children, adolescents, prescribing

ABBREVIATIONS

BPCA—Best Pharmaceuticals for Children Act FDA—US Food and Drug Administration PREA—Pediatric Research Equity Act

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The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

abstract



The passage of the Best Pharmaceuticals for Children Act and the Pediatric Research Equity Act has collectively resulted in an improvement in rational prescribing for children, including more than 500 labeling changes. However, off-label drug use remains an important public health issue for infants, children, and adolescents, because an overwhelming number of drugs still have no information in the labeling for use in pediatrics. The purpose of off-label use is to benefit the individual patient. Practitioners use their professional judgment to determine these uses. As such, the term "off-label" does not imply an improper, illegal, contraindicated, or investigational use. Therapeutic decision-making must always rely on the best available evidence and the importance of the benefit for the individual patient. *Pediatrics* 2014;133:563–567

THE PROBLEMS WITH BACKING AWAY FROM PEDIATRIC STUDIES AND LABELING

- Absence of labeling remains too common
 - Many drugs (upwards of 50%) used in pediatric practice do not have pediatric specific labeling
 - This is due to a dearth of research knowledge about drugs in pediatric patients
 - Failing to label a drug does not shut down the use of the drug

THE PROBLEMS WITH BACKING AWAY FROM PEDIATRIC STUDIES AND LABELING

- Pediatric drug research protects children
 - Studies expose 10s to 100s of children to carefully monitored risk to protect 1000s to 10,000s of children from unknown and largely unmonitored risks

THE PROBLEMS WITH BACKING AWAY FROM PEDIATRIC STUDIES AND LABELING

- Inappropriate extrapolation of dosing, efficacy, and safety from adult studies to infants and child is like throwing darts in a breeze
 - The opposite of precision medicine
 - Unpredictably inaccurate
 - Children will get hurt
 - Pediatric drug labeling based on extrapolation of efficacy can be appropriate when done carefully

- The framework for labeling pediatric medications needs to prioritize:
 - Common conditions or serious conditions
 - Medications that are being used without labeling and in ways that may be less effective or less safe than is possible

- The framework for labeling pediatric medications should be based on rigorous studies:
 - Efforts to support and expand drug studies in children need to be continued

- The framework for labeling pediatric medications should anticipate and manage the tradeoffs inherent in all medications between a drug's potential benefits and harms:
 - For drugs such as opioids is true for both individual patients & populations of persons

- Pediatric drug labeling should not:
 - Be looked upon as a solution for problems that labeling does not cause and cannot solve
 - Serve as a distraction and excuse to not grapple with more effective solutions to stop the addiction epidemic

CONCLUSION

- Our nation is facing an opioid epidemic that we need to stop
 - We cannot shy away from the necessary steps we must take to effectively stop this disaster
- We also must serve and care for children with severe refractory pain
- We need balanced policy to achieve both goals

THANK YOU