Community: North Carolina’s SuPRE Drug Program in Wilkes County – the Chronic Pain Initiative and Project Lazarus

Presenter
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The Five Requisite Components in a “SuPRE” Program

**C**ommunity knowledge and coalition

**S**urveillance (mortality, ED, and PMP data)

**P**revention (*the Chronic Pain Initiative*)

**R**escue (*Project Lazarus*)

**E**valuation (outcome and process)
1. Community Knowledge and Coalition
Wilkes County, NC

- Population, 68,000
- Median income, $34,258
- Poverty rate, > 12%
- Layoffs by major employers
- 70 miles across
- Not much heroin abuse
- >600/100,000 drug-related ED visits at Wilkes Regional
- Drug overdose mortality rate > 36/100,000 for cocaine, methadone and the other prescription controlled substances.

Sanford: 2009-CDC Prescription Drug Conf.
Community Partners (1)

- Wilkes Co. Healthy Carolinians Council
  - Substance Abuse Task Force
- Wilkes Regional Medical Center
- Wilkes Co. Health Department
- Wilkes Co. Sheriff’s Department
- Wilkes Co. Child Abuse Prevention Team
Community Partners (2)

- SAFE (Family Shelter; Domestic Violence)
- United Way
- Wilkes Ministerial Association
- New River Behavioral Health Center
- Parents and teens
- Wilkes Co. Schools
- Northwest Community Care Network (Medicaid Regional Authority)
Three Dimensional Haddon Matrix

Adapted from Runyan, CW. Injury Prevention, 1998(4), 302-307

Factors

Phases

Pre-event
Event
Post-event

Host
Agent/vehicle
Physical environment
Social environment

Decision Criteria

Other identified criteria
Feasibility
Preferences
Stigmatization

Equity
Freedom
Cost
Effectiveness

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Funding

- Once the concept of Project Lazarus is accepted (i.e., pilot study is positive) then
- Your funding, like politics, becomes local
- It is part of knowing your community and building coalitions
- Estimate the cost of prevention and rescue
- Estimate the cost of no prevention and rescue.
2. Surveillance of Drug Overdoses

Wilkes County’s systems for tracking accidental drug-related ‘issues’
Surveillance

• Mortality
  – Death Certificates
  – Medical Examiner investigations
• Poison Control Calls
  – Carolinas Poison Center
• Emergency Departments Visits
  – NCDETECT
• Prescription Drug Program Monitoring
  – NC Controlled Substances Reporting System

<table>
<thead>
<tr>
<th>Year</th>
<th>North Carolina</th>
<th>Wilkes</th>
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<tbody>
<tr>
<td>2003</td>
<td>8.2</td>
<td>23.9</td>
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<tr>
<td>2004</td>
<td>8.5 8.2</td>
<td></td>
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<tr>
<td>2005</td>
<td>10.4</td>
<td>24.5</td>
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<tr>
<td>2006</td>
<td>10.5</td>
<td>26.9</td>
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<tr>
<td>2007</td>
<td>10.8</td>
<td>35.8</td>
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</tbody>
</table>
Substances implicated in Wilkes Co.

- Methadone
- Oxycodone
- Cocaine
- Fentanyl

Average Age At Death, 2007

- 40 years

Other contributing factors, 2007

- Xanax
- Alcohol
- Tramadol
Dispensed Prescriptions for a Controlled Substances by Number of Scripts and Month: Wilkes County NC, July-December 2007

Sanford: 2009-CDC Prescription Drug Conf.
Rates of Resident Prescriptions of Controlled Substances, July 2007

Resident Unintentional Poisoning Death Rates, 2006

Rate per 100,000 Population
- 0.0 - 6.5
- 6.6 - 14.1
- 14.2 - 25.3
- 25.4 - 44.0

*Note: rates based on less than 10 deaths are unreliable and should be interpreted with caution.
3. Prevention
The Chronic Pain Initiative

The Northwest Community Care Network (NCCN) – one of 15 NC state Medicaid Regulatory Authorities
The Chronic Pain Initiative

1. Education of physicians in pain management
2. Distribution of pain management tool kit
3. Modification of ED opioid use
4. Case management of ED and Medicaid patients
5. Use of Controlled Substances Reporting System
6. Decrease cost of medical (Medicaid) care
7. Pilot study of Project Lazarus in Wilkes Co.
The Chronic Pain Initiative

1. Physician Education
   – Scheduled lectures
   – Low back pain
   – General pain treatment and referral guidelines
   – Managing the chronic pain patient
   – NC Controlled Substances Reporting System
   – Best Practice Took Kit
The Chronic Pain Initiative

2. CPI Best Practice Tool Kit
   I. Opioids in the Management of Chronic Pain: An Overview
   II. Assessment and Management Algorithms
   III. Patient Treatment Record
      I. Treatment Agreement (Pain Contract)
      II. Chronic Pain Progress Note
      III. Medication Flowsheet
      IV. Personal Care Plan
      V. Functional Ability Questionnaire (FAQ)
   IV. Patient Education Materials
The Chronic Pain Initiative

3. Emergency Department
   – Guideline for treatment of pain, narcotic dispensing
   – Case manager in ED
   – Call schedule for dentistry
   – Referral networks
   – Chronic pain handout
The Chronic Pain Initiative

4. Case Management
   – Patient enrollment (Medicaid)
   – Pain management strategies
     • Holistic resources in community
     • Narcotic utilization
   – Decrease use of multiple physicians
   – Decrease use of multiple pharmacies
   – Data collection
The Chronic Pain Initiative

4. A Pharmacy Home
   – Patient assigned to single pharmacy for all controlled substances
   – Pharmacy receives copy of patient’s pain contract
   – ‘Flag’ alert system
The Chronic Pain Initiative

4. B Mental Health
   - Coalition members
   - Monthly support groups
   - Positive sharing
   - Education on holistic management of pain
   - YMCA/Wellness Centers therapy and exercise programs
   - Collaboration with local Mental Health providers
   - Buprenorphine access
5. The Controlled Substances Reporting System – NC’s PDMP

- Mandatory data reporting, began July 2007
- Website is secure with password protection
- On-line access to patient prescription profiles
- Currency: two to four week lag time
- Approximately 1 million scripts/month
- Physician/Office education on access & utilization
The Chronic Pain Initiative

6. Decrease cost of treating Medicaid patients

   The NCCN covers 6 rural NC counties.

   CPI programs apply to physicians who treat Medicaid patients in the 6 county area.
7. Project Lazarus

- Provides the opioid antagonist naloxone to pain patients as rescue medicine for potentially fatal respiratory depression from opioid overdose to everyone in Wilkes Co.
- Those with substance use disorders are also targeted for inclusion in program through the ED and substance use treatment services.
- Simultaneous recruitment to destigmatize the intervention.
Project Lazarus: Goals

Reduce
Deaths from drug overdoses.
ED visits for drug overdoses/substance abuse.

Initiate
Education; distribution of naloxone kits.
Routine co-prescribing of naloxone with high dose opioid prescriptions to high-risk patients.

Demonstrate
Broad applicability of co-prescribing naloxone to high-risk patients in the rest of NC and the US.
4. Rescue
Treatment Provided Prior to Deaths from Unintentional Drug Overdoses, NC: 1997-2001

- Dead at scene: 59%
- Dead in ED/died after ED: 17%
- Transported/DOA: 9%
- Rx at scene/died: 8%
- Admitted: 7%

Rescue

• Prevention doesn’t always work
• Revision of concepts needed
• Use of naloxone as patient safety, not just post-exposure treatment or harm reduction
  – Similar to the use of the EpiPen for reversing allergic reactions until other medical help can arrive.
Evaluation of Naloxone Use by Intravenous Drug Users (IDUs)

- No overall increase in drug use or frequency of use.
- No unexpected major medical side effects.
- Possible increase in desire to seek drug treatment.
- Excellent identification of appropriate use scenarios.
- What is the alternative?

Naloxone (N) in the Brain

**opioid receptors activated by heroin and prescription opioids**

 opioids broken down and excreted

Pain Relief
Pleasure
Reward
Respiratory Depression

Reversal of Respiratory Depression
Opioid Withdrawal

Sanford: 2009-CDC Prescription Drug Conf.

From N. Dasgupta, 2008
Naloxone hydrochloride (Narcan®)

- Mu-opioid receptor antagonist
- Can’t get high from it
- Clear liquid
- Used in anesthesiology
- Used in emergency
- Quick acting
- Lasts 30-90 minutes
- Generic (cheap?)
- Delivered via injection (IM, SC, IV) or nasal

Source: www.anypositivechange.org

From N. Dasgupta, 2008
Sanctioning the use of Naloxone for all Opioid Users

- Acceptance of new role of naloxone by local medical care practitioners takes sanctioning by recognized authorities
- North Carolina Medical Board
  - Presentation to Medical Board Nov. 2007
  - Multiple articles in MNCB Forum (newsletter)
NCMB position statement on use of naloxone

• The prevention of drug overdoses is consistent with the Board’s statutory mission to protect the people of North Carolina. The Board therefore encourages its licensees to cooperate with programs like Project Lazarus in their efforts to make naloxone available to persons at risk of suffering opioid drug overdose.
Project Lazarus: Components

1. Education
2. Informed Consent
3. Intake Form
4. Naloxone Kit
5. Rescue
**Project Lazarus: Target Population**

- D/C from ED for drug overdose/intoxication
- Hx of nonmedical use of drugs
- High dose prescription
- New methadone script
- Released from jail, detox program
- In methadone or buprenorphine treatment program

**Any opioid script and**
- smoking/COPD
- renal/hepatic disease
- known alcohol abuse
- concurrent scripts for benzodiazepene, SSRI or TCA antidepressant
- remoteness from medical care
- patient request
Project Lazarus: Informed Consent

Description of pilot study to assess feasibility of using naloxone by anyone in target population.

Acknowledging understanding of project.

Providing consent for study staff to access personal medical information from LMD, ED and CSRS.

Contact information for participants on how to obtain more naloxone or sources of substance abuse treatment.
<table>
<thead>
<tr>
<th>Risk Factors (check all that apply)</th>
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<tbody>
<tr>
<td>1. Patient released from emergency medical care involving opioid poisoning/intoxication</td>
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<tr>
<td>2. Suspected history of illicit or non-medical opioid use</td>
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<tr>
<td>3. High-dose opioid prescription (≥ 200 mg of morphine equivalent/day)</td>
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<td>4. Any methadone prescription to opioid naive patient</td>
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<tr>
<td>Any opioid prescription and ...</td>
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<tr>
<td>5. smoking/COPD/emphysema, history or other respiratory illness or obstruction</td>
</tr>
<tr>
<td>6. renal dysfunction, hepatic disease</td>
</tr>
<tr>
<td>7. known or suspected concurrent alcohol use</td>
</tr>
<tr>
<td>8. concurrent benzodiazepine prescription</td>
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<tr>
<td>9. concurrent SSRi or TCA anti-depressant prescription</td>
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<tr>
<td>10. Prior release from custody</td>
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<tr>
<td>11. Release from opioid detoxification or mandatory treatment program</td>
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<tr>
<td>12. Voluntary request from patient</td>
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<tr>
<td>13. Patients in methadone or buprenorphine detox/maintenance (for addiction or pain)</td>
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<tr>
<td>14. Patient may have difficulty accessing emergency medical services (distance, remoteness)</td>
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<tr>
<td>15. Other (specify):</td>
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<table>
<thead>
<tr>
<th>Patient Information</th>
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<tr>
<td><strong>Patient Name:</strong></td>
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<tr>
<td><strong>Patient Address:</strong></td>
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<tr>
<td><strong>Date of Birth:</strong></td>
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<tr>
<td><strong>Gender:</strong> Male ☐ Female ☐ Other/NA ☐</td>
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<td><strong>Medicaid patient:</strong> Yes ☐ No ☐ Unknown ☐</td>
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<td><strong>Known medication hypersensitivities:</strong></td>
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<table>
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<tr>
<th>Dispensing Details</th>
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<tr>
<td><strong>Name of Prescriber:</strong></td>
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<tr>
<td><strong>Expiration date for naloxone (if dispensed):</strong></td>
</tr>
<tr>
<td><strong>Was this a refill:</strong> Yes ☐ No ☐</td>
</tr>
</tbody>
</table>
Project Lazarus: Naloxone Kit

2 mL pre-loaded syringes (1 mg/mL)
1 nasal adaptor; gloves; DVD on use; brochure - NO Needles

Sanford: 2009-CDC Prescription Drug Conf.
Project Lazarus: Patient/Peer Education on DVD and Kit Insert

Patient responsibilities in pain management.
Recognize signs and symptoms of opioid overdose.
Importance of calling 911.
Rescue breathing.
Administration of naloxone.
Options for substance abuse treatment.
Project Lazarus: Training DVD

Patient rights and responsibilities (1)

– Have your pain relieved and live a normal life
– Follow prescription instructions exactly
– Have a contract/agreement with MD
  • Monitor urine for drug use/abuse
  • Allow MD to access and share patient info.
  • continued on next slide
Project Lazarus: Training DVD

• Patient rights and responsibilities (2)
  – Never mix opioids with other medications or alcohol without prior approval by MD
  – Never share medication with someone else
  – Store medication in a safe place
Project Lazarus: Training DVD

• Learn how to recognize an opioid overdose
  – Signs and symptoms of an opioid overdose
  – Differentiating between opioid and non-opioid overdose
  – Risk factors for opioid poisoning
  – Dispel street myths for dealing with an overdose.
Project Lazarus: Training DVD

• Recognize the importance of calling 911
  – Why it is important to call 911
  – Learn what information to give to the 911 dispatcher
  – Reinforce why it is important to stay with victim
  – Learn what information to give EMS.
Project Lazarus: Training DVD

• Learn rescue breathing
  – Rescue position
  – How to clear an obstructed airway
  – Technique for rescue breathing
  – How many breaths to give
  – Evaluation of breathing
Project Lazarus: Training DVD

• Learn how to administer naloxone (1)
  – Preparing the syringe and nasal adaptor
  – How to administer
  – Reinforce staying with victim
  – When to administer a second dose
  – Possible adverse events of naloxone administration to opioid dependent people
  – Kit contents
Project Lazarus: Training DVD

• Learn how to administer naloxone (2)
  – Obtain prescription and dispense naloxone
  – Making an overdose response plan
  – Reporting an opioid reversal
  – Expirations and refills.
Project Lazarus: Training DVD

• Learn options for drug treatment
  – Know how to identify when opioid use becomes problematic
  – Understand treatment options for drug abuse/dependence
  – Identify local entities that provide services for those interested in reducing drug use.
5. Evaluation
Project Lazarus Evaluation

OUTCOME MEASURES – quasi-experimental design

• Hospital ED visit trends
• Mortality trends; drugs and circumstances from ME reports
• Prescribed controlled substance trends

PROCESS MEASURES

• Patient experience surveys
• Provider opinion surveys
• Pilot testing of educational video
• Monitoring for unintended consequences
Project Lazarus: Firsts

1. First naloxone program in the South.
2. First time introduced into primary/general medical practice – as a patient safety issue.
3. First to focus on prescription opioids.
4. First to include pain patients (to date only IDUs).
5. First community-based approach.
6. First time approved by a state medical board.

Adapted from N. Dasgupta, 2008
Designing Your Community-Drug Overdose Program

1. Community knowledge and coalition
2. Surveillance
3. Prevention
4. Rescue
5. Evaluation
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