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

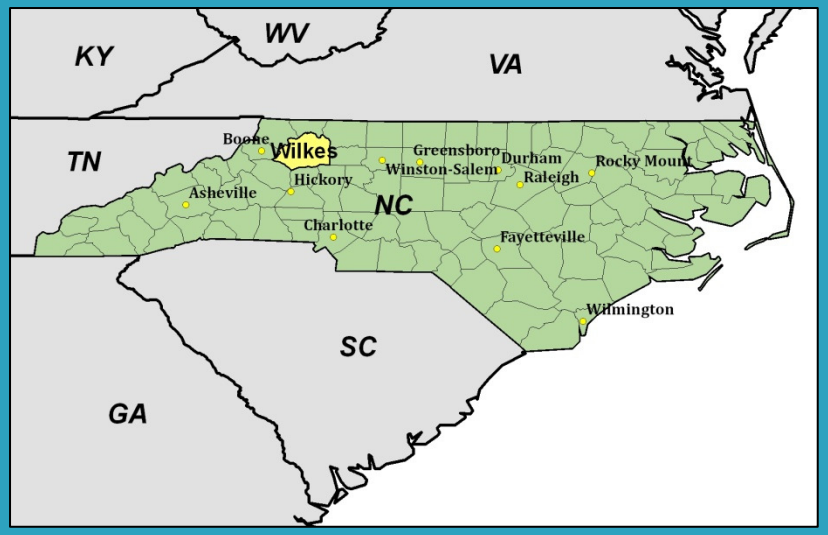
Community knowledge and coalition

Surveillance (mortality, ED, and PMP data)
Prevention (the Chronic Pain Initiative)
Rescue (Project Lazarus)
Evaluation (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.



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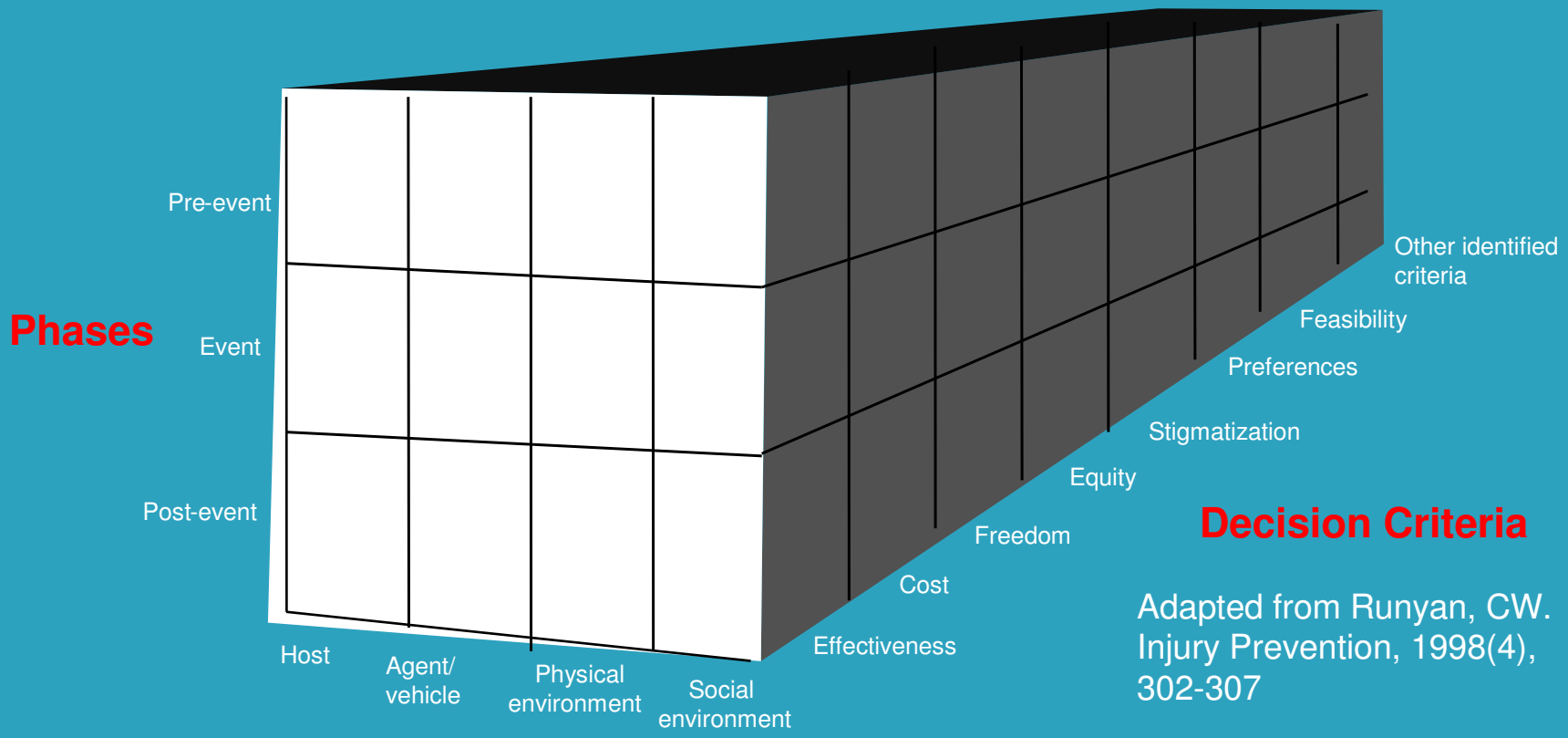
Community Partners (1)

- 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

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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'

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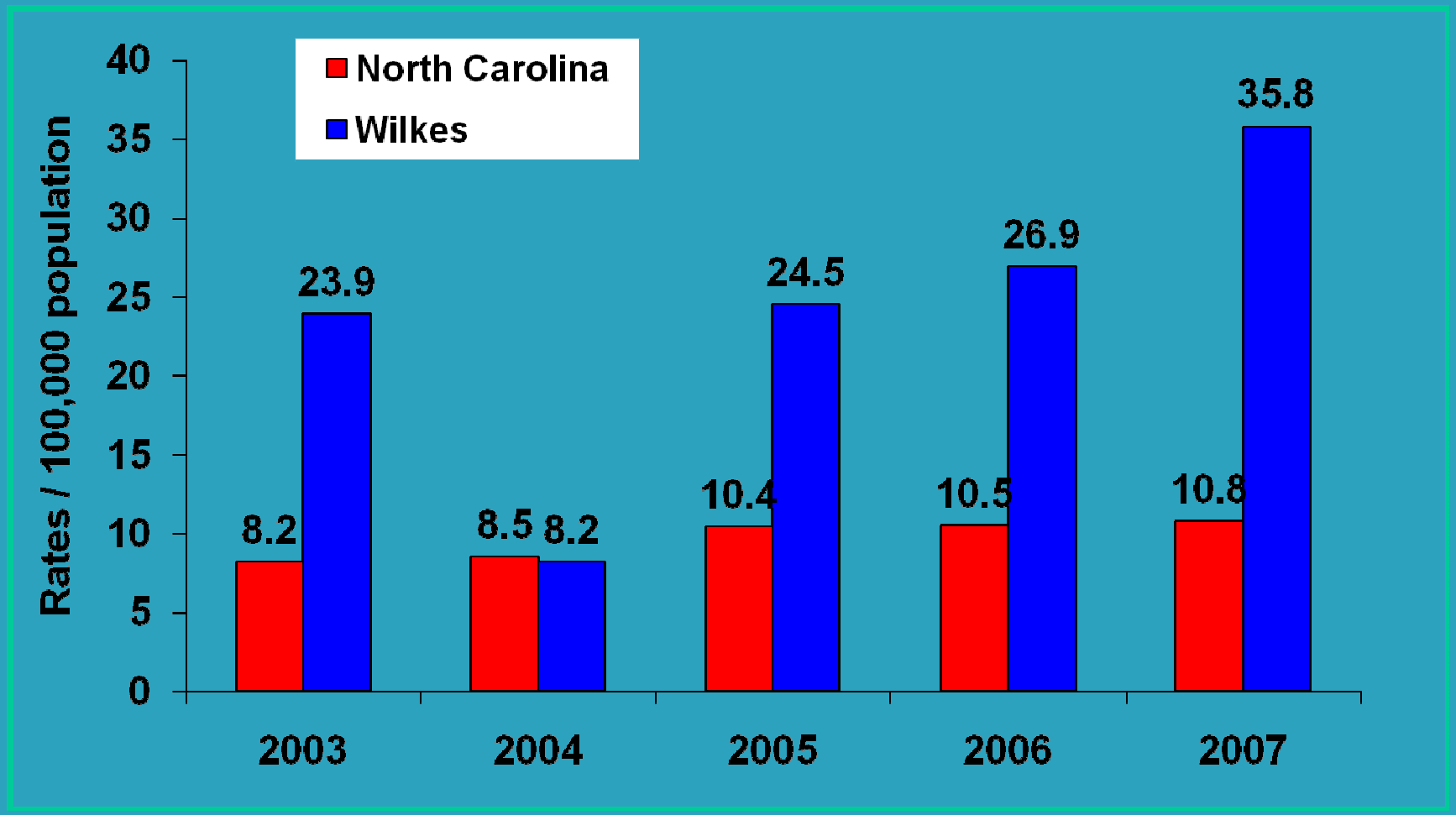
Surveillance

- 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

Resident Deaths Rates for Unintentional Poisonings: North Carolina and Wilkes County, 2003 – 2007



Substances implicated in Wilkes Co.

- Methadone
- Oxycodone
- Cocaine
- Fentanyl

Average Age At Death, 2007

40 years

Other contributing factors, 2007

Xanax
Alcohol
Tramadol

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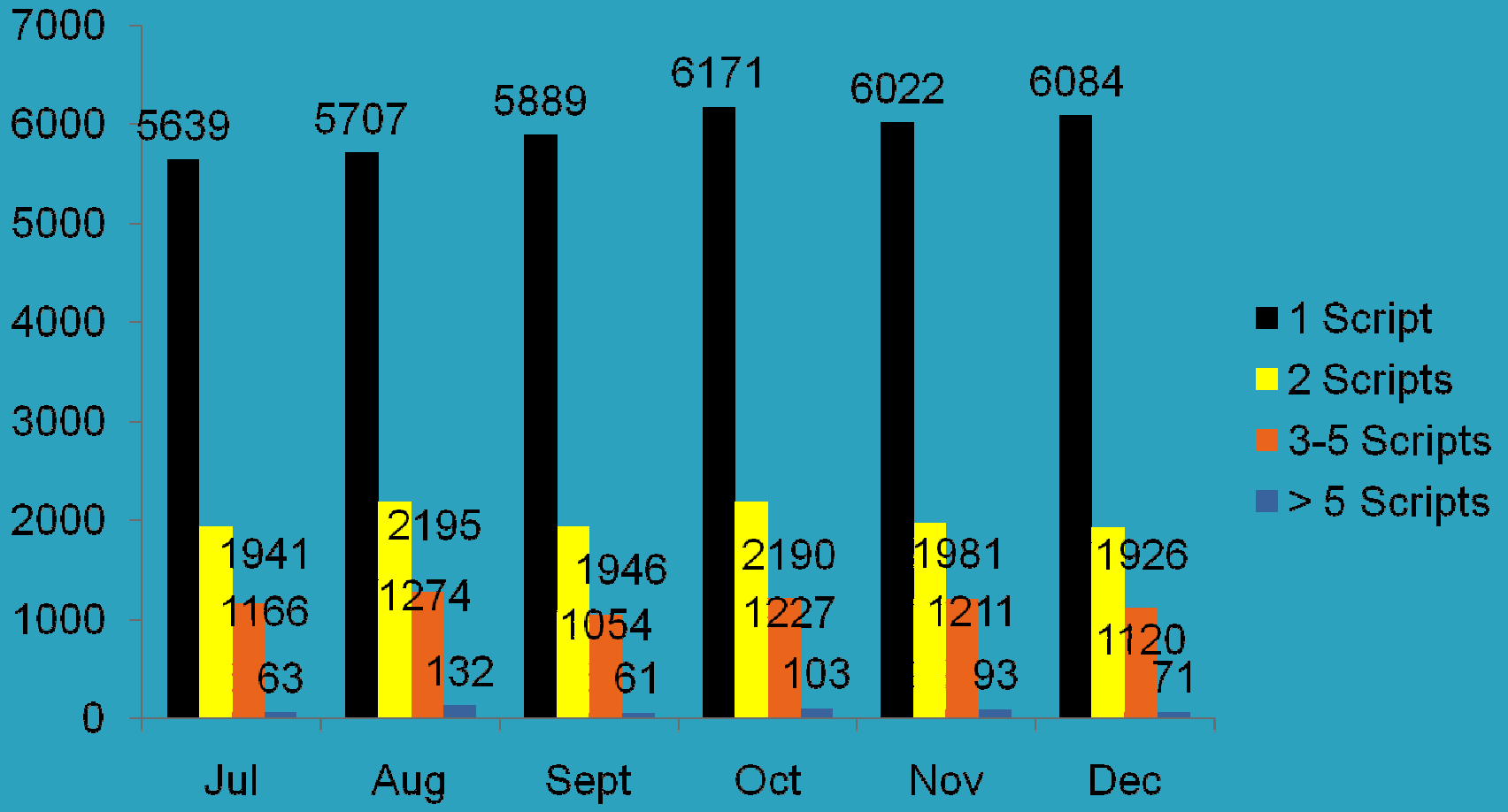
Dispensed Prescriptions for a Controlled Substances by Number of Scripts and Month: Wilkes County NC, July-December 2007



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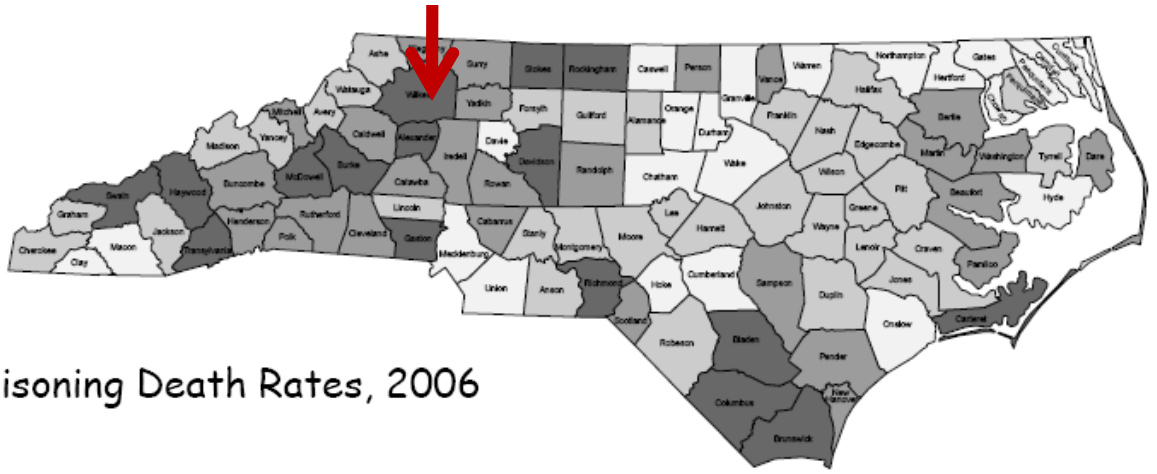
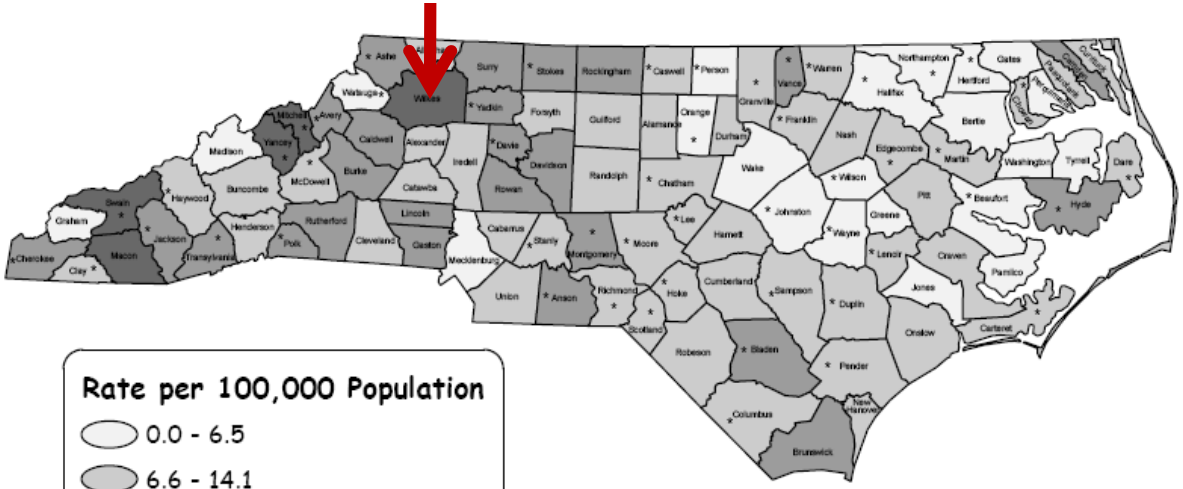
Rates of Resident Prescriptions of Controlled Substances, July 2007



Resident Unintentional Poisoning Death Rates, 2006



*Note rates based on less than 10 deaths are unreliable and should be interpreted with caution.

Rate per 10,000 Population*
659.1 - 1072.7
1072.8 - 1398.9
1399.0 - 1721.4
1721.5 - 2087.6

C State Center for Health Statistics

3. Prevention

The Chronic Pain Initiative

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

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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

The Chronic Pain Initiative

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.

The Chronic Pain Initiative

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.

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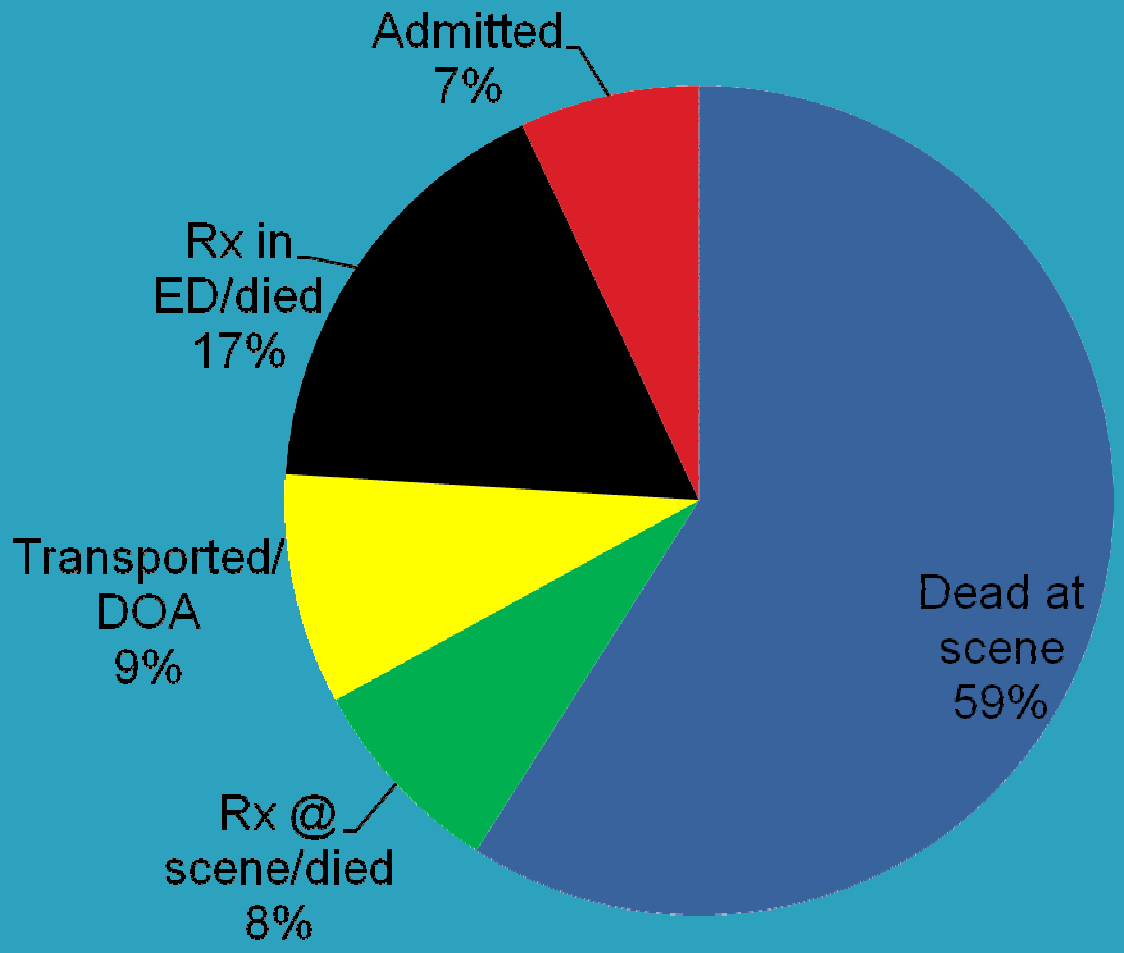
4. Rescue

Treatment Provided Prior to Deaths from Unintentional Drug Overdoses, NC: 1997-2001



Source: Sanford. Findings and Recommendations of the Task Force to Prevent Deaths from Unintentional Drug Overdoses in NC, 2003.

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.

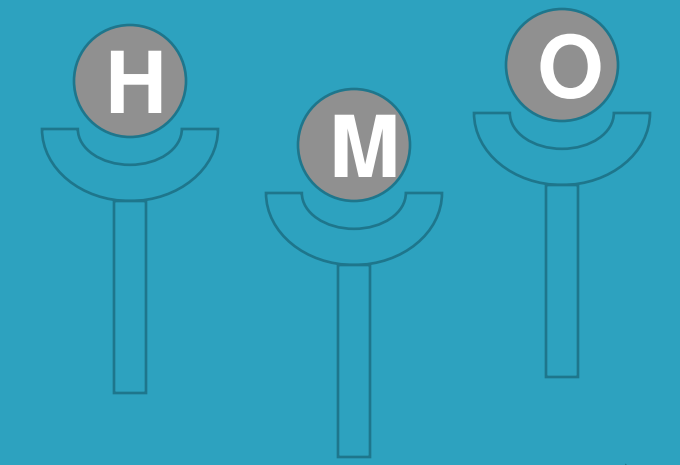
Evaluation of Naloxone Use by Intravenous Drug Users (IDUs)

- 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?

Source: Maxwell, S., et al., *J Addict Dis*, 2006. 25(3): p. 89□96; Sporer, K.A. and A.H. Kral, *An Emerg Med*, 2007. 49(2): p. 172□7; Green TC, et al. ICRDH, Warsaw, Poland, May 2007.

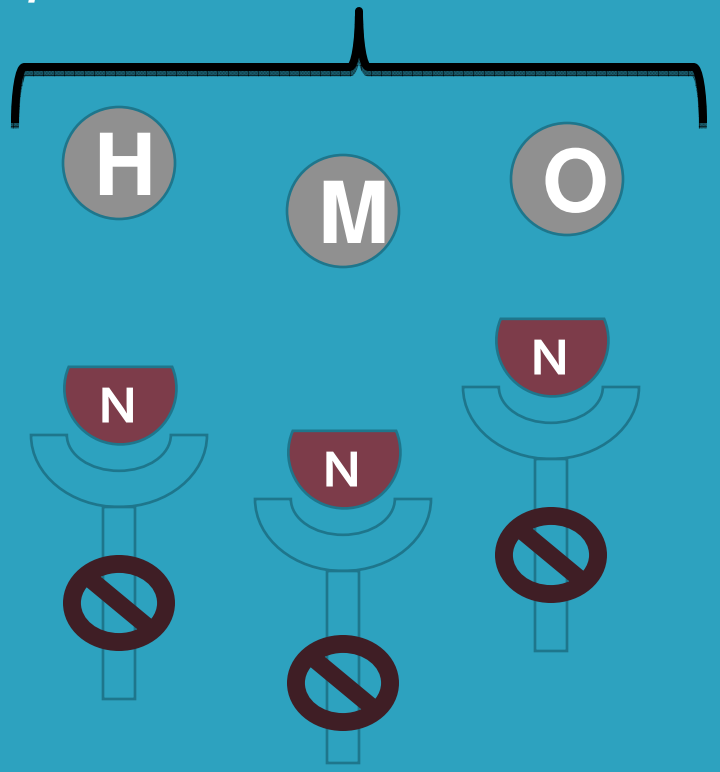
Naloxone (N) in the Brain

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



Pain Relief
Pleasure
Reward
Respiratory Depression

opioids broken down and excreted



Reversal of Respiratory Depression
Opioid Withdrawal

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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

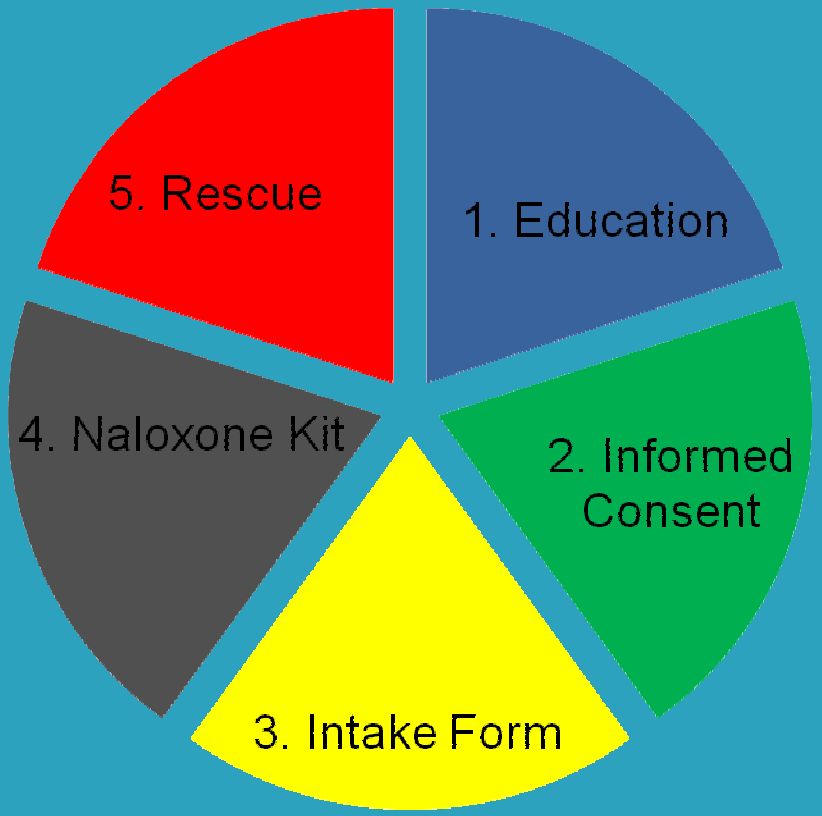
Sanctioning the use of Naloxone for all Opioid Users

- 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)
  - Position statement regarding Project Lazarus, adopted August 2008.

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



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

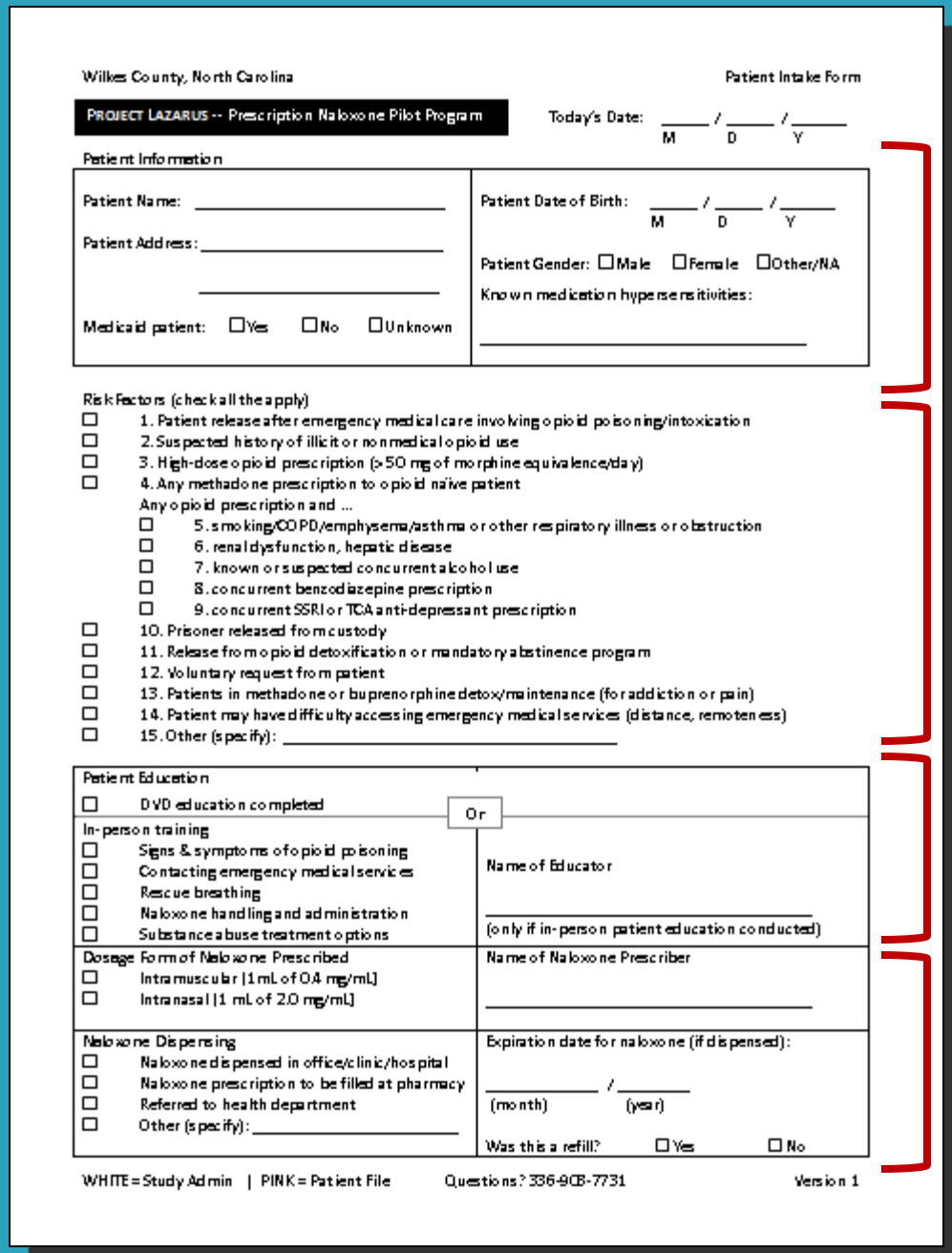
In methadone or buprenorphine treatment program

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.



Wilkes County, North Carolina — Patient Intake Form

PROJECT LAZARUS -- Prescription Naloxone Pilot Program — Today's Date: ____ / ____ / ____ (M / D / Y)

Patient Information

Patient Name: _____

Patient Address: _____

_____

Medicaid patient: ☐Yes ☐No ☐Unknown

Patient Date of Birth: ____ / ____ / ____ (M / D / Y)

Patient Gender: ☐Male ☐Female ☐Other/NA

Known medication hypersensitivities:

_____

Risk Factors (check all that apply)

- ☐ 1. Patient release after emergency medical care involving opioid poisoning/intoxication
- ☐ 2. Suspected history of illicit or non-medical opioid use
- ☐ 3. High-dose opioid prescription (>50 mg of morphine equivalence/day)
- ☐ 4. Any methadone prescription to opioid naïve patient

Any opioid prescription and …

- ☐ 5. smoking/COPD/emphysema/asthma or other respiratory illness or obstruction
- ☐ 6. renal dysfunction, hepatic disease
- ☐ 7. known or suspected concurrent alcohol use
- ☐ 8. concurrent benzodiazepine prescription
- ☐ 9. concurrent SSRI or TCA anti-depressant prescription

- ☐ 10. Prisoner released from custody
- ☐ 11. Release from opioid detoxification or mandatory abstinence program
- ☐ 12. Voluntary request from patient
- ☐ 13. Patients in methadone or buprenorphine detox/maintenance (for addiction or pain)
- ☐ 14. Patient may have difficulty accessing emergency medical services (distance, remoteness)
- ☐ 15. Other (specify): _____

Patient Education

☐ DVD education completed — Or

In-person training

- ☐ Signs & symptoms of opioid poisoning
- ☐ Contacting emergency medical services
- ☐ Rescue breathing
- ☐ Naloxone handling and administration
- ☐ Substance abuse treatment options

Name of Educator

_____

(only if in-person patient education conducted)

Dosage Form of Naloxone Prescribed

- ☐ Intramuscular [1 mL of 0.4 mg/mL]
- ☐ Intranasal [1 mL of 2.0 mg/mL]

Name of Naloxone Prescriber

_____

Naloxone Dispensing

- ☐ Naloxone dispensed in office/clinic/hospital
- ☐ Naloxone prescription to be filled at pharmacy
- ☐ Referred to health department
- ☐ Other (specify): _____

Expiration date for naloxone (if dispensed):

_____ / _____

(month) (year)

Was this a refill? ☐Yes ☐No

WHITE = Study Admin | PINK = Patient File — Questions? 336-903-7731 — Version 1

Intake Form

- Patient information
- Risk Factors/ Indications/ Populations (14)
- Document training
- Dispensing details

From N. Dasgupta, 2008

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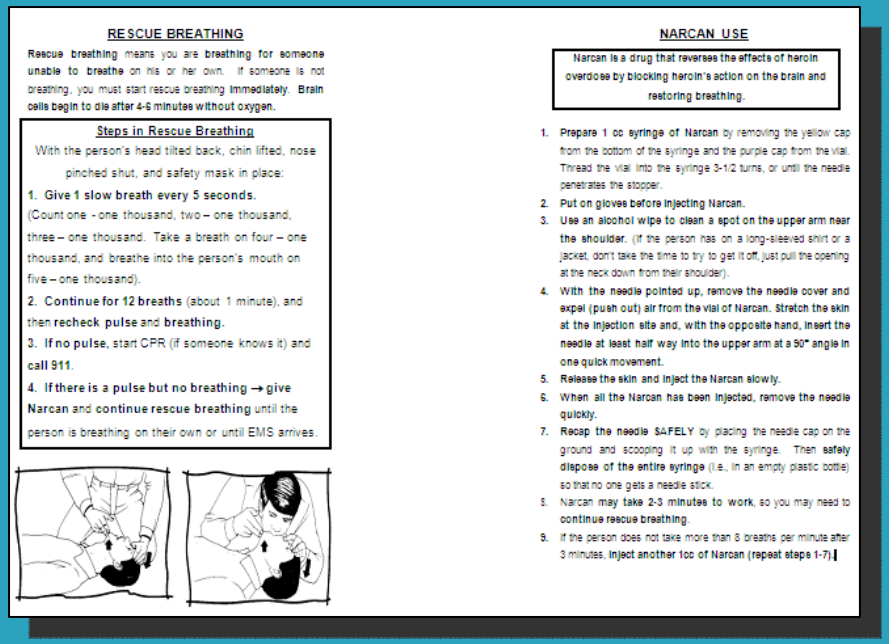
Project Lazarus: Naloxone Kit

2 mL pre-loaded syringes (1 mg/mL)

1 nasal adaptor; gloves; DVD on use; brochure - NO Needles



RESCUE BREATHING

Rescue breathing means you are **breathing for someone unable to breathe** on his or her own. If someone is not breathing, you must start rescue breathing **immediately. Brain cells begin to die after 4-6 minutes without oxygen.**

Steps in Rescue Breathing

With the person's head tilted back, chin lifted, nose pinched shut, and safety mask in place:

1. **Give 1 slow breath every 5 seconds.** (Count one - one thousand, two – one thousand, three – one thousand. Take a breath on four – one thousand, and breathe into the person's mouth on five – one thousand).
2. **Continue for 12 breaths** (about 1 minute), and then **recheck pulse** and **breathing.**
3. **If no pulse,** start CPR (if someone knows it) and **call 911.**
4. **If there is a pulse but no breathing → give Narcan** and **continue rescue breathing** until the person is breathing on their own or until EMS arrives.

NARCAN USE

Narcan is a drug that reverses the effects of heroin overdose by blocking heroin's action on the brain and restoring breathing.

1. **Prepare 1 cc syringe of Narcan** by removing the yellow cap from the bottom of the syringe and the purple cap from the vial. Thread the vial into the syringe 3-1/2 turns, or until the needle penetrates the stopper.
2. **Put on gloves before injecting Narcan.**
3. **Use an alcohol wipe to clean a spot on the upper arm near the shoulder.** (If the person has on a long-sleeved shirt or a jacket, don't take the time to try to get it off, just pull the opening at the neck down from their shoulder).
4. **With the needle pointed up, remove the needle cover and expel (push out) air from the vial of Narcan. Stretch the skin at the injection site and, with the opposite hand, insert the needle at least half way into the upper arm at a 90° angle in one quick movement.**
5. **Release the skin and inject the Narcan slowly.**
6. **When all the Narcan has been injected, remove the needle quickly.**
7. **Recap the needle SAFELY** by placing the needle cap on the ground and scooping it up with the syringe. Then **safely dispose of the entire syringe** (i.e., in an empty plastic bottle) so that no one gets a needle stick.
8. **Narcan may take 2-3 minutes to work,** so you may need to **continue rescue breathing.**
9. **If the person does not take more than 8 breaths per minute after 3 minutes, inject another 1cc of Narcan (repeat steps 1-7).**

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Adapted from Dasgupta, 2008

Intranasal Administration

From N. Dasgupta, 2008

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 mediation 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

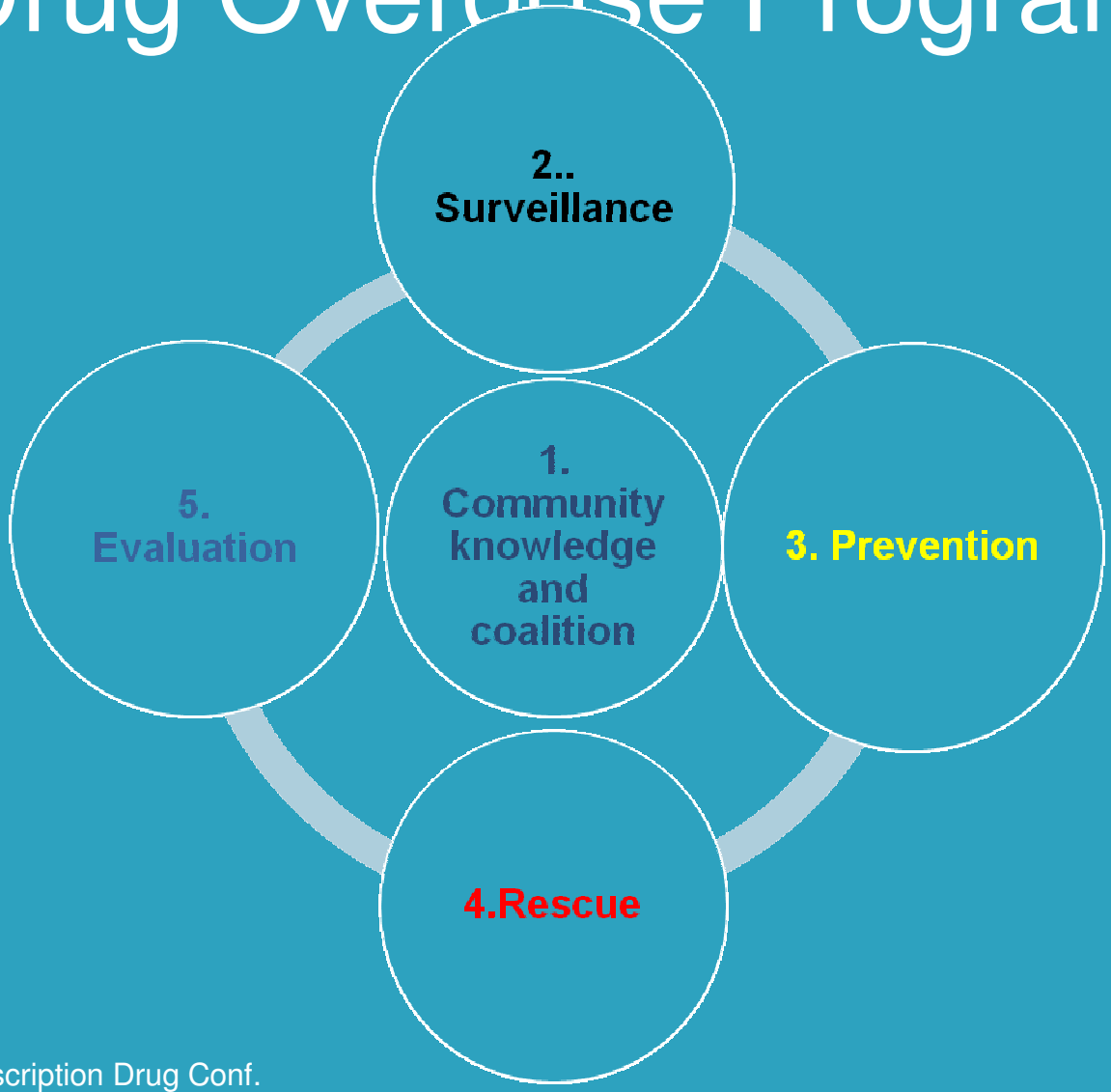
- Patient experience surveys
- Provider opinion surveys
- Pilot testing of educational video
- Monitoring for unintended consequences

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



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