Overarching Medication Disposal Study Concept

Education for Prevention

PROJECT LAZARUS

PATIENT

FAMILY

CAREGIVER

CHURCH

HEALTH DEPARTMENT

DENTIST

CLINIC

WORK

HOSPITAL

PHARMACIST

SCHOOL

PHYSICIAN

MEDIA
<table>
<thead>
<tr>
<th>State</th>
<th>April 30, 2016</th>
<th>April 29, 2017</th>
<th>Percentage Change</th>
<th>Delta</th>
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</thead>
<tbody>
<tr>
<td>North Carolina</td>
<td>15,449</td>
<td>26,420</td>
<td>71%</td>
<td>10,971</td>
</tr>
<tr>
<td>Kentucky</td>
<td>9,752</td>
<td>11,439</td>
<td>17%</td>
<td>1,687</td>
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<tr>
<td>Tennessee</td>
<td>21,229</td>
<td>24,594</td>
<td>16%</td>
<td>3,365</td>
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<tr>
<td>South Carolina</td>
<td>6,688</td>
<td>7,404</td>
<td>11%</td>
<td>716</td>
</tr>
<tr>
<td>Georgia</td>
<td>8,853</td>
<td>9,635</td>
<td>9%</td>
<td>782</td>
</tr>
<tr>
<td>Virginia</td>
<td>31,017</td>
<td>26,975</td>
<td>-13%</td>
<td>-4,042</td>
</tr>
<tr>
<td>West Virginia</td>
<td>5,876</td>
<td>4,021</td>
<td>-32%</td>
<td>-1,855</td>
</tr>
</tbody>
</table>
• 250 patients frequently received 30 pills;  

53% of patients required only 2 or less 19 pills per user unused  

*Rogers et al J Hand Surg Am 2012;37:645-650*

Looked at opioids prescribed and used after several urological procedures;  

58% of dispensed medications were consumed,  
67% of consumers had a surplus,  
92% received no disposal instructions.  
91% kept the medication at home,  
6% threw it in the trash,  
2% flushed and only 1% returned to pharmacy.  

Treating Chronic Pain Appropriately

"Meeting patients where they are at" means that small changes at home can lead to less pain.

Appropriate treatment for chronic pain is multimodal including interventions like:

- Psychotherapy/counseling
- Chiropractic
- Acupuncture
- Physical and Occupational Therapy
- Massage Therapy
- Relaxation/guided imagery/meditation
- Exercise
- Weight loss
- Good nutrition
- Etc.
Substance Use Disorder treatment,
Unfortunately, access to treatment is limited by three main factors:

• **Acceptance, Availability** and **Accessibility** of treatment options
  Negative attitudes or **stigma** associated with addiction in general and drug treatment.

• **Integration**
  Law Enforcement – Behavioral Health –
  SA Treatment – ED – Health Department –
  Medical Providers – Labor and Delivery - OB/GYN

buprenorphine, naltrexone, methadone,
12 Step, abstinence programs,
residential, Peer Support
Understand the “Concept of Addiction”
Effects of Drugs on Dopamine Release

Amphetamine

Cocaine

Nicotine

Morphine

Di Chiara and Imperato, PNAS, 1988
Behavior

- Lack of Dopamine
- Craving
- Survival Mode
- Primal Action
Diagnosis based in the description of behavior
Aberrant behavior should be expected
Therefore behavior is a symptom not a frustration
Treatments

Since lack of dopamine is the basis for driving the behavior

Augmentation of Dopamine makes sense

Buprenorphine and Methadone safely increase dopamine

This allows for stabilization of craving

Allowing for behavioral therapy to be effective
American Society for Addiction Medicine

Genetic factors account for about half of the likelihood that an individual will develop addiction.

Culture also plays a role in how addiction becomes

Environmental factors interact with the person’s biology and affect the extent to which genetic factors exert their influence.
Dopamine D2 Receptors are Decreased by Addiction
Local methadone clinic helps reduce Rx deaths

Posted: Wednesday, March 12, 2014 2:00 pm

Jule Hubbard

Mountain Health Solutions, Wilkes County’s only methadone clinic, is credited with helping to bring a dramatic reduction in deaths from prescription pain medication overdose in Wilkes in the last five years...

http://www.journalpatriot.com/news/article_dbd0f6e8-aa0c-11e3-8435-001a4bcf6878.html

- OTP SA treatment admissions
  2010 - 0, 2017 - 500+
- Churches supporting individuals in treatment
In his national bestselling book, *Tipping Points*, Malcolm Gladwell has anecdotally detailed the influence of culture and environment on group behavior:

“*Epidemics are sensitive to the conditions and circumstances of the times and places in which they occur.*"

*The take home point is that this problem cannot be solved in a clinic visit, but must be addressed at the community level. Culture drives behavior.*
Drug Problem?

Drug Problem

Biological – TBI, PTSD

Cultural

Environmental

Depression

Trauma

Poverty

Crime

Death

Finances

Family

Health

Economics
Contributing Factors - Environmental

- Exposure to stress
- Early physical or sexual abuse
- Witnessing violence
- Peers who use drugs
- Developmental stage at exposure to drugs
- Easy access to drugs
- Community poverty
- Lack of parental monitoring
- Poor social skills
- Aggressive behavior
Wilkes County, NC Arrests
Journal Patriot News

50 people charge with drug offenses, mostly pain pills May 5, 2017

<table>
<thead>
<tr>
<th>Number Charged</th>
<th>Date</th>
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<tbody>
<tr>
<td>73</td>
<td>April 18, 2016</td>
</tr>
<tr>
<td>48</td>
<td>May 18, 2015</td>
</tr>
<tr>
<td>54</td>
<td>Aug 21, 2015</td>
</tr>
<tr>
<td>31</td>
<td>Jan 5, 2015</td>
</tr>
<tr>
<td>65</td>
<td>Dec 17, 2014</td>
</tr>
<tr>
<td>29</td>
<td>Apr 16, 2014</td>
</tr>
<tr>
<td>25</td>
<td>Mar 17, 2014</td>
</tr>
<tr>
<td>53</td>
<td>Nov 20, 2013</td>
</tr>
</tbody>
</table>

Wilkes 2nd in U.S. in income loss
The median income in Wilkes dropped 30.4 percent, from $47,992 in 2000 to $33,398 in 2014
<table>
<thead>
<tr>
<th>Primary Substance</th>
<th>Secondary Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atenolol, Gabapentin, Trazodone</td>
<td>Diphenhydramine, Ethanol, Lorazepam, Mirtazapine, Trazodone</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>Alprazolam, Amitriptyline, Carisoprodol, Diazepam</td>
</tr>
<tr>
<td>Fentanyl</td>
<td>Diphenhydramine, Fluoxetine, Gabapentin, Hydrocodone</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>Alprazolam, Gabapentin, Nortriptyline</td>
</tr>
<tr>
<td>Cocaine, Fentanyl</td>
<td>Methamphetamine</td>
</tr>
<tr>
<td>Fentanyl</td>
<td></td>
</tr>
<tr>
<td>Buprenorphine</td>
<td>Carbamazepine, Pregabalin</td>
</tr>
<tr>
<td>Oxymorphone</td>
<td>Oxycodone</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>Alprazolam, Diphenhydramine, Doxylamine, Gabapentin, Quetiapine</td>
</tr>
<tr>
<td>Morphine, Oxymorphone</td>
<td>Alprazolam, Duloxetine, Gabapentin</td>
</tr>
<tr>
<td>Metoprolol</td>
<td></td>
</tr>
<tr>
<td>Oxycodone</td>
<td>Diazepam, Gabapentin</td>
</tr>
<tr>
<td>Morphine</td>
<td>Gabapentin</td>
</tr>
<tr>
<td>Cocaine, Methadone</td>
<td>Gabapentin, Trazodone</td>
</tr>
</tbody>
</table>
LIQUOR
WINE
COLD BEER

PAIN & COLD
MEDICINE

Canal
Lazarus Peer Guides (LPGs) offer friendly companionship and successful experience navigating the pathway toward recovery.

We have:
• A stable recovery. • A desire to enrich lives. • Specialized training and certification to handle a crisis, an overdose, and save lives.

Supportive Roles
Empathic Support
Resource Support
Constructive Support
Connective Support

Lived Experience
Problem-Solving:
Crisis Intervention
Community Navigation
Family Involvement

Support Groups
Specialized Case Management

- Housing
- Food
- Transportation
- Recovery Treatment
- Childcare
- Job
- Education
- Utilities
- Safety

- Landlords
- Probation/Parole
- Clothing
- Domestic disputes
- Recovery capital
- Support systems
- Social networks
- Family engagement
- Spiritual growth
Wilkes woman stands up to opioid addiction
From wreckage to recovery

“I remember what I was wearing, what everything smelled like, even what the weather was like outside,” she added. “A friend of mine gave me a 30-milligram ............ That was when I was first introduced to it. I crushed it up and snorted it. And the immediate result was complete and total euphoria on a level that I had never experienced in my life. It was…”

“…It was bliss. It was a contentment that I had never known. It was instant. I was in love. I felt beautiful and like I belonged. From that first pill, that one, teeny-tiny pill, I was totally overwhelmed.”

Journal Patriot Posted: Friday, May 26, 2017 12:00 pm  Laura Mitchell
• Respiratory depression/Overdose prevention training

• Distributing a script that gives patients specific language they can use with their family to talk about overdose and develop an action plan, similar to a fire evacuation plan

• Naloxone access to community, tribal groups and military

• Third Party Prescribing
• Standing Orders
• Pharmacy Dispensing
• Program Distribution
• New Devices
• Federal/State Funding
opiod receptors activated by heroin and prescription opioids

Pain Relief
Pleasure
Reward
Respiratory Depression

Naloxone in the Brain
opiods broken down and excreted

Reversal of Respiratory Depression
Opioid Withdrawal
RISK FACTORS for opioid-induced respiratory depression

- 1. Recent emergency medical care for opioid poisoning/intoxication.
- 2. Suspected history of illicit (heroin) or nonmedical opioid use.
- 3. Opioid prescription.
- 4. Any methadone prescription to opioid naïve patient.
- 5. Recent release from incarceration.
- 6. Recent release from opioid detox or mandatory abstinence program.
- 7. In methadone or buprenorphine detox/maintenance (addiction or pain).
- 8. Voluntary request from patient or family member.
- 9. May have difficulty accessing EMS (distance, remoteness, etc.)

Any opioid prescription and ...

- 1. Smoking/COPD/emphysema/asthma/sleep apnea, other respiratory Diagnosis.
- 2. Renal dysfunction or hepatic disease.
- 3. Known or suspected concurrent alcohol use.
- 4. Concurrent benzodiazepine prescription.
- 5. Concurrent SSRI or TCA anti-depressant prescription.
NALOXONE

- Provider Education
- Hospital ED Policies
- Diversion Control
- Pain Patient Support
- Harm Reduction
- Addiction Treatment
- Community Education
- Provider Education