Use of an Opioid Systems Map for Cross-Sector Engagement to Respond to a Shared Public Health Crisis

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Presented to Communities Joined in Action Conference

April 26, 2019
Objectives

• Describe how systems thinking and a systems map of the opioid epidemic were used to engage multi-sector stakeholders.
• Identify how proposed solutions to a public health crisis such as the opioid epidemic may have immediate and broader effects – intended and unintended consequences – and how mapping can help.
• Develop strategies for engaging multiple stakeholder groups around a common public health problem by using strategies that facilitate recognition of share problems and cross-sector solutions.
What are the opioid issues your community is experiencing?
The opioid epidemic is a complex system with smaller systems within the broader public health systems, and is an adaptive issue.

Adaptive means that the solution is not clear cut.

Systems maps reframe to reality of opioid use, misuse, and recovery as a complex system:

- Show relationships between elements
- Help identify unintended consequences and “upstream” causes and solutions
- Many actors, sectors, interactions, and risk factors involved
- Requires multisector and actor collaboration

- Systems maps force collaborators to focus more on physics and populations - rather than a single perspective or individual
POPULATIONS AFFECTED

• Adolescents and young adults
• Adults in middle age
• Seniors
• Pregnant women
• Newborns
  – Neonatal Abstinence Syndrome
• Children of parents using substances
  – Adverse childhood experiences - neglect, abuse
• Families
  – Develop stress disorders
• Grandparents and other relatives
  – Adoption of (grand)children when parents die or are incapable of taking care of children
• Foster care providers
• First responders, health, law enforcement
Who’s Involved in Response?

**Government:** Federal, state, local governments, agencies, other organizations

**Medical/Health**
- Providers, practitioners, hospitals, health care corporations
- Opioid treatment programs
- Pharmacists, pharmacy corporations
- First responders
- Insurers, Medicaid
- Public health

**Community**
- Persons in recovery
- Families, friends
- Recovery specialists/peer support workers
- Peer support organizations
- Prevention and harm reduction specialists
- Community organizations
- Employers, human resource and employee assistance programs
- Housing, employment resources

**Law/Justice**
- Law enforcement, courts, corrections
- Medical examiners

**Others**
- Professional organizations
- Social workers/Child welfare workers
- Teachers, day care staff, school administrators
- Data managers
Impacting Opioid Use/Substance Use Locally

- Education/Awareness
- Stigma reduction
- Community engagement
- Strategic planning
- Reduced access, misuse and overdose
- Treatment, care, recovery support
- Legislation
- Socioeconomic stabilization
Lots of Opioid Response Strategies
Where do they fit? How do they fit together?

Change Availability
- Prescriptions
- Heroin
- Fentanyl/Synthetics

Prevent Use
- Alternative treatments
- Reduce desirability, need
- Education
- Mental health care
- Trauma prevention and treatment
- Pregnancy/neonatal Exposure
- Housing
- Employment

Reduce Access to Opioids
- Providers
- At home
- In school
- In community

Early ID and Intervention
- Check PDMP
- Screen with SBIRT
- CRAFT
- Harm reduction

Available Effective Treatment
- Require effectiveness
- Sufficient providers
- Treatment referral

Reduce Excess Opioids
- Fewer prescriptions
- Fewer pills/prescription
- Drug take-back programs
- Impede flow of heroin and synthetics into market

Prevent Overdose
- Fewer opioid pills
- Naloxone
- Medication-Assisted Treatment
- Manage treatment and detox transitions
- Testing for fentanyl, synthetics

Harm Reduction
- Needle exchange
- Safe injecting sites
- Warm hand-offs

Support for Families, Friends
- Resources and education
- Groups
- Communication, networking

Recovery Support
- Medication-Assisted Treatment
- Peer support, warm lines
- Continuing care
- Linkage to community

Access to Treatment
- Insurance
- Safe detox, holds
- MAT
- Diversion
- Peer support
- Warm hand-offs
- Hub and spoke models

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How to Make Sense of It All?

Make a Systems Map!!
Why Take a Systems View?

Where’s the Leverage?

What’s Hidden?

What’s in Plain Sight?

The Iceberg, a metaphor for the level at which individuals interact with a system.
Why take a Systems View?

- Puts the pieces together
- Shows relationships
- What happens where in the system as a whole?
- Who needs to be involved at what level?
- Where are the leverage points for change?
- How will actions affect outcomes?
- What are the unintended consequences of actions?
Putting the Pieces Together: The Opioid Systems Map

- GHPC and Pontifex Consulting developed the map in late 2016.

- Built collaboratively with subject matter experts: public and behavioral health, and people with lived experience.

- Continuing to build out
Examples of How We Have Used Our Opioid Systems Map

2016-2017: Legislative Health Policy Certificate Program
Purpose: mindset,* conversations, big picture

2017-2018: Georgia Department of Public Health
Purpose: mindset,* crossing silos for cross-sector collaboration, strategic planning

*Recall iceberg and the importance of mindset as a leverage point.
How did the Opioid Systems Map Help?

• Shows stakeholders a view from outside their own vantage point
• Shows relationships between different groups and actions
• Helps stakeholders see where they fit in
• Generates ideas about who needs to be involved
• Generates ideas on who to talk to or work with
• Shows where there might be better “upstream” solutions
• Shows where to expect results
• Helps identify potential problems that could result from action
• Helps to build short- and long-term strategies
• Serves as a tool to get people to strategize and work together
Systems Maps - Pieces

**Populations**

**People** – Groups with certain characteristics.

**Arrows** – “Flows” – paths to change, from one group to another.

**Faucets** – “Stocks/Gates” increase or decrease flow from one group to another. *(like you’re filling a bathtub – or not)*

**Leverage Points = Places to effect changes**

- Gates can be opened or closed.
- Some have large effect.
- Some have smaller, but necessary effect.
- May be unintentionally opened or closed.

Population using Rx opioids ➔ Population misusing opioids
Let’s Build the Map!
Opioid Systems Map

Suffering w/ Untreated Pain

Population with Perceived Untreated Psychological or Physical Pain

Receiving Rx opioids after alternative treatment

Population in Alternative Treatment

Receiving alternative treatment

Beginning to misuse Rx immediately

Beginning to misuse Rx

Prescriptions

Receiving Rx opioids

Receiving alternative treatment

Misuse

Legend
Outside system
Population
Pain Treatment
Misuse
Opioid Treatment
Incarceration
Developing pain
Opioid Rx
Alternate Tx
Rx misuse
Illicit misuse
Incarceration
Dying
ACEs
Tx & recovery
LT recovery
Opioid Systems Map

Reduce Excess Opioids
- Fewer prescriptions
- Fewer pills/prescription

Suffering w/ Untreated Pain

Pain Treatment

Change Availability
- Prescriptions

Prevent Use
- Alternative treatments
- Reduce desirability, need
- Education
- Mental health care
- Trauma prevention and treatment

Legend
- Outside system
- Population
- Pain Treatment
- Misuse
- Opioid Treatment
- Incarceration
- Developing pain
- Opioid Rx
- Alternate Tx
- Rx misuse
- Illicit misuse
- Incarceration
- Dying
- ACEs
- Tx & recovery
- LT recovery

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Opioid Systems Map

Prevent Overdose
- Less opioid pills
- Naloxone
- Medication-Assisted Treatment
- Manage treatment and detox transitions

Early ID and Intervention
- Check PDMP
- Screen with SBIRT
- CRAFT
- Harm reduction

Reduce Access to Opioids
- Providers
- At home
- In school
- In community

Harm Reduction
- Needle exchange
- Safe injecting sites
- Warm hand-offs

Change Availability
- Heroin
- Fentanyl/Synthetics

Reduce Excess Opioids
- Drug take-back programs
- Impede flow of heroin and synthetics into market

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Opioid Systems Map

Access to Treatment
- Medical
- Police-Assisted Diversion
- Safe detox
- Insurance
- Peer support

Legend
- Outside system
- Population
- Pain Treatment
- Misuse
- Opioid Treatment
- Incarceration
- Developing pain
- Opioid Rx
- Alternate Tx
- Rx misuse
- Illicit misuse
- Incarceration
- Dying
- Tx & recovery
- LT recovery

Recovery Support
- Medication-Assisted Treatment
- Peer support
- Continuing care
- Linkage to community

Available Effective Treatment
- Require effectiveness
- Sufficient providers
### Opioid Systems Map

**Suffering w/ Untreated Pain**
- Developing perceived physical pain
- Developing perceived psychological pain

**Pain Treatment**
- Receiving alternative treatment
- Receiving Rx opioids after alternative treatment
- Population in Long-Term Recovery from Opioids

**Misuse**
- Misuse Rx opioids
- Misuse illicit opioids
- Misuse Rx immediately
- Misuse illicit immediately

**Treatment & Recovery**
- Receiving Rx opioids
- Receiving Rx opioids after alternative treatment
- Entering treatment or recovery from Rx opioids

**Prescriptions**
- Entering treatment or recovery from opioids
- Entering treatment or recovery from illicit opioids

**Incarceration/Justice System**
- Receiving Rx opioids after alternative treatment
- Receiving alternative treatment
- Populations with perceived untreated psychological or physical pain

**Legend**
- Pain Treatment
- Misuse
- Opioid Treatment
- Incarceration
- Developing pain
- Opioid Rx
- Alternate Tx
- Rx misuse
- Illicit misuse
- Incarceration
- Dying
- ACEs
- Tx & recovery
- LT recovery

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Available Effective Treatment
- Require effectiveness
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- Treatment referral

Recovery Support
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- Peer support, warm lines
- Continuing care
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Support for Families, Friends
- Resources and education
- Groups
- Communication, networking

Opioid Systems Map

Prevent Overdose
- Naloxone
- Medication-Assisted Treatment
- Manage treatment and detox transitions
- Education

Access to Treatment
- Insurance
- Safe detox, holds
- MAT
- Evidence-based
- Peer support
- Warm hand-offs
- Hub and spoke models

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Opioid Systems Map

Impact later in life

Social Determinants

ACEs

Legend

Outside system
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Opioid Systems Map

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• Education
• Mental health care
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• Pregnancy/neonatal Exposure
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Building Your Own Systems Maps

• Start with a problem
• What leads to that problem?
• What leads to the conditions before the problem?
• What are the potential outcomes at each level?
• Where do you need to get more information?
• Who needs to be involved so that you can build a complete picture?
How Does a Systems Map Help with Strategic Planning?

- Provides a “view from the balcony”
- Identifies populations and organizations involved
- Identifies places where action is needed
- Shows desired outcomes
- Helps identify needed products/activities to get to outcomes
Questions?
THANK YOU

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