A Multifaceted Novel Approach to Combat the Opiate Epidemic: Using Innovative Technology and Community Partners

Opioid Data Through Action Conference
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April 2019
Using Technology to Develop a Comprehensive Overdose Response Plan

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Things You Have Heard/ Will Hear

- Data Collection
- Youth Education
- Peer Recovery
- Court System
- Trauma Informed Care
- Stigma
- Workforce Issues
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Background

- Clark County, Indiana population 125,000
- 376 square miles, yet 80% within ten miles of the Ohio River
- Located between major urban area in Louisville, and Scott County
- EMS coverage issues with greater than 15 min response times the norm in numerous areas of the county
Numbers

- Baseline overdose death rate in Clark County was 25-30 until 2014
- 2014  53
- 2015  53
- 2016  89
Numbers

- ED visits with ‘opiate’ in the diagnosis
- 2014  49
- 2015  51
- 2016  182
Past Barriers

- Limited public understanding of substance use disorder
- Stigma
- Limited treatment options
- Public Health issues (HIV, Hepatitis C, Infections) with little clinical experience or support
- 1 Billion dollar impact on the economy in Clark County
So Where Do You Start?

- Clark County Cares- a grassroots organization composed of community members from all walks of life
- Support community activities related to recovery- treatment options, narcan training, syringe service programs, residential recovery, job skills
- Must have community support!!!!!!
Who Is Represented

- Concerned Citizens
- Law Enforcement
- Judges
- Recovery Organizations

- Healthcare
- Elected Officials
- Business Leaders
- Media
Activities

• Core group meets every Monday morning
• Goals, event planning, upcoming events, troubleshoot
• Keeps momentum going
• Monthly meetings - testimonials, updates on recovery options, etc.
• Retreats, trips, etc
Drug Awareness Week

- Monday - MLK Unity March
- Tuesday - Starting Young: Schools and Prevention
- Wednesday - Addiction Effect on the Local Workforce: Panel Discussion
- Thursday - Indiana Addresses Addiction
- Friday - Recovery Rocks: Creating a Recovery Community
- Saturday - Who is Watching the Kids: Family Day
- Sunday - Candlelight Vigil: Remembering Loved Ones Lost to Addiction
Questions to Consider

• How can we use technology to better serve our community?
• How to we reach our overdose patients faster? Esp in outlying areas.
• How do we develop surge capacity for overdose clusters?
• How will we manage these patients when they present to the ED?
• How do we combat the lack of inpatient beds in the area?
Response Phases

• Phase 1 - Acute Use to Entry Into the Healthcare System
• Phase 2 - Entry Into the Healthcare System into Stable Recovery
• Phase 3 - Stable Recovery to Integration Back to Everyday Life
So What’s the Plan

- Pulse Point
- Everbridge
- MAT from the ED
- Addiction Transition Team
- Threat Matrix/Rapid Notification Protocol
Pulse Point

• County by County: Clark County went live in December 2018
• Shows a running log of various incidents in the county—Medical Emergencies, Motor Vehicle Accidents, Fires, etc.
• If you are within a certain radius of a patient that is in cardiac arrest, it will notify you with an alarm. It walks you directly to the patient
• Also has an AED map that walks you to the nearest AED for the patient
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Pulse Point

- You will not receive a notification if does not go out as unresponsive
- Outside the radius, you will not receive a notification
- Public places only
- Totally anonymous- we get no info on who responded
- Can still sign up to help even if not CPR trained
- Covered by Good Samaritan Law
ARE YOU CPR TRAINED?

CPR alerts notify you when your life-saving skills are needed nearby.

✅ CPR ALERTS ENABLED
Allow PulsePoint to access this device’s location?

ARE YOU CPR TRAINED?

CPR alerts notify you when your life-saving skills are needed nearby.

CPR ALERTS ENABLED

CONTINUE
Clark County

FOLLOW YOUR FIRST AGENCY

It looks like you are currently located in a PulsePoint connected community.

☑ FOLLOWING

FINISH
CLARK COUNTY HEALTH

ACTIVE (1)

Medical Emergency
WESTPORT RD, MARYSVILLE, IN
NWEMS SQ56 SQ57 UEMS3
11:07 AM
10:07 AM
10:07 AM
CST
CST
CST

RECENT (37)

Expanded Traffic Collision
1613 E 8TH ST, JEFFERSONVILLE, IN
EN41 TW41 YEMS4
B110 B
11:54 AM
10:54 AM
10:54 AM
CST
CST
CST

Medical Emergency
GREENWOOD, JEFFERSONVILLE,...
YEMS1
11:47 AM
10:47 AM
10:47 AM
CST
CST
CST

Medical Emergency
BUCKEYE DR, CLARKSVILLE, IN
YEMS
10:31 AM
09:31 AM
09:31 AM
CST
CST
CST

Medical Emergency
KEHOE LN, JEFFERSONVILLE, IN
YEMS3
09:58 AM
08:58 AM
08:58 AM
CST
CST
CST

Medical Emergency
HAMBURG PIKE, JEFFERSONVL...
YEMS2
09:38 AM
08:38 AM
08:38 AM
CST
CST
CST

Medical Emergency
GILMORE AVE, JEFFERSONVILLE...
YEMS2
09:10 AM
08:10 AM
08:10 AM
CST
CST
CST
Ivy Tech Community College, Ogle Hall

On the wall to the left of the elevator. Inside and to the right from door 10, down the hall past the bathrooms from door 3 (entrance to Horseshoe Assembly Center).

Clark County
PulsePointActivation @1000live... · 2h
CPR Activation for @SDFD at 06:33 AM PST (MORENA BLVD); 2 citizen responders just notified.
#PulsePointConnected

PulsePointActivation @1000live... · 2h
CPR Activation for @CLARK_DEPT at 08:38 AM CST (HAMBURG PIKE); 2 citizen responders just notified. 2 nearby AEDs identified. #PulsePointConnected

PulsePointActivation @1000live... · 2h
CPR Activation for @KENTONCOUNTY911 at 09:39 AM EST (W PIKE ST); 2 citizen responders just notified. #PulsePointConnected

PulsePointActivation @1000live... · 3h
CPR Activation for @LBFD at 06:10 AM PST (E 4TH ST & ORANGE AVE); 2 citizen responders just notified. 2 nearby AEDs identified. #PulsePointConnected
What else goes out as unconscious/unresponsive??

- We train for CPR and Narcan delivery at the same time
- Only place in the country dispatching narcan trained providers directly to the site of an overdose in real time
- Decreases lag time from respiratory arrest to delivery by several minutes, which can be life or death
- Can get everything else on our doorstep…….
Pulse Point

- Multiple unexpected benefits
- Traffic, fires, etc
- CPR training in the county is up astronomically
- People invested and involved in the community and in public health
Everbridge

- Previous notification system involved multiple steps and multiple agencies
- One touch system that allows rapid notification
- Can use ESSENCE alert to notify first responders, local ER, and behavioral health entities of an overdose cluster and each can implement their response plan
- Also keep local providers updated on issues, trends, etc
Addiction Transition Team

• Multidisciplinary team of community stakeholders that meet monthly to discuss treatment options and new services in community, minimizing duplication and improving communication

• Patient is given a handout that shows up to date options in the community as well as a survey to help identify needs and strengths/weaknesses of the program’

• ER Follow-up Clinic is the backbone of this program
ER Follow-up Clinic

- Once weekly clinic where anyone who has been seen in the ER can follow-up on a walk-in basis, regardless of ability to pay
- Patient receives medical treatment, medication to assist withdrawal symptoms, scheduling for behavioral health appointment, basic need assessment- clothing, food, housing assistance, as well as Narcan training for patient and family
- Revisit the different community resources as outlined in the Addiction Transition Team handout
- Are welcome to return on an as needed basis until are stable inpatient or outpatient management
MAT from the ED

- Have begun the process on a limited bases
- Data from other areas is excellent
- Still building framework
- Social Services/ED Navigator is key
- ER follow-up Clinic is first line of connection
Close the loop

- You have had Pulse Point notification
- You communicated via Everbridge
- Patient has been stabilized in the ED
- Treatment initiated
- Referral made
- Done?
When to Notify Public

• Periodic spikes in overdose activity, especially as fentanyl becomes more ubiquitous
• Now have the ability to synthesize this data in real time, not retrospectively
• But what do we do with it? How, What, When, etc
• Politics and perceptions
• Use Everbridge
Threat Matrix

- Anecdotal reports from users
- Increase supply reports from law enforcements
- Overdose fatality
- Multiple fatality at same site
- Reports from local healthcare facilities of increased overdoses
- Reports from EMS of increased narcan use and overdose activity
- Reports from local recovery organizations of increased activity, overdoses etc
Threat Matrix

• Must tailor it to the resources and info available in your community
• Monitor it at least weekly, preferably biweekly
• Establish a baseline, then use upward deviations to guide your notifications
Public Notifications

• Social Media, Social Media, Social Media
• Must develop a robust page with active followers and entertaining posts so when you actually need to deliver information they will pay attention
• When you do deliver important information, the news media and other sources will follow-up and help get your story out
• Keeps public motivated, trained, and engaged
• Can’t overuse it, public will get notification fatigue
General Barriers

- EMS manpower limits response capacity
- Varying buy-in from local ED’s
- Limited Behavioral Health capacity
- Fentanyl presence
- Shift toward methamphetamine or co-abuse
- Patient mindset
Barriers PulsePoint

- Only for PUBLIC places
- False notifications
- Public Narcan availability
- Fear
Barriers- ED and ED Follow-up Clinic

• Compassion Fatigue
• Care Coordination
• Still large gap between referrals and patients who present to clinic
Barriers- Public Notification

• High activity levels close together
• Notification fatigue
• Reaching difficult populations- homeless, recently incarcerated
Data

• Overdose Death Total in Clark County for 2017 - 59 (34% decrease)
• 2018 - 50 (15% decrease from 2017, and 44% decrease from 2016)
• Lowest death total since 2013
• ED visits – 171 in 2017 (8% decrease)
• 2018 – 103 (43% decrease from 2016)
ED Follow-up Clinic Success

- Saw over 200 unique patients
- Data quality limited but estimated decreased ED return rate by 30% and prevented numerous hospital re-admits for our patient population
- Funneled numerous patients into primary care and intensive outpatient treatment programs
- Essentially served as the ‘medical home’ for patients that would otherwise not have a provider
Pulse Point - Successes

- 483 Private CPR incidents
- 182 Public
- Over 800 citizens signed up
- 5 successful resuscitations by Pulse Point responders
- Huge increase in CPR training across the county
- Narcan training numbers have tripled
Public Notification Successes

- Our first rapid response notification was in March of this year
- Everbridge notified first responder, healthcare, recovery communities within 5 minutes of determination
- Social media push reached 50k people
- Newspapers, TV stations picked up within 24 hours
- Overdose activity normalized within 24 hours, surrounding areas continued to see a spike
Future Goals

- Pulse Point responder increase of 100 per year, classes at major employers and high school health classes
- Verified Responder program initiated
- Public Narcan Hotspots
- Consistent Everbridge Communication
- Rapid Response Teams/Paramedicine that alleviate the EMS burden in overdose clusters
Future Goals

- Recovery Coaches that can perform face to face evals or < 24 hour follow-up to reinforce treatment options
- Outpatient detox protocol adoption that encourages consistency among providers
- Increased retention in patients referred from the ED to the Follow-up Clinic, and expanded hours for the clinic
- Continue to develop ways to quantify the financial impact of the ED follow-up clinic
- Robust MAT program
Flow Summary

- Pulse Point – keeps people alive
- Everbridge – gets them to treatment more quickly and efficiently
- MAT from ED/Addiction Transition Team/ED Follow-up Clinic - keeps them in treatment
- Threat matrix/Public notification system - closes the loop
- Links must be constantly updated and tailored to the needs of the community
Goals

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