Community Health Assessment of Globe, Miami, San Carlos

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Immersion Weekend August 2018
Introduction

- Explored, assessed, and compared the communities of Miami, Globe, San Carlos by conducting a windshield survey, attending panel discussion, and performing additional research
  - Developed an understanding of community and region history
  - Analyzed current data and statistics
    - Demographics, physical environment, health status, and impact and implication for healthcare
- Created a foundation for development of a scholarly project
EAHEC Scholars guided by community members while conducting a windshield survey in August 2018.
History & Culture

GLOBE:
- Globe was founded in 1876 as a mining town and was incorporated in 1907
- Silver was the first mineral to be mined, and by the late 1880’s copper predominated

MIAMI:
- Miami was founded in 1907 and first developed by the Miami Land and Improvement Company, primarily due to the large porphyry deposits (there was a new process that was developed at that time that allowed copper to be extracted from porphyry ore)

SAN CARLOS:
- Historically there were seven Apachean tribes, and the Western Apache included the White Mountain-San Carlos.
- After the Indian Reorganization Act in 1934, the San Carlos Apache formed their own government and were then recognized as the San Carlos Nation
<table>
<thead>
<tr>
<th>City</th>
<th>Population</th>
<th>Median Age</th>
<th>Median Household Income</th>
<th>Poverty Rate</th>
<th>Most Common Education Level Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Globe</td>
<td>7,369</td>
<td>44.5</td>
<td>$42,557</td>
<td>20%</td>
<td>22.6% have a high school diploma</td>
</tr>
<tr>
<td>Miami</td>
<td>2,153</td>
<td>36</td>
<td>$36,298</td>
<td>25.8%</td>
<td>24.7% have a high school diploma</td>
</tr>
<tr>
<td>San Carlos</td>
<td>10,218</td>
<td>N/A</td>
<td>$26,875</td>
<td>3.6%</td>
<td>26.7% have a high school diploma</td>
</tr>
</tbody>
</table>
The majority of Miami’s population, shown on the left, identify as Hispanic/Latino. This is in contrast to Globe’s population, shown on the right, which is predominately White. San Carlos residents identify as Native American.
Globe (18.23 sq mi) is located in Gila county in southern Arizona, approximately 100 miles directly north of Tucson.

Miami (0.88 sq mi) is directly adjacent to Globe.

The San Carlos Indian Reservation is approximately 20 miles east of Globe. It is 1,834,781 acres and covers three counties: Gila, Graham, and Pinal.
Physical Environment and Utilities

- Mine tailings (ore waste) are visible throughout both towns, as mining is the dominant industry in the area
- The area suffered from poor air quality prior to 1999, but the quality has improved significantly between then and 2009
- Water
  - Miami & Globe: Arizona Water Company (AWC) - deep groundwater aquifers
  - San Carlos Reservation: Central Arizona Project and Arizona Water, private wells
- Sewage
  - Miami & Globe: city sewers
  - San Carlos: septic tanks (not annually checked)
Health Status Themes

- High incidence of sexual health related problems including:
  - STIs
  - Unplanned pregnancy

- High incidence of chronic conditions including:
  - Obesity
  - Diabetes
  - Hypertension/heart disease
  - Hyperlipidemia

- High incidence of mental health issues including:
  - Substance abuse teens and adults
  - Suicide
Access to health facilities and insurance status

- Limited access to primary and specialty care, virtually no mental health services, multiple hospitals in the area
  - Hospitals: Cobre Valley & San Carlos
- The majority of the Globe and Miami populations are insured, while the San Carlos population is not
  - Insurance status impacts accessibility of health services and is a predictor of health outcomes
Impact of Rural Setting on Healthcare Delivery & Outcomes

- Globe, Miami, and San Carlos are classified as medically underserved, which means there fewer than required medical services. This in turn impacts:
  - Wait time to receive care
  - Number of provider options for patients to choose between
  - Longer distance to be traveled to access specialty care
  - Increase in indirect cost to patients due to necessity of travel
  - Progression and worsening of health conditions, as well as cause potential irreversible complications due to lack of access to care
Impact of Rural Setting on Healthcare Delivery & Outcomes

- Additionally, rural settings traditionally have less access to mental health care. In the Globe, Miami, and San Carlos areas these repercussions present as:
  - Higher incidence of substance use disorder (prescription opioids, alcohol, other street drugs)
  - Increase rates of addiction, substance use related death, accidents due to intoxication
  - Alarmingly high rate of overdose and overdose caused death
How can we reduce the rate of overdose deaths?

- Increase community education on the realities and dangers of substance use disorder
- Create treatment and detox facilities
- Teach emergency personnel and family members how to recognize overdose case and administer naloxone effectively
- Increase law enforcement presence to curb or stop the inflow of illicit substances
- Follow good controlled substance prescription practices
Scholarly Project

To increase awareness of resources available for providers, pharmacists, residents, firefighters, and police to help combat the opioid crisis and improve outcomes.
Resources for Providers

- Initially developed for a CME event provided by Arizona Department of Health Services.
- Now to be utilized by providers as a resource
  - Screening tools
  - Reference tables
  - Guidance when managing patients with pain and addiction
Some of What's Included In the Resource:

- Clinical evaluation tools
- Opioid and Benzodiazepine Pharmacology
- How To’s
  - Approach a patient
  - Diagnose Opioid use disorder
- Naloxone
  - Standing Orders
  - Training for patients on use of Naloxone
- Arizona Laws and Regulatory Summary
  - A.R.S. 36-2228 - Provides immunity for Physicians and nurse practitioners who issue standing order
How to find a Medication Assisted Treatment (MAT) Provider
Resources for Pharmacists

Standing Order:

ARIZONA DEPARTMENT OF HEALTH SERVICES

STANDING ORDERS FOR NALOXONE

This standing order is issued by Dr. Cara Christ, MD MS (NH 2013-0042190), Director of Arizona Department of Health Services. The standing order authorizes any Arizona-licensed pharmacist to dispense naloxone to any individual in accordance with the conditions of this order.

Dispense one of the following naloxone products based on product availability and preference.

☐ For intranasal administration in children 15 years or <20kg: adolescents; adults

Dose: NARCAN® 0.4mg/mL spray

Sig: For suspected opioid overdose, administer a single spray of Naloxone in each nostril. Repeat after 3 minutes if no or minimal response.

Rx: PM, IV 1 year

OR

Dispense: 2mg/2ml, single-dose blister-packaged syringes. Includes 1 Narcan® 4mg/mL nasal spray and 1 Narcan® 4mg/mL nasal spray without needle.

Sig: For suspected opioid overdose, administer a single spray of Naloxone in each nostril. Repeat after 3 minutes if no or minimal response.

Rx: PM, IV 1 year

☐ For intramuscular injection in children 15 years or <20kg: adolescents; adults

Dose: 0.8mg/kg in 1 mL single dose vial. Include 1 Narcan® 4mg/mL nasal spray without needle.

Sig: For suspected opioid overdose, inject 1 mL in an arm or shoulder or thigh. Repeat after 3 minutes if no or minimal response.

Rx: PM, IV 1 year

☐ For intramuscular or subcutaneous injection in children 15 years or <20kg: adolescents; adults

Dose: EVOCAN® 4mg/mL auto-injector, #12 pre-filled syringe

Sig: For suspected opioid overdose, follow auto-injection instructions from device. Place on thigh and inject 0.4mL. Repeat after 3 minutes if no or minimal response.

Rx: PM, IV none year

Cara Christ, MD MS, Director of Arizona Department of Health Services

Effective date 11/20/18, expiration date 11/20/20

Updated December 8, 2017

FAQ:

Frequently Asked Questions (FAQs)

Pharmacist Reporting

What am I required to report?

Pharmacists are required to report naloxone doses dispensed to the Prescription Drug Monitoring Program (PDMP). See Reporting for information on required reporting, health conditions to be reported, and reporting systems.

When are we required to report? As of, how long is the acceptable timeline between an incident and when we must submit the report?

Our request of you, and our goal as a Department, is for all reporters to submit a report within 5 business days. We understand that this may not always be possible, but request your assistance in obtaining timely and potentially life-saving data.

Does the reporting mandate include weekends?

For the purposes of reporting under Emergency Rule 18-A-A. C. 4, “business day” means the period from 8:00 a.m. to 5:00 p.m. Monday through Friday, and excluding state holidays.

Why is this now reportable?

On June 3, 2017, Arizona Governor Doug Ducey declared a Public Health State of Emergency due to the outbreak of addictions. More than two addicts die every day due to opioid-related overdoses. An Enhanced Surveillance Advisory went into effect June 15, 2017 as a first step toward understanding the current burden in Arizona and to collect data to better target interventions. On October 9, 2017, emergency rules for opioid-related reporting were put in place.

Am I required to report every dose of naloxone I dispense?

No. Naloxone doses dispensed are required to be reported if they are in response to a suspected opioid overdose or provided for patients who may be at risk of an opioid overdose. If naloxone is dispensed for another purpose, like to reverse IV sedation or anesthesia, it does not need to be reported.

Do I need to report naloxone doses administered and/or dispensed in the situation where a physician administers naloxone from an automatic dispenser for a suspected opioid overdose (e.g. in an Emergency Department)?

Pharmacists are only required to report doses of naloxone they personally dispense and not the administration of naloxone (see Reporting). Therefore, in the situation where a physician administers naloxone from an automatic dispenser, there is no reporting required from the pharmacist.
A.R.S 362228

- Allows LE officer or EMT to administer naloxone.
- Requires a standing order issued by physician or nurse practitioner.
- There is a statewide standing order for officers who have completed training.
- Mandates training on proper administration of naloxone before LE or EMT may administer naloxone.
- States that LE or EMT may administer to a person if officer believes that the person is suffering from opioid-related overdose.
February 3, 2020

Subject: Naloxone Leave Behind Program

Dear Arizona EMS Agencies:

Arizona law permits EMS agencies who have responded to an individual experiencing an opioid-related overdose (“at-risk persons”) to leave behind pre-packaged, intranasal naloxone (Narcan®) if the ENCT believes that it can be used in the future by the at-risk person, family members, or friends to reverse an opioid overdose. The naloxone leave behind kit should include instructions on when and how it should be administered.

ARS 36-2256 is written broadly and allows the administrative medical director of an EMS agency to write a protocol for a naloxone leave behind program for patients or family members who may be at high risk for overdose. This is at the discretion of, and requires the approval from, the agency’s administrative medical director.

An EMS agency that is interested in implementing a naloxone leave behind program, but does not have administrative medical direction, may approach the Department for assistance if they qualify under ARS 36-2256.3A.

Sincerely,

Terry Mullins, Chief
Bureau of EMS & Trauma System
Arizona Department of Health Services

Gail Bradley, M.D., FACEP, FAEMS
Medical Director
Bureau of EMS and Trauma System
Arizona Department of Health Services

Governor
Cara M. Christ, MD, MS
Director
A background on Naloxone aka Narcan

● What is naloxone?
  ○ Naloxone, also known as Narcan®, is a drug to treat the effects of opioids and can save the life of someone overdosing on opioids. The enhanced surveillance also allows us to track how many times naloxone has been dispensed by a pharmacist or given to someone who may be suffering from an opioid overdose.

● What is the difference between naloxone administration and dispensing?
  ○ Naloxone Dispensing is when a pharmacist provides a package and/or “kit” of naloxone/Narcan® to someone for them to have and keep for their use in an emergency (or in case a friend or family members needs it). Pharmacists may also dispense naloxone to certain community-based organizations so that the organizations can then provide the kits to people who may need them. ADHS’s
  ○ Naloxone/Narcan® administration is the act of getting a medication (in this case naloxone) into a person's bloodstream.
How is naloxone administered?

- Depending on the packaging, naloxone/Narcan® can be administered in one of three ways:
  - (1) Via a mist sprayed into a person's nose; (for the out-of-hospital setting)
  - (2) Via an injection directly into a person’s muscle usually in the top of their upper thigh or in the muscular portion of their upper arm or shoulder; (for the out-of-hospital setting)
  - (3) Via a needle that has been placed into a person’s vein, usually on the inside of their arm. (for certified/licensed healthcare professionals)
How Does It Work?

- Blocks effects of opioids on brain
- Temporarily reverses respiratory and CNS depression

Naloxone reversing an overdose

Naloxone has a stronger affinity to the opioid receptors than opioids, such as heroin or oxycodone, so it knocks the opioids off the receptors for a short time (30-90 minutes). This allows the person to breathe again and reverse the overdose.
References


References


References


References


Old Dominion Mine Globe (n.d) https://www.azfamily.com/old-dominion-mine-globe-arizona/image_91ae57e6-1d3d-11e9-b69a-b3ade9a000cc.html


