A Rural Crisis: The Opioid Epidemic in the San Luis Valley
Collaborative Approach for Substance Use Disorder in the San Luis Valley

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Chief Medical Officer
Colorado's San Luis Valley thrives on its agricultural background and is nationally known for its potato production. Also flourishing in this high-mountain desert are cool weather crops such as lettuce, spinach, and quinoa.

Agriculture has long been the basis of the economy in the San Luis Valley. Unique in world topography, the elevation of the valley floor is 7,600 feet above sea level. The San Luis Valley is a large, flat intermountain valley that varies from 20 to 50 miles in width and is about 100 miles north to south. All crops are grown with irrigation water whose source is the abundant snow in the surrounding mountains.

2019 Alamosa Convention & Visitors Bureau
Evolving Markets
Total Population per County: Native vs. Foreign Born

<table>
<thead>
<tr>
<th></th>
<th>Costilla</th>
<th>Conejos</th>
<th>Rio Grande</th>
<th>Alamosa</th>
<th>Saguache</th>
<th>Mineral</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total:</strong></td>
<td>3628</td>
<td>8109</td>
<td>11236</td>
<td>15903</td>
<td>6320</td>
<td>834</td>
</tr>
<tr>
<td><strong>Native Born:</strong></td>
<td>3321</td>
<td>7846</td>
<td>10497</td>
<td>14251</td>
<td>5562</td>
<td>826</td>
</tr>
<tr>
<td><strong>Foreign Born:</strong></td>
<td>307</td>
<td>263</td>
<td>739</td>
<td>1652</td>
<td>758</td>
<td>8</td>
</tr>
</tbody>
</table>
Count of Foreign Born Residents per County: Naturalized vs. Noncitizen

<table>
<thead>
<tr>
<th>County</th>
<th>(Total) Foreign Born</th>
<th>Naturalized</th>
<th>Noncitizen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costilla</td>
<td>307</td>
<td>136</td>
<td>171</td>
</tr>
<tr>
<td>Conejos</td>
<td>263</td>
<td>106</td>
<td>157</td>
</tr>
<tr>
<td>Rio Grande</td>
<td>739</td>
<td>254</td>
<td>485</td>
</tr>
<tr>
<td>Alamosa</td>
<td>1652</td>
<td>421</td>
<td>1231</td>
</tr>
<tr>
<td>Saguache</td>
<td>758</td>
<td>283</td>
<td>475</td>
</tr>
<tr>
<td>Mineral</td>
<td>8</td>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>
Percentage of Subgroup (Native, Naturalized, Noncitizen) With No Health Insurance per County

- **Costilla**
  - Native: 12%
  - Naturalized: 13%
  - Noncitizen: 74%

- **Conejos**
  - Native: 14%
  - Naturalized: 36%
  - Noncitizen: 29%

- **Rio Grande**
  - Native: 10%
  - Naturalized: 63%
  - Noncitizen: 52%

- **Alamosa**
  - Native: 10%
  - Naturalized: 9%
  - Noncitizen: 50%

- **Saguache**
  - Native: 15%
  - Naturalized: 46%
  - Noncitizen: 55%

- **Mineral**
  - Native: 7%
  - Naturalized: 0%
  - Noncitizen: 0%

Valley-Wide Health Systems, Inc.
Your Health, Our Priority!
Percentage of Subgroup in Poverty by County

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Costilla</th>
<th>Conejos</th>
<th>Rio Grande</th>
<th>Alamosa</th>
<th>Saguache</th>
<th>Mineral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native</td>
<td>31%</td>
<td>21%</td>
<td>17%</td>
<td>25%</td>
<td>20%</td>
<td>12%</td>
</tr>
<tr>
<td>Naturalized</td>
<td>11%</td>
<td>7%</td>
<td>0%</td>
<td>14%</td>
<td>29%</td>
<td>0%</td>
</tr>
<tr>
<td>Noncitizen</td>
<td>9%</td>
<td>20%</td>
<td>42%</td>
<td>60%</td>
<td>25%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Drug Deaths: United States vs. Colorado

[Graph showing drug deaths per 100,000 population from 1990 to 2016, with United States and Colorado data compared.]

Source:
- CDC, National Vital Statistics System
National Center for Health Statistics, Age-Adjusted Death Rates
For Drug Poisoning Per 100,000 Population: 2013
National Center for Health Statistics, Age-Adjusted Death Rates
For Drug Poisoning Per 100,000 Population: 2017

Poison Mortality:
- 18.0 - 21.0
- 21.0 - 24.0
- 24.0 - 27.0
- 27.0 - 30.0
- 30.0 - 33.0
- 33.0 - 35.0

County Boundaries:
- Saguache
- Rio Grande
- Alamosa
- Costilla
- Conejos
- Archuleta
- Mineral
- Hinsdale
- San Juan
- Fremont
- Custer
- Huerfano

Distance Scale:
- 0
- 10
- 20
- 30
- 40 mi
**Type of Substance Injected**

*Combination refers to clients using a combination of two or more substances. Heroin/Meth, Dilaudid/Heroin, Heroin/Cocaine, Heroin/Insulin are the combinations used by our clients. Other refer to getting needles for someone else, or otherwise did not specify.*

- Combination: 89
- Heroin: 45
- Meth: 30
- Other: 11
- Did not disclose: 9

* n = 14, information gathered from new intake forms, beginning February 20, 2019.

**Participated in Substance Abuse Treatment**

- Yes: 7
- No: 7

* Data based on clients who shared they had participated in substance abuse treatment. One client indicated participating in more than one form of treatment.
Depression

- Depressive symptoms are more prevalent among indigenous Mexican agricultural workers
- Spanish literacy contributes to the likelihood of having depression

Remedies for Depression

- Drinking and taking drugs to reduce symptoms
- Seeking professional help, without the use of medications
- Increased and encouraged community socializing and social support
- Reuniting with family.

Risk and Access to Treatment

• Combined 2003 to 2011 data indicate that Hispanics aged 12 or older were more likely than non-Hispanics to have needed substance use treatment in the past year (9.9 vs. 9.2 percent)

• Hispanics who needed substance use treatment were less likely than non-Hispanics to have received treatment at a specialty facility in the past year (9.0 vs. 10.5 percent)

• Among Hispanics needing but not receiving treatment, only 5.6 percent perceived a need for treatment

Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (October 25, 2012). The NSDUH Report: Need for and Receipt of Substance Use Treatment among Hispanics. Rockville, MD.
Three studies conducted in the West and Southwest found that Latinos and Latinas who were born in the United States reported greater substance use and abuse than either individuals born in Mexico or European Americans (Farabee et al., 1995; Golding, Brurnam, Benjamin, & Wells, 1992; Vega et al., 1998).

Respondents who had migrated to the United States and respondents who had family members who migrated in the United States were more likely to have used alcohol, marijuana, or cocaine at least once in their lifetime; to develop a substance use disorder; and to have a current (in the past 12 months) substance use disorder than were other Mexicans. Guilherme Borges, Maria Elena Medina-Mora, Joshua Breslau, Sergio Aguilar-Gaxiola. Am J Public Health. 2007 Oct; 97(10): 1847–1851. doi: 10.2105/AJPH.2006.097915

Recent national surveys indicate that Latinas/os have less access than other Americans to substance abuse treatment (SAMHSA, 2001; 2002a) or that they have to wait longer to access such services.
The role of MAT in OUD

Medication-assisted treatment (MAT) is the use of medications with counseling and behavioral therapies to treat substance use disorders and prevent opioid overdose.

MAT operates to normalize brain chemistry, block the euphoric effects of alcohol and opioids, relieve physiological cravings, and normalize body functions without the negative effects of the abused drug.

Medication-Assisted Treatment (MAT) in combination with counseling and behavioral health therapies, provide a “whole-patient” approach to the treatment of substance use disorders. Research shows that a combination of medication and therapy can successfully treat these disorders, and for some people struggling with addiction, MAT can help sustain recovery.

SAMSHA
Buprenorphine

Buprenorphine is an opioid partial agonist.

This means that, like opioids, it can produce effects such as euphoria or respiratory depression.

With buprenorphine, however, these effects are weaker than those of full drugs such as heroin and methadone.

Health care providers must have waiver training and a special DEA license to prescribe buprenorphine.
Mechanism of Action of Buprenorphine

Opioid receptor unsatisfied — Withdrawal. As someone becomes “tissue” to opioids, their opioid receptors become less sensitive and require more opioid than required to produce the same effect. The body physically demands the body can no longer manufacture enough natural opioids to keep up with this increased demand. When there is an insufficient amount of opioid receptors activated, the body feels pain. This is withdrawal.
Buprenorphine Misuse Potential

Because of buprenorphine’s opioid effects, it can be misused, particularly by people who do not have an opioid dependency.

Naloxone is added to buprenorphine to decrease the likelihood of diversion and misuse of the combination drug product. When these products are taken as sublingual tablets, buprenorphine’s opioid effects dominate and naloxone blocks opioid withdrawals.

If the sublingual tablets are crushed and injected, however, the naloxone effect dominates and can bring on opioid withdrawals.
Naltrexone

- Naltrexone is an opioid antagonist, which means that it works by blocking the activation of opioid receptors. Instead of controlling withdrawal and cravings, it treats opioid use disorder by preventing any opioid drug from producing rewarding effects such as euphoria.

- It works differently in the body than buprenorphine and methadone, which activate opioid receptors in the body that suppress cravings.

- There is no abuse and diversion potential with naltrexone

SAMSHA
How Naltrexone Works

EXCESSIVE STIMULATION OF THE DOPAMINE REWARD SYSTEM IS BLOCKED

= Endogenous Opioid  = VIVITROL
Naltrexone

- Naltrexone is also used to treat alcohol use disorder.

- It comes in a pill form or as an injectable. The pill form of naltrexone (ReVia, Depade) can be taken at 50 mg once per day. The injectable extended-release form of the drug (Vivitrol) is administered at 380 mg intramuscular once a month.

- Research has shown that naltrexone decreases reactivity to drug-conditioned cues and decreases craving. Patients who have been treated with extended-release injectable naltrexone may have reduced tolerance to opioids and may be unaware of their potential sensitivity to the same, or lower, doses of opioids that they used to take.
Methadone

- Methadone is a synthetic *opioid agonist* that eliminates withdrawal symptoms and relieves drug cravings by acting on opioid receptors in the brain.

- It lessens the painful symptoms of opiate withdrawal and blocks the euphoric effects of opiate drugs such as heroin, morphine, and codeine, as well as semi-synthetic opioids like oxycodone and hydrocodone.

- Patients taking methadone to treat opioid addiction must receive the medication under the supervision of a physician.

- By law, methadone can only be dispensed through an opioid treatment program certified by SAMHSA.

- Women who are pregnant or breastfeeding can safely take methadone.

  SAMSHA
Published research indicates that the most prevalent forms of MAT, buprenorphine and methadone, are similar in terms of effectiveness.

Although MAT has significant evidence to support it as an effective treatment, it remains highly underutilized, being used by an estimated 1 million of the 2.5 million Americans who might benefit from receiving it.

Barriers to MAT treatment

- Cost
- Access
- Stigma
- Lack of awareness
What is Integrated Care?

- The care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families using a systematic and cost effective approach to provide patient-centered care in a defined population.

- This care may address mental health and substance use issues, life stressors and crisis, stress related physical symptoms, and ineffective patterns of health care utilization.
The Role of Behavioral Health in Primary Care

- In Colorado, it is harder to get an appointment for mental health and substance use than for primary care, according to the CHAS.
- **21%** of those who couldn’t get needed services for drug or alcohol use said it was because they had a hard time getting an appointment.
- **35%** who couldn’t get needed mental health services said it was because they had a hard time getting an appointment.
- Meanwhile, just **11%** of Coloradans didn’t see a general doctor because of difficulty getting an appointment.

Source: Colorado Health Access Survey
Patient Centered Medical Home

The patient-centered medical home is a model of primary care where patients receive well-coordinated services and enhanced access to a clinical team. The team uses decision support tools, measure their performance, engage patients 'in their own care and conduct QI activities.
Components of PCMH include:

- Patient Centered
- Coordinated
- Based on Quality and Safety
- Accessible
- Comprehensive
- SBIRT – screening, brief intervention and referral to treatment

- Outreach: in 2019 we screened 295 agricultural workers for drugs and alcohol

- Care coordination to help with referrals and community resources

- Case management to identify barriers to care

- Address social determinants of health – transportation, housing, food insecurity
- SBIRT – screening, brief intervention and referral to treatment
- Access to care – waivered providers in all counties, open schedule for same day appointments
- Group Visits
- “Bup” group”
- Mobile Van
Community Partners

- SLV Behavioral Health
- SLV Health
- Rio Grande Hospital
- Methadone Clinic
- SLV Public Health Partnership
Community Partners

- SLV Area Health Education Center/SHARPP Harm Reduction
- La Puente
- LEAD program “Law Enforcement Diversion Program”
- IT MATTRs – High Plains Research Network, University of Colorado
Conclusion

- Substance use disorder has impacted the San Luis Valley to a greater extent than other areas in Colorado.
- Agricultural workers and their descendants are at increased risk for using substances to treat their depression.
- Medication assisted treatment can be an effective modality to treat substance use disorder.
- An integrated approach that includes behavioral health is a way to provide patient-centered care that addresses life stressors that may contribute to substance use disorder.
- Collaboration with partners is an important component in addressing drug abuse in the community.
Thank you