

## 2018 Model Practices

### Applicant Information

Full Name: Alyson Shupe		Company:	
Title:	Email: ashupe@tchd.org	Phone: (720)233-6764	
City: Greenwood Village	State: CO	Zip: 80111-5113	

### Size

Select a size:

- Small (0-50,000)    Medium (50,000-499,999)    Large (500,000+)

### Practice Categories

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select all the practice areas that apply: \*

- |   |   |   |  |  |
|---|---|---|--|--|
| <input type="checkbox"/> Access to Care                   | <input type="checkbox"/> Advocacy and Policy Making       | <input type="checkbox"/> Animal Control                 | <input type="checkbox"/> Coalitions and Partnerships | <input type="checkbox"/> Communications/Public Relations                               |
| <input checked="" type="checkbox"/> Community Involvement | <input type="checkbox"/> Cultural Competence              | <input type="checkbox"/> Emergency Preparedness         | <input type="checkbox"/> Environmental Health        | <input type="checkbox"/> Food Safety   |
| <input type="checkbox"/> Global Climate Change            | <input type="checkbox"/> Health Equity                    | <input type="checkbox"/> HIV/STI                        | <input type="checkbox"/> Immunization                | <input type="checkbox"/> Infectious Disease  |
| <input checked="" type="checkbox"/> Informatics           | <input type="checkbox"/> Information Technology           | <input type="checkbox"/> Injury and Violence Prevention | <input type="checkbox"/> Marketing and Promotion     | <input type="checkbox"/> Maternal-Child and Adolescent Health                          |
| <input type="checkbox"/> Organizational Practices         | <input type="checkbox"/> Other Infrastructure and Systems | <input type="checkbox"/> Primary Care                   | <input type="checkbox"/> Quality Improvement         | <input type="checkbox"/> Research and Evaluation                                       |
| <input type="checkbox"/> Tobacco                          | <input type="checkbox"/> Vector Control                   | <input type="checkbox"/> Water Quality                  | <input type="checkbox"/> Workforce                   | <input type="checkbox"/> Conference Theme: Unleashing the Power of Local Public Health |

Other::

Opioid and Heroin Use and Prevention

Is this practice evidence based, if so please explain.:

All data used on this practice website were analyzed and presented adhering to strict epidemiologic standards, including HIPAA restrictions. Kernel density maps are based on guidelines widely used in the geographic information systems community for data display. The website was developed following the World Wide Web Consortium (W3C) standards for web design and applications and ArcGIS development principles.

### Winnable Battles

To keep pace with emerging public health challenges and to address the leading causes of death and disability, CDC initiated an effort called Winnable Battles to achieve measurable impact quickly. Winnable Battles are public health priorities with large-scale impact on health and known effective strategies to address them. Does this practice address any CDC's seven Winnable Battles? If so, please choose from the following: \*

- Food Safety    HIV in the U.S.    Nutrition, Physical Activity, and Obesity    Tobacco    Healthcare-associated Infections  
 Motor Vehicle Injuries    Teen Pregnancy    None

### Overview: Provide a brief summary of the practice in this section (750 Word Maximum)

Your summary must address all the questions below:

- Brief description of LHD- location, demographics of population served in your community
- Describe public health issue
- Goals and objectives of the proposed practice
- How was the practice implemented/activities
- Results/Outcomes (list process milestones and intended/actual outcomes and impacts.
  - Were all of the objectives met?
  - What specific factors led to the success of this practice?
- Public Health impact of practice
- Website for your program, or LHD.

750 Word Maximum

Tri-County Health Department (TCHD) is the largest local health department in Colorado and serves over 1.5 million people in Adams, Arapahoe and Douglas Counties in the Denver metropolitan area. TCHD's jurisdiction encompasses urban, suburban and rural areas and includes 26 municipalities and 3 unincorporated areas. The demographic characteristics of the jurisdiction vary and encompass vast extremes wherein one county has one of the highest proportion of Hispanic residents (nearly 40%) and highest rates of childhood poverty in the state, and another is one of the most affluent and least diverse counties in the state. Public Health Issue On October 26, 2017, the opioid crisis was declared a public health emergency by the Acting Health and Human Services (HHS) Secretary Eric D. Hargan. In recent years, reflecting national trends, areas within TCHD's jurisdiction experienced a dramatic increase in the number of deaths due to opioid overdose; in one county rising from 10 deaths in 2013 to 60 deaths in 2015. The number of deaths due to heroin overdose within our jurisdiction has also increased with a particularly sharp upward trend starting in 2013, nearly tripling in one county and nearly doubling in another. Data from public health surveillance systems and lived experience from community members converged to heighten awareness of this critical public health problem. In the fall of 2016, public officials in TCHD's jurisdiction turned to TCHD to illuminate the extent of the problem and to mobilize a comprehensive response. TCHD applied the 10 essential services, starting with monitoring and diagnosing the health problem and informing and educating people about the issues of the opioid crisis. Goals and objectives The goal of this practice was to develop a website containing timely and accurate data to identify the scope of the opioid problem and available resources to support community-based efforts to address the crises from various angles. The objectives of this practice were to 1) geographically display local level prevalence of opioid and heroin deaths over time; 2) display substance abuse and mental health treatment options including contact information and detailed characteristics of each treatment setting; 3) display prevention initiatives including household drug take-back sites and Naloxone retailers; and 4) link viewers to concrete action items and community and statewide initiatives to address the crisis. Implementation/Activities/Outcomes 1. Determined content for website by reviewing data requests from community members, agency staff, media, elected officials and organizations • Opioid overdose deaths by census tract over time • Heroin overdose deaths by census tract over time • Point locations of substance abuse treatment settings • Point locations of mental health centers • Point locations of household drug take-back sites and Naloxone retailers and links to prevention initiatives 2. Compiled and formatted data for the site • Geographic shape files; Vital records data; SAMHSA data; Colorado Dept. of Public Health and Environment (drug take-back data); Stop the Clock Colorado (Naloxone data) 3. Identified appropriate application for data display • ArcGIS Open Data site 4. Designed the website • Completed October 2016 5. Demonstrated website to agency staff, substance abuse coalitions, experts and refined based on feedback • Completed December 2016-January 2017 6. Launched website • April 2017 7. Logged comments and further requests for data; tweaked site according to feedback • Added link to the "Celebrating Lost Loved Ones" site; altered wording, updated data All of the objectives for this practice were met. Factors that led to the success of the practice included a proactive response to community needs; reliance on expressed community and stakeholder input into the design of the practice; timely, available data; analytic display tools; existing community partnerships, coalitions and networks; and TCHD staff capacity. Public Health Impact Since the creation of the opioid website, there has been a dramatic increase in the information available to the public. TCHD's partner agencies have utilized the site to access data, identify communities in greatest need, share maps and graphs, and better understand the distribution of resources. Local governments have been able to better understand the magnitude of the problem and availability of resources within their boundaries. This site has also helped generate discussion around naloxone use, syringe disposal locations, and locations of future substance abuse treatment facilities. The success of this platform has inspired TCHD to create more topic-specific sites to provide ready-to-use data and maps to local governments and community partners, which will ultimately help TCHD provide the right resources to residents and keep them engaged with the latest health trends in their communities. Website: <http://opioid-tchdgis.opendata.arcgis.com/>

## Responsiveness and Innovation

A Model Practice must be responsive to a particular local public health problem or concern. An innovative practice must be (1) **new to the field of public health (and not just new to your health department)** OR (2) **a creative use of an existing tool or practice**, including but not limited to use of an Advanced Practice Centers (APC) development tool, The Guide to Community Preventive Services, Healthy People 2020 (HP 2020), Mobilizing for Action through Planning and Partnerships (MAPP), Protocol for Assessing Community Excellence in Environmental Health (PACE EH). Examples of an inventive use of an existing tool or practice are: tailoring to meet the needs of a specific population, adapting from a different discipline, or improving the content.

- Statement of the problem/public health issue
- What target population is affected by problem (please include relevant demographics)
  - What is the target population size?
  - What percentage did you reach?
- What has been done in the past to address the problem?
- Why is the current/proposed practice better?
- Is current practice innovative? How so/explain?
  - Is it new to the field of public health
  - OR**
  - Is it a creative use of existing tool or practice:  
What tool or practice did you use in an original way to create your practice? (e.g., APC development tool, The Guide to Community Preventive Services, HP 2020, MAPP, PACE EH, a tool from NACCHO's Toolbox etc.)
- Is the current practice evidence-based? If yes, provide references (Examples of evidence-based guidelines include the Guide to Community Preventive Services, MMWR Recommendations and Reports, National Guideline Clearinghouses, and the USPSTF Recommendations.)

2000 Word Maximum

Problem Every day, more than 90 Americans die after overdosing on opioids. The misuse of and addiction to opioids—including prescription pain relievers, heroin, and synthetic opioids such as fentanyl—is a serious national crisis that affects public health as well as social and economic welfare. The Centers for Disease Control and Prevention estimates that the total "economic burden" of prescription opioid misuse alone in the United States is \$78.5 billion a year, including the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement (<https://www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis>). A more recent estimate from the Council of Economic Advisors indicates that the actual cost may be much higher, over \$500 billion/year. Communities within TCHD's jurisdiction saw similar effects of the opioid crisis. In the five years from 2012-2016, there were 565 opioid/heroin related deaths within our jurisdiction. In each of the three counties, the death rate from opioid overdose tripled between 2001-2003 and 2013-2015. Although the number of deaths remains low in relative terms, each is tragic and the impacts are far reaching throughout families and communities. Target population The ultimate goal is to assist communities hardest hit by the opioid epidemic by providing data and information that can help to allocate resources, program support, and funding to address the problem at a local level. This website was designed to address an audience with influence on the allocation of resources, program support, and policy development, some of which include: local governments, city council members, healthcare providers, and non-profit and partner groups working in substance abuse prevention and treatment. Because of the open nature of a website it can be hard to quantify reach, but through a combination of the following factors, we can conclude we have been quite successful in reaching our target population. 1) There have been over 9,000 unique visits to this site with an average of 44 per day since its launch in April. The number of visits has far exceeded many other public health related website we have experienced in the past. 2) Since the launch of the site, TCHD has had numerous engagements with our elected officials and community groups who have asked specifically about the data and information on the site. In addition, our Executive Director has used the site as a tool in multiple presentations to our elected officials to communicate information about the opioid epidemic. 3) There has been work around the community with both our local governments and substance abuse coalitions that have relied on data and information from this site in framing the issue through reports and presentation. a. <https://www.google.com/url?sa=t&rcrt=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEwiN8M7lpOnXAhWs3YMKHVf0BtwQFgg6MAM&url=http%3A%2F%2Fwww.douglas.co.us%2Fdocuments%2Fopioid-report.docx&usg=AOvVaw2a-HepoaoYUeGOZBaE8u0rsat&rcrt=j&q=&esrc=s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEwiN8M7lpOnXAhWs3YMKHVf0BtwQFgg6MAM&url=http%3A%2F%2Fwww.douglas.co.us%2Fdocuments%2Fopioid-report.docx&usg=AOvVaw2a-HepoaoYUeGOZBaE8u0r> 4) Based on this work, TCHD has been invited to participate with a national opioid data mapping work group through New America in developing best practices around ways to map and deliver data around the opioid epidemic. a. <https://www.newamerica.org/public-interest-technology/blog/launching-opioid-mapping-initiative/> 5) TCHD has recently been recognized by ESRI on its effective use of GIS platforms in disseminating public health data at both its Annual 2017 User Conference and as a case study. a. [http://www.esri.com/library/casestudies/communicating-the-severity-of-the-opioid-crisis.pdf?adumkts=industry\\_solutions&aduse=hhs&aduin=public\\_health&aduc=print&adum=flier&aduSF=url&utm\\_Source=other&aduca=m17Opioid\\_Epidemic](http://www.esri.com/library/casestudies/communicating-the-severity-of-the-opioid-crisis.pdf?adumkts=industry_solutions&aduse=hhs&aduin=public_health&aduc=print&adum=flier&aduSF=url&utm_Source=other&aduca=m17Opioid_Epidemic) 6) Neighboring LPHAs have requested our assistance and consultation in how they can also communicate their opioid data in a similar manner. Past efforts Traditional means of public health data dissemination and information sharing are in the form of Community Health Assessments, issue briefs, and the like, typically featuring static bar graphs and charts. Prevalence data and death rates are commonly displayed; however, resource data and program support is not as common. LPHAs strive to make data available to multiple audiences, frequently supplying estimates and rates, but with little interpretation and limited ability to display data for small areas. Only some public health surveillance systems collect data which can be geocoded and mapped, and even then, issues of confidentiality and small numbers limit the ability to drill down to the neighborhood level. Due in part to the organizational structure of many LPHAs, the data analysts (if they exist) are frequently in their own shop, somewhat segregated from program staff. The result is data that is pushed out often reflects the organization chart, with the "data" being divorced from the action we want to stimulate based on the data. How the current practice is better This practice differs in several key ways. The site itself functions as a "one stop shop", combining outcome, treatment resource, prevention, and qualitative data, and also pointing the viewer to actions that can be taken and ways to get involved in ongoing efforts. The maps are all interactive, allowing the viewer to zoom in to the neighborhood level. In order to enable this while maintaining confidentiality of death data, point locations were determined by geocoding residential addresses of the deceased. Geographically isolated single events were not represented on this density surface to protect patient privacy. Cells appearing on the surface require clusters of three or more deaths. The density surface was classified using equal intervals with an adjustment to mask individual events. The map indicates concentrations of events relative to the total number of events in the selected time period. Years of death data were aggregated in 2 year intervals to stabilize estimates based on small numbers and series illustrating the geographic distribution of deaths over time. The maps displaying substance abuse and mental health service locations are also interactive, allowing viewers to zoom to the street level. Each service site represented on the map can be selected and displays the facility name, address, phone numbers (main number, intake, emergency), the type of care provided, facility type, treatments approaches, smoking policy, service setting, public or private nature of facility, payment, insurance, funding accepted, payment assistance available, language services, special programs and groups offered, ancillary services, and age groups accepted. These data are maintained by the Substance Abuse and Mental Health Services Administration (SAMHSA) and were abstracted from SAMHSA's national directory of service providers found on their website. These data are updated annually based on SAMHSA's update cycle. Finally, the section on the website "What can we do right now?" features user friendly information, links to additional resources and concrete action steps everyone can take to address the opioid crisis. How the current practice is innovative This practice distinguishes itself as innovative in three ways: 1) its development relied heavily on community input as to content, 2) its ability to bring large amounts of quantitative and qualitative data together to provide a fuller picture of the opioid crisis at the local level, and 3) engaging the public with community level maps to tell a public health story. 1) This is not a traditional data site driven by analysts in a health department making assumptions about what the public needs. Rather, the data and information in this site was based on our interactions with community partners and programs already addressing the opioid issue in the community, on data requests TCHD was receiving from the community and elected officials, and listening to our community members during town hall meetings and community presentations where this was brought up as an important topic to them. 2) Unlike many public health data sites, this site brings together a substantial amount of data about a health topic but then also addresses data related to resources, community programs and partner work, TCHD efforts, qualitative data about those with first-hand experience, and ways to get involved in the existing community work. Combining all these types of data around a single topic helps the viewer understand a more complete picture of the opioid crisis specific to each community. 3) The site engages the viewer in a way that cannot be achieved through standard tables, charts and lists of data. People have inherent knowledge and understanding about their own community and the communities around them. Utilizing a mapping platform to describe a health condition and resources enables them to place that information within the context of what they already understand about a community which in turn, increases their level of engagement with these data. It allows them to make better informed decisions about those communities and understand the challenges faced by a community in addressing the opioid crisis. Current practice evidence-base All data were analyzed and presented adhering to strict epidemiologic standards, including HIPAA restrictions. Kernel density maps are somewhat new to public health but are based on guidelines widely used in the geographic information systems community for data display. The website was developed following the World Wide Web Consortium (W3C) standards for web design and applications and ArcGIS development principles.

## LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broad-based involvement and participation of community partners (e.g., government, local residents, business, healthcare, and academia). If the practice is internal to the LHD, it should demonstrate cooperation and participation within the agency (i.e., other LHD staff) and other outside entities, if relevant. An effective implementation strategy includes outlined, actionable steps that are taken to complete the goals and objectives and put the practice into action within the community.

- Goal(s) and objectives of practice
- What did you do to achieve the goals and objectives?
  - Steps taken to implement the program
- Any criteria for who was selected to receive the practice (if applicable)?
- What was the timeframe for the practice
- Were other stakeholders involved? What was their role in the planning and implementation process?
  - What does the LHD do to foster collaboration with community stakeholders? Describe the relationship(s) and how it furthers the practice goal(s)
- Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/ budget breakdown.

5000 words maximum

Goal(s) and objectives of practice The goal of this practice was to develop a website containing timely and accurate data to identify the scope of the opioid problem and available resources to support individual and community-based efforts to address the crises from various angles. The objectives of this practice were to 1) geographically display the prevalence of opioid and heroin deaths over time; 2) display substance abuse and mental health treatment options including contact information and detailed characteristics of each treatment setting; 3) display prevention initiatives including household drug take-back sites and Naloxone retailers; and 4) link viewers to concrete action items and community and statewide initiatives to address the crisis. Steps taken to implement the practice This practice grew out of interest by community member, media, and elected official's interest in understanding the opioid crisis on a local level and seeking actions to combat the crisis. Initially, requests for data and information from TCHD were fulfilled and logged. The TCHD Executive Director was increasingly besieged by inquiries from the media and elected officials. Two of the counties in TCHD's jurisdiction were particularly concerned. In one county, a county commissioner pulled together a task force to address the opioid crisis with various county departments, community mental health centers, and Kaiser Permanente. In another county, a concerned citizen approached the county commissioners who then convened a diverse stakeholder group with government, private and nonprofit partners. In response to this growing concern, TCHD was asked to convene leadership from both of these county's action groups and to form a coalition to reduce overdose deaths and increase awareness and education of prevention strategies. The third county in TCHD's jurisdiction has asked to join this effort at a future date. This Coalition was named the Tri-County Overdose Prevention Partnership (TCOPP). Current membership includes public, private, non-profit partners, law enforcement, treatment providers, hospitals, community mental health centers, youth prevention coalitions, statewide organizations, and private residents. TCOPP desired to be data driven and also wanted to use data in its education efforts. It soon became apparent that a comprehensive central location for data and information which was easily accessible to the public would meet many stakeholders' needs. An internal TCHD development team was assembled consisting of two population health epidemiologists, the Manager of Informatics, Epidemiology and Health Planning, the Public Health Prevention and Policy Manager (in charge of tobacco and substance abuse), the Syndromic Surveillance epidemiologist, and the Medical Epidemiologist. This group reviewed the requests for data that were routinely coming in and the requests for data and data products from TCOPP. The group carefully catalogued all potential data sets and evaluated their utility for inclusion, deciding on the data elements to be included in the site. The groups also brainstormed the inclusion of other elements for the site. The Senior Population Health Epidemiologist, and GIS expert, explored the functionality of the ESRI ArcGIS Open Data site to use as a platform for sharing the opioid and heroin data. It was determined that the Open Data site would be an adaptable and easy-to-use interface to quickly communicate relevant and accurate information that could be utilized by all the department's community members. Two population health epidemiologists compiled the data from various organizations and prepared it for the site. The Senior Epidemiologist programmed the site. The team, including TCHD's Executive Director and the Epidemiology, Planning and Communication Division Director reviewed and refined the site. The next step was to gather feedback from community members and stakeholders. The Executive Directors of the five metro Denver area LPHAs have formed the Metro Denver Partnership for Health to support collaborate public health initiatives across the region. One work group of the Partnership is the Infrastructure Work Group comprised of data analysts, epidemiologists and informaticians from each of the 5 LPHAs. The goal of this group is to build capacity to share data and analytic resources to reduce duplication of effort and enable data-driven collaboration efforts such as policy development. This group provided critical feedback regarding the site and offered suggestions for enhancements. TCHD is fortunate to have myriad active coalitions and community partners and this network was used to review and provide input into the site as well. Specifically the newly formed TCOPP was key in both supporting the development of the site and providing input into the content and feedback regarding the final site. With Mental Health being the focus of TCHD's Community Health Improvement Plan, various mental health work groups comprised of an array of stakeholders also provided input into the site and suggestions for additions and other refinements. One unanticipated outgrowth of this was the desire among mental health professionals to develop a similar site focused specially on mental health. (Although not the focus of this application, the site has been recently developed and can be viewed here: <http://mentalhealth-tchdgis.opendata.arcgis.com/>) Finally, the site was made live and advertised through various channels including TCHD's internal newsletter, presentation to TCHD's Board of Health, email to TCHD's key stakeholder list, presentations to various coalitions and committees, featured at conferences, and in a blast fax through the state health department to all LPHAs throughout the state of Colorado. The timeframe of the practice from inception to deployment was spring of 2016 to spring of 2017 (site was launched April 1, 2017). Stakeholder involvement As reported above, stakeholders played key roles in all phases of the practice. Much of TCHD's work is conducted through community partnerships. TCHD carefully nurtures relationships with the medical provider community, mental health and substance abuse providers, the early childhood community, local and county government officials, and more. Because of these strong relationships, TCHD has ready avenues for disseminating information and resources such as this Open Data website. These groups also disseminated the website through their independent networks. Practice costs Most of the costs of the project were in-kind staff resources. As estimated combined .25 FTE over the course of one year was devoted to this project. Technology costs were also required for the practice. Though the software and servers used were already purchased and in use by TCHD, the ArcGIS server had an initial cost of \$5,000 and an ongoing maintenance fee of \$2,000 per year and SAS software is used to analyze the data. Both the server and software are used for many other projects as a part of the data and informatics infrastructure of TCHD. The free version of Tableau software was also used for part of the site.

## Evaluation

Evaluation assesses the value of the practice and the potential worth it has to other LHDs and the populations they serve. It is also an effective means to assess the credibility of the practice. Evaluation helps public health practice maintain standards and improve practice. Two types of evaluation are **process** and **outcome**. Process evaluation assesses the effectiveness of the steps taken to achieve the desired practice outcomes. Outcome evaluation summarizes the results of the practice efforts. Results may be long-term, such as an improvement in health status, or short-term, such as an improvement in knowledge/awareness, a policy change, an increase in numbers reached, etc. Results may be quantitative (empirical data such as percentages or numerical counts) and/or qualitative (e.g., focus group results, in-depth interviews, or anecdotal evidence).

- What did you find out? To what extent were your objectives achieved? Please re-state your objectives.
- Did you evaluate your practice?
  - List any primary data sources, who collected the data, and how (if applicable)
  - List any secondary data sources used (if applicable)
  - List performance measures used. Include process and outcome measures as appropriate.
  - Describe how results were analyzed
  - Were any modifications made to the practice as a result of the data findings?

## 2000 Words Maximum

Please enter the evaluation results of your practice (2000 Words Maximum): \*

To what extent were practice objectives achieved? The objectives of this practice were to 1) geographically display the prevalence of opioid and heroin deaths over time; 2) display substance abuse and mental health treatment options including contact information and detailed characteristics of each treatment setting; 3) display prevention initiatives including household drug take-back sites and Naloxone retailers; and 4) link viewers to concrete action items and community and statewide initiatives to address the crisis. The first three objectives were achieved and can be empirically assessed as they appear on the website: <http://opioid-tchdgis.opendata.arcgis.com/>. The final objective can only be evaluated by process measures somewhat distal to the outcome of interest. Process evaluation In order to measure our fourth objective, link viewers to concrete action items and community and statewide initiatives to address the crisis, we tracked web analytics, recorded groups to which the website link was sent, and presentations of the website made to various groups. Between the launch of the website on April 1, 2017 and November 30, 2017 we have had over 9,000 unique visits to the website and an average of 44 visits per day. The link to the site was sent out to 116 partners at various organizations throughout TCHD's jurisdiction. These organizations included nonprofits, schools, medical providers, mental health providers, government officials, and more. The link was also sent out to all 54 local health departments in Colorado. The website was featured in the internal TCHD newsletter and sent to TCHD's approximately 360 FTE. A demonstration of the website was provided to several stakeholder groups and coalitions reaching over 100 individuals. The website attracted national attention as well. It was featured at ESRI's 2017 global user conference with over 17,000 attendees. ESRI is also highlighting the site on its website: <http://www.esri.com/industries/health> and will include an article about it in their quarterly ArcUser Publication. Two other LPHAs in the Metro Denver area have replicated parts of this work for their jurisdictions. TCHD shares code and provides technical assistance as needed. Analysts at one of the county governments within TCHD's jurisdiction have used the site to develop a county assessment of the opioid crisis to begin to determine how their county government and staff can address the crisis within their work <https://www.google.com/url?sa=t&rc=j&q=&esrc=s&s&source=web&cd=4&cad=rja&uact=8&ved=0ahUKEWiN8M7lpOnXAHwS3YMKHVf0BtwQFgg6MAM&url=http%3A%2F%2Fwww.douglas.co.us%2Fdocuments%2Fopeoid-report.docx&usq=AOVvaw2a-HepoaoYUeGOZBaE8u0r>. TCHD has also been invited to participate with a national opioid data mapping work group through New America in developing best practices around ways to map and deliver data around the opioid epidemic. <https://www.newamerica.org/public-interest-technology/blog/launching-opioid-mapping-initiative/> As mentioned early, TCHD developed a mental health website at the urging of internal mental health staff and their community partners. Also in response to the favorable reception of the opioid site, a tobacco and an obesity website are under development. Modifications made to the practice as a result of the data findings Partners provided specific feedback on the opioid website, particularly regarding resource links and proper names of organizations. Two substance abuse service organizations called to let us know that they were not included on the resource list obtained through SAMHSA, so they were added to the map. Modification was made to the text defining the kernel density maps to enhance viewer understanding.

## Sustainability

Sustainability is determined by the availability of adequate resources. In addition, the practice should be designed so that the stakeholders are invested in its maintenance and to ensure it is sustained after initial development (*NACCHO acknowledges that fiscal challenges may limit the feasibility of a practice's continuation.*)

- Lessons learned in relation to practice
- Lessons learned in relation to partner collaboration (if applicable)
- Did you do a cost/benefit analysis? If so, describe.
- Is there sufficient stakeholder commitment to sustain the practice?

- o Describe sustainability plans

**1500 Words Maximum**

Please enter the sustainability of your practice (2000 Words Maximum): \*

Lessons learned TCHD reaped the benefits from developing this practice with heavy subject matter expertise and community input. Before using this method, our data products reflected traditional display methods—prevalence graphs, pie charts and the like. These methods have their utility, but we have found that building data products with and for the community engages our partners in a more meaningful way and therefore ensures that data are used. This method requires more time on the front end, but saves time in response to data requests on the back end. Cost/benefit analysis done? No. Stakeholder commitment to sustain the practice The project is self-supporting; however, partner's interest in the site can only be maintained through regular updating of the data on the site, and by including new datasets and information as it becomes available. For instance, Colorado has a Prescription Drug Monitoring Program and we have been working with partners to mine the data related to opioid prescribing practices and trends. . TCHD's Medical Epidemiologist has partnered with another LPHA to develop a dashboard displaying opioid-related calls to the Rocky Mountain Poison Control Center and we will link this site to and from this practice site in the near future. Sustainability plans As mentioned, we built this practice using hard- and software that are already part of TCHD's informatics infrastructure. We have skilled staff who can develop these websites using the ArcGIS technology. We are building redundancy for this skill set as well. One outgrowth of this project's success was the development of our website featuring mental health. This was initiated based on stakeholder request and is currently live. In this case, we were able to capitalize on lessons learned and repurpose much of the code and data for this site. As we go further, our process will become better refined and our skills will increase, making this practice our new way of doing business. We are currently working on developing a site featuring tobacco and one featuring obesity. Due to the interest in the approach among our regional LPHA partners, we will also be able to support their efforts and subsequently learn from them as we grow this practice in our region.

**Additional Information**

How did you hear about the Model Practices Program?: \*

- I am a previous Model Practices applicant
- At a conference
- Colleague in my LHD
- Colleague from another public health agency
- E-Mail from NACCHO
- Model Practices Brochure
- NACCHO Connect
- NACCHO Exchange
- NACCHO Exhibit Booth
- NACCHO Website
- Public Health Dispatch