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# **2020 Model Practices**

Applicant Information							
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City:			State:	Zip:			
San Luis Obispo			CA	93401-4534			
Size							
Select a size: *							
☐ Small (0-50,000)	99,999) 🗖 Large (500	),000+)					
Application Information							
Local Health Department/Organization Name:	*						
County of San Luis Obispo Public Health Depart	rtment						
Title of Drooting *							
Title of Practice: *							
Respiratory Disease Differentiation Quick Reference Poster							
Submitter Name: *							
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#### Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select the most relevant category that applies most to your practice: : \* Advocacy and Coalitions and ☐ Communications/Public Animal Control Access to Care Policy Making **Partnerships** Relations Community □ Cultural Emergency Environmental Health Food Safety Involvement Competence Preparedness ☐ Global Climate Health Equity Immunization ☐ HIV/STI Change Injury and Violence Information Marketing and Organizational Prevention Adolescent Health Technology Promotion **Practices** □ Quality ☐ Other Primary Care □ Research and Evaluation □ Tobacco Improvement Vector Control ☐ Workforce Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select the second most relevant category that applies most to your practice: : \* ▼ Communications/Public Advocacy and Coalitions and Animal Control Access to Care Relations Policy Making **Partnerships** Community Cultural ☐ Environmental Health □ Food Safety Involvement Competence Preparedness Global Climate Health Equity ☐ HIV/STI Immunization Infectious Disease Change ☐ Information □ Injury and Violence Marketing and Organizational Technology Prevention Promotion Adolescent Health **Practices**

Research and Evaluation

□ Tobacco

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

Quality

Improvement

Your summary must address all the questions below:

Primary Care

□ Water Quality

- Brief description of LHD- location, demographics of population served in your community.
- Describe public health issue.

□ Other

Vector Control

**Practice Categories** 

- 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.

Please use this portion to respond to the questions in the overview section. : \*

San Luis Obispo County, commonly known as SLO, is picturesque mix of urban and rural communities located on the central coast of California. With a total population of 277,977, nearly 25% of those are over the age of 60, a relatively higher share of the population as compared to the state average of 18% senior citizens. Most residents identify as white (69%), followed by Hispanic/Latino (22%). Key industries in the county include tourism, education, energy, agriculture and government. The county includes seven cities, though most of the county's 3,326 square miles are unincorporated. The eastern region is sparsely populated with vast areas of agricultural and undeveloped government lands between small, unincorporated towns.

Clinicians everywhere have faced the challenge of rapidly differentiating infectious respiratory diseases to provide the most direct path to treatment for each patient, but also to protect members of the community from infectious disease. Respiratory diseases, however, often present in a way that defies ready differentiation. With additional testing and information now available, we have learned that a better understanding of regional epidemiology of illnesses can help inform diagnosis of respiratory disease. We developed this new resource for clinicians, the Respiratory Disease Differentiation Quick Reference Poster, that incorporates local information to help differentiate among influenza, community-acquired pneumonia, coccidioidomycosis (Valley fever), and tuberculosis (TB).

In SLO County, we see distinct trends and challenges in accurately diagnosing these illnesses. TB, for example, is quite uncommon in SLO County, with an incidence rate of 2.2 per 100,000 (well below the state average of 5.2). Yet we frequently see TB on the differential diagnosis for patients who present with respiratory symptoms. This creates the need for isolation, thereby adding a burden to the patient and to our health care system—a burden we should ask them to carry only when truly needed.

Valley fever, on the other hand, is relatively common in SLO County with an incidence rate of 150.4 per 100,000 (compared to the state average of 18.8). This fungal infection is highly endemic in southern Arizona and California's southern San Joaquin Valley, as well as SLO County. Yet Valley fever is often not suspected until other possibilities have been eliminated. For patients, that can mean unnecessary antibiotics, uncomfortable tests, and months of anxiety as symptoms worsen. Often misdiagnosed as bacterial pneumonia, the CDC estimates about 60 – 80% of patients with Valley fever are given one or more rounds of antibiotics before receiving a correct diagnosis and appropriate treatment.

The goal of this practice was to support local clinicians in respiratory disease differentiation. Our plan to achieve this was to provide clinicians with information about the regional epidemiology of influenza, community-acquired pneumonia, Valley fever, and TB for consideration when assessing patients presenting with symptoms of respiratory illness.

The goal and objectives were achieved based on the positive feedback we received and the continued interest in the poster. We are also pleased that our development of this poster is helping other jurisdictions. Since other local health departments expressed interest in using the poster to support their local clinicians, we created a customizable template of the poster for health departments to insert their local epidemiology information and department branding.

The primary factor that led to the success of the practice was the recognition that an understanding of local epidemiology can be essential in ensuring accurate and timely diagnosis and treatment of respiratory diseases. In addition, we listened to our target audience to learn how to best package and present this information.

Due to age-related characteristics like frailty and immunosenescence, respiratory infections produce more severe illness, a larger number of hospitalizations, and greater mortality in older than in younger adults. With one quarter of the SLO County population over the age of 60, and an aging population nationwide, public health can provide clinicians with the epidemiological information they need to support accurate and timely diagnosis and treatment of respiratory diseases.

Please view the Respiratory Disease Differentiation Quick Reference Poster at file:///P:/Admin/NACCHO%20MP%20Award%20App/Respiratory\_Disease\_Quick\_Reference\_SLOCo\_2019.pdf and visit the County of San Luis Obispo Public Health Department website at:https://www.slocounty.ca.gov/Departments/Health-Agency/Public-Health.aspx

#### 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.

Please state the Responsiveness and Innovation of your practice: \*

In SLO County, we see distinct trends and challenges in accurately diagnosing respiratory diseases, which can lead to unnecessary antibiotics, uncomfortable tests, and months of anxiety as symptoms worsen.

The goal of this practice was to support local clinicians in respiratory disease differentiation. Our plan to achieve this was to provide clinicians with information about the regional epidemiology of influenza, community-acquired pneumonia, Valley fever, and TB for consideration when assessing patients presenting with symptoms of respiratory illness.

To address this issue, we first listened to our target audience to learn how to best package and present this information. We informally consulted with local emergency room clinicians to better understand the most effective method. We considered issuing advisory notices and offering in-service training and presentations. However, based on the feedback we received, we learned clinicians are most likely to receive this information if it can be easily and quickly referenced the moment it is needed.

Once we determined that local emergency rooms and urgent care centers were receptive the idea of a wall poster, we developed the content, with insight from the California Department of Public Health Center for Infectious Disease. For each of the four diseases, the poster briefly addresses Signs & Symptoms, Disease Course, Epidemiology (respiratory transmission, incidence rate, and risk factors), Testing, Radiology, Do I...? (isolate, report), and seasonal prevalence. Our in-house communications coordinator designed the 17x 11" poster, which was printed on durable and water-resistant paper. Posters were delivered to local hospitals and urgent care centers. We continued to market the poster in newsletter and magazine articles targeting clinicians and shared it with other local health departments.

Respiratory Disease Differentiation Quick Reference Poster

# LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broadbased 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.

Enter the LHD and Community Collaboration related to your practice: \*

The goal of this practice was to support local clinicians in respiratory disease differentiation. Our plan to achieve this was to provide clinicians with information about the regional epidemiology of influenza, community-acquired pneumonia, Valley fever, and TB for consideration when assessing patients presenting with symptoms of respiratory illness.

To begin, we first listened to our target audience to learn how to best package and present this information. We informally consulted with local emergency room clinicians to better understand the most effective method. We considered issuing advisory notices and offering inservice training and presentations. However, based on the feedback we received, we learned clinicians are most likely to receive this information if it can be easily and quickly referenced the moment it is needed.

Once we determined that local emergency rooms and urgent care centers were receptive the idea of a wall poster, we developed the content, with insight from the California Department of Public Health Center for Infectious Disease. For each of the four diseases, the poster briefly addresses Signs & Symptoms, Disease Course, Epidemiology (respiratory transmission, incidence rate, and risk factors), Testing, Radiology, Do I...? (isolate, report), and seasonal prevalence. Our in-house communications coordinator designed the 17x 11" poster, which was printed on durable and water-resistant paper. We delivered the posters to our contacts at local hospitals and urgent care centers with instructions to post on the wall where highly visible to clinicians. We continued to market the poster in newsletter and magazine articles targeting clinicians and shared it with other local health departments.

We have received additional requests for the poster and local clinicians report that they find it helpful. We are also pleased that our development of this poster is helping other jurisdictions. Since other local health departments expressed interest in using the poster to support their local clinicians, we created a customizable template of the poster for health departments to insert their local epidemiology information and department branding.

Respiratory Disease Differentiation Quick Reference Poster

#### 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.
  - o Describe how results were analyzed.
  - Were any modifications made to the practice as a result of the data findings?

Please enter the evaluation results of your practice: \*

The goal of this practice was to support local clinicians in respiratory disease differentiation. Our plan to achieve this was to provide clinicians with information about the regional epidemiology of influenza, community-acquired pneumonia, Valley fever, and TB for consideration when assessing patients presenting with symptoms of respiratory illness.

At this time, we do not have quantitative data to determine if the poster improved accuracy in diagnosing these respiratory illnesses; however, we have received additional requests for the poster and local clinicians report that they find it helpful. For this reason, we believe the goal and objectives were achieved based on the positive feedback we received and the continued interest in the poster. We are also pleased that our development of this poster is helping other jurisdictions. Since other local health departments expressed interest in using the poster to support their local clinicians, we created a customizable template of the poster for health departments to insert their local epidemiology information and department branding.

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### 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.

Please enter the sustainability of your practice: \*

The Department distributed the Respiratory Disease Differentiation Quick Reference Poster to local clinicians in May 2019. To sustain this practice, we will follow up with clinicians annually to ensure the content remains relevant and current. In addition, we created a customizable template of the poster for other health departments to insert their local epidemiology information and department branding. By making a template available, other departments are also able to update content as needed to ensure the poster remains a relevant resource in their jurisdiction.

Respiratory Disease Differentiation Quick Reference Poster

Additional information				
How did you hear about the Model Practices F	Program:: *			
☐ I am a previous Model Practices applicant	☐ At a NACCHO conference	☐ Colleague in my LHD	<ul><li>Colleague from another public health agency</li></ul>	☐ E-Mail from NACCHO
▼ NACCHO Publication (Connect, Exchange, Public Health Dispatch)	□ NACCHO Website			
Have you applied for Model Practices before?	*			
☐ No, this is my first time applying.	s, I have applied in the	past.		
If you answered yes to the question above, pla	oogo lot up know the w	oor and award two		
ii you ariswered yes to the question above, pie	ease let us know the y	ear and award typ	е	
2016 Model Practice Award for Outsideln SLO				