

## 2017 Model Practices

### Applicant Information

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### Model Practice Title

Please provide the name or title of your practice: \*

Utilizing informatics to standardize and streamline Zika testing requests and case investigation

### 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.: \*

☐ Access to Care

☐ Advocacy and Policy Making

☐ Animal Control

☐ Coalitions and Partnerships

☐ Communications/Public Relations

☐ Community Involvement

☐ Cultural Competence

☐ Emergency Preparedness

☐ Environmental Health

☐ Food Safety

☐ Global Climate Change

☐ Health Equity

☐ HIV/STI

☐ Immunization

☒ Infectious Disease

☒ Informatics

☒ Information Technology

☐ Injury and Violence Prevention

☐ Marketing and Promotion

☐ Maternal-Child and Adolescent Health

☐ Organizational Practices

☐ Other Infrastructure and Systems

☐ Organizational Practices

☐ Primary Care

☐ Quality Improvement

☐ Research and Evaluation

☐ Tobacco

☐ Vector Control

☐ Water Quality

☐ Workforce

☐ Conference Theme: Bridging Clinical Medicine and Population Health

Other::

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

## 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

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

The Fairfax County Health Department (FCHD) is located in Northern Virginia (VA) in the suburbs of Washington, D.C. and serves the 36th largest county in the United States. The population of Fairfax County in 2014 was estimated at 1,137,538, accounting for 13.7% of the population of the Commonwealth of VA. Given that Fairfax County is the largest health district in the National Capital Region, its large immigrant population makes the County more susceptible to emerging infections compared to more rural areas of the country. The Zika virus epidemic offered unique challenges to public health. In Virginia, local health departments were asked to facilitate the Zika testing request process as all Zika testing was done through public health laboratories. Over the course of 2016, approximately 48% (1009) of all test requests in Virginia were routed through FCHD and 25% (26) of cases resided in Fairfax County. The disproportionate percentage of work related to emerging infections when compared to Fairfax County and Virginia population is typical given the large subset of population with recent foreign travel. The burden of human surveillance Zika related work fell to the Communicable Disease/Epidemiology Unit (CD/Epi Unit) at the Fairfax County Health Department. With already full caseloads and unfilled positions, adequately accomplishing this new workload was extremely difficult. As the number of requests and questions about Zika increased, a small group at FCHD convened to develop and implement a more productive process for Zika response. The goal of this work was to create a system to electronically automate the vast majority of testing requests, procedural paperwork, and communication (internal and external) of information related to Zika virus, hence allowing our Unit to focus on areas of more pressing public health concern such as Zika case investigation and patient/clinician education. The proposed new system would include the following features: • A secure (HIPPA compliant) website on FCHD's website where clinicians could request Zika testing through the state lab. The request form would ensure collection of all pertinent information to the approval process. • Once a request was made on the website, a notification would be sent to the CD/Epi Unit of the request available for review (via secure email). • The CD/Epi Unit would review the request and approve or reject on the system. This process would result in a secure email to the requester informing them of this decision. • Approved emails would contain collection and submission instructions for the requesting provider as well as Zika education. Rejected emails would contain testing algorithm and Zika education. • Internal notifications would also automatically occur among key staff members at FCHD to ensure efficient notification (Lab, vector control, HD leadership) when new and pertinent information is entered into the system. • This system would also allow FCHD to quickly collect and analyze information (generate reports) on Zika testing requests and case information. • The system would also send reminders to providers who are entering information on the pregnancy registry. The informatics team at FCHD developed a data system in SharePoint that achieved all of the goals listed above. The system was implemented on 03/22/2016. The link to the request site can be found here: <https://www.fairfaxcounty.gov/webforms/?form=TVpOdKtR5Qm5wY3locTA0TUENjFKRkRjN29jaHJoK3hnZ1QzbDBvTGJQbDd1SmhRZG94bjN1djI2amFBSGhTbDlyd1dlU2w1NEYxZnlwRkUzM2FKc2c9PQ==> As of 12/08/2016, 1,009 requests have gone through the SharePoint system. The FCHD CD/Epi Unit was able to limit Zika coverage from a team of CD Nurses to one nurse that covers Zika requests/education/follow-up full-time, which greatly enhanced our ability to respond to communicable disease threats in our community.

## 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

Please state the Responsiveness and Innovation of your practice (2000 Word Maximum) : \*

The Zika virus epidemic offered unique challenges to public health. In Virginia, local health departments were asked to facilitate the Zika testing request process as all Zika testing was done through the state lab. The burden of human surveillance Zika related work fell to the Communicable Disease/Epidemiology Unit (CD/Epi Unit) at the Fairfax County Health Department. With already full caseloads and unfilled positions, adequately accomplishing this new workload was extremely difficult. With implementation of the system and workload management, on average, providers received a response to their testing request within a one hour time period or less during normal business hours. As Zika Virus is a new concern for public health in the U.S., a completely novel system was needed to ensure completion of all required investigations (not just including Zika Virus). An automated electronic system would handle the vast majority of testing requests, procedural paperwork, and communication (internal and external) of information related to Zika virus, hence allowing our Unit to focus on areas of more pressing public health concern such as Zika case investigation and patient/clinician education. The target population for this work was internal FCHD staff and external providers requesting testing. All providers in Fairfax County were shared the request link and direct consultation was made available to any provider needing technical support.

## 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

Enter the LHD and Community Collaboration related to your practice (5000 words maximum): \*

The goal of this project was to create a system to electronically automate the vast majority of testing requests, procedural paperwork, and communication (internal and external) of information related to Zika virus, hence allowing our Unit to focus on areas of more pressing public health concern such as Zika case investigation and patient/clinician education. Numerous meetings were held between epidemiology and informatics staff at FCHD to ensure the successful completion of this process. Stakeholders (OB/GYN providers) feedback was also solicited to ensure the tool meets their needs as well as the system's ease of use. From start to finish, this project took approximately two months. Although no cost analysis was completed, FCHD utilized their existing contract with SharePoint, therefore the only costs associated with this project were work hours, which we can estimate was significantly lower than if the system did not exist.

## 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): \*

Limited evaluation was done as this is such a recent/new process. FCHD's SharePoint Zika request system has accepted 1,009 requests for testing, 848 were approved for testing and 161 requests were denied with Zika testing and education provided. The unit's goal was to respond to requests within 24 hours, however, with implementation of the system, during normal business hours providers received a response in one hour or less. Actionable internal notifications were given on 849 Fairfax Zika cases or suspected cases. 53 electronic referrals to vector control were made immediately upon lab results received, shortening the response time for vector abatement actions in Fairfax County. The system was also used internally to notify the Fairfax County Health Department lab of incoming specimens/approvals, notify the incident management team of confirmed cases and to notify the mosquito control program of suspected or confirmed cases that required follow-up. The FCHD Zika request system was the first of its kind in Fairfax County and the Commonwealth of Virginia. Based on the success of the FCHD's Zika Testing Online Request Form and process, Virginia Department of Health (VDH) developed an online requesting for Zika process and database to be used statewide.

## 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?
  - Describe sustainability plans

## 1500 Words Maximum

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

As this project yields no more costs and only saves FCHD work hours, we will continue to utilize this tool as long as it is needed. The long-term goals of this project are to facilitate as much of the Zika process as possible to limit the amount of man hours spent on testing requests, procedural paperwork, and communication (internal and external) of information related to Zika virus. Given uncertain financial futures and constant budget shortfalls, the development of this system has also fostered future project proposals in this mold to help electronically automate other communicable disease processes that can further streamline FCHD's work. As emerging infections are a continual source of concern in public health, we can expect to utilize this model for future large scale public health responses to securely collect and transmit information electronically.

## Additional Information

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

- |  |   |   |  |  |
|--|---|---|--|--|
| <input type="checkbox"/> I am a previous Model Practices applicant | <input type="checkbox"/> At a Conference      | <input type="checkbox"/> NACCHO Website | <input type="checkbox"/> Public Health Dispatch                      | <input type="checkbox"/> Colleague in my LHD           |
| <input type="checkbox"/> Model Practices brochure                  | <input type="checkbox"/> NACCHO Exhibit Booth | <input type="checkbox"/> NACCHO Connect | <input type="checkbox"/> Colleague from another public health agency | <input checked="" type="checkbox"/> E-Mail from NACCHO |
| <input type="checkbox"/> NACCHO Exchange                           |   |   |  |  |