PHAB Annual Report
Section II
Approval Date: November 2014 Effective Date: January 2015
For Health Departments Accredited Under Version 1.0

On this form, you will report on the health department's activities related to improvement; continuing processes; and emerging public health issues and innovations. Please provide brief responses to these questions. Each question should have a response of no more than 500 words. When you have completed this form, please log on to e-PHAB and upload this document. Upload the document as a Word file; do NOT convert it to a PDF.

Health Department Name
Maine Center for Disease Control and Prevention

Performance Management and Quality Improvement			
1. How has the health department implemented and/or changed its performance management system over the past year? *Please provide an example of how the health department has tracked its performance.* **(Word limit: 500)**			
Maine CDC re-vamped its performance management system in 2016/2017. The new system began with measures of interest to the Commissioner of the Department of Health and Human Services (the umbrella department for Maine CDC). These measures were outcome-based, reflected Departmental investments and had data that could be updated no less frequently than quarterly. Building on the limited number of measures reported to the Commissioner, the Maine CDC Executive Management Team used Maine CDC's Strategic Priorities to expand to sixteen measures for a more comprehensive dashboard. While some of these measures are outcome-based, others are more focused on process data that are more continually updated. These are being linked to annual outcome data that are being developed for a public facing reporting tool. Next steps are to expand further for each Division within Maine CDC, and eventually to all programs. As an example, current smoking by adults is a key long-term outcome indicator. However, given the multiple influences on this measure, and the lack of new data more frequently than yearly, Maine CDC has focused its performance in this area on smoking cessation and is measuring the number of Maine residents and MaineCare (Medicaid) members who access the Maine Tobacco Help Line, which is a key strategy that the Department is investing in to influence current smoking rates.			
2. How has the health department implemented and/or changed its quality improvement (QI) plan over the past year? (Word limit: 500)			
In order to increase QI reporting, we developed three additional templates for reporting QI projects. Additionally, we have started trainings at every QI Team meeting, continued bi-annual QI culture survey, and included QI in Senior Management Team meetings.			
3. Which of the following most accurately characterizes the QI culture in the health department? *(See http://qiroadmap.org/assess/ for a description of these phases. Place an X in the column to the left of the phase that best applies.)*			
	Phase 1: No knowledge of QI	X	**Phase 4: Formal QI implemented in specific areas**
	Phase 2: Not involved with QI activities		**Phase 5: Formal agency-wide QI**
	Phase 3: Informal or ad hoc QI		**Phase 6: QI Culture**
4. Has there been a change in the health department's phase of QI culture in the past year? If so, what has changed and why? (Word limit: 500)			
There has not been a change. The most recent survey evaluation of the QI culture (June 2017) indicated there is an increase in formal (and also informal) QI activity in various areas. New members have been recruited for the QI Team. We are in the process of revamping our communication strategies, including			

collection of information on QI activities. . These activities are intended to further engage staff and advance the QI culture.

5. The table below lists several characteristics of a QI culture. Please complete the table below to indicate one concrete step the health department has taken over the past year to improve each characteristic listed and one step it plans to take next year. If the health department has not worked on a characteristic or has no plans to work on it in the coming year, leave that part of the table blank. *(See http://qiroadmap.org/assess/ for a description of these characteristics. Two characteristics – QI model/plan and performance management system - have been omitted from the table because they were previously described in questions 1 and 2.)* **(Word limit: 100 words per row)**		
Characteristics	**Steps Taken Last Year**	**Steps Planned for Next Year**
Leadership	Maine CDC has included QI as a standing agenda item on Senior Management Team meetings.	Maine CDC will include a review of performance measures and progress as a standing agenda item on Senior Management Team meetings and include discussion of QI activities needed to make further progress. SMT will share success stories with their staff.
QI Champions	The QI Team has recruited new/more members from different divisions `for better representation across the agency.	QI Champions will be developing strategies to mentor new staff and ensure all new staff receives basic QI training as part of on-boarding.
QI Training	We've added QI training to all QI Team meetings.	Maine CDC will integrate QI training at all Senior Management Team meetings, and conducting Lunch and Learns focused on QI.
Staff engagement	A QI culture survey was administered to staff with revised questions based on feedback from the previous survey.	The QI Team will be offering more training based on feedback from the QI survey, and will be challenging the Maine CDC to complete one QI project, per program, per calendar year. We will also be developing a communication plan which will highlight QI activities.
Resources	Maine CDC recently hired two new staff for Performance Improvement, Accreditation and Workforce Development. QI is integrated into both positions.	Maine CDC is creating a more user friendly intranet and will be adding QI training resources and tools to it.
Data	Maine CDC leadership developed new performance measures aligned with our Strategic Plan.	Maine CDC will be expanding indicators on the performance management system to include all programs.

6. Please provide a brief overview of QI projects conducted in the past year. Include the number of projects, their type (administrative or programmatic), and the proportion of health department program areas/offices that engaged in one or more of them. Please indicate whether this is an expansion over the past year (e.g., the number and/or type, extent of participation, etc). (Word limit: 500)

Maine CDC completed 20 QI projects in the last year. Of these, 3 were administrative, and 17 were programmatic. This is an increase of 10 total QI projects over the previous year. This increase is in part due to better reporting of program QI activities. This includes projects in five of five divisions.

Select one QI project to describe in greater detail below

7. What issue did this QI project address? How was that need determined (e.g., Accreditation Committee, Site Visit Report, customer survey, audit, etc.)? What was the QI initiative aim (including the specific measurable goals set for the activity)? (Word limit: 500)

At the Health and Environmental Testing Laboratory (HETL), expenses are greater than revenues. HETL looked to improve sustainability of their operations in order to continue to be able to provide all current services to the public. They knew that private water test kits were being distributed at no charge, but had not evaluated how many were never returned for testing with payment, resulting in a cost to the lab for the unreturned test kit.

8. How was the QI project implemented? What methods and tools were used? Was a pilot conducted? (Word limit: 500)

A sustainability review of laboratory data from StarLims was conducted in December 2016 using brainstorming and root cause analysis. The team working on this review determined that they wanted to eliminate the total number of private water test kits that were being distributed at no charge and not returned for testing. The group used the PDCA cycle for this project.

Data showed that >4,000 kits had not been returned for testing in the years 2005-2016. The cost of the unreturned test kits was "estimated" for the year 2015. This was considered needless spending. At a current cost of approximately $11.70 per kit (not including the cost of the test), it was estimated that $20,428 was spent needlessly (1,746 kits) in 2015 and justified the up-front payment of all future private water tests (pre-payment of test, which includes cost of kit).

2015 data was used as it was believed that some test kits distributed in 2016 could still be sent in for testing and the likelihood of 2015 test kits being returned for testing was much less likely. (At the time of the StarLims review, 2,449 test kits distributed in 2016 had not been returned for testing.)

Once the decision was made to begin requesting pre-payment, a form was redesigned to allow for easy up-front collection of private water tests. Personnel in the shipping and receiving department were trained on how to use the form and request the payment. The "pre-payments" have been tracked weekly since 1/9/2017.

9. Did the health department gain information and/or understanding in the course of implementing the QI project that led the health department to make changes in this project or in other QI work? (Word limit: 500)

1. A form/information sheet was created to send to callers who do not want to provide credit card information over the phone. The order form can be returned with a check or sometimes credit card information that would not be given over the phone.
2. More clients are directed to the website if they would like to order tests via the website and pay by credit card there.
3. It is no longer necessary to send out letters informing private water clients that their tests are complete and that payment must be received before the results are sent, which has reduced administration time.
4. When the sample is received there is less record-keeping than before because payments no longer accompany the samples and do not have to be entered onto the chain of custody. This also reduces in administration time.
5. During the "Check" cycle, it was found that some pre-payments were missed. Sometimes a caller was transferred to an analyst if they had questions about which kit to order. Not all analysts were aware of the change to up-front payment, so early on, some kits were sent without pre-payment. Training was adjusted and offered to more analysts, and that eliminated this problem.

10. What are the outcomes of the QI project (including progress towards the measurable goals that were set)? Please provide specific data. (Word limit: 500)
The cost of unreturned test kits no longer has to be absorbed by HETL. While administrative efforts have had to increase to manage up front collections (pre-payment), post-testing notification to the client to request payment is no longer necessary for private water tests. As of 6/9/2017, 1,204 private water test kits have been distributed and $54,674 in test pre-payment has been collected. Average collection per kit was $45.40 in 2017 (including test cost). As of 7/14/17, 618 pre-paid kits have not been returned, which is on pace with previous years, although we do not know how many of these will still be sent in for testing. This is an estimated (year-to-date) gain of $28,057, which would have otherwise resulted in a minimum estimated loss of $7,230. Pre-payment not only eliminates the cost to the lab of distributing unused private water test kits, but it may also decrease the amount of unreturned test kits, and may improve the rate of completed tests.
11. Does the health department plan to do additional work related to this QI project next year? This could include standardizing the initiative or replicating it to other units, service lines, or organizations. *(If yes, please describe below. If no, please leave the next box blank.)* **(Word limit: 500)**
Yes, HETL intends to continue tracking pre-payment rate and plans to explore other opportunities for up-front payment of tests. HETL also plans to explore opportunities to improve the collection process and is currently reviewing "Pay Maine" for electronic collections.
12. To which PHAB measure(s) does this QI project apply?
11.2, 2.3

Continuing Processes

13. Describe how the health department has updated and/or expanded the community health assessment over the past year. Include information about the process as well as the resultant changes. (Word limit: 500)

In 2016, Maine CDC, in partnership with four major health systems in Maine (Central Maine Healthcare, Eastern Maine Health System, MaineGeneral, and MaineHealth) released the Maine Shared Community Health Needs Assessment (Shared CHNA). This updated and replaced our 2012 State Health Assessment, and included reports for each of our eight geographic public health districts and each of our sixteen counties, as well as a state-level report. Analyses included stratification on a number of demographic and socio-economic variables. Sortable and filterable data tables were posted on the Maine CDC website.

Over the past year, a further assessment of the availability of data for populations with disparate health outcomes was completed, with several recommendations from that report implemented, including the inclusion of transgender questions on the Maine Behavioral Health Risk Factors Survey and the Maine Integrated Youth Health Surveys. A report on Social Determinants of Health has been drafted and will be finalized this summer. This report will include data summaries for a number of populations with disparate health outcomes, building on the indicators included in the Shared CHNA.

The Shared CHNA partnership has begun planning for the 2019 Shared CHNA. Indicators are being reviewed, as well as possible options for improvements to our community engagement process.

14. Describe how the health department has implemented and/or revised the community health improvement plan over the past year. Include information about the process as well as the resultant changes. (Word limit: 500)

A revised implementation plan for the final year of the 2013-2017 State Health Improvement Plan (SHIP) was developed in the summer of 2016 (for the state fiscal year July 2016 – June 2017). The workgroups contributing to this plan are reporting on a quarterly basis, and the final report on this SHIP will be finalized by October 2017.

Based on the 2016 Shared CHNA, each of the nine Public Health Districts have developed a District Public Health Improvement Plan (DPHIP), and began implementation in January 2017. These District plans are being incorporated into the next SHIP. The State Coordinating Council for Public Health selected state-level priorities for the 2017-2020 SHIP. - Objectives and strategies are still draft at this time.

15. If the health department has observed improvements in any of the health status measures in the community health improvement plan, please provide examples here. (Word limit: 500)

Maine CDC has seen improvements in several health status measures related to its current State Health Improvement Plan:

- Childhood vaccinations increased from 75% (2014) to 76.7% (2017).
- Adolescent vaccinations increased from 55% (2004) to 69.4% (2017).
- Pneumococcal Vaccinations for adults ages 65 and older increased from 70.7% (2012) to 77.5% (2015).
- The percentage of adults who had their diabetes under control increased from 36% (2016) to 41% (2017).
- Daily sugar-sweetened beverage consumption decreased from 26.2% (2013) to 23.1% (2015, high school) and 23.4% (2013) to 20.2% (2015, middle school).
- Misuse of prescription drugs decreased from 7.1% (2011) to 4.8% (2015, high school) and from 36.6% (2011) to 25.4% (2015, middle school). There was no improvement in self-reported adult rates of prescription drug misuse.
- Exposure to secondhand smoke decreased from 10.6% (2012) to 9.9% (2015, adults, non-significant change), 43.4% (2011) to 34.4% (2015, high school) and from 3.2% (2011) to 2.2% (2015, middle school).
- Thirty-day (should this be “30-day”) youth cigarette use decreased from 15.5% (2011) to 10.7% (2015, high school) and from 4.2% (2011) to 2.7% (2015, middle school).
- 1,535 people with pre-diabetes or at high risk for developing Type 2 diabetes, completed the National Diabetes Prevention Program (NDPP).
- 5,233 people with diabetes received formal diabetes training, known as Diabetes Self-Management.

Training (DSMT).

16. Describe how the health department has implemented the strategic plan over the past year. (Word limit: 500)

Maine CDC made progress on all four of its current strategic priorities in the past year. Some examples of progress include:

- **Data:** Implementation of a chronic disease dashboard using data from the state's health information exchange, showing key indicators, such as the percentage of adults who had their diabetes under control and the percentage of adults with hypertension who had their blood pressure under control (increased from 32% to 47% in first year); completed expansion of ALMS system to track licensing for behavioral health and substance abuse treatment facilities, and launched the public query for behavioral health licenses (Substance Abuse and Mental Health) which includes service level detail. (https://www.pfr.maine.gov/ALMSOnline/ALMSQuery/SearchCompany.aspx); made public water system compliance sample results available on-line. The data for these on-line reports are updated on a weekly basis. (http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/pws/onlineSamples.shtml)
- **Partnerships:** Re-focused on the activities of the State Coordinating Council for Public Health on the Preventive Health and Health Services Block Grant, and the State Health Improvement Plan, implemented contracts for District Coordinating Council supports and implementation of District Public Health Improvement Plans.
- **Laws & regulations:** Promulgated new lead investigation rules to require inspections for new US CDC standards and hired staff to increase capacity to meet new rule requirements; launched an on-line tool enabling property owners or potential buyers access to septic system permits (which includes the system design) from 2004 to the present: https://www1.maine.gov/cgi-bin/online/mecdc/septicplans/index.pl.
- **Efficiency:** Established core business hours to address staffing coverage issues; implementedg electronic document archival for savings in space and time required to retrieve historical records; obtained hiring freeze exemptions and filled 73 critical vacancies to ensure adequate staffing.

17. Sharing Your Work - Please indicate how the health department has provided support to other health departments or shared its experiences with others outside of the department, related to quality improvement, performance management, or accreditation.
(Select all that apply. Place an X in the column to the left of the activity.)

	Submitted an example to PHQIX		**Gave a presentation at a meeting**
x	**Provided one-time consultation to staff at another health department**		**Provided ongoing assistance to staff at another health department**
	Published an article in a journal		**None**
	Submitted an example to NACCHO's Toolbox		

18. If the health department provided support or shared its experience with other health departments in a way not listed in question 17 above, please list it below.

Maine CDC staff participate in both national and New England based workgroups and networking opportunities. For example, Performance Improvement Coordinators and Accreditation Coordinators from the six New England states meet monthly via conference call to shared experiences and ideas for improvements to processes and problem-solving. Maine CDC participates in networks and workgroups established by ASTHO, including the Public Health Performance Improvement Network, the Accreditation Coordinators Learning Collaborative, and Eastern Border Health Initiative (currently infectious disease and emergency preparedness focused).

19. Please describe one of the activities above (questions 17-18) of which the health department is most proud. (Word limit: 500)

Maine CDC's Manager for Performance Improvement and Accreditation participated in ASTHO's workgroup to develop an issue brief on health equity and accreditation. By providing Maine's experience and perspective, the needs to address health equity in a smaller, rural state will be better represented in this resource.

Emerging Public Health Issues and Innovations			
20. Has the health department conducted work in any of the following areas? *(Select all that apply. Place an X in the column to the left of the issue.)*			
x	**Informatics**	x	**Emergency preparedness**
x	**Health equity**	x	**Workforce**
x	**Communication science**	x	**Public health/health care integration**
x	**Costing Services/ Chart of Accounts**	x	**Public health ethics**
x	**Climate change**		

21. If the health department is engaged in addressing another emerging area or developing another innovation (not included in question 20), please describe it below.
Substance exposed infants, recreational and medical marijuana, and transition to long-term care.
22. If the health department is engaged in work in an emerging area, please tell the story of the health department's work in one area. (Word limit: 500)
Through Maine's State Innovation Model (SIM) grant from the Centers for Medicaid and Medicare Services, Maine CDC was a partner in bringing population health to health care transformation in Maine. The Innovation Center, described below in #23, is continuing this work with a predictive analytics pilot that focuses on patients at risk for hospitalization or re-hospitalization because of hypertension, diabetes and other high risk chronic conditions. Maine CDC has partnered with one hospital system, St. Joseph's in Bangor, the state-wide health information exchange (HIE) and MaineCare to use HIE data to identify patients whose social determinants of health increase their risk of preventable hospitalizations. A registered nurse at the HIE has developed protocols for outreach to patients who have been identified to connect them, not only to preventive health services, but also to community services that assist with other identified needs such as housing, social connections, and reliable transportation. This outreach and referrals to existing assistance are proving to assist patients in better chronic health condition management. - The next steps are to expand this model to other communities and health systems.
23. Please describe the health department's approach to pursuing innovation. (Word limit: 500)
As part of the SIM grant, Maine CDC was a key partner in pursuing the triple AIM through strong public health and health care integration. Specifically, Maine CDC played strong roles in the development of protocols to support Community Health Workers in a rural state, using predictive analytics by leveraging data from the Statewide Health Information Exchange, and strengthening management of chronic disease. As that funding ended, the Department developed an Innovation Center housed in the Commissioner's Office to continue health care transformation by testing new ideas with staff who are not burdened with other day to day job requirements. When an idea is tested and found to be worthwhile, it is then rolled out to the relevant DHHS Office. This Center will be governed by SIM leadership in the Office of MaineCare Services, Maine CDC and the Commissioner's Office.

Overall Improvements
24. Aside from what has previously been reported in this report, has the health department made any improvements that have had a significant impact on the health department or the community it serves in the past year? (OPTIONAL, Word limit: 500) *What has been the impact on the health department and/or the community? How was that impact measured? Please provide specific data, if available, to demonstrate measurable impact.*