Application of Information Sharing (IS) Performance Measures into Practice
A CDC Public Health Emergency Preparedness (PHEP) Cooperative Agreement Case Study

Purpose
This case study provides PHEP awardees with examples that will allow them to apply performance measures (PM) guidance to their jurisdictions. The case study is intended to provide examples of how the performance measures can be implemented; awardees are encouraged to review the aspects that may apply to them while ensuring that the measures apply to the particulars of their own jurisdictions.

PHEP 6.1
Share Epidemiological/Clinical Data (Awardee)
The awardee health department can share basic epidemiological and/or clinical data with relevant healthcare organizations (HCOs) [Yes/No]

PHEP 6.2
Share Epidemiological/Clinical Data (LHD)
Proportion of PHEP-funded LHDs that can share basic epidemiological and/or clinical data with relevant healthcare organizations (HCOs)

HPP-PHEP 6.1
Information Sharing
Percent of local partners that reported requested Essential Elements of Information (EEI) to the health/medical lead within the requested timeframe

Example 1 – A Centralized State with Regional Health Districts

State Awardee X is comprised of a central office and eight health districts, each of which has its own office staffed with state employees. District office staff have connections with local response entities, including hospitals, long-term care facilities, and others. Each district office is linked to the central office and to state and local partners via a number of Information Technology (IT) systems, including the state surveillance system, the Health Alert Network, and various other communication channels. Both Awardee X and its district health officials have responsibilities related to the PHEP Information Sharing ("IS" or PHEP Capability 6 capability).

Awardee X is aware that during the 2009 H1N1 influenza pandemic, communication between health departments and healthcare organizations (HCOs) was disjointed. Some hospitals, private providers and community clinics routinely received and acted upon epidemiological and clinical information sent to them by the health department, while others did not. There were challenges with HCOs receiving information or receiving it much later than intended. Based on these challenges and additional assessment work identified through the Capabilities Planning Guide (CPG), Awardee X has decided to incorporate IS into its work plan for funding and building of the capability. Based on the IS capability and associated performance measures for it, the awardee's goals in building IS capability will be identifying points of contact, identifying optimal data sharing mechanisms, and identifying the types of pertinent information that HCOs will need to receive in order to make informed decisions regarding treatment and allocation of resources during a public health emergency. Both PHEP 6.1 and 6.2 are applicable here since both the awardee (state) health department and local (district) health departments have IS capabilities and responsibilities. Although Awardee X has a centralized governance structure, the district health offices are counted as "LHDs" for the purposes of performance measures data collection.

Awardee X has allocated about 10% of its PHEP award to Information Sharing in the Capabilities Plan. Awardee X will be providing all 8 of its district health offices PHEP funds and support to build IS capability. Once the budget

period is underway, Awardee X facilitates a collaborative planning meeting and invites the designated emergency preparedness/response representative(s) from the 8 district health offices as well as the relevant central office staff to attend. Awardee X decides to incorporate pandemic influenza planning into the building of the IS capability because this has been deemed a priority by elected officials in the state as well as the awardee health department itself.

During the planning meeting, Awardee X encourages the group to review their H1N1 after-action reports as well as other relevant documents. The purpose of the review is to identify the HCOs with which district offices communicated effectively during the 2009 H1N1 pandemic as well as the type of communication strategies employed. The group is then asked to identify the HCOs with whom it was more challenging to communicate as well as factors that hindered communication. The group determines that communicating with HCOs was especially challenging when points of contact were not identified. Without pre-identified, specific points of contact it was difficult – and in some cases, impossible – for health department staff to determine whether information had been received or acted upon. Therefore, during this budget period Awardee X plans to identify, in coordination with its district health offices, a standard position/point of contact (e.g., the designated emergency preparedness/response coordinator or an infection control nurse) at each relevant HCO. Through coordination with the jurisdiction's Hospital Preparedness Program (HPP), Awardee X provides a list of all hospitals, long-term care facilities, and community health centers to the district health office representatives to begin the process of identifying points of contact.

Next, Awardee X facilitates a discussion concerning which processes for communicating information to HCOs the district health departments can utilize as well as methods for identifying the needed information. For several years, the health department has been using the Health Alert Network (HAN) to communicate urgent messages to the provider community. Although Awardee X is generally supportive of its use, it also realizes that historically it has not been able to determine the extent to which messages issued through the HAN are actually received. In building Function 3 (especially Task 5 and Priority Resource Element 1) of the IS capability, the awardee decides to improve this aspect of HAN use. In addition, because the HAN only reaches a subset of HCOs with which the central office and district offices would need to communicate in a pandemic, the health department decides it will also co-facilitate a regularly scheduled call with its jurisdictional HPP Program partners to address this gap in communication. District staff are asked to facilitate these calls in each district.

In one of the local (district) health departments that provides services to a large urban city, there is interest in sending epidemiological data into a secure portal maintained by an operational regional healthcare coalition. The coalition uses this portal on a daily basis to share data for situational awareness with hospitals, long-term care facilities, community health clinics and others. Awardee X encourages district offices to communicate with local partners to identify when and/or under what circumstances it will need to update and send information to HCOs. Finally, to address the minimum set of data elements needed to be shared with HCOs, Awardee X encourages the group to reach out to the designated points of contact at the relevant HCOs and discuss which data it will be able to provide, when, and it what format.

To collect and report performance measure data, Awardee X distributes Excel-based tools, developed by CDC and designed for use by local health departments, to the eight district offices. These tools are utilized to assist data collection for PHEP 6.2. District office staff enter their performance measure data into the tools and send them back to Awardee X by the due date provided to them by Awardee. In this case, Awardee X has communicated a due date to the LHDs that allows 30 days for Awardee X to aggregate the data for PHEP 6.2 and enter it into PERFORMS in time to meet the CDC reporting deadline. To collect data on PHEP 6.1, Awardee X completes a Word reporting template, also provided by CDC. Finally, State Awardee X copies/pastes the data into PERFORMS.

For BP1 Awardee X can only report 2 out of 4 required criteria "checked" for PHEP 6.1 (see four bulleted items under "How is the measure calculated?" on page 60 of the BP1 performance measures guidance, version 1.1). Awardee X will therefore focus on building the other two required criteria in BP2. Similarly, only 1 out of 8 health districts (i.e., LHDs) has all four of the required criteria for meeting PHEP PM 6.2 in place (see four bulleted items under "How is the measure calculated?" on page 62 of the guidance). Therefore, Awardee X will report 1 LHD in the numerator and 8 LHDs in the denominator. Awardee X now has a baseline for the entire project period. Awardee X's goal, by the end of BP 5, is for all eight health districts to meet all of the required criteria to be placed in the numerator (i.e., numerator = 8 and denominator = 8). The IS performance measures allow Awardee X to track which of the required elements each health district needs to meet before it can be counted towards the numerator of PHEP 6.2. Awardee X will also have visibility on the barriers district offices are experiencing in meeting these requirements, since each health district will report this information as well.

Example 2 – Centralized state without LHDs (also applies to directly-funded localities, territories and freely associated states)

Awardee Z is composed of one central health department office. Awardee Z has no LHDs, including regional, district or municipal health departments. Awardee Z's central health department provides all health department services to the entire jurisdiction. Awardee Z's PHEP director is also the HPP director. Awardee Z has good connections with local response entities including hospitals, long-term care facilities, and emergency response agencies.

Currently, Awardee Z works closely with a neighboring state, which also allocates PHEP funds to the information sharing capability. Based on their JRAs, each state plans for several types of incidents, including an influenza pandemic, a hurricane, and flooding. The two states identify their respective HCOs and points of contact. Because of how their incident management systems are set up, each state utilizes substantially different sets of data elements and platforms/processes for sharing information. Awardee Z is a much smaller state and more of their services are housed in central locations, therefore its minimum set of data elements contains fewer elements than its neighboring state. This variability between jurisdictions is expected.

Over the past 3 years, Awardee Z has dedicated PHEP funds to building its IS capability. Awardee Z decides that it does not need to *build* IS capability, but it does need to dedicate PHEP funds to the capability in order to *sustain* current abilities. For that reason, Awardee Z will report on PHEP PM 6.1. Since Awardee Z does not have any local or district health offices with IS-related functions, it does not have to report on PHEP PM 6.2. When reviewing PHEP PM 6.1, Awardee Z realizes that it already has all four of the needed elements in place required to meet the performance measure. Therefore, Awardee Z is able to "check" each of the four boxes of required elements as met when reporting on PHEP PM 6.1 in PERFORMS.

Joint HPP-PHEP Performance Measure

Awardee X often experiences some type of major natural weather-related event, usually related to hurricanes (or tropical storms) and related flooding. In recent years, this jurisdiction has also experienced a significant uptick in power outages during the summer as hotter weather taxed the power grid in this region of the country. Because of this, the awardee has ample opportunity to apply the joint HPP-PHEP performance measure, which assesses the proportion of local partners that report requested Essential Elements of Information (EEI) within the requested timeframe, when such an incident occurs. The awardee coordinates with emergency management, sub-state regional entities (in this case, district health offices), and local HCOs themselves, to ensure that a POC has been identified for each HCO, major entities are equipped to receive HAN messages (and have redundant communications systems), and that a minimal, pre-identified set of data are able to be communicated should the request come from the health/medical lead in this jurisdiction (in this case, the ESF #8 desk in the EOC). When an anticipated tropical storm grazes the state, the state calls to request evacuation and

generator status for each of 10 HCOs in the affected areas of the state. It asks for a response within four hours. Eight of the 10 HCOs provide all requested information within four hours. Two of the 10 HCOs provide either evacuation or generator status, but not both. At the conclusion of this incident, the state puts together the required data for the joint performance measure. It records 8 in the numerator and 10 in the denominator. Because the criteria for inclusion in the numerator includes reporting *all* requested EEI (i.e., both evacuation *and* generator status), the state is not able to record 10 in the numerator. In conducting an after-action review of the incident, the state realizes that the two HCOs that did not communicate all requested EEI were: (a) both the same type of facility (e.g., long-term care); and (b) were located in one health district. The state, in concert with the affected health district, therefore create an improvement plan to work with long-term care facilities to ensure that each one has proper equipment and training related to emergency response, including knowledge of correct protocols and procedures to determine evacuation and generator status as well as the ability to communicate with emergency management personnel as needed.