

Application of Non-pharmaceutical Interventions (NPI) Performance Measures into Practice

A CDC Public Health Emergency Preparedness Cooperative Agreement Case Study

Purpose

This case study provides Public Health Emergency Preparedness (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 11.1: Determine Role with Partners (Awardee)

The awardee health department has collaborated with legal, scientific and community partners to determine roles and responsibilities for the development and implementation of NPI recommendations [Yes/No]

PHEP 11.2: Determine Role with Partners (Local Health Departments)

Proportion of PHEP-funded local health departments (LHDs) that have collaborated with legal, scientific and community partners to determine roles and responsibilities for the development and implementation of NPI recommendations

PHEP 11.3: Develop NPI Recommendations with Partners

Proportion of key partners identified to have an incident-specific role that participated in the development or implementation of NPI during an incident

PHEP Non-pharmaceutical Intervention (NPI) Performance Measure Case Study

PHEP Example 1 – A centralized state with regional/district public health offices and one municipal health department in a large city

Awardee X is a medium sized state with several state-run district/regional public health offices and a large, independent municipal health department. Public health services are provided by a mix of the central public health state office, district offices and the municipal health department (for residents of that city). Awardee X has a programmatic goal to build its NPI capability (Capability 11) during Budget Period 1 (BP1) and will allocate PHEP funds to help achieve this goal. Based on its governance structure and functional operations, pre-incident planning activity will occur at both the state and local (district) level. Awardee X will also contract with the large municipal health department to conduct NPI preparedness activities. The awardee will therefore report on both pre-incident planning measures for NPI, PHEP 11.1 and 11.2.

Awardee X's PHEP director reviews PHEP 11.1 and learns that to answer "YES" in meeting the PM, the health department must have addressed the following 11 elements (see "How is the measure calculated?" on page 84 of the PM guidance, version 1.1):

- Legal: Identification of legal authorities for NPI implementation (hazard-specific)
- Legal: Identification of legal barriers to NPI implementation
- Legal: Identification of authorities able to alter legal statutes as needed
- Scientific: Identification of SMEs needed to assess the severity of exposure and/or transmission
- Scientific: Identification of triggers for needing an NPI
- Scientific: Development of NPI recommendations prior to incidents
- Scientific: Agreement to participate in NPI recommendation development/adjustment at the time of an incident
- Community: Identification of community organizations needed for NPI implementation (hazard-specific)
- Community: Contact information for two representatives from each community organization
- Community: Development of Letters of Agreement, MOUs, or jointly developed operational plans
- Community: Identification of secondary factors (e.g., those based on intended and unintended consequences) that affect NPI implementation

The PHEP director schedules a meeting with staff from around the state, including the state health officer, a designee for the state superintendent of schools, a senior epidemiologist with expertise related to pandemic influenza, an expert on radiation exposure from the state university, legal staff from the governor's office and the health department, law enforcement, the state department of

transportation, emergency management and key local level staff. During the meeting, they review various facets of NPI, including a brief introduction of what it is and the contexts in which it may be needed. They also discuss historical experience in the state developing NPI recommendations, most recently (on a large scale) during the 2009 H1N1 pandemic response. The PHEP director highlights key passages from a state-level after-action report developed following 2009 H1N1, which noted challenges in developing and issuing NPI recommendations in the early phases of that incident as well as confusion and pushback by local partners, including schools, adult and child day care centers, and businesses, in implementing the recommendations. Several corrective actions that came out of the 2009 H1N1 response activities include (1) establishing roles and responsibilities related to NPI recommendations and implementation, (2) conducting foundational pre-incident planning with new and existing partners, and (3) solidifying clear lines of communication with pre-established partners.

At this meeting, it becomes clear that the only elements for PHEP 11.1 currently in place are existing “off-the-shelf” NPI recommendations for pandemic influenza and jointly developed operations plans between the state’s health department and the state’s Department of Education. The participants at this meeting agree to complete several action items during the budget period, including addressing all remaining legal, scientific and community items as described in the measure.

Q1. How many of the initial 11 elements of PHEP 11.1 are in place at the beginning of the budget period?

A. Two: **Scientific** - Development of NPI recommendations prior to incidents; and **Community** - Development of Letters of Agreement, MOUs, or jointly developed operational plans

Q2. Does awardee X have to complete all remaining (i.e., not-yet-completed) elements in this budget period?

A. **No.** It may choose to focus on any it wishes. For example, the awardee could choose to focus on the “legal” elements in BP1, “scientific” in BP2 and “community” in BP3. Please note, the awardee will not receive a “Yes” for PHEP 11.1 until it successfully completes all 11 elements.

Q3. Does it matter whether local health departments (LHDs) are units of state or local government for the purposes of reporting on PHEP 11.2?

A. **No.** PHEP-funded LHDs funded or supported to do NPIs must submit data to the awardee so the awardee can submit PHEP 11.2 to CDC. In BP1 only, *all* PHEP-funded or supported LHDs (irrespective of whether those funds/support are going to NPI) must submit data as part of PHEP 11.2

PHEP Example 2 – Decentralized state with a large number of towns and counties

State awardee Y is comprised of a very large number of small, autonomous local governing bodies (townships, counties, etc.). Although there are autonomous local health departments and boards of health in each town or county, the state has organized much PHEP-related public health activity by region. Responsibility for NPI activity, especially during a public health emergency, lies largely at the regional level. In the absence of an emergency, the only NPI work that actually goes on include basic messaging (hand washing, cover your cough, etc.) during flu season and communication to food handlers following outbreaks.

After reviewing its strategic plan, the previous year's jurisdictional risk assessment (JRA) and its most recent Capabilities Planning Guide (CPG) data, awardee Y decides to build its NPI capability this budget period. It allocates a portion of its PHEP award to NPI by contracting with its eight regional health departments to do work in this area. Regional health departments utilize PHEP funding to support either current staff or contractors to carry out basic NPI planning activities that correspond with the 11 NPI elements (see pages 86 and 87 of the PHEP BP1 PM Guidance and Specifications document, version 1.1). One of the contract deliverables for each of these health departments is completion of all 11 NPI elements (legal, scientific and community) found in PHEP 11.2. These contract deliverables are due to the state by each regional health department at the end of the project period. Extent of completion of these elements will be used to calculate PHEP 11.2.

The state PHEP director convenes staff from the eight regional health departments to discuss the specifics of the NPI-related planning work that should be carried out during the budget period. A few of the regions decide to collaborate on several of the NPI PM elements common to all of them, including: examining legal statutes and issues and convening scientific experts to determine appropriate NPI strategies. This will save time and money, and reduce the risk of duplication of effort (across the regions) in achieving all the elements of the performance measure. To monitor progress within the budget period, the PHEP director indicates she will send out an e-mail quarterly to all eight regional offices requesting a status on each of the 11 elements. She also offers to work with regions to ensure they have access to state-level resources to resolve any particularly challenging issues, especially related to legal items or access to appropriate scientific expertise. The regional staff discusses various strategies for how they will each address the "community" component of the NPI elements. In particular, they focus on which community partners would be appropriate as part of an effort to develop joint plans and strategies related to NPI. The PHEP director makes the helpful suggestion that several of these community partners may be some of the same key organizations that LHDs and regional offices have been working with already as part of their work related to the community preparedness capability.

The PHEP director also calls attention to PHEP 11.3, which is a response performance measure. She recommends that each regional office become familiar with the measure, because should a public health emergency occur requiring NPI, each of the regions will be responsible for reporting on it. She and the regional staff come up with lists of various SMEs who will be essential in developing recommendations; regional staff will go back to their regions to determine which additional community-level partners should also be part of any response and potential NPI recommendation development.

Q1. By the end of the budget period, two of the eight regional health departments have all 11 elements in place. What is the numerator and denominator for PHEP 11.2?

A. Although there are 100 counties and towns, most of which have their own local board of health or health department, the main operational unit at the local level for NPI is the regional health department. Since there are 8 regional health departments receiving PHEP funds to do NPI work, the denominator is eight and the numerator is two. In BP1 only, *all PHEP-funded LHDs* (at the appropriate operational level, for example, the region in this case), irrespective of whether they are working on NPI pre-incident planning, are required to report on PHEP 11.2

Q2. In this example, primarily responsibility for NPI lies at the local/regional level; therefore, the awardee must report on PHEP 11.2. Must the awardee also report on PHEP 11.1?

A. The awardee only has to report on PHEP 11.1 if it is funding NPI-related work at the awardee-level. There is an exception: In Budget Period 1, all awardees must report on PHEP 11.1 irrespective of funding toward the capability.

Q3. Are the LHDs that report on PHEP 11.2 restricted to the county sample CDC has provided PHEP awardees?

A. No. The county sample is only applicable to the PHEP performance measures associated with the community preparedness, epidemiological investigations, and surveillance capabilities. That sample has no bearing or relationship to any of the new performance measures, including those related to NPI, introduced in Budget Period 1.

Q4. How can the awardee assist the remaining six LHDs (regional health departments) that did not “meet the measure?” How can CDC assist the awardee in helping its LHDs?

A. When collecting for PHEP 11.2, awardees are encouraged to track barriers and challenges at the local or regional level. This information can then be used by the awardee to devise strategies for technical assistance or other forms of help. In this case, the awardee (state) may be able to leverage its resources and access to expertise to assist regional health departments with the “legal” and “scientific” components that are part of the NPI pre-incident planning measures. CDC project officers can use PHEP 11.2 (and 11.1) data to help provide technical assistance or steer awardees to other awardees who appear to have done well in this area.

Q5. Is there an exception to reporting on PHEP 11.1 and 11.2 in BP1?

A. Yes. Even if an awardee is not allocating any PHEP funds to NPI, it must report on PHEP 11.1 and, if applicable to local/regional/district health offices, PHEP 11.2 in Budget Period 1. All PHEP-funded or supported LHDs (or regional/district offices), irrespective of capabilities they are funded to work on, should be included as part of the denominator for PHEP 11.2 in BP1 only. After that, only LHDs funded or supported to do NPI should be included in the denominator.