Flu on Call™: An Innovative Strategy
to Provide Services to Ill People and Reduce Demand
April 2014

Background
The impact of a severe influenza pandemic could be overwhelming to hospital emergency departments, clinics, and medical offices if large numbers of ill people simultaneously seek care. Current planning guidance largely focuses on improving “supply” of medical care services to reduce surge on hospitals and other medical facilities during a pandemic. However, it’s critical that more planning be focused on reducing “demand” for such services by more appropriately matching patient needs with alternative types of care.

Based on lessons from the 2009 H1N1 pandemic, the Centers for Disease Control and Prevention (CDC), in collaboration with the National Association of County and City Health Officials (NACCHO), and the Association of State and Territorial Health Officials (ASTHO), among other partners, launched an effort to explore the acceptability and feasibility of using a coordinated network of triage telephone lines during a pandemic. These lines could assess the health status of callers, help callers determine the most appropriate site for care (e.g., hospital ED, outpatient, home), provide clinical advice, and possibly provide access to antiviral medications for ill people, if appropriate. As part of this effort, the integration and coordination of poison control centers (PCCs), existing nurse advice lines, 2-1-1 information lines, and other hotlines are being investigated. Utilizing a network of triage lines is one of many potential tools that may be useful in reducing medical surge during a severe pandemic.

Learning from Experience: The H1N1 Influenza Pandemic
CDC’s initiative to develop a coordinated network of triage lines was largely inspired by the success of an effort implemented in Minnesota during the 2009 – 2010 H1N1 pandemic influenza response. During that time, public health officials established the statewide Minnesota Flu Line to provide an alternative to face-to-face care. Registered nurses staffed these telephone lines and triaged callers using an established protocol. They provided advice to callers about when and where they needed to seek care, and provided information about how to care for ill people at home. They also provided access to prescriptions for antiviral medications for callers who met certain criteria. The Minnesota Flu Line served the needs of more than 27,000 callers between Oct. 21, 2009, to March 31, 2010 and may have prevented up to 11,000 in-person healthcare visits to EDs, clinics and doctor’s offices during the pandemic.
**Flu on Call™ Project Description**

The Centers for Disease Control and Prevention (CDC) launched the Nurse Triage Line (NTL) Project in September 2011 in collaboration with the Association of State and Territorial Health Officials (ASTHO) and the National Association of County and City Health Officials (NACCHO). In 2013, the NTL project was renamed **Flu on Call™**, supporting a more consumer-friendly identity and reflecting the involvement of a broad array of health-care professionals who would be staffing the triage line. CDC continues to explore the feasibility and acceptability of developing a national call center model to improve access to antiviral medications over the telephone to symptomatic callers, if appropriate. The project is currently focusing on the development and implementation of plans and capabilities with poison centers and call centers identified by the American Association of Poison Control Centers (AAPCC) and United Way Worldwide/2-1-1.

**Essential Partnerships**

CDC convened a core project team of representatives from ASTHO, NACCHO, the Oak Ridge Institute for Science and Education (ORISE), the American Association of Poison Control Centers (AAPCC), United Way Worldwide/2-1-1, the Department of Veteran Affairs, HHS’ Health Resources and Services Administration (HRSA), and Public Health Management Corporation (PHMC). This core project team has worked together to conduct research; convene stakeholder meetings; design, participate in, and evaluate a simulation exercise; present findings at national conferences; and develop an operational plan for **Flu on Call™**. In addition to developing a core project team, CDC has developed many other key partnerships with health plans and professional health care organizations.

**NACCHO & ASTHO Advisory Groups**

To ensure that **Flu on Call™** adequately incorporated state and local perspectives into the design of the model, ASTHO and NACCHO each formed ancillary advisory bodies of their respective state and local membership to provide leadership and guidance. The ASTHO Advisory Committee is made up of state health officials, state epidemiologists, PCC representatives, and other state public health staff. Local health department representatives and a PCC representative serve on the NACCHO Ad Hoc **Flu on Call™** Workgroup, including select representatives from NACCHO’s Infectious Diseases and Ad Hoc Antiviral Dispensing Project Workgroups.

**Project Milestones**

Summarizing lessons learned during the 2009 H1N1 pandemic – ASTHO and NACCHO jointly developed a summary document entitled: *Report on the Role of Flu Information and Triage Lines in Reducing Surge in Healthcare Facilities and Increasing Access to Antiviral Medication during the 2009 H1N1 Pandemic*. This report describes the operations of triage lines that used nurses to triage callers and provide antiviral medications during the 2009 H1N1 influenza pandemic, including public health-affiliated PCCs and other H1N1 flu call lines that provided public information and support. Examples and lessons learned from those experiences are also included which have been instrumental in shaping the **Flu on Call™** effort, and informing operations that could be activated in the event of a severe influenza pandemic. Also included in the report are templates of clinical protocols for use during a future pandemic, information
identifying outstanding policy, legal, medical, and nursing practices, and recommendations for resolving these issues.

**Legal Report** – ASTHO, NACCHO, and CDC partnered with legal experts from the Arizona State University Sandra Day O’Connor College of Law to produce an exploratory report, *National Nurse Triage Line Project: A Review of Legal and Policy Issues*. This report identified general legal and policy issues implicated in a national strategy to establish a network of triage lines, suggests viable solutions based on existing interpretations of law and practice, and offers lessons learned from prior emergencies. Collectively, these issues relate to routine uses of triage lines in non-emergencies and distinct legal and policy concerns arising from efforts to systematically “ramp up” these lines for mass use in major emergencies. The report provides multiple examples of broad federal, state, and local laws, but does not specify jurisdictions’ legal provisions on each of the core issues. Public and private actors may seek to independently assess their particular legal infrastructure consistent with key issues identified in the report.

**National-Level Stakeholders Meeting** – CDC hosted the *Nurse Triage Line Project Stakeholders Meeting* on March 20, 2012 in Atlanta to introduce the concept and begin to explore the feasibility and acceptability of this model with stakeholders. Ninety representatives from federal, state, and local public health agencies, associations of physicians, nurses, health insurers, emergency managers, and pharmacists, and PCCs attended the meeting. Additionally, subject matter experts from triage lines and other community call centers, public health law professionals, and public policy leaders participated in the meeting. An opt-in mobile text messaging service designed to provide antiviral prescription follow-up and promote medication adherence was introduced as a component of *Flu on Call™*.

**Simulation Exercise (SIMEX)** — In winter 2013, NACCHO and ASTHO staff and workgroup members participated in the planning, implementation, and evaluation of the *PCC/2-1-1 SIMEX* in El Paso, Texas. This exercise was part of the ongoing effort to explore the acceptability and feasibility of using a coordinated network of triage telephone lines during a pandemic. As part of this effort, the integration and coordination of poison control centers (PCCs), and 2-1-1 information lines were investigated. NACCHO and ASTHO participated in core team planning calls led by CDC along with key stakeholders from several other organizations. Additionally, two NACCHO staff and two ASTHO staff participated in the site visits to the El Paso Health Department, which houses the 2-1-1 Center, and the West Texas Regional Poison Center in January 2013.

NACCHO staff served as a liaison to all local partners including the local health department/2-1-1, local emergency management, and fire/EMS while ASTHO served in the same role at the state level. The *PCC/2-1-1 SIMEX* was successful because it showed how 2-1-1 Centers and PCCs can operate as a coordinated call center system to manage a surge in callers seeking medical advice or treatment during a severe influenza pandemic. The project team is now using the information gathered from this exercise to develop an operational plan for such a coordinated system. The SIMEX also served as the launching pad for two community stakeholder meetings.
in Seattle, WA, and Portland, ME, that successfully discussed the feasibility of integrating such coordinated networks into specific communities.

Community Stakeholder Meetings: In March and May 2013, NACCHO, ASTHO and CDC convened two community stakeholder meetings, in Seattle, WA, and Portland, ME, respectively. The purpose of these meetings was to conduct facilitated discussions that explore both the feasibility of implementation and impact of a coordinated network of triage lines within different communities. The objectives of these meetings were to: 1) Explain the Flu on Call™ project, its current progress, and possible implementation plans to state and local colleagues and solicit their input; 2) Understand current state and local plans for surge mitigation during a future pandemic; 3) Discuss how implementation of this effort may impact and augment state and local plans; 4) Examine opportunities, as well as barriers and challenges, related to the implementation of Flu on Call™; 5) Understand how best to coordinate a network of triage lines with community stakeholders; and 6) Develop a summary of needed resources, key issues/challenges, and potential solutions that arise during community stakeholder meetings to inform Flu on Call™ implementation plans.

Approximately 40 – 80 key stakeholders attended each meeting to learn about the project and provide their perspective on how it could be implemented in their communities. Representatives from local health departments, state health departments, 2-1-1 centers, poison centers, local nurse triage lines, healthcare coalitions, emergency management services, and other groups participated in the discussions. Much of the meetings focused on how Flu on Call™ could be implemented and integrated into existing surge plans.

Role of State and Local Health Departments
Given the positive feedback from public health officials, including those attending the community stakeholders meetings, the project team will continue to work with state and local stakeholders during the preparedness (i.e. “surge readiness”) phase of the project to understand how they can both support and benefit from Flu on Call™. As part of this phase, state and local health departments may begin updating their pandemic influenza web-based resources so that during an emergency, 2-1-1 centers will be able to easily access and share such localized resources with callers.

It is anticipated that when implemented, the Flu on Call™ system should complement and support existing state and local health department plans and response capabilities during a severe pandemic. Health departments should still continue to follow their existing response plans, and Flu on Call™ could serve as an additional resource where community members can receive timely, accurate information and antiviral medication for treatment, if appropriate. When the system is activated during a severe pandemic, poison centers and 2-1-1 call centers will rely on state and local health departments to provide situational awareness about the impact of the event in their communities and links to key public health guidance and messages. By also developing and distributing timely and accurate information to 2-1-1 centers and poison control centers, state and local health departments will ensure that Flu on Call™ communicates
the most relevant information to the people within each community or jurisdiction during a pandemic.

In order for Flu on Call™ to work seamlessly, many different key organizations must collaborate and communicate. As the project work continues to develop the operational plan, the project team will continue to explore: 1) understanding the needs of special populations; 2) developing appropriate triage tools; and 3) ensuring clinical coordination. While a draft operational framework has been developed to guide this system, the project team continues to work with partners to refine and improve operational plans and procedures.

Conclusion
Flu on Call™ is a national-level initiative that has the potential to positively impact pandemic response in communities. The system builds upon existing state and local planning efforts and will potentially reduce the burden on medical facilities. Through continued collaboration, this project offers local and state health departments the opportunity to enhance their own pandemic influenza planning efforts by leveraging the resources and strengths of partner organizations and systems.

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