THE HEALTH DEPARTMENT'S RESPONSE TO THE H1N1 INFLUENZA PANDEMIC

MASTER OF PUBLIC HEALTH FIELD PLACEMENT ACTION LEARNING PROJECT FINAL REPORT

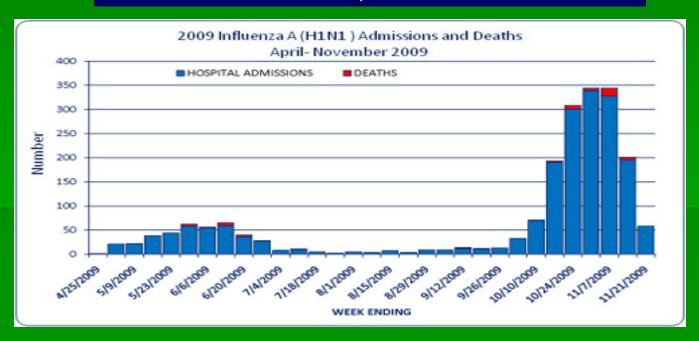
December 3, 2009

INTRODUCTION:

A. The 2009 H1N1 Influenza Pandemic in Illinois

- Illinois continues to have Widespread Influenza Activity
- Since April 2009, 2001 Hospitalizations and 64 Deaths

Illinois H1N1 Influenza Hospital Admissions and Deaths¹



¹Illinois Department of Health. http://www.idph.state.il.us/h1n1_flu/sf_statistics.htm. Accessed on 12/01/09.

INTRODUCTION:

B. The 2009 H1N1 Influenza Pandemic in the county

- County continues to have widespread influenza activity
- Since May 2009, 61 hospitalizations and 5 deaths
- Deaths with underlying chronic conditions, age range of 12-80 years
- Increased school closings and visits to hospital emergency rooms and clinics

Chief Epidemiologist:

"School Absenteeism increased steadily since labor day with students reporting fevers, sore throats and cough."

OBJECTIVES:

- A. Summarize the Health Department's Influenza Pandemic Plan
- B. Summarize Problems Encountered During Implementation of the H1N1 Influenza Program
 - 1. Do a nested process evaluation with one of the solutions to a problem in the H1N1 Influenza Vaccination Program
 - a. Develop a Logic Model
 - c. Develop Logic Evaluation Questions
 - d. Present Results, Conclusions and Recommendations
- C. Summarize Lessons Learned from the Problems Encountered During the Implementation of the H1N1 Influenza Vaccination Program
- D. Discuss Public Health Significance of the Action Learning Report.

METHODS:

- Searched national, state, and the local websites, databases and published literature for influenza pandemic plans.
- Gathered feedback about the health department influenza pandemic plans from county officials.
- Performed nested process evaluation on the health department's communication activities to county clinical providers for H1N1 influenza vaccination pre-registration.
 - Followed and based action steps on the CDC's evaluation framework.
 - Developed a logic model for the plan and process evaluation questions.
 - Gathered feedback by telephone and personal interview from 14 identified clinical practices whose providers refused to participate in the H1N1 influenza vaccination pre-registration process and who ordered less than 50 doses of the H1N1 influenza vaccine.

A. The Health Department's Influenza Pandemic Plan

- Plan gives a detailed framework of preparation and response to an influenza pandemic.
- Goal: Reduce influenza-related illnesses and deaths
 Minimize its socio-economic impact in the county
- Plan very similar to the state of Illinois Pandemic Influenza Preparedness and Response Plan.¹
- Criticisms of Plan:
 - Not available to the public
 - Emphasis towards enhanced surveillance and community mitigation measures, not towards risk communication strategies.

¹http://www.idph.state.il.us/pandemic_flu/H1N1_Pandemic_Flu_Plan_0914 09.pdf.

A. The Health Department's Influenza Pandemic Plan (continuation)

- Adopted state's H1N1 Influenza Mass Media Campaign
- Use traditional media (television, radio, print media including newspapers and fax broadcasts)
- Use social media (facebook, twitter, widgets, etc.)
- Website solely dedicated to H1N1 pandemic











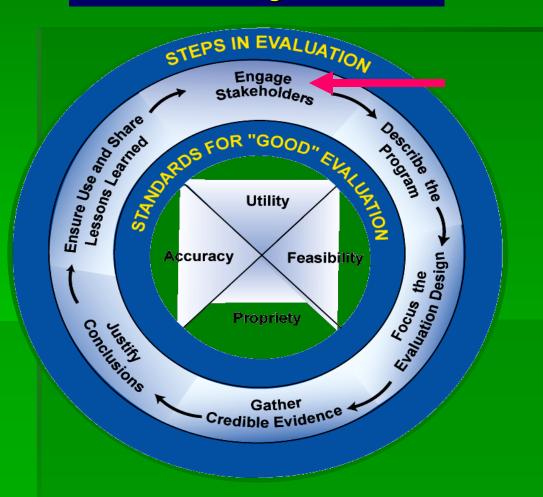
A. The Health Department's Influenza Pandemic Plan (continuation)

Master Stakeholder Communication List for the H1N1 Influenza Pandemic

	STAKEHOLDERS	METHOD OF CONTACT	HEALTH DEPT STAFF RESPONSIBLE TO CONTACT STAKEHOLDERS
GROUP A	Health Department		
	Board of Health, CHC Governing Council, Staff, Illinois Department of Public Health County's State Legislative Delegation	Email, conference calls, direct personal calls, web conference	Health Department's Executive Director, Chief Epidemiologist Chief Policy Analyst
GROUP B	Communicable Disease Prevention, Mitigation and Treatment Guidance		
	Hospitals including VA Center Physician, Dental and Veterinarian Offices Northern Illinois Public Health Centers Consortium	Emails, Fax broadcasts	Nurse Epidemiologist Communication Manager
GROUP C	Potentially At Risk Populations in residential, day treatment, or group settings –clients and staff are at risk of spreading communicable diseases		
	Childcare providers, DCFS Nurse Consultants Schools, Nursing Homes, Jails, Private Businesses, Libraries, Congregations	Fax broadcasts	Emergency Response Coordinator Communications Manager
GROUP D	Public Information		
	Media, Municipalities, Townships, Cities, Villages	Contact Public Information Officer	Communications Manager
GROUP E	Assistance to Emergency Management		
	County Emergency Management Agency Fire, Police, County Clerk, Medical Reserve Corps	Email, personal calls	Emergency Response Coordinator

B. Problems Encountered During Implementation of the H1N1 Vaccination Program

Framework for Program Evaluation



Problem #1:

Insufficient number of health department physicians and nurses to administer the H1N1 Influenza Vaccines to 300,000 high-risk county residents.

Source: Centers for Disease Control and Prevention. Framework for Program Evaluation in Public Health. MMWR1999; 48 (No. RR-11).

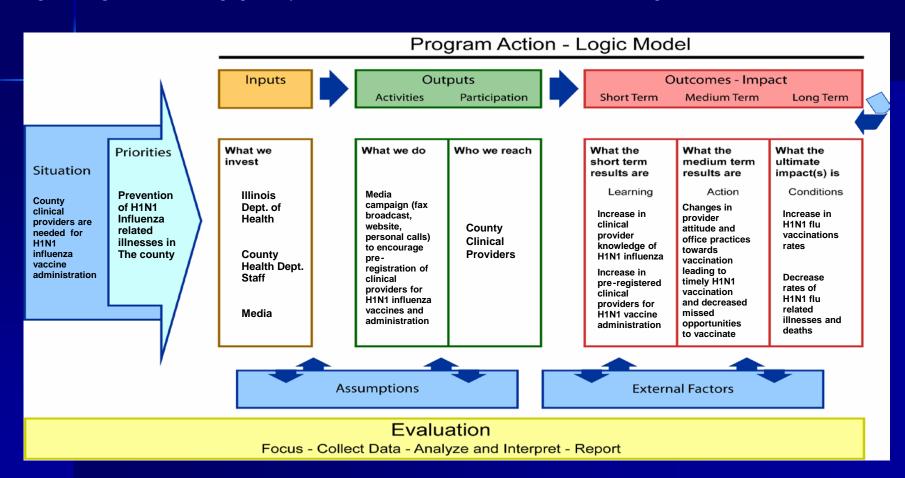
Solution to Problem 1: Recruit County Clinical Providers as H1N1 Vaccine Administrators

- In early August, the Illinois Department of Public Health (IDPH) requested Illinois healthcare providers to pre-register for the H1N1 influenza vaccines.
- The health department informed county clinical providers through
 - Health Department Website
 - Fax Broadcasts
 - Personal Calls

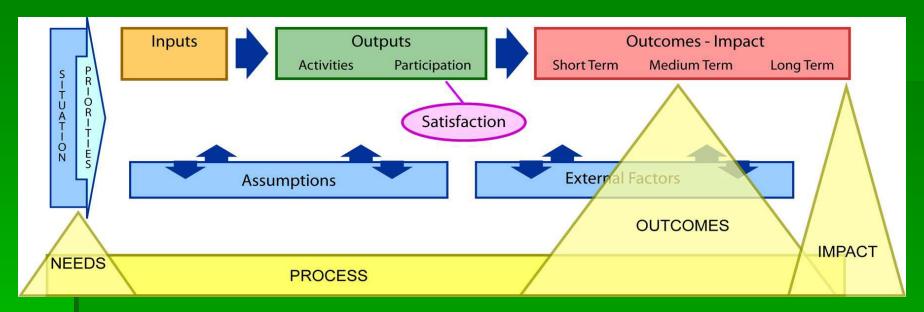


Describe the Program through a Logic Model

Figure 5: Logic Model Encouraging County Clinical Providers for H1N1 Influenza Vaccination Pre-registration



Focus the Evaluation Design



PROCESS EVALUATION QUESTIONS:

Are activities delivered as intended? Are participants being reached as intended?

Sources of Lake County Clinical Providers H1N1 influenza information

What are participant reactions?

- Reasons for non-participation in H1N1 vaccination pre-registration and in ordering < 50
 H1N1 influenza vaccination doses
- Expectations of the LCHD/CHC in dealing with the H1N1 influenza pandemic

Gather Credible Evidence and Justify Conclusions

Process Evaluation Results

- End of August 31, 2009:
 - 295 Clinical practices pre-registered
 - 7 Clinical practices refused to vaccinate
 - 7 Clinical practices ordered less than 50 doses of H1N1 influenza vaccine

Telephone and Personal Interview of the 13 Clinical Providers:*

- All had no clinic H1N1 Influenza Pandemic Plan
- 5/13 gave information to their patients about H1N1 Prevention and Treatment

* One clinical provider refused to be interviewed

Gather Credible Evidence and Justify Conclusions

Reasons for Non-Participation in H1N1 Vaccination Pre-registration (n=6*).

- 1. Do not give vaccinations due to being a subspecialty practice or Hospitalists.
- 2. Most patients do not belong to the high-risk group for H1N1 influenza vaccination
- 3. Lack of information on H1N1 influenza vaccine safety.
- 4. Lack of information on vaccine reimbursement by public and private insurance companies.
- 5. Competition with pharmacies with regards to H1N1 influenza vaccine administration.
- 6. Personal decision.
- * One provider refused to be interviewed

Gather Credible Evidence and Justify Conclusions (continuation)

Reasons for Ordering Less than 50 H1N1 Influenza Vaccine Doses (n=7).

- 1. Do not give vaccinations due to being a subspecialty practice.
- 2. Patients are not in the high-risk group for H1N1 influenza vaccination.
- 3. Will give immunizations to staff members only.
- "Wait and See" attitude because of lack of information on the H1N1 influenza vaccine's safety.
- 5. No time to administer H1N1 influenza vaccine. Time better spent treating patients.
- 6. New Staff members need to learn vaccine administration.
- 7. Do not know how many doses to order.

Gather Credible Evidence and Justify Conclusions (continuation)

Patient Characteristics of an Internist whose Patients do not belong to the High-Risk Group for H1N1 Influenza Vaccination.

•	Age Group:	
	19-24 years	<1%
	25-64 years	19%
	65+ years	80%
	Race/Ethnic Background:	
	White	75%
	African American	20%
	Others	5%
	Type of Insurance	
	Medicare	80%
	Private Insurance	20%

Gather Credible Evidence and Justify Conclusions (continuation)

Patient and Physician Characteristics of an Internist with No Time to Give the H1N1 Influenza Vaccine to Patients.

Age Group:

Most patients are 19-64 years old

Race/Ethnic Background:

Hispanics 80% Others 20%

Type of Insurance

Medicare 5%
Private Insurance 90%
No insurance 5%

Full time and part-time employees in practice:

One full time physician

Four secretaries

Gather Credible Evidence and Justify Conclusions (continuation)

Sources of H1N1 Influenza Prevention and Treatment Information from the 13 Clinical Practices

- 1. Website sources (CDC, Illinois Dept. of Public Health, county health department websites)
- 2. Fax Broadcasts from the county health department
- 3. H1N1 Influenza brochure from a city hospital
- 4. No sources

Gather Credible Evidence and Justify Conclusions (continuation)

The 13 Clinical Practices' Expectations of the Health Department in Dealing with the H1N1 Influenza Pandemic

- 1. More guidance from the health department with regards to H1N1 influenza prevention and treatment.
- 2. Print materials (posters and brochures) for their patients.
- 3. Continue with fax broadcasts.
- 4. Expects the health department to take care of their indigent patients H1N1 influenza vaccinations.
- 5. Nothing is needed from the health department.

Ensure Use and Share Lessons Learned

Conclusions of Process Evaluation:

- Majority of county clinical providers/practices participated in the H1N1
 influenza pre-registration process; those who did not had valid reasons for
 non-participation and in ordering less than 50 doses of H1N1 influenza
 vaccines.
- 2. The health department website and fax broadcasts were major sources of H1N1 influenza information. However, most providers do not give information about H1N1influenza to their patients and do not have an H1N1 influenza pandemic plan.
- 3. These practices expect more guidance from the health department with regards to prevention and treatment of H1N1 influenza.

Presented to Health Department Epidemiology Section on October 5, 2009

Ensure Use and Share Lessons Learned (Continuation)

Recommendations of Process Evaluation:

- Continue to give up-to-date information on H1N1 influenza prevention and treatment to clinical providers.*
- 2. Encourage clinical providers, particularly to those of high-risk groups, to designate specific days for H1N1 influenza immunizations so as to minimize interruption of their clinical care.

Presented to Health Department Epidemiology Section on October 5, 2009

^{*} During the process evaluation, we were able to convince three clinical practices to be H1N1 influenza vaccine administrators to their patients.

Problem 2: Inadequate Number H1N1 Influenza Vaccine Doses Received

Last week of October, the health department received only 12,650 H1N1 influenza vaccine doses out of a requested 100,000 doses.

Consequences during the health department's free Clinic:

- Long Lines
- Long Waits
- Frustrated Citizens
- Cancellation of free clinics after two days.



Picture from a local newspaper, News-Sun Newspaper, (10/30/09): "The line starts here: A dose of frustration for flu shot vaccination."

C. Lessons Learned from Problems Encountered During the Implementation of the H1N1 Influenza Vaccination Program

1. Public health programs "do not go smoothly" as planned.

Health department had to make quick changes by setting up walk-in clinics.

2. The need for an effective communications response during a pandemic.

Properly planned and delivered messages leads to public trust.

3. Importance of public health evaluations.

Improves operations and efficient outcomes.

C. Public health significance of the action learning report

1. I witnessed "Public Health in Action."

The health department's preparation and response to the H1N1 influenza pandemic achieves public health's mission:

"fulfilling society's interest in assuring conditions in which people can be healthy." ¹

Essential public health services were being delivered:
Identifying and investigating H1N1 cases in the county
Informing and educating residents of H1N1 influenza
pandemic
Mobilizing important stakeholders in the county

2. I was part of "Public Health in Action."

Process evaluation is an ongoing public health service of "evaluating effectiveness, accessibility and quality of public health programs." ²

¹Institute of medicine, National Academy of Sciences. The Future of Public Health. Washington, DC: National Academy Press; 1988.

²Public Health Steering Committee. Public Health in America. Washington, DC: U.S. Public Health Service; 1995.

CONCLUSIONS:

This report summarized my learning experience about the health department's planning efforts and response to the H1N1 influenza pandemic through its H1N1 Influenza vaccination program.

It reminded us of the importance of an effective communication response during a pandemic.

Also, it showed us that an effective public health program has to go through regular and comprehensive evaluations.