

Leveraging the Electronic Health Record for Public Health Alerting

**Clinician Outreach and
Communication Activity (COCA)
Conference Call**

Tuesday, June 22, 2010



TODAY'S PRESENTER



Nedra Garrett, MS

Acting Director

Division of Informatics Practice,
Policy & Coordination - CDC



Objectives

At the conclusion of this hour, each participant should be able to:

- Discuss the public health benefits of Electronic Health Record Systems
- Identify the types of information in Electronic Health Record Systems that can be leveraged for alerting
- Describe conditions most suitable for alerting in Electronic Health Record Systems



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CDC, our planners, and our presenter wishes to disclose they have no financial interests or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters. This presentation does not involve the unlabeled use of a product or products under investigational use.

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Leveraging the Electronic Health Record for Public Health Alerting

Clinician Outreach and Communication Activity (**COCA**) Conference Call

Nedra Garrett, MS

Office of Surveillance, Epidemiology & Laboratory Services
(proposed)

Public Health Informatics & Technology Program Office (proposed)

June 22, 2010



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

Agenda

- ❑ Overview of EHR Alerting
- ❑ Example Scenario
- ❑ Key Components of EHR Alerting Solution
- ❑ Public Health Conditions Suitable for Alerting
- ❑ Public Health-Clinical Value Add
- ❑ Next Steps



Health IT as a Source of Public Health Information

- Health IT & the EHR fundamentally change the availability of clinical information for public health
 - Timely access to specific information
 - Electronic availability is a byproduct of standard clinical practice
- Utility of Health IT is dependent upon the availability of that information nationally and globally

Must maintain patient privacy.

Must provide incentives for healthcare to take part.

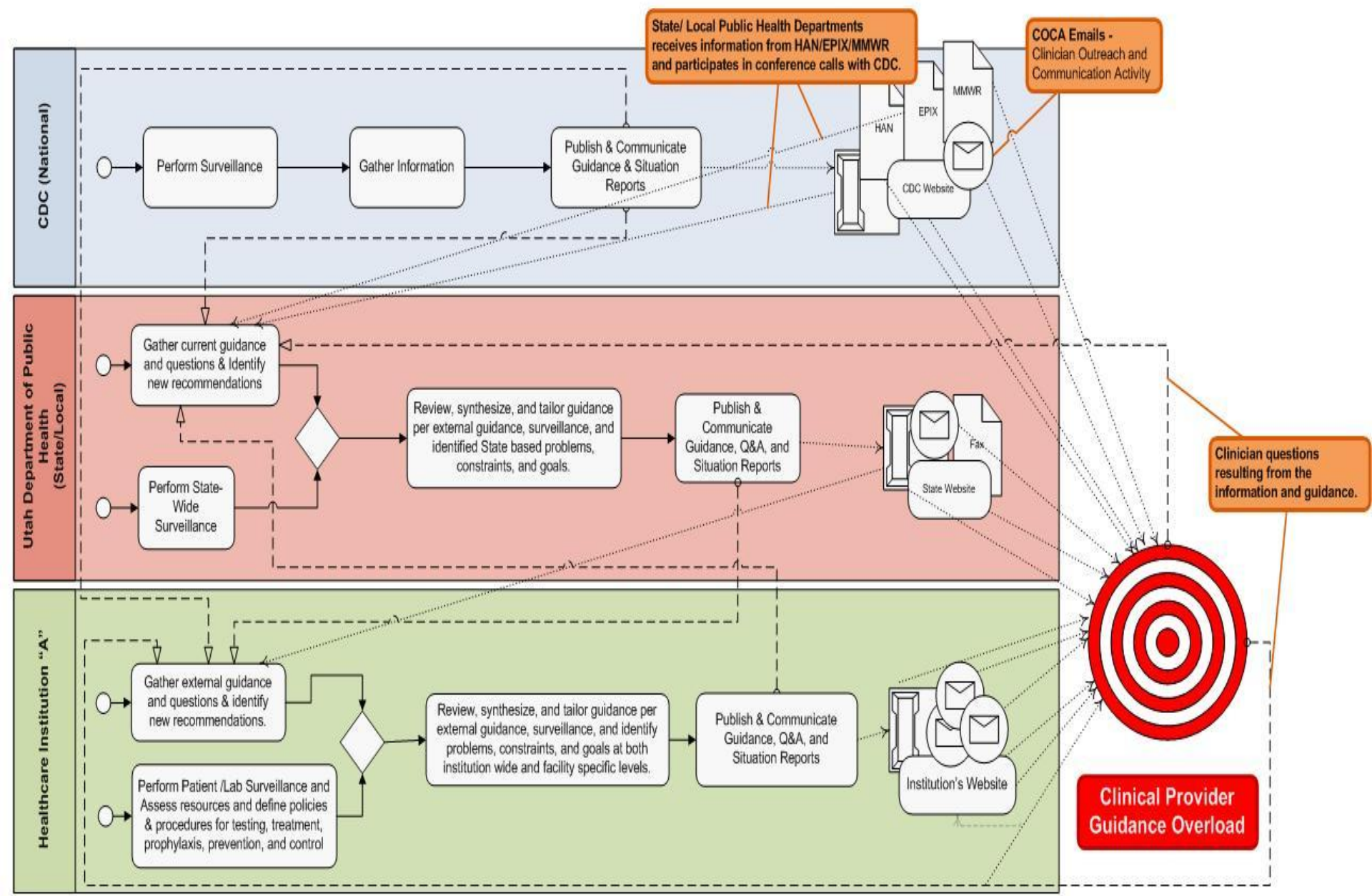


Project Objectives

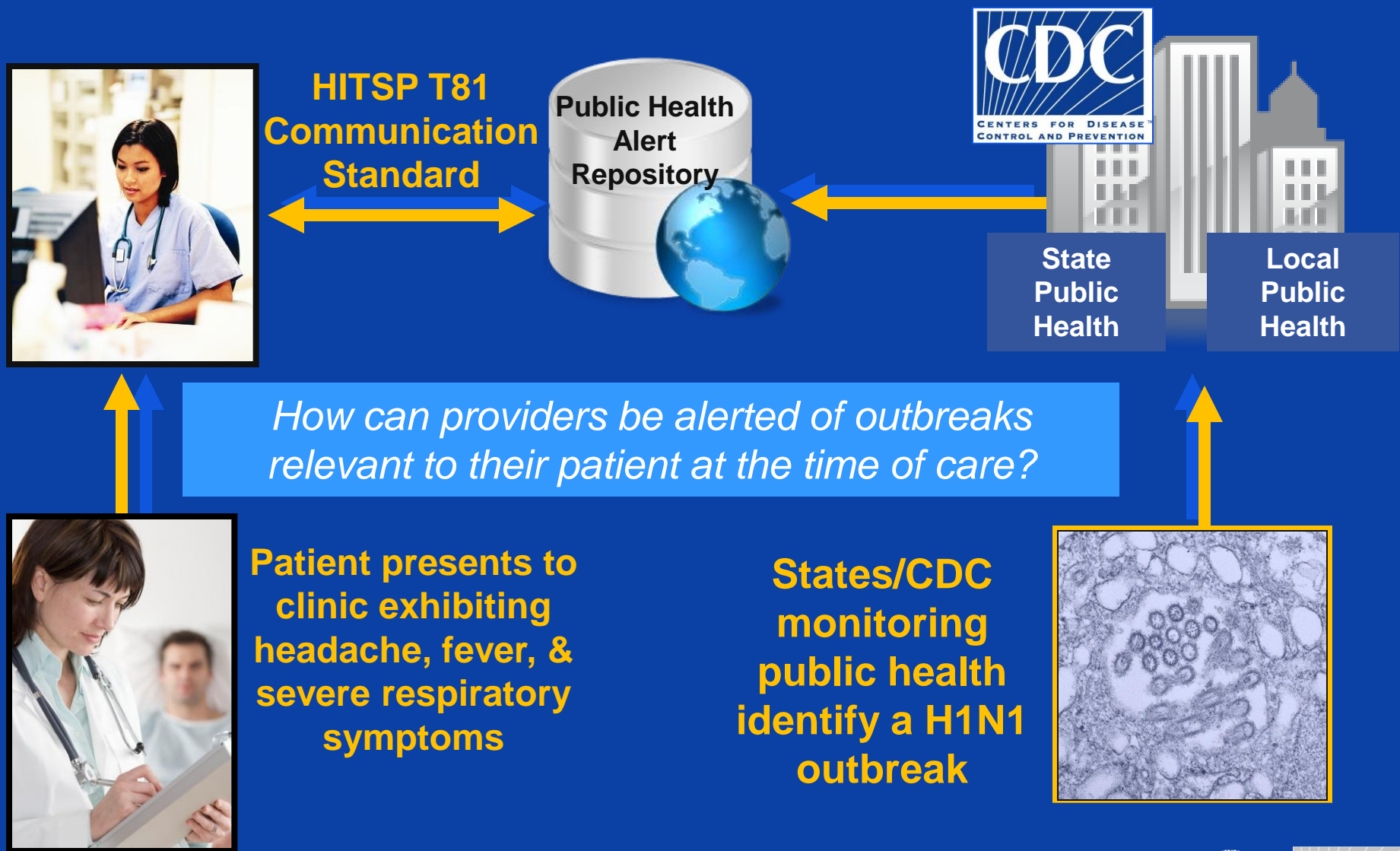
- ✓ To demonstrate the ability of a public health agency to generate an 'actionable' public health alert that can be consumed by an EHR system
- ✓ To demonstrate the effectiveness of a public-private collaborative to advance the practice of public health in the medical setting using non-traditional partners testing the capability in both commercial and open electronic health record systems
- ✓ To determine if EHR data can be leveraged to identify specific patients with risk factors related to the health condition identified in the alert
- ✓ To demonstrate the transmission & integration of public health information into the clinical workflow
- ✓ To evaluate the impact using qualitative approaches on clinicians' behaviors



Alert Guidance from US Public Health Entities to Utah Clinicians During the H1N1 Outbreak



Information Exchange



Public Health Considerations

- ❑ **Dynamic in nature**
 - Urgency
 - Multiple alerts, same problem
 - Changing landscape of problem e.g. new cases, new locations
- ❑ **Scope of information**
 - Population vs. patient specific
- ❑ **Multi-stakeholder response/involvement**
 - CDC, State & Local Health Departments
 - Healthcare Providers
 - Other federal agencies e.g. FDA



Clinical Considerations

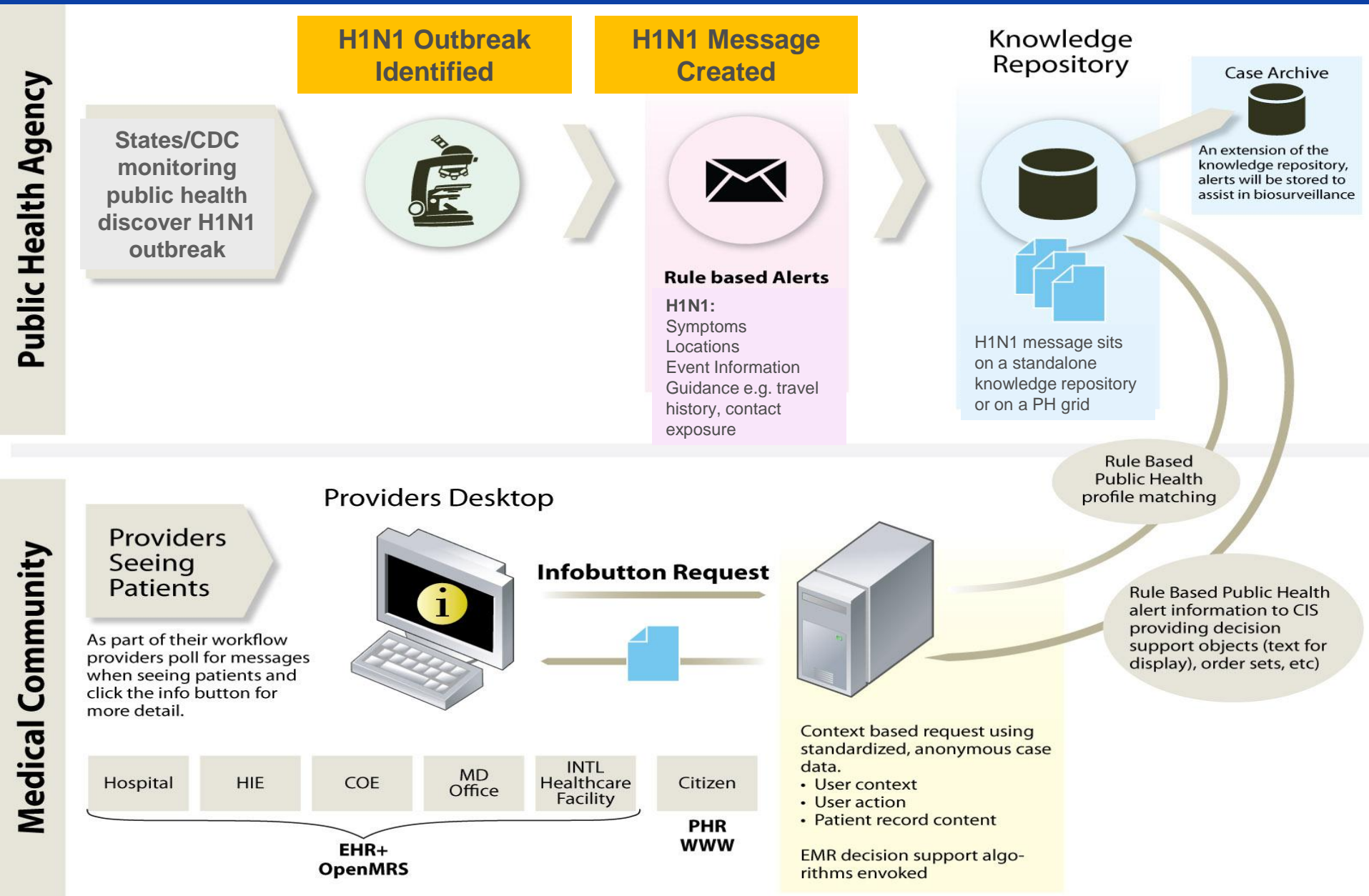
- **Information Needs e.g. H1N1**
 - *Patient Specific Recommendation*
 - *General Recommendation*
 - *Prioritization*
 - *Special populations*
 - *What's New & Different*
- **Presentation of Information**
 - *DSS, Infobutton Manager*
 - *Public Health Importance Indicator?*
 - *Alert Fatigue*



EXAMPLE SCENARIO



Public Health EHR Alerting Flow



“EHR-Friendly” Alert Message

H1N1 Alert Message

Message ID 264803

Event Summary:

CDC, in collaboration with public health officials in Georgia and Florida is investigating cases of febrile respiratory illness caused by swine influenza (H1N1) viruses. As of 1 pm on August 6th, 2009, 5 laboratory confirmed cases of Swine Influenza infection have been confirmed in the United States.

Symptoms

Cough

Fever

Chills

Congestion

Patient Demographics

Age: All

Gender: All

Race: All

Jurisdictions

30369

32628

Recommendations

See http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm for guidance on infection control in health care settings

Visit http://www.cdc.gov/h1n1flu/guidance_homecare.htm for more information on caring for sick persons in the home.

Visit <http://www.cdc.gov/h1n1flu/qa.htm> questions and answers about H1N1 influenza.

An example of information taken from biosurveillance efforts to author an alert in the alert repository



Information Exchange - Welcome Nedra Garrett

Create Event Create Event from Template

Search Criteria

Categories

- All
- Cryptosporidium
- Anthrax
- Bukholder Cepacia
- H1N1 Novel Virus
- Various Fecal Colirforms
- Yellow Fever
- Infectious Disease Prophylaxis
- E Coli
- Listeria
- West Nile Virus
- Toxicity
- Pertussis
- Infant Death
- Asthma
- Wildfires
- Fluoroquinol I Warnings
- Formaldehyde Toxicity
- Emergency Preparedness
- Disaster Recovery
- FDA Recall
- Product Safety
- Diagnostic Testing
- Salmonella
- Public Health Guidance
- Chlamydia
- Giardiasis
- Gonorrhea
- Henatitis B/C

Create Event

Add Attachment

Disease/Condition: **H1N1** *This field is required*

Severity:

- Unknown
- Minor
- Moderate
- Severe
- Extreme

This field is required

Issue Date: 08/28/2009

Expiration Date: 08/28/2009

Title: **Investigation and Interim Recommendations: S** *This field cannot be left blank*

Event description

Preview | Commit | Cancel

Last Modified	Syndrome
08/28/2009 12:29:37 ...	H1N1 Novel...
08/28/2009 12:22:19 ...	H1N1 Novel...
08/28/2009 12:00:25 ...	H1N1 Novel...
08/24/2009 11:53:40 ...	Hepatitis A
08/24/2009 10:58:08 ...	Measles

Time period of Cases	August 10
Treatment	The virus segments... swine or h... elsewhere... oseltamivi... with swine... resistant to... oseltamivi...

Prevention

To read the complete revised guidance see:
<http://www.cdc.gov/h1n1flu/guidance/exclusion.htm>

Search Criteria

Categories

- All

Event List Grid							
R	Concern Level	Title	Author	Start Date	End Date	Last Modified	Syndrome
	Moderate	Risk of Swine Flu Associated wi...	bnichols	04/26/2009	03/27/2010	08/27/2009 04:33:36 PM	H1N1 Novel Virus
	Moderate	CDC Updates Recommendati...	bnichols	08/06/2009	03/31/2010	08/27/2009 04:31:37 PM	H1N1 Novel Vi...
	Severe	Investigation and Interim Recom...	bnichols	08/13/2009	12/31/2009	08/27/2009 04:30:02 PM	H1N1 Novel Virus
	Moderate	Hepatitis A in a Food Handler...	bnichols	08/26/2007	10/26/2007	08/24/2009 11:53:40 PM	Hepatitis A
	Moderate	Measles outbreaks in the Un...	bnichols	01/12/2008	06/28/2008	08/24/2009 10:58:08 PM	Measles

Edit Event | Delete Event | Add Comment

ID	45	Issue Date	08/13/2009
Author	bnichols	Last Modified	08/27/2009 04:30:02 P
Severity	Severe	Date Created	08/13/2009 02:04:42 P
Disease/Condition	H1N1 Novel Virus		
Title	Investigation and Interim Recommendations: Swine Influenza (H1N1)		
Alert Category	Health Advisory	Urgency	Expected
Number of Cases	8	County	Fulton, GA
State	FL, GA	Zip Code	30269, 32628
Name	Tony Smith	Email	ttvsmith@hd.org
Phone #	626 357- 1234	Agency	Georgia Division of Publ
	The symptoms of this new H1N1 flu virus in people are similar to the symptoms of seasonal flu and include		

Search Criteria

Event List Grid

Edit Event | Delete Event | Add Comment

<p>Symptoms</p>	<p>The symptoms of this new H1N1 flu virus in people are similar to the symptoms of seasonal flu and include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. A significant number of people who have been infected with this virus also have reported diarrhea and vomiting. Also, like seasonal flu, severe illnesses and death has occurred as a result of illness associated with this virus.</p>	<p>Time period of Cases</p>	<p>August 10, 2009 to August 28, 2009</p>
<p>Prevention</p>	<p>To read the complete revised guidance see: http://www.cdc.gov/h1n1flu/guidance/exclusion.htm</p>	<p>Treatment</p>	<p>The viruses contain a unique combination of gene segments that have not been reported previously in swine or human influenza viruses in the U.S. or elsewhere. At this time, CDC recommends the use of oseltamivir or zanamivir for the treatment of influenza with swine influenza viruses. The H1N1 virus is resistant to amantadine and rimantadine but not to oseltamivir or zanamivir.</p>
	<p>Report any positive findings to your local health department.</p>		<p>Persons with febrile respiratory illness should stay home from work or school to avoid spreading infection (including influenza and other respiratory illnesses) to others in their communities. In addition, frequent hand washing can lessen the spread of respiratory illness.</p>

Search Criteria

Categories sidebar with 'All' folder icon.

R	Concern Level	Title	Author	Start Date	End Date	Last Modified	Syndrome
✉	Moderate	CDC Updates Recommendati...	bnichols	08/06/2009	03/31/2010	08/28/2009 12:29:37 PM	H1N1 Novel Vi...
📁	Severe	Investigation and Interim Recom...	bnichols	08/13/2009	12/31/2009	08/28/2009 12:22:19 PM	H1N1 Novel Virus
✉	Moderate	Risk of Swine Flu Associate...	bnichols	04/26/2009	03/27/2010	08/28/2009 12:00:25 PM	H1N1 Novel Vi...
✉	Moderate	Hepatitis A in a Food Handler...	bnichols	08/26/2007	10/26/2007	08/24/2009 11:53:40 PM	Hepatitis A
✉	Moderate	Measles outbreaks in the Un...	bnichols	01/12/2008	06/28/2008	08/24/2009 10:58:08 PM	Measles

Edit Event | Delete Event | Add Comment

<p>List of Possible / Additional Questions to ask</p>	<p>What is the patient's age? Is the patient pregnant? Is the patient immunocompromised? Does the patient care for children under the age of six years old? Does the patient have cardiovascular disease?</p>	<p>Case Detection / Diagnostic Tests</p>	<p>Clinicians should consider differential diagnosis of pa illness and who 1) live in l Dixie County , Florida or who traveled recently to I persons who had febrile r one of the three U.S. cou preceding their illness ons</p> <p>Patients who meet these c influenza, and specimens j sent to public health labor characterization. Clinicians who suspect sw humans should obtain a n patient, place the swab in</p>
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Distribute Alert

Providers Desktop

Providers Seeing Patients

As part of their workflow providers poll for messages when seeing patients and click the info button for more detail.



Infobutton Request



Context based request using standardized, anonymous case data.

- User context
- User action
- Patient record content

EMR decision support algorithms evoked

Rule Based Public Health profile matching

Rule Based Public Health alert information to CIS providing decision support objects (text for display, order sets, etc)

Knowledge Repository



Salmonella message sits on a standalone knowledge repository or on a PH grid

Hospital

HIE

COE

MD Office

INTL Healthcare Facility

Citizen

EHR+
OpenMRS

PHR
WWW

Patient Presents to Clinic

- **Christine Cisgeemr, a 9 year healthy child develops a fever, chills, cough and stuffy nose.**
- **Christine arrives at the local urgent care center and information is provided to the reception which is entered into the EHR system.**



Reason for Visit Documented

Centricity Physician Office - NOT FOR PATIENT USE - Kelly G. Starr MD @ Eastside Clinic (sutrain) - 3/20/2009 12:14 ...

Go Actions Options Help

Desktop Chart Appts Reg Reports LinkLogic New View Print Help EXIT

Christine Cisgemr Patient ID: 135-TEST001 Home: None Work: None Insurance: Group:
9 Year Female

Find Pt. Protocols Graph Handouts Probs Meds Refills Allergies Directives Flowsheet Orders End Upd...

Summary Problems Medications Alerts Flowsheet Orders Documents Update

Doc ID: 32 Properties: Office Visit at EAST on 03/20/2009 12:10 AM by Kelly G. Starr MD

Summary: []

Inserted

- Chief Complaint
- Vital Signs
- Prescriptions

Arial 12 B I U

OFFICE VISIT

History of Present Illness
[Chief Complaint]

History
Past Medical History:

Current Problems (prior to this update):

Current Medications (prior to this update):

Chief Complaint: Christine Cisgemr

Chief Complaint: Fever, chills, cough, stuffy nose

History of Present Illness:

Prev Form (Ctrl+PgUp) Next Form (Ctrl+PgDn)

Disposition:

For Help, press F1

Verified: Demographics Location

Captures the chief complaint

Anonymous Patient Profile

Centricity Physician Office - NOT FOR PATIENT USE - Kelly G. Starr MD @ Eastside Clinic (sutrain) - 3/20/2009 12:14 ...

Go Actions Options Help

Desktop Chart Appts Reg Reports LinkLogic New View Print Help EXIT

Christine Cisgeemr Home: None Work: None
79 Year Female (DOB: 11/28/1929) Patient ID: 135-TEST001 Insurance: Group:
Christine Cisgeemr
9 Year Female

Meds Refills Allergies Directives Flowsheet Orders End Upd...

Summary Problems Medications Alerts Flowsheet Orders Documents Update

Doc ID: 32 Properties: Office Visit at EAST on 03/20/2009 12:10 AM by Kelly G. Starr MD

Summary: Change Properties... Attach

Inserted

Chief Complaint Vital Signs Prescriptions

OFFICE VISIT

History of Present Illness
[Chief Complaint]

History
Past Medical History:

Current Problems (prior to this update):

Current Medications (prior to this update):
ALBUTEROL SULFATE 0.5 % NEBUL SOLUTION (ALBUTEROL SULFATE)

Attachments

Chief Complaint: Christine Cisgeemr

Chief Complaint: tummy ache

History of Present Illness: **Fever, chills, cough, stuffy nose**

Prev Form (Ctrl+PgUp) Next Form (Ctrl+PgDn)

Plan
Disposition:

For Help, press F1

Date: 8/31/2009

Age: 9

Gender: female

Chief Complaint: headache, chills, cough, stuffy nose and fever

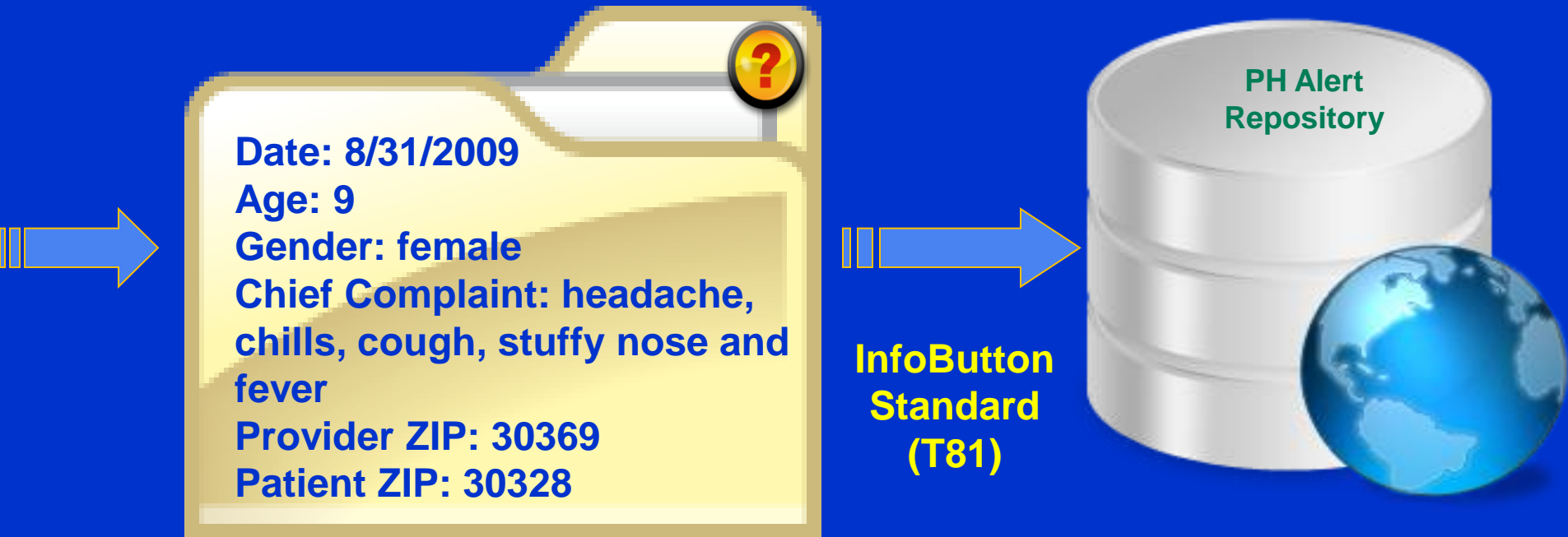
Provider ZIP: 30369

Patient ZIP: 30328

**Automatically created by
the EHR application**



Profile Sent to Alert Repository



Automatically sent to the alert repository



Algorithms Match Information- H1N1

EHR Anonymous Profile

H1N1 Alert Message -- ID 264803

Message --ID 26329

Event Summary:

CDC, in collaboration with public health officials in Georgia and Florida is investigating cases of febrile respiratory illness caused by swine influenza (H1N1) viruses. As of 1 pm on August 6th, 2009, 5 laboratory confirmed cases of Swine Influenza infection have been confirmed in the United States.

Symptoms

Cough	match	Cough
Fever	match	Fever
Chills	match	Chills
Congestion	match	Stuffy nose

Patient Demographics

Age: All	match	Age: 79
Gender: All	match	Gender: female
Race: All	match	Race: Caucasian

Jurisdictions

30369	match	Patient Jurisdiction: 30369
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Recommendations

See http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm for guidance on infection control in health care settings
Visit http://www.cdc.gov/h1n1flu/guidance_homecare.htm for more information on caring for sick persons in the home.
Visit <http://www.cdc.gov/h1n1flu/qa.htm> questions and answers about H1N1 influenza.

Chief Complaints

Cough
Fever
Chills
Stuffy nose

Patient Demographics

Age: 79
Gender: female
Race: Caucasian

Jurisdictions

Patient Jurisdiction: 30369
Provider Jurisdiction: 30328

H1N1 Alert Message Message ID 264803

Event Summary:

CDC, in collaboration with public health officials in Georgia and Florida is investigating cases of febrile respiratory illness caused by swine influenza (H1N1) viruses. As of 1 pm on August 6th, 2009, 5 laboratory confirmed cases of Swine Influenza infection have been confirmed in the United States.

Symptoms Cough

Fever

Chills

Congestion

Patient Demographics

Age: All

Gender: All

Race: All

Jurisdictions

30369

32628

Recommendations

See

http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm for guidance on infection control in health care settings

Visit http://www.cdc.gov/h1n1flu/guidance_homecare.htm for more information on caring for sick persons in the home.

Visit <http://www.cdc.gov/h1n1flu/qa.htm> questions and answers about H1N1 influenza.

Date of Last Update: 08/27/2009

Expiration Date: 11/01/2009

Relevant Alerts Downloaded to EHR

Centricity Physician Office - NOT FOR PATIENT USE - Kelly G. Starr MD @ Eastside Clinic (sutrain) - 3/20/2009 12:14 ...

Go Actions Options Help

Desktop Chart Apts Reg Reports LinkLogic New View Print Help EXIT

Christine Cisgeemr Patient ID: 135-TEST001 Home: None Work: None
Insurance: Group:

9 Year Female

Find Pt. Protocols Graph Handouts Probs Meds Refills Allergies Directives Flowsheet Orders End Upd...

Summary Problems Medications Alerts Flowsheet Orders Documents Update

Doc ID: 32 Properties: Office Visit at EAST on 03/20/2009 12:10 AM by Kelly G. Starr MD

Summary: [] Change Properties... Attach

Inserted Arial 12 B I U

History
Past Medical History:

Current Problems (prior to this update):

Current Medications (prior to this update):
ALBUTEROL SULFATE 0.5 % NEBU SOLN (ALBUTEROL SULFATE)

Attachments

Chief Complaint: Christine Cisgeemr

Chief Complaint: []
History of Present Illness: **Fever, chills, cough, stuffy nose**

Alerts Available Public Health Alert Reviewed: No

Prev Form (Ctrl+PgUp) Next Form (Ctrl+PgDn) Close

Plan
Disposition:

For Help, press F1

Browser navigation bar with address: https://infoshare.jhuapl.edu/emr_infoshare/InfoButtonRequest

Menu: File Edit View Favorites Tools Help

Address bar: <https://infoshare.jhuapl.edu/...>

Page navigation: Home RSS Print Page Settings

Current Public Health Alerts for:

- > Chief Complaint: headache fever
- > Service Delivery ZIP: 30269
- > Patient ZIP: not specified
- > Patient Gender: Male
- > Patient Age: not specified
- > Encounter Date: Tue Sep 29 21:40:37 EDT 2009

Risk of Swine Flu Associated with Travel to Affected Areas

Moderate | H1N1 Novel Virus | 4/26/09 - 3/27/10

Public health officials within the United States and throughout the world are investigating outbreaks of swine influenza (swine flu).

People entering the United States who are experiencing symptoms consistent with swine flu and have traveled to an affected area (see <http://www.cdc.gov/swineflu/investigation.htm> for affected areas), or have been exposed to someone possibly infected with swine flu, during the last 7 days should report their illnesses to their health care provider immediately and inform them of their recent travel.

People traveling from the United States to affected areas should be aware of the risk of illness with swine flu and take precautions.

The full alert is presented providing event information and recommendation which may help diagnose and treat Catherine's symptoms

Agency	CDC-HAN
Characteristics of Agent	Swine flu is a respiratory disease of pigs caused by a type A influenza virus that regularly causes outbreaks of influenza among pigs. Swine flu viruses do

Prevention	<p><i>There are antiviral medications for prevention and treatment of swine flu that a doctor can prescribe. Do not go to work, school, or travel while ill.</i></p> <p>To prevent the spread of swine flu: Avoid contact with ill persons.</p> <p>When you cough or sneeze, cover your nose and mouth with a tissue or your sleeve (if you do not have a tissue). <i>Then use used tissues in a trash can.</i></p> <p>After you cough or sneeze, wash your hands with soap and alcohol-based hand gel.</p> <p>If you think you are ill with flu, avoid close contact with others as much as possible. Stay at home or in your hotel room. Seek medical care if you are</p>
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Educate the patient with treatment and prevention materials

Treatment	<p><i>Seek medical care if you are severely ill (such as having trouble breathing). There are antiviral medications for prevention and treatment of swine flu that a doctor can prescribe. Do not go to work, school, or travel while ill.</i></p>
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Treatment

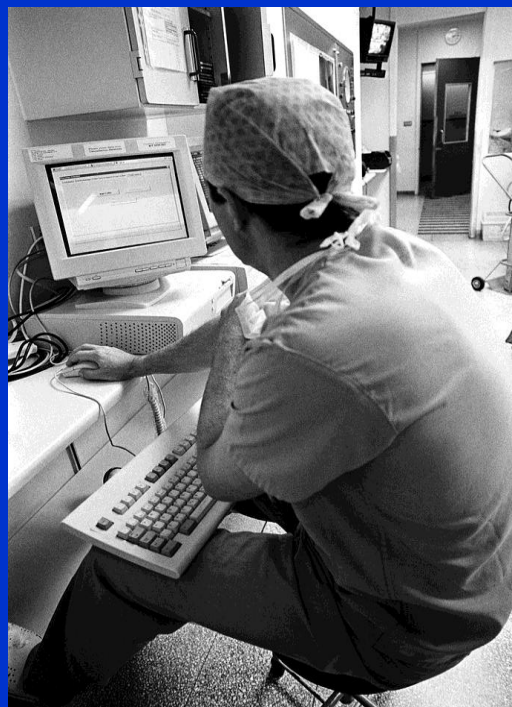
Patient Education	<p>To read the complete revised guidance see: http://www.cdc.gov/h1n1flu/guidance/exclusion.htm</p>
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List of Possible / Additional Questions to Ask	<p>What is the patient's age? Is the patient pregnant? Is the patient immunocompromised? Does the patient care for children under the age of six years old? Does the patient have cardiovascular disease?</p>
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Seeking additional information from links

Links For Recommending Prevention	<p>People entering the United States who are experiencing symptoms consistent with swine flu and have traveled to an affected area (see http://www.cdc.gov/swineflu/investigation.htm for affected areas), or have been exposed to someone possibly infected with swine flu, during the last 7 days should report their illnesses to their health care provider immediately and inform them of their recent travel.</p>
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Provider Accesses Alert



Provider clicks on alert button

A summary of the alert appears

! CDC Updates Recommendations for the Amount of Time Persons with Influenza-Like Illness should be Away from Others

Moderate | H1N1 Novel Virus | 8/6/09 - 3/31/10

On August 5, 2009, CDC changed its recommendation related to the amount of time people with influenza-like illness should stay away from others (the exclusion period). New guidance indicates that people with influenza-like illness should stay home for at least 24 hours after their fever is gone (without the use of fever-reducing medicine). A fever is defined as having a temperature of 100° Fahrenheit or 37.8° Celsius or greater.

This is a change from the previous recommendation that ill persons stay home for 7 days after illness onset or until 24 hours after the resolution of symptoms, whichever was longer.

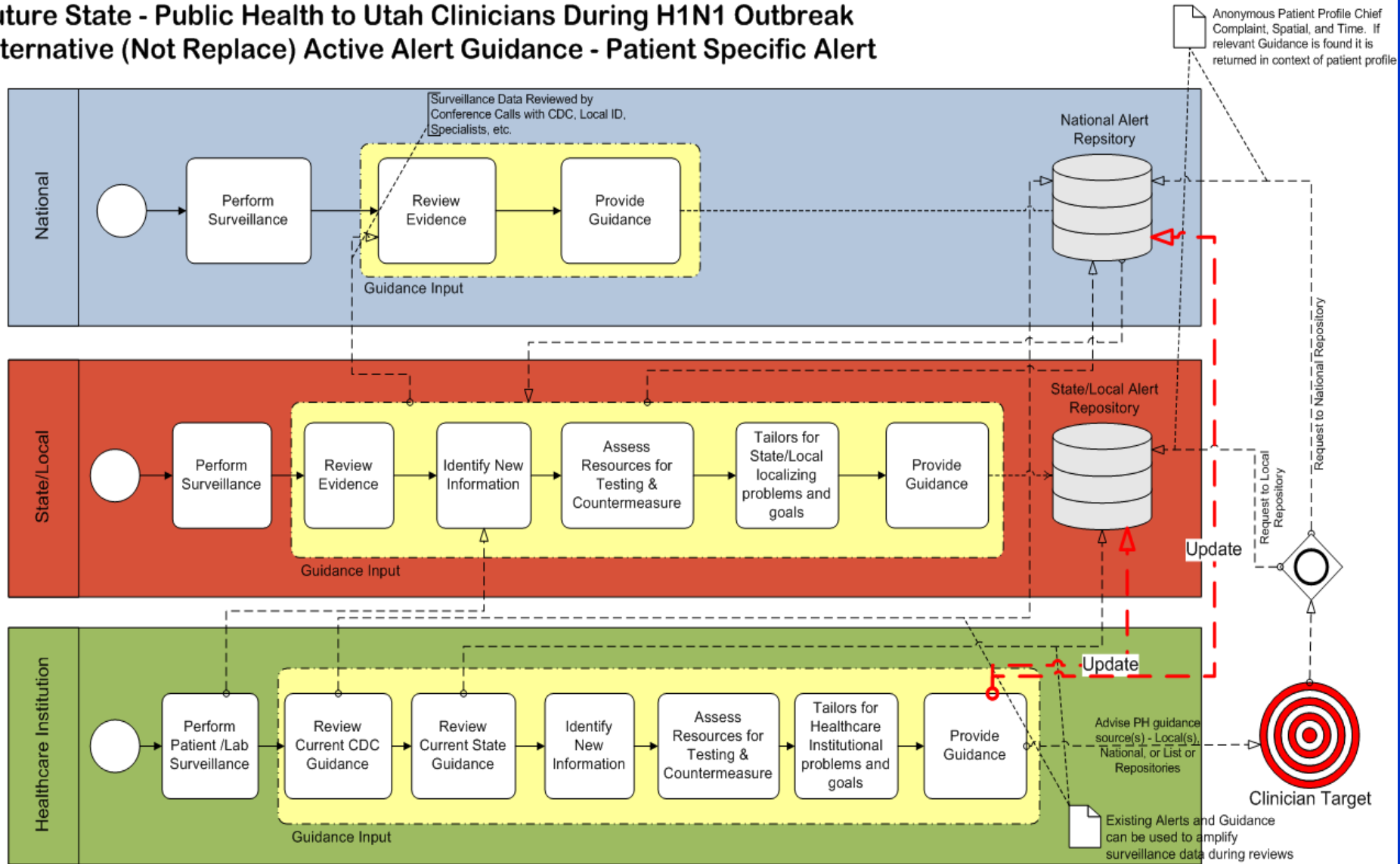
The new recommendation applies to camps, schools, businesses, mass gatherings, and other community settings where the majority of people are not at increased risk for influenza complications. CDC recommends this exclusion period regardless of whether or not antiviral medications are used. This guidance does not apply to health care settings where the exclusion period continues to be for 7 days from symptom onset or until 24 hours after the resolution of symptoms, whichever is longer.

[+ Show/Hide Details](#)

Provider click the show/hide details to view more information

Example of Future State of Alerting

Future State - Public Health to Utah Clinicians During H1N1 Outbreak Alternative (Not Replace) Active Alert Guidance - Patient Specific Alert



Public Health Conditions Suitable for Alerting in EHR Systems

Generally require patient specific information e.g. demographics, geography, chief complaint, reason for visit, occupation, travel history

- Interim Recommendations for the Use of Influenza Antiviral Medications
- Temporary Decrease in Human Rabies Vaccine Supplies
- Potential for Dengue Infection Among Relief Workers Returning from Haiti
- Foodborne Diseases (Salmonella, E.coli)
- Potential Cases of Mumps During a Multi-State Outbreak
- Legionnaires' Disease
- Screening high risk persons (TB, STDs, Mammography, etc.)



Public Health – Clinical Value Proposition

- Opportunity to improve dissemination of public health information at point of care
- Opportunity to increase compliance with public health recommendation and guidelines
- Opportunity for more timely patient specific information
- Opportunity for public health to take advantage of information afforded by EHR systems



Value Proposition (cont.)

- What are key indicators of activities associated with communicating alert information would measure contribution for public health and the clinical community
 - Alert creation, distribution, etc.
 - Finance, quality, efficiency, information and data reliability & availability, effectiveness, security & privacy, innovation, productivity, and/or management, etc.



Next Steps

- ❑ **Pilot the integration of alerts in EHR system in ambulatory setting**
- ❑ **Evaluate for extensibility for other domains**
- ❑ **Continued involvement in national Health IT efforts**



Contact:
Nedra Garrett
ngarrett@cdc.gov

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: cdcinfo@cdc.gov Web: www.atsdr.cdc.gov



Continuing Education Credit/Contact Hours for COCA Conference Calls

Continuing Education guidelines require that the attendance of all who participate in COCA Conference Calls be properly documented. All Continuing Education credits/contact hours (CME, CNE, CEU, CECH, and ACPE) for COCA Conference Calls are issued online through the CDC Training & Continuing Education Online system <http://www2a.cdc.gov/TCEOnline/>.

Those who participate in the COCA Conference Calls and who wish to receive CE credit/contact hours and will complete the online evaluation by **Jul 30 2010** will use the course code **EC1648**. Those who wish to receive CE credits/contact hours and will complete the online evaluation between **Jul 31, 2010** and **Jul 31, 2011** will use course code **WD1648**. CE certificates can be printed immediately upon completion of your online evaluation. A cumulative transcript of all CDC/ATSDR CE's obtained through the CDC Training & Continuing Education Online System will be maintained for each user.



Thank you for joining the call -
Please email us questions at
coca@cdc.gov

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Emergency Preparedness and Response

[EPR](#) > [Preparedness for All Hazards](#) > [Clinician Resources](#)

Conference Calls

COCA's goal is to help you provide the best health care possible. We offer conference calls, podcasts and other tools for potential emergencies and emerging health threats. Here you will find our most recent COCA call information and archived call materials, as well as information on continuing education credit.

If there's a topic you'd like us to cover, let us know at coca@cdc.gov.

Upcoming Conference Calls

Leveraging the Electronic Health Record for Public Health Alerting

Presenters: Nedra Garrett, MS (CDC)

Date/Time: Tuesday, June 22, 2010 1-2 PM Eastern Time

Overview: With the passage of the American Recovery and Reinvestment Act and its focus on Electronic Health Record (EHR) systems, public health has an unprecedented opportunity to leverage the

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