

Keeping the Circle Strong: Using a Federal Electronic Health Record (EHR)

for Quick Outbreak Response and Planning in Indian Country

Nancy Bennett, B.S. Management Information Systems Analyst

Great Lakes Inter-Tribal Epidemiology Center



BACKGROUND

Certain people, such as older people, young children, and people with certain chronic health conditions, are at high risk for serious complications from Influenza (the flu). Compared to the general U.S. population, American Indian and Alaska Native people are more likely than others to get seriously ill from the flu.

The American Indian and Alaskan Native population have much higher rates of underlying chronic illnesses such as asthma and diabetes, as well as higher rates of obesity, poverty, delayed access to health care and low vaccination coverage.¹ These associated risk factors may make them more vulnerable to flu-like viruses. This is important because high risk populations receive priority access to the vaccine.

As part of the response to the 2009 H1N1 novel influenza outbreak response, the Indian Health Service requested estimates of the numbers of high risk American Indian & Alaska Native who receive health care at Indian Health Service or Tribal Clinics and health care workers at risk for exposure.

1 retrieved August 30, 2012 from the World Wide Web: CDC.gov/h1n1flu



OBJECTIVE

Indian Health Service requested a high-risk patient count from all Tribal clinics & hospitals. To accomplish this, the clinics and hospitals queried their Resource Patient Management System (RPMS) database. RPMS is an electronic health record application provided by the IHS to all clinics and hospitals in the Indian Health Service system.

RESULTS AND CONCLUSIONS

Percentage of Visits for Influenza-like Illness (ILI) per week
Overall ILI % (ILI visits per week / Total visits per week)
(ILI) in IHS, October through April

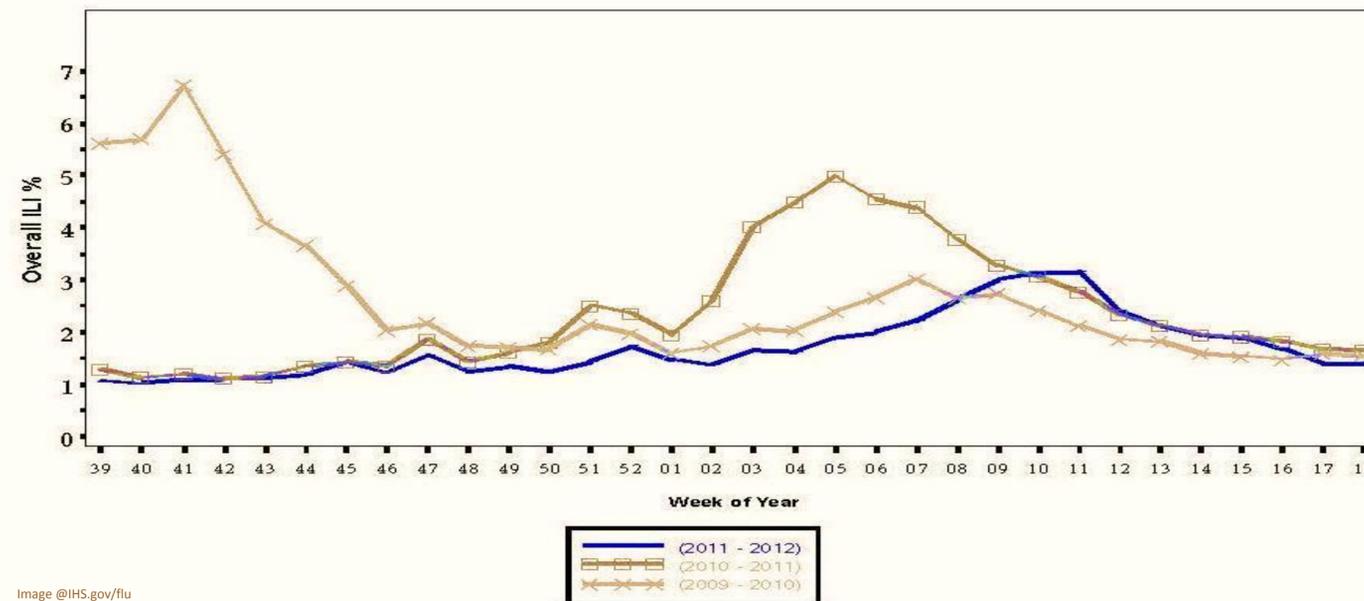


Image @IHS.gov/flu

METHODS

In 2009, "Guidance for Generating General Population Estimates for H1N1 Influenza Activities" was developed by Great Lakes Inter-Tribal Epidemiology Center, Northwest Portland Indian Health Board, and the Indian Health Service Division of Epidemiology and Disease Prevention. This step-by-step technical manual assisted Indian Health Service and Tribal clinics and hospitals in querying the complex RPMS database system to determine which patients were at risk for complications from the flu. They reported an up-to-date account of the number of high risk patients in each region of the country to the IHS, which then requested that facilities share the data with their State health departments.

RESULTS AND CONCLUSIONS

These numbers were used by some States to determine vaccine and antiviral distributions for Indian Health Service and Tribal clinics. Data received by Indian Health Service from 236 facilities indicates that over 50% of the American Indian & Alaska Native population falls into a high risk or high priority group. Previous practice of distributing the influenza vaccine to State health departments based solely on U.S. Census numbers would likely result in an underestimate of the vaccine needed to cover target groups in American Indian & Alaska Native populations. The American Indian & Alaska Native population has been historically under-reported via the U.S. Census. Data gathered using the technical manual directly resulted in the latest recommendations from the Centers for Disease Control (CDC) to include the American Indian & Alaska Native population as a high risk group.

During the 2009 H1N1 pandemic, American Indian & Alaska Native people were four times more likely to die from the H1N1. Influenza-like illness (ILI) has shown a decline in the months October 2011 through April 2012 compared to the same time period in 2008-2009, a direct result of the target populations receiving the vaccine.

2 Retrieved August 30, 2012 from the World Wide Web IHS.gov/flu

CONTACT INFORMATION & PARTNERS

Nancy Bennett, B.S.
Management Information Systems Analyst
PO Box 9
Lac du Flambeau, WI 54538
715-588-1029
nbennett@glitc.org

Mary Brickell, Portland IHS Area
Thomas Weiser, Portland IHS Area
Cheyenne Jim, IHS Division of
Epidemiology and Disease Prevention
Amy Groom, IHS Division of
Epidemiology and Disease Prevention
Great Lakes Inter-Tribal Epidemiology Center
Great Lakes Inter-Tribal Council



Northwest Portland Area
Indian Health Board
Indian Leadership for Indian Health