

Family Care Assisting Diabetes Patients with Influenza Prevention

Issue:

Influenza is a debilitating infection for the young and healthy, taking weeks to recover to normal strength, but for infants, the elderly, and those with chronic illness – it can be life-threatening. The effect of high blood glucose on the vascular, neural, and mucosal systems makes people with diabetes more susceptible to dehydration, bacterial pneumonia, and abnormal changes in bowel bacteria (1,2). These tendencies, associated with the disease, lead to a greater susceptibility to extended illness and complications of the flu.

People with diabetes are six times more likely to be hospitalized during flu epidemics and three times more likely to die with flu or related complications (3, 4). Mortality rates among people with diabetes can increase by 5 percent to 15 percent during an influenza epidemic - third in mortality only to people with cardiovascular disease and chronic pulmonary disorders (5). Immunization for influenza has been shown to prevent illness in approximately 70 percent to 90 percent of healthy persons less than 65 years of age (6). This represents a large reduction in the epidemic character of each outbreak, as well.

Missouri data show that among all adult residents with diabetes 64.2 percent get an annual flu shot and 58.3 percent have had a pneumonia vaccination (7). Monthly vaccination rates for the Missouri Federally Qualified Health Centers' diabetes registry ranged from 14.2 percent to 24.8 percent for an overall rate around 20 percent in 2006. One FQHC had a month in which they reported that 41.4 percent of their registry had been vaccinated, however risk remains high for a large proportion of people with diabetes.

Intervention:

In April 2007, Family Care Health Centers initiated educational sessions on the flu for all their employees. In addition, Family Care Health Centers supervised a flu vaccine clinic and provided information on flu prevention to all patients with diabetes.

Impact:

The flu vaccination rate for Family Care Health Centers increased above the 2005 baseline by 65 percent. Though like regional and national rates, (15.3 percent and 26.0 percent, respectively) rates remain well below the Health Resources and Services Administration's goal of more than 90 percent, each shot is considered a life-saving gesture (Fig. 1). In Missouri, the FQHCs that participate in the National Health Disparities Collaborative vaccinated an average of 25,731 patients with diabetes, annually between 2005 and 2008.

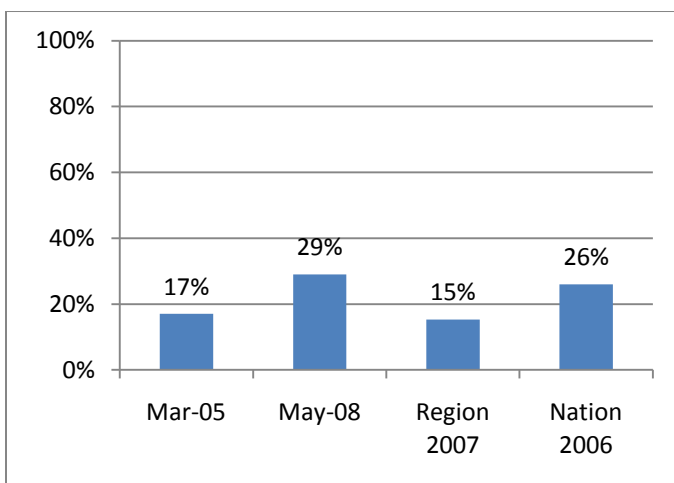


Figure 1. Prevalence of vaccination for influenza among patients in the diabetes registry at Family Care Health Centers in Missouri participating in the National Health Disparities Collaborative (Family Care Health Centers in Missouri: March 2005, May 2008; NHDC regional cluster: Region 2007; NHDC nationally: Nation 2006).

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