



Pneumococcal Vaccination Survey of Community Health Centers

Hawaii Immunization Coalition and Hawaii Department of Health Immunization Branch

2014



Background

Pneumococcus can cause serious life-threatening infections of the lungs, blood, and brain. However, the pneumococcal polysaccharide vaccine (PPSV23) effectively protects against 23 types of pneumococcal bacteria. The Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) recommends routine vaccination of all adults 65 years of age and older.¹ Despite this recommendation and the efficacy of the vaccine, Hawaii's PPSV23 immunization rate remains below the national average. In a 2011 survey, only 67.7% of adults aged 65 years and older reported ever receiving PPSV23, compared to the national average of 70.0%.² Geographically, the PPSV23 immunization rates range from 60.5% in Kapaa (Kauai) to 69.7% in Honolulu (Oahu). In addition to the disease burden on community health, pneumococcus infections can place an economic burden on health systems in Hawaii. Based on national data, the estimated cost of pneumococcus for adults age 65 and older in Hawaii could be up to \$15.5 million.³

In order to better understand PPSV23 immunization rates in Hawaii, the Hawaii Immunization Coalition (HIC) and the Hawaii State Department of Health (DOH) Immunization Branch developed and conducted a survey of healthcare facilities statewide. This data will be used to target resources for immunization education more effectively by addressing specific barriers and developing strategies for each facility.

Methods

A 16-question survey was mailed to 55 Community Health Centers (CHCs) on the islands of Oahu, Lanai, Maui, Kauai, Molokai, and Hawaii. The mailing included a letter addressed to the CHC Medical Director explaining the purpose of the survey as well as a fact sheet about pneumococcal infection and vaccination rates for Hawaii (as of 2011).

The survey contained general questions about the CHC's adult immunization practices as well as questions specific to pneumococcal vaccination. CHCs could complete the survey as either a hard copy to be returned to DOH (in postage-paid return envelope) or as an online questionnaire via SurveyMonkey.

The CHCs were given approximately two weeks to complete the survey. After that time, reminder phone calls were made to non-responders, extending the due date for another two weeks.

Acknowledgements

Mahalo to all of the participating Community Health Centers for their feedback and their continued efforts to increase immunization rates in our local communities!

¹ Centers for Disease Control and Prevention (CDC). Updated Recommendations for Prevention of Invasive Pneumococcal Disease Among Adults Using the 23-Valent Pneumococcal Polysaccharide Vaccine (PPSV23)--Advisory Committee on Immunization Practices (ACIP), 2010. *MMWR Morb Mortal Wkly Rep.* 2010; 59(34):1102-1106

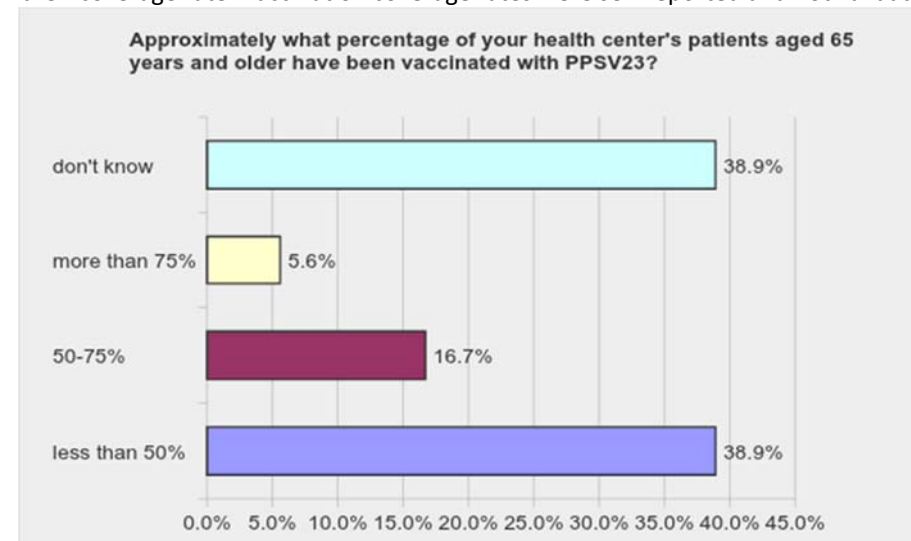
² Behavioral Risk Factor Surveillance System (BRFSS) 2011

³ J.M. McLaughlin. Estimated Human And Economic Burden Of Four Major Adult Vaccine-Preventable Diseases In The United States, 2010. *Value in Health.* May 2013 (Vol. 16, Issue 3, Page A86)

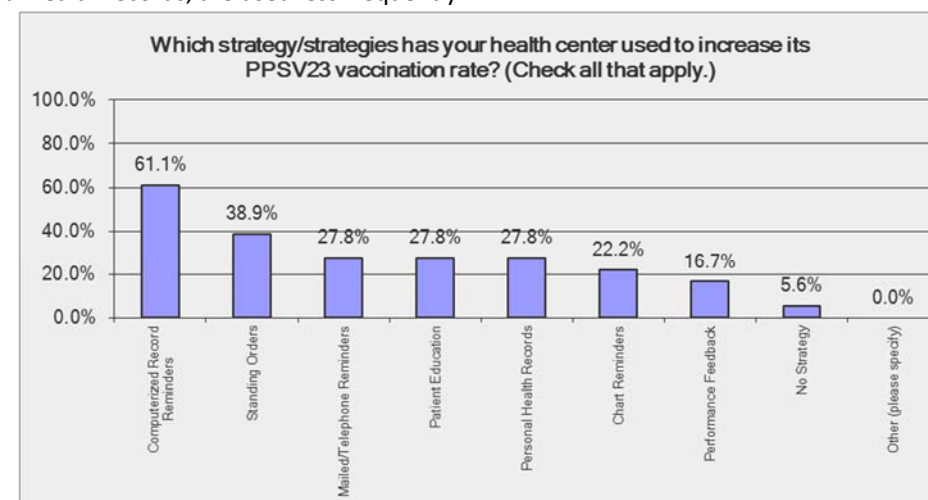
Results

Completed surveys were received by 22 of the 55 CHCs, resulting in a 40% response rate. Of the 22 respondents, 19 provide primary care services to adults 60 years and older. Routine vaccination of patients 65 years and older with PPSV23 vaccine was reported by all health centers servicing older adults.

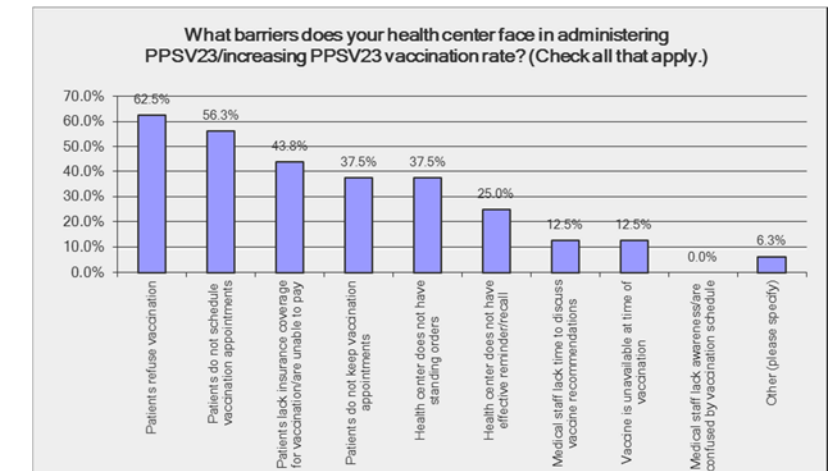
When asked to estimate the percentage of their patients aged 65 years and older who had been vaccinated with PPSV23, only one respondent reported a coverage rate of more than 75%. Three (3) estimated their coverage rate at between 50 and 75%. Seven (7) respondents reported their PPSV23 vaccination coverage rate at less than 50% and an equal number did not know their coverage rate. Vaccination coverage rates were self-reported and not validated.



As a reflection of the increasing employment of electronic medical record systems (EMRs) by healthcare providers, most respondents (61%) utilize computerized record reminders to increase PPSV23 vaccination rates. Although highly recommended as a strategy to increase vaccination rates, only 39% of respondents utilize standing orders. Other traditional methods of increasing vaccination rates, including mail/telephone reminders, patient education, and personal health records, are used less frequently.



Sixty-three percent of respondents feel that patient refusal is a barrier to PPSV23 vaccination, followed by approximately half who reported that patients do not schedule vaccination appointments. Over 40% of respondents cited patients' lack of insurance coverage or inability to pay for vaccination as a barrier to increasing their PPSV23 vaccination rate. Another commonly reported barrier was the lack of standing orders for vaccination.



When asked what kind of support HIC and/or DOH could provide to help increase PPSV23 vaccination rates, half of respondents requested free or low-cost vaccine. One third of respondents felt that a vaccine registry would help to increase vaccination rates.

Discussion

Of the 22 CHCs surveyed, 19 responded that they provide primary care services for adults aged 65 years and older. While all of those who were surveyed offer the pneumococcal vaccine PPSV23 to their patients, only 5.6% report that more than 75% of these patients are vaccinated with PPSV23. Equally disconcerting is that 38.9% of the health care centers report that they are unaware of the vaccination status of the population. More than half used the EMR/EHR to determine the vaccination status of their patients, also reporting that they utilize the computerized record reminders as a strategy to increase vaccination rates. Common barriers to vaccination adherence include patient refusal, lack of insurance coverage for vaccination as well as lack of standing orders for vaccination. Survey-takers recommended low cost vaccines and a statewide registry as possible strategies to increase immunization rates, among others. The implications for the collected data point toward education of patient and staff alike. Further research would be beneficial in the areas of successful PPSV23 vaccination strategies and overcoming barriers to vaccination.

Next Steps

1. Share survey results with CHCs to increase their awareness of current PPSV23 vaccination rates, barriers to immunization, and recommendations for increasing vaccination rates.
2. Meet with representatives from the PPSV23 vaccine manufacturer to share the results of this survey and request their assistance in increasing vaccination rates in the CHCs.
3. Further explore health insurer policies in covering adult vaccination, including PPSV23.
4. Continue to collaborate with DOH in addressing barriers to vaccination of adults who are not insured.
5. Utilize survey results when applying for community grants addressing PPSV23 vaccination rates.