Improving PPSV23 Vaccination Rates at the UNMH Westside Clinic
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Background/Introduction
- Pneumonia caused by streptococcus pneumonia represents a major cause of bacterial pneumonia, especially in the elderly.
- Pneumococcal polysaccharide vaccine (PPSV23) is recommended to all adults 65 years and older, people 2 through 64 years with certain medical conditions, and all adults older than 19 years who smoke.
- This vaccine prevents severe pneumococcal disease, reduces hospital admissions and risk of death.
- Numerous interventions implemented in health systems throughout the US have improved vaccination rates include financial incentives, clinician reminders, patient outreach, clinician education, and case management involvement.
- On a routine audit of vaccination efforts at Westside Clinic that rate of pneumococcal vaccination in patients older than 65 years of age was found to be low.
- We sought to improve the rate of vaccination through direct-physician phone outreach to non-vaccinated patients over 65 years of age.

Results
- 282 patients >65 years of age were identified who had not received the PPSV23.
- It was discovered that 103 patients (36.5%) had already been vaccinated.
- Following intervention 15 patients were vaccinated at a UNM clinic, at the time data was reviewed (with remaining patients still planning to get vaccinated at a later point).
- 121 patients (43%) did not respond or refused vaccination following intervention.
- Of eligible patients still receiving care at Westside clinic, 46.5% were verified to be vaccinated, thus improving the rate of compliance at Westside Clinic.

Discussion
- Upon chart review it was discovered that a large portion of identified un-vaccinated patients (36.5%) had already been vaccinated, however it was not properly captured in the EMR.
- Following our intervention several patients did receive the PPSV23 vaccine at Westside Clinic, with several more still planning to get the vaccine at an outside pharmacy or at a later date.
- Overall, accounting for ineligible patients we were able to improve the rate of pneumococcal vaccination in patients >65 years of age receiving care at Westside Clinic to 46.5%, which was above our goal of 15%.
- A major systems barrier we discovered for compliance with vaccination in the EMR, was that not all documented vaccines were also captured in health care maintenance, which is how compliance rates are audited.
- Direct physician outreach was appreciated by many patients and allowed them to reconnect with the clinic, during the COVID-19 pandemic, while multiple other patients refused or did not respond. More telephone outreach could certainly be considered to improve other healthcare metrics at the clinic.

Methods
- A list of patients aged > 65 years receiving primary care at Westside Clinic were identified who had not received the PPSV23 vaccine.
- A script was created for residents to use for direct telephone outreach.
- Charts were reviewed and if documentation errors were found in the EMR they were updated to reflect patients that were previously vaccinated.
- Remaining patients were then contacted via telephone and advised of the benefits of PPSV23.
- If the patients were amenable to vaccination, a nurse visit was scheduled for administration of the vaccine. Patients were also advised of how to seek the vaccine in the community.

Results of Telephone Intervention Entailing Discussion About Getting Pneumovax

<table>
<thead>
<tr>
<th>Total number of patients &gt;65 years old, who had not received the pneumovax</th>
<th>282</th>
</tr>
</thead>
<tbody>
<tr>
<td>Already vaccinated</td>
<td>103</td>
</tr>
<tr>
<td>Agreed to get the vaccine</td>
<td>28</td>
</tr>
<tr>
<td>Vaccinated at UNM after discussion</td>
<td>15</td>
</tr>
<tr>
<td>Refused or no response</td>
<td>121</td>
</tr>
<tr>
<td>Found ineligible, deceased, or no longer receiving care at UNM health system</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 1: Displays results following telephone intervention entailing discussion about getting pneumovax.

![Chart 1: Displays PDSA flow chart displaying steps of intervention](chart1.png)

![Chart 2: Displays results following telephone intervention entailing discussion about getting pneumovax](chart2.png)

Next Steps
- Examine EMR ease for capturing of vaccination in health care maintenance.
- Improve EMR interface NMSIIS so vaccination is automatically uploaded and captured.
- Expand project to include other groups eligible for PPSV23 vaccination per guidelines.
- Create patient education handouts about benefits of vaccination for hesitant patients.
- Multidisciplinary approach, involving MA screening patients for vaccination at primary care visits.

References