Utilizing Population Health Outcomes Data to Increase Adult Pneumococcal Immunization Rates

Pfizer Final Report
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In collaboration with
Direct One Communications
Confluent Healthcare Solutions
Humedica
AMGA
Aim and Goals

- The aim of this PI-CME activity was to improve clinical outcomes and address barriers related to pneumococcal vaccination.

- Goals:
  - Increase the percent of eligible patients, ≤65 who have received a pneumococcal vaccination within the time period of the project.
  - Increase the percentage of people, ages 19 to 64, who have chronic illness or at high risk for infection, including chronic cardiac, pulmonary, liver disease, or diabetes.
Outcomes

Increase in Pneumococcal Vaccination Rates in Patients ≥ 65 Years of Age / CME + CPD

- Community Physicians: 45 Physicians, 14,667 Patients
  - Baseline: 52%, +22% to 64%
  - Final: 64%
  - Increase: 1,857 patients

- Holston Medical Group: 14 Physicians, 4,811 Patients
  - Baseline: 50%, +29% to 79%
  - Final: 79%
  - Increase: 548 patients

- Sentara Medical Group: 44 Physicians, 15,906 Patients
  - Baseline: 60%
  - Final: +35% to 95%
  - Increase: 3,087 patients

Increase in Pneumococcal Vaccination Rates in High-Risk Patients / CME + CPD

- Community Physicians: 45 Physicians, 26,649 Patients
  - Baseline: 40%
  - Final: +53% to 93%
  - Increase: 1,261 patients

- Holston Medical Group: 14 Physicians, 9,286 Patients
  - Baseline: 40%
  - Final: +56% to 96%
  - Increase: 320 patients

- Sentara Medical Group: 44 Physicians, 25,391 Patients
  - Baseline: 40%
  - Final: +53% to 93%
  - Increase: 2,294 patients
## Impact on Number of Patients Vaccinated

<table>
<thead>
<tr>
<th>Patient group</th>
<th>Number physicians</th>
<th>Finished CME?</th>
<th>Number of eligible patients</th>
<th>Number vaccinated at baseline assessment</th>
<th>Number vaccinated at final assessment</th>
<th>Change from baseline in number of patients vaccinated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elderly</td>
<td>103</td>
<td>Yes</td>
<td>35,384</td>
<td>20,853</td>
<td>26,345</td>
<td>+ 5,492 (+ 26.3%)</td>
</tr>
<tr>
<td></td>
<td>217</td>
<td>No</td>
<td>70,098</td>
<td>43,362</td>
<td>52,630</td>
<td>+ 9,268 (+ 21.4%)</td>
</tr>
<tr>
<td>Total</td>
<td>320</td>
<td>–</td>
<td>105,482</td>
<td>64,215</td>
<td>78,975</td>
<td>+ 14,760 (+ 23.0%)</td>
</tr>
<tr>
<td>High-risk</td>
<td>103</td>
<td>Yes</td>
<td>61,326</td>
<td>8,786</td>
<td>12,661</td>
<td>+ 3,875 (+ 44.1%)</td>
</tr>
<tr>
<td></td>
<td>217</td>
<td>No</td>
<td>101,349</td>
<td>14,576</td>
<td>19,645</td>
<td>+ 5,069 (+ 34.8%)</td>
</tr>
<tr>
<td>Total</td>
<td>320</td>
<td>–</td>
<td>162,675</td>
<td>23,362</td>
<td>32,306</td>
<td>+ 8,944 (+ 38.3%)</td>
</tr>
</tbody>
</table>
Conclusions

• Nearly a third (103/316) of the primary care physicians who participated in this program completed the PI CME educational activities offered and received 20 AMA PRA Credits™.

• The program was successful in driving up pneumococcal vaccination rates: a total of 14,760 elderly patients and 8,944 patients at high risk of pneumococcal infection in just three medical groups were vaccinated post baseline over its two-year course.

• Access to the Clinical Performance Dashboard alone improved pneumococcal vaccination rates by 20% to 42%.

• In addition, finishing the CME program worked even better, improving pneumococcal vaccination rates by 22% to 53%, especially in vaccinating younger patients at high risk.

• The program achieved both Moore’s Level 5 (Performance) and Level 6 (Patient Health Status).