ENHANCING RISK-BASED IMMUNIZATION RATES AMONG FAMILY MEDICINE CLINICS IN MILWAUKEE, WISCONSIN

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INTRODUCTION

• One of Healthy People 2020’s goals focuses on increasing immunization rates.

• As 2020 approaches, many of our immunization rates remain suboptimal.
  • This is in part due to a lack of patient education and counseling, which is often challenging.
  • Education and counseling may be better accomplished through a multidisciplinary approach.

OBJECTIVE: To determine whether educating nurses and medical assistants on vaccination indications will increase the appropriate vaccination rates of our patient populations at two of our clinics.

STUDY OUTLINE

PGY-2 + PGY-3 Residents (N = 20)

Pre-Intervention Group
 Patients = 191 at Family Care Center (FCC) and Family Practice Center (FPC)

- Random Selection (N=1000)
- Exclusion of patients seen by one of the studies investigators.

07/01/17
09/30/17

Patients = 872

10/01/17
10/31/17

Intervention with Nurses & Medical Assistants

Post-Intervention Group
 Patients = 192 at FCC and FPC

- Repeat Patients Excluded (N=1935)
- Random Selection (N=1000)
- Exclusion of patients seen by one of the studies investigators.

11/01/17
01/31/18

Patients = 817

METHODS

Educational Intervention
• A case-based lecture series during lunch hour
• Developed based on standard CDC vaccination recommendations
• Addressed immunization guidelines and identified barriers to vaccination.

Participant Incentives
• $5-dollar gift card for each session attended
• Light snacks were available at each session

Materials Handed out to Participants
• "Quick Reference Guide" listing common vaccine indications
• The American Academy of Pediatrics "Refusal to Vaccinate" form
• The CDC’s 2015 Pneumococcal Vaccine Timing for Adults handout

MOST COMMON INDICATIONS

PRE- & POST-INTERVENTION COMBINED

<table>
<thead>
<tr>
<th>Selected High-Risk Groups</th>
<th>Percent (%</th>
<th>Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refugees</td>
<td>10.12%</td>
<td>(N=171)</td>
</tr>
<tr>
<td>History of STI/High Risk</td>
<td>12.67%</td>
<td>(N=214)</td>
</tr>
<tr>
<td>Patients ≥65 y/o</td>
<td>10.42%</td>
<td>(N=176)</td>
</tr>
<tr>
<td>Heart/Lung Disease</td>
<td>37.06%</td>
<td>(N=626)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>16.87%</td>
<td>(N=285)</td>
</tr>
</tbody>
</table>

COMPARISON TO NATIONAL DATA

<table>
<thead>
<tr>
<th>PPSV23 &amp; Risk Group</th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
<th>P-Value</th>
<th>National Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>19–64 y/o High Risk</td>
<td>42.1% (N=380)</td>
<td>46.6% (N=380)</td>
<td>0.261</td>
<td>23%</td>
</tr>
<tr>
<td>≥65 y/o</td>
<td>83.3% (N=90)</td>
<td>92.1% (N=80)</td>
<td>0.091</td>
<td>63.6%</td>
</tr>
</tbody>
</table>

Hep B & Risk Group

| Chronic Liver Disease     | 41.86% (N=43)    | 39.58% (N=40)     | 0.827   | 27.4%         |
| Diabetics                 | 26.3% (N=137)    | 25.0% (N=148)     | 0.806   | 24.4%         |

DISCUSSION

• Overall, slight increases in immunization rates were observed. However, none of them reached statistical significance.

• Additionally, rates differed between clinics.

• While the data show that immunization rates at the two clinics are better than national averages, there is still a lot of room for improvement in terms of risk-based vaccinations.

CONCLUSION

For the vast majority of vaccines, the intervention did not have much of an impact; thus, implying the need to refocus vaccination educational efforts on to physicians, or to shift the focus from education to automatic recall reminders.

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