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

Zeeshan Yacoob B.Sc. 1; Christopher Cook, DO 2,3; Jessica Kram, MPH 1,4; Marianne Klumph, MA 1,4; Dennis Baumgardner, MD 1,2,4; Marisa Stanley, MPH 1; Paul Hunter, MD 1; Fabiana Kotovicz, MD 1,2,3

1University of Wisconsin Madison School of Medicine and Public Health; 2Department of Family Medicine; 3Aurora University of Wisconsin Medical Group, 4Center for Urban Population Health, Milwaukee, WI

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 = 1951 at Family Care Center (FCC) and Family Practice Center (FPC)
07/01/17 → 09/30/17
- Random Selection (N=1000)
- Exclusion of patients seen by one of the studies investigators.

Patients = 872

10/01/17 → 10/31/17
Intervention with Nurses & Medical Assistants

Post-Intervention Group
Patients = 1019 at FCC and FPC
11/01/17 → 01/31/18
- Repeat Patients Excluded (N=1935)
- Random Selection (N=1000)
- Exclusion of patients seen by one of the studies investigators.

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

COMPARISON TO NATIONAL DATA

<table>
<thead>
<tr>
<th>PPSV23 &amp; Hep B 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=309)</td>
<td>46.6% (N=296)</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=76)</td>
<td>0.091</td>
<td>63.6%</td>
</tr>
<tr>
<td>Hep B &amp; Risk Group</td>
<td>Pre-Intervention</td>
<td>Post-Intervention</td>
<td>P-Value</td>
<td>National Data</td>
</tr>
<tr>
<td>Chronic Liver Disease</td>
<td>41.86% (N=43)</td>
<td>39.58% (N=48)</td>
<td>0.827</td>
<td>27.4%</td>
</tr>
<tr>
<td>Diabetics</td>
<td>26.3% (N=137)</td>
<td>25.0% (N=148)</td>
<td>0.806</td>
<td>24.4%</td>
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</tbody>
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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.