Improving Vaccination Rates for the 2018-2019 Influenza Season
Preventive medicine is critical to help people live longer, healthier lives and keep health care costs down. Promoting influenza immunizations among your patients can significantly contribute to these outcomes. According to the Centers for Disease Control and Prevention (CDC), during the 2017-2018 flu season alone, the influenza vaccine prevented 7.1 million illnesses, 3.7 million medical visits, 109,000 hospitalizations, and 8,000 deaths associated with the flu.\textsuperscript{1}

While these results indicate the significant benefits of current influenza vaccination, there is still a need for improved vaccination rates. For the same 2017-2018 flu season, nearly 58% of children\textsuperscript{2} and only 37% of adults\textsuperscript{3} received the vaccination. This was a 6% decline for adults from the previous season and their lowest rate since the CDC began recording official data in the 2009-2010 flu season.\textsuperscript{3}

This organizational supplement summarizes information and resources the American Academy of Family Physicians (AAFP) develops, utilizes, and disseminates to family physicians and their health care teams to increase influenza vaccination rates. The supplement focuses on the 2018-2019 influenza season to include:

- Composition changes
- Recommendation changes
- Vaccine choices by age
- Communicating with patients
- Forming a plan

**COMPOSITION CHANGES**

Trivalent vaccines are traditional vaccines and protect against three flu viruses: influenza A (H1N1) virus, influenza A (H3N2) virus, and influenza B virus. Quadrivalent vaccines protect against these same three viruses and an additional B virus. There were a couple changes in the composition of the trivalent and quadrivalent vaccines for the 2018-2019 influenza season. The A and B strains are indicated below:\textsuperscript{4}

**Trivalent vaccines contain:**
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus\textsuperscript{*}
- B/Colorado/06/2017-like virus (Victoria lineage)\textsuperscript{*}\textsuperscript{4}

**Quadrivalent vaccines contain:**
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus\textsuperscript{*}
- B/Colorado/06/2017-like virus (Victoria lineage)\textsuperscript{*}
- B/Phuket/3073/2013-like virus (B/Yamagata lineage)\textsuperscript{4}

\textsuperscript{*}Indicates changes in the composition for the 2018-2019 influenza season.

**RECOMMENDATION CHANGES**

In addition to composition changes, there were recommendation changes issued by the CDC for the 2018-2019 influenza season. However, the AAFP differs about the recommendation for a live attenuated influenza vaccine (LAIV) issued by the CDC. That bullet is bolded below.

Here is a summary of the CDC recommendation changes and the AAFP recommendation about LAIV:\textsuperscript{4,5}
- Afluria quadrivalent is now appropriate for children \( \geq 5 \) years (previously indicated for children \( \geq 18 \) months)\textsuperscript{4}
- Fluarix quadrivalent is now appropriate for children \( \geq 6 \) months (previously indicated for children \( \geq 3 \) months) at the same 0.5 ml dose\textsuperscript{4}
- The CDC recommends LAIV4 (flu mist) is now an option for appropriate individuals. Versions of LAIV4 in the prior two influenza seasons were not recommended due to the H1N1 component. That H1N1 component was replaced and tested to show improved replicative fitness.\textsuperscript{4} However, since it has not been tested during an influenza season, the AAFP has given a preferential recommendation of the inactivated influenza vaccine (IIV) over the LAIV4 (flu mist) vaccine. The AAFP does say LAIV4 can be used in appropriate individuals 2-49 years who would not otherwise be vaccinated.\textsuperscript{5}

**VACCINE CHOICES BY AGE**

All individuals \( \geq 6 \) months with no contraindications should annually receive the appropriate influenza vaccine. There are three types of influenza vaccines in the U.S. for the 2018-2019 influenza season: IIV, recombinant influenza vaccine (RIV), and LAIV. All LAIV types are a quadrivalent flu vaccine.

The table on the next page is adapted from the CDC and provides vaccines and dosing amounts by age. The full table can be found at www.cdc.gov/flu/protect/vaccine/vaccines.htm.

Several age groups and other groups of individuals are at greater risk of influenza complications. Groups at greater risk of complication when contracting influenza include:\textsuperscript{5}
- Children <5 years; especially those <2 years
- Adults \( \geq 50 \) years; especially those \( \geq 65 \)
- Pregnant women
- Residents of nursing homes and long-term care facilities
- Individuals with chronic illnesses
- American Indians and Alaskan natives\textsuperscript{7}

**COMMUNICATING WITH PATIENTS**

The costs of influenza vaccination are significant, both medically and economically. The CDC estimates that 23 million medical visits, 960,000 hospitalizations, and 79,000 deaths occurred during the 2017-2018 influenza season.\textsuperscript{1} According to one study, the total economic burden of influenza to the health care system and society is $11.2 billion annually.\textsuperscript{9}
### Quadrivalent IIVs (IIV4s)

<table>
<thead>
<tr>
<th>Age</th>
<th>Dose</th>
<th>Trade Name (Manufacturer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-35 months</td>
<td>0.25 mL prefilled syringe</td>
<td>Fluzone quadrivalent (Sanofi Pasteur)</td>
</tr>
<tr>
<td>≥6 months</td>
<td>5.0 mL multi-dose vial</td>
<td>Afluria quadrivalent (Seqirus)</td>
</tr>
<tr>
<td></td>
<td>0.5 mL prefilled syringe</td>
<td>Fluzone quadrivalent (Sanofi Pasteur)</td>
</tr>
<tr>
<td></td>
<td>0.5 mL single-dose vial</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.0 mL multi-dose vial</td>
<td></td>
</tr>
<tr>
<td>≥6 months</td>
<td>0.5 mL prefilled syringe</td>
<td>FluLaval quadrivalent (ID Biomedical Corp. of Quebec)</td>
</tr>
<tr>
<td></td>
<td>5.0 mL multi-dose vial</td>
<td></td>
</tr>
<tr>
<td>≥6 months</td>
<td>0.5 mL prefilled syringe</td>
<td>Fluarix quadrivalent (GlaxoSmithKline)</td>
</tr>
<tr>
<td>≥3 years</td>
<td>0.5 mL prefilled syringe</td>
<td>Afluria quadrivalent (Seqirus)</td>
</tr>
<tr>
<td>≥4 years</td>
<td>0.5 mL prefilled syringe</td>
<td>Flucelvax quadrivalent (Seqirus)</td>
</tr>
<tr>
<td>18-64 years</td>
<td>5.0 mL multi-dose vial (jet injector)</td>
<td>Afluria quadrivalent (Seqirus)</td>
</tr>
</tbody>
</table>

### Trivalent IIV (IIV3s)

<table>
<thead>
<tr>
<th>Age</th>
<th>Dose</th>
<th>Trade Name (Manufacturer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥6 months</td>
<td>5.0 mL multi-dose vial</td>
<td>Afluria (Seqirus)</td>
</tr>
<tr>
<td>≥3 years</td>
<td>0.5 mL prefilled syringe</td>
<td></td>
</tr>
<tr>
<td>18-64 years</td>
<td>5.0 mL multi-dose vial</td>
<td></td>
</tr>
<tr>
<td>≥65 years</td>
<td>0.5 mL prefilled syringe</td>
<td>Fluad (Seqirus)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fluzone high-dose (Sanofi Pasteur)</td>
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</tbody>
</table>

### Quadrivalent RIV (RIV4)

<table>
<thead>
<tr>
<th>Age</th>
<th>Dose</th>
<th>Trade Name (Manufacturer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥18 years</td>
<td>0.5 mL prefilled syringe</td>
<td>Flublok quadrivalent (Sanofi Pasteur)</td>
</tr>
</tbody>
</table>

In order to help reduce the medical and economic costs, it is imperative to have a strategy and to communicate with your patients about the importance of getting vaccinated. Dispelling flu myths is one step to put patients at ease. Familydoctor.org identifies these myths and information to dispel them at www.familydoctor.org/flu-myths/.

**FORMING A PLAN**

A strategy to improve your influenza vaccination rate doesn’t require a complicated plan and can be incorporated into daily activities in your practice. A recent *FPM* article identified the following five steps:10

**Find a champion:** Identify a physician or staff member to advance your practice’s influenza vaccination efforts. The individual should stay current on vaccination guidelines and regularly communicate these and other efforts to all care team members.

**Use standing orders:** Set up protocols care team members can use to assess immunization status and administer vaccinations without a direct order from the physician.

**Optimize your documentation:** Under Medicare’s Quality Payment Program (QPP), the quality measure for influenza vaccination can be reported as a performance exclusion if: a flu shot cannot be administered because the patient already received the shot; has a relevant allergy; declines the shot; or due to a health system reason, such as a vaccine shortage. Make sure you document the reason, so it won’t affect quality measures in QPP.

**Provide regular reminders:** Some electronic health records (EHRs) can prompt care team members if the patient has received the flu shot. Reminders can also be sent to patients through EHR portal messages, email, phone, or postcard. Text messages are becoming more popular as reminders.

**Give ongoing feedback:** Set up regular evaluation and feedback sessions to check in to see how your practice is performing. This could contain your practice’s vaccination rates and a discussion about what is working and what is not in your performance.10
REFERENCES

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