



<b>Body System: Pediatrics</b>		
<b>Session Topic: Pediatric and Adolescent Immunization Update</b>		
<b>Educational Format</b>		<b>Faculty Expertise Required</b>
<b>REQUIRED</b>	Interactive Lecture	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required.
<b>OPTIONAL</b>	Problem-Based Learning (PBL)	Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. <u>Please describe your interest and plan for teaching a PBL on your proposal form.</u>
<b>Professional Practice Gap</b>	<b>Learning Objective(s) that will close the gap and meet the need</b>	<b>Outcome Being Measured</b>
<ul style="list-style-type: none"> <li>Family physicians have knowledge gaps in keeping up to date on current immunization schedules and alerts</li> <li>Family physicians have knowledge and performance gaps in utilizing standing orders, standardized protocols to screen for immunizations during patient encounters, and adopting a systematic approach to vaccine administration</li> <li>Family physicians have knowledge and performance gaps in using available patient education resources to counsel patients about vaccine safety and efficacy</li> <li>Family physicians have knowledge and performance gaps related to participation in available childhood immunization programs, including having effective and efficient vaccine administration strategies</li> </ul>	<ol style="list-style-type: none"> <li>Identify available vaccine administration strategies and resources, available patient education resources or programs, vaccine alert systems, current immunization schedules, for child and adolescent patients.</li> <li>Use evidence-based recommendations and guidelines to establish standardized vaccine administration procedures, including standardized protocols to screen for immunizations during child and adolescent patient encounters.</li> <li>Counsel parents of children and adolescents, using available patient education resources and motivational interviewing about vaccine safety and efficacy.</li> <li>Participate in available childhood immunization programs, and administer using a standardized process.</li> </ol>	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.



ACGME Core Competencies Addressed (select all that apply)			
X	Medical Knowledge		Patient Care
X	Interpersonal and Communication Skills		Practice-Based Learning and Improvement
	Professionalism		Systems-Based Practice
Faculty Instructional Goals			
<p>Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.</p> <ul style="list-style-type: none"> <li>• Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy &amp; reference citations</li> <li>• Facilitate learner engagement during the session</li> <li>• Address related practice barriers to foster optimal patient management</li> <li>• Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the <u>References</u> section below are a good place to start <ul style="list-style-type: none"> <li>○ Visit <a href="http://www.aafp.org/journals">http://www.aafp.org/journals</a> for additional resources</li> <li>○ Visit <a href="http://familydoctor.org">http://familydoctor.org</a> for patient education and resources</li> </ul> </li> <li>• Provide evidence-based recommendations and guidelines for optimal vaccine administration and office protocols for child and adolescent patients.</li> <li>• Provide examples of available resources to keep physicians up to date on current immunization schedules, alerts, and available childhood immunization programs.</li> <li>• Provide specific examples to assist physician-learners in optimally managing their participation in childhood immunization programs.</li> <li>• Provide specific strategies and resources to assist physician-learners to counsel parents of children, using available patient education resources and motivational interviewing about vaccine safety and efficacy.</li> </ul>			

**Needs Assessment:**

Immunizations are critical to maintaining health and the prevention of disease for everyone in the U.S. Vaccinations are recommended throughout life to prevent vaccine-preventable diseases and their sequelae. Data from the 2011 CDC National Health Interview Survey indicates that only 45.3% of children 6 months to 17 years had received an influenza vaccination during the past 12 months; only 27.2% of adults 18-49 years had received an influenza vaccination during the past 12 months.<sup>1</sup>

In 2010, primary care physicians provided preventive care during more than 207 million office visits; including more than 22 million influenza vaccinations.<sup>2</sup> Eighty-seven percent of active American Academy of Family Physician (AAFP) members provide immunizations in their practices.<sup>3</sup> However, data from the 2012 AAFP CME Needs Assessment Survey indicates that family physicians have statistically significant and meaningful gaps in knowledge and skill to provide optimal immunization management.<sup>4</sup> CME outcomes data from the 2012 and 2015 AAFP FMX (formerly Scientific Assembly): *Child and Adolescent Immunizations* session



indicate that physicians have knowledge and practice gaps regarding immunization alerts; standing protocols to screen for immunizations at every visit; the utilization of EHR reminder systems; recognizing updates to the immunization schedule, relative to the schedule published the prior year; having effective counseling and patient education resources available for parents who question the safety and efficacy of vaccines; and participation in childhood immunization programs.<sup>5,6</sup>

There are numerous barriers to achieving optimal vaccination rates, including low patient health literacy and understanding of vaccine safety and efficacy; organizational barriers such as cost, insurance coverage; and operational barriers such as not stocking all recommended vaccinations and lack of standing orders.<sup>7-12</sup> The 2012 AAFP Immunization Survey indicates that the most commonly-cited patient barriers to immunization were safety concerns (58%), personal or religious beliefs (53%) and cost (51%); the most commonly-cited practice-level barriers to immunization were cost (51%), patient acceptance (33%), and supply of vaccine (30%); sixty-five percent of respondents indicated that at least one parent refused vaccinations for their child; fifty-seven percent of respondents indicated participation in the Vaccines for Children program, and among those who did not indicate participation, respondents indicated that it was too burdensome (36%), difficulties associated with keeping vaccines separated (34%), difficulty of record-keeping (32%), and they don't care for children (28%).<sup>3</sup> Low socioeconomic status has been cited as a reason for lack of immunizations. More recently, however, parental reluctance to vaccinate their children has become a growing public health concern.<sup>13</sup>

Family physicians should remain up to date on current AAFP immunization schedules, and receive continuing education aimed at helping physicians overcome common barriers to immunization management.<sup>14,15</sup> In fact, key points for practice from the 2017 ACIP/AAFP Childhood Immunization Recommendations include:<sup>16</sup>

- Infants should receive their first dose of hepatitis B vaccine within 24 hours of birth.
- Two doses of human papillomavirus vaccine administered at zero and then 6 to 12 months is recommended for adolescents who begin the series before 15 years of age.
- The recommendations for both meningococcal vaccines apply regardless of human immunodeficiency virus status or CD4 count in children and adolescents.
- In low-risk adolescents, serogroup B meningococcal vaccine may be given as a two-dose series.
- High-risk medical conditions may require altered vaccine schedules.

Physicians should consider AAFP Clinical Preventive Service Recommendations for Immunizations, summarized as:<sup>17</sup>

#### **Immunization, Children**

- The AAFP *recommends* immunizing all children 0-6 years of age using the AAFP recommendations unless contraindicated. (2010) (Grade: A recommendation)

#### **Immunization, Children, Catch-up**

- The AAFP *recommends* immunizing children 0-6 years who are between doses for vaccinations with the AAFP recommendation unless contraindicated. (2010) (Grade: A recommendation)

#### **Immunization, Adolescent**



- The AAFP *recommends* immunizing all adolescents 7-18 Years of age using the AAFP recommendations unless contraindicated. (2010) (Grade: A recommendation)

### **Immunization, Adolescent, Catch-up**

- The AAFP *recommends* immunizing adolescents 7-18 Years who are between doses for vaccinations with the AAFP recommendation unless contraindicated. (2010) (Grade: A recommendation)

Despite many patient and physician barriers to pediatric and adolescent vaccinations, rates can be improved, often with simple interventions such as patient reminders and recalls, standing orders, and patient education. As our health systems become increasingly automated, electronic clinical decision-support systems (CDS) systems and new mobile applications can help make vaccination more efficient and reliable.<sup>18,19</sup> Practices can achieve sustainable increases in childhood immunization rates by analyzing and eliminating physical and procedural barriers to immunization, and implementing strategies to address those barriers:<sup>20</sup>

- Providing provider and staff education
- Establish pre-visit planning
- Establish EHR vaccine order “smart sets”
- Reorganize vaccine accessibility within the facility
- Utilize no-show reminder letters
- Utilize no-show reminder phone calls
- Offer walk-in immunizations for standard CDC-recommended immunizations

Family physicians should adopt a systematic approach to vaccine administration that includes educating patients and office staff and using reliable sources of information, standing protocols during patient encounters, and widely accepted practice management resources.<sup>21</sup> Physician recommendation is the most important factor influencing a patient’s decision to be immunized, and with a recent surge of vaccine-preventable diseases, it is important for physicians to recommend these important vaccinations.<sup>22-24</sup>

Physicians may improve their pediatric immunization practices by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:<sup>13</sup>

- Physicians should explain to parents that vaccines—including the measles, mumps, and rubella vaccine—are beneficial, safe, and effective.
- Physicians should reassure parents that there is no evidence that vaccines cause autism or neurologic problems.
- Physicians should inform parents that the risk of intussusception with the rotavirus vaccine is minimal compared with the decrease in morbidity and mortality associated with rotavirus diarrheal disease.
- Live attenuated influenza vaccine and inactivated influenza vaccine are both appropriate options in healthy children two to eight years of age who have no contraindications. Either vaccine is appropriate in older children and in adults up to 49 years of age.
- The tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) vaccine should be administered to pregnant women at 27 to 36 weeks' gestation to provide passive immunity for their infants.



- Human papillomavirus vaccine should be administered to adolescent females and males.

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- AAFP Immunization Schedules<sup>25</sup>
- Update on immunizations in children and adolescents<sup>14</sup>
- Vaccine administration: making the process more efficient in your practice<sup>26</sup>
- Achieving sustainable increases in childhood immunization rates<sup>20</sup>
- ACP Immunization Advisor<sup>18</sup>
- Resolving patients' vaccination uncertainty: going from "no thanks!" to "of course!"<sup>23</sup>
- Engaging Patients in Collaborative Care Plans<sup>27</sup>
- Clinical decision support: using technology to identify patients' unmet needs<sup>28</sup>
- Documenting and coding preventive visits: a physicians' perspective<sup>29</sup>
- Encouraging patients to change unhealthy behaviors with motivational interviewing<sup>30</sup>
- CDC Vaccines & Immunizations: Patient Education<sup>31</sup>
- FamilyDoctor.org. Immunization Schedules (patient resource)<sup>32</sup>
- FamilyDoctor.org. Vaccines ( many patient resource)<sup>33</sup>
- FamilyDoctory.org - Childhood Vaccines: What They Are and Why Your Child Needs Them (patient resource)<sup>34</sup>

References

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