

**Milestone: 50th Anniversary of the Surgeon General's Report on Smoking**

# Perspectives

A VIEW OF FAMILY MEDICINE IN NEW JERSEY

VOLUME 13, ISSUE 1 • 2014

## SMOKING and HEALTH

REPORT OF THE ADVISORY COMMITTEE  
TO THE SURGEON GENERAL  
OF THE PUBLIC HEALTH SERVICE



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
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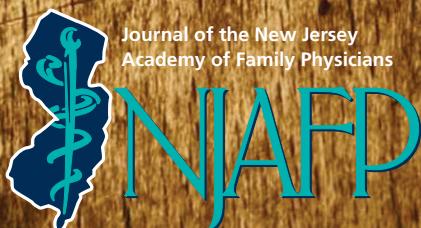
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## On the Cover

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# A World of Difference

I started this column writing about the need for positive communication to counteract the anti-vaccination movement. In researching this topic, I stumbled upon a World Health Organization (WHO) Bulletin<sup>1</sup> about the effect that vaccines have had on the world. I expected the usual reports on reductions in morbidity and mortality, but there were facts in this bulletin that I never knew or even suspected. For example, did you know that the only other substance more effective in reducing the burden of infectious disease is clean water? Other examples of the positive effects of vaccines include:

- Global Eradication: once a pathogen has been eradicated it cannot re-emerge (unless reintroduced either accidentally or intentionally). This allows vaccination and other preventative measures to be discontinued. Smallpox falls into this category. Polio is the next disease targeted for eradication. Type 2 polio has already been eliminated, but types 1 and 3 still exist.
- Elimination: Diseases can be eliminated locally without global eradication. Substantial progress has been made in four of the six WHO regions to eliminate measles. The disease is no longer indigenous in these regions and importing the virus does not result in a sustained spread of the virus. However, for this fact to remain true there must be more than 95% population immunity through the two-dose vaccine regimen. Measles has already been eliminated in the Americas, and measles, mumps, and rubella have been eliminated in Finland. The elimination of the viruses from these regions is proof of the feasibility of their eventual global eradication. However, it must be noted that local elimination does not remove the danger of reintroduction of the disease in such as the re-emergence of measles introduced back into the U.S. by those originally infected in other WHO regions.<sup>2</sup>
- Reduction of morbidity and mortality: Vaccines protect the individual if administered before exposure, and some vaccines are effective even after exposure, i.e., rabies, hepatitis A and B, measles, and varicella. On a global level, vaccines prevent almost 6 million deaths, and in the U.S. there has been a 99% decrease in nine of the diseases for which immunization is routinely recommended.
- Protection of unvaccinated populations: Herd immunity protects the unvaccinated when a sufficient number of the population is immunized. Source drying also protects unvaccinated populations by stopping the reservoir of the infection, for example immunization of food handlers to control typhoid and hepatitis A.
- Protection against related diseases: Vaccines can prevent against disease that are related to the target disease. Research has shown that the influenza vaccine can be protective for otitis media in children, and measles vaccination protects against complications such as dysentery and bacterial pneumonia.
- Cancer prevention: Chronic hepatitis B infection is known to lead to liver cancer, and some cervical cancers are linked to the human papillomavirus. Immunization can prevent these cancers from occurring.



*continued on page 28*

# New Challenges, New Opportunities

Thomas A. Shaffrey, MD

*Dr. Shaffrey is president of the New Jersey Academy of Family Physicians. He is in private practice in Bound Brook, NJ.*

**A**s in the past, each year brings new challenges and new opportunities. 2014 opened with significant changes related to the Affordable Care Act, and 2013 closed with a significant proposal to eliminate the Medicare calculation known as the SGR, the means by which the federal government determines what it will pay for health care services. Both changes are likely to have significant effects on how practices operate.

At the end of 2013, members of the U.S. Congress offered a proposal regarding Medicare's payment formula, the SGR. Most of us are aware that this formula, first adopted in the 1990s, is tied to economic indicators for the national economy. For the past decade, this formula has dictated that Medicare payments be reduced. Each year, Congress has passed what has become known as the "Doc Fix" to prevent this from happening, but the end result has only compounded the need for greater reductions the following year. Last fall, a bipartisan proposal was presented that would eliminate the SGR and freeze Medicare payments at the 2013 level

colleague had to obtain short-term loans this month to pay for practice expenses because of increased delays in payments. Another colleague informed me that last year, after nearly 2 decades, his practice was no longer viable and he had to seek employment elsewhere. The reason? The lack of payment increases as well as outright payment cuts. A third has asked when, after funding the expenses and obtaining PCMH certification, she could expect to see increases in payments to justify those expenses. These are not the first occurrences of such issues that I have encountered. I would venture that other colleagues are experiencing similar problems.

It is critical that you be heard and not keep the problems that you are facing to yourself. I have made a point of discussing these topics with local colleagues as well as those from other states. Many of these issues are being felt across the state and across the country. Unless there is recognition of common problems, there cannot be a unified effort to find a common solution. The NJAfp is here to represent you, but in order to do so, you must be willing to share the obstacles that are affecting you and your practice. As I noted last June, one of the simplest but most powerful quotes that I believe is important is, "I cannot keep my patients healthy if I'm not healthy." To that purpose, I ask you to let me know what is happening to you, the problems that you are facing, and the successes that you have had. Please feel free to contact me at [president@njafp.org](mailto:president@njafp.org), and consider joining the AAFP listservs to read and share your experiences with colleagues from across the country, available at <http://www.aafp.org/about/membership/services/aafp-connection.html>

I also urge each member to consider being a county representative to the 2014 House of Delegates, which precedes the yearly Scientific Assembly in June. The House of Delegates, when in session, is the governing body of the NJAfp. It is here where members can best inform the NJAfp Board and, by extension, the AAFP of what is happening to you and your practice, and direct what changes are needed to help maintain your practice and keep it viable for years to come. ▲

**Editor's Note:** The NJAfp House of Delegates will convene at 8:00 am on Friday, June 13, 2014 at the Sheraton Atlantic City Convention Center Hotel. Visit [www.njafp.org/SCSA](http://www.njafp.org/SCSA) for updates and registration information.



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**It is critical that you be heard and not keep the problems that you are facing to yourself. You must be willing to share the obstacles that are affecting you and your practice.**

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for the next 10 years. The American Academy of Family Physicians (AAFP) held conference calls with representatives of state chapters to discuss this proposal. After due consideration, the AAFP gave its conditional support to the proposal and is pursuing changes to strengthen aspects of primary care payments.

Since the beginning of the year, I have heard stories of difficulties from colleagues whom I have known for quite some time. One

# Transformative Ideas *Ignore at Your Own Risk*

*Ray Saputelli, MBA, CAE*

*Raymond J. Saputelli, MBA, CAE is the Executive Vice President of the New Jersey Academy of Family Physicians (NJAfp) and the Executive Director of the NJAfp Foundation.*

The Patient Centered Medical Home is a doomed failure. It must be. It's all over the healthcare news. The first indication was the February 25th *JAMA* article that studied "One of the first, largest, and longest-running multipayer trials of patient-centered medical home medical practices in the United States" and found it to be "associated with limited improvements in quality and was not associated with reductions in use of hospital, emergency department, or ambulatory care services or total costs of care over three years." Shortly after, we heard from MedPAC Chair, Glenn Hackbarth, JD, who said, "In order to meet all the NCQA requirements, there are a lot of bells and whistles that have been added. My impression is that not all of them have really been validated as added value, but they add cost. I'm worried that maybe the medical home model has a real cost disadvantage." In the wake of these comments almost every healthcare reporter, blogger, observer, and commentator has had something to say about the failure of the model. Why wouldn't they? After all, bad news is good for business in the cut-throat, get-it-first game of news reporting in our sound-bite hungry culture. It's even better if they can tell us what we should think in 140 characters or less.

My first reaction to the news was that this was all coming from people with something to gain by the failure of the model. I came

able is the motivation behind some of the naysayers, I don't really know if that is the motivation for everyone. Certainly there are some people who really do want to find a way to lower cost, improve quality and the patient experience, and improve the overall health of the population.

So why the myopia? How does one who is not simply motivated by the desire to mute change argue against the changes to healthcare delivery that the PCMH model advocates? In my opinion it is because too much of the dialogue is focused on immediate cost reduction while the model likely "bends the cost curve" over a longer interval. At the risk of being glib, if we are simply interested in reducing immediate healthcare costs we would make it MORE difficult to access care. If my chronic condition is undiagnosed and/or untreated, and if I am then denied access to the ER for the acute episodes that are the result of that undiagnosed and untreated condition, I do not consume any healthcare resources. Costs in that short window of time are in fact reduced. We know that is not a sustainable, nor a socially acceptable model. Conversely, if the system diagnoses and treats more chronic illness sooner and more effectively by employing team-based, efficient, and effective care that is easily accessed; and if the system provides the patient with the tools and resources to more effectively manage their condition; and if we replace the perverse incentives of our volume-based payment system with



## We must continue to learn how to improve the PCMH model, what we value, and how we pay for it.

to the opinion honestly. My father always said "don't believe anything you read and only half of what you see." Of course he wasn't quite that cynical, but he did instill a healthy skepticism in his son. He would tell me that every experiment sets out to prove or disprove something, and smart people with a stake in the outcome can often mold the results to support of their vision. Like Mark Twain said, "There are three kinds of lies: lies, damned lies, and statistics." While I am certain that the desire to see the PCMH model fail in order to maintain a status quo that is more comfort-

one that pays for value, we may actually see a spike in cost in the near term, but the investment in those changes will undoubtedly pay dividends over time. Of course if we continue to refine the model, for example utilizing data and information to deliver the right care to the right patients at the right time, we can even blunt some of that initial spike. I know this is not news to most of the people who will read this; yet for so many the results of one trial are deemed to be a death-knell rather than another step towards the desired end of redesigning our

*continued on next page*

# Perspectives: A View of Family Medicine in New Jersey

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# Transformative Ideas

*continued from previous page*

healthcare delivery system to be financially sustainable.

In 1932 while discussing the potential to harness nuclear energy, Albert Einstein said "There is not the slightest indication that [it] will ever be obtainable. It would mean that the atom would have to be shattered at will." It is reasonable to assume that an intellect such as Einstein had some degree of confidence when he made that statement. In fact, it is likely that he based his opinion on the research and empirical data that was available at the time. I can imagine such research and data described using statements such as: *Interventions to transform the atom into harnesable energy sources are increasingly common, but their effectiveness in improving power quality and containing energy costs is unclear.* Perhaps I am being too facetious, but I am glad that we never stopped trying.

Almost one-hundred years earlier, French surgeon Dr. Alfred Velpéau wrote: "The abolishment of pain in surgery is a chimera. It is absurd to go on seeking it... Knife and pain are two words in surgery that must forever be associated in the consciousness of the patient." Having been a surgical patient in the past, I can offer first-hand gratitude that early attempts to dull the pain of surgery, as disappointing as they may have been, were not abandoned in favor of sharper scalpels.

In July of last year, the 2012 results of the PCMH program were published. This program, its roots almost 5 years prior, was at the time a most unlikely collaboration between NJ AFP and Horizon

Blue Cross and Blue Shield of NJ. The program compared how health care was delivered to 70,000 members in patient-centered practices to the health care delivered to members in other primary care practices. The results showed impressive improvements in care and reduced costs to those members in the program. Some of the highlights included: 5% higher rate in improved diabetes control (HbA1c), 3% higher rate in breast cancer screenings, 11% higher rate in pneumonia vaccinations, 23% lower rate in hospital inpatient admissions, 12% lower rate in Emergency Room (ER) visits, and 9% lower cost of care for diabetic patients. The 2013 results (when published), buttressed in some ways by the additional transformative efforts and improved payment model and funding of the Comprehensive Primary Care Initiative in practices where there is crossover, will likely show even better results.

Much like those who continued to study and refine research in support of transformative ideas proved the initial doubters and naysayers wrong in the areas of nuclear energy, surgical anesthesia, and in many other examples throughout history of transformative ideas that might have been abandoned if only viewed through the single lens early expectations and small result samples (examples abound from radio to the telephone, and from the automobile to space travel), we must continue to learn how to improve the PCMH model, what we value, and how we pay for it. We know what the alternative gets us, and it's simply not sustainable. As always, that's simply my opinion. I welcome yours. ▲

# What Have You Done For Me Lately?

EVP Ray Saputelli, MBA, CAE, and NJAfp President Tom Shaffrey, MD, represented New Jersey in an AAFP-led conference call focused on the SGR.

The NJAfp has teamed with ArcheMedX to create a unique online course on the treatment of major depressive disorder. See New Jersey View (p. 23) for details.

## AAFP Resources for Preventive Services Under the Affordable Care Act

The AAFP has developed an Affordable Care Act (ACA)/clinical preventive services resources page on the AAFP website to assist members in helping their patients take full advantage of the 2014 changes coming to preventive health care coverage benefits under the ACA. The resource page will help family physician members to better counsel patients on the new benefits as well as help them provide and code for preventive services.

Learn which preventive services are covered under the ACA, and help your patients take full advantage of their new health care benefits for issues such as immunizations, obesity, and tobacco cessation. In addition, update yourself on coding changes, and receive current information on the AAFP's ACA-related advocacy efforts.

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## ACADEMY VIEW

# On Smoking and Health

JANUARY 11, 2014, marked the 50th anniversary of the surgeon general's landmark report on smoking and its effect on health. This scientifically rigorous report was the first federal government report to link smoking with diseases such as lung cancer and heart disease.

Since the release of this historic publication, 31 more surgeon general reports have been published, increasing our understanding of the health and financial burden caused by tobacco use. We know now that a host of other cancers and illnesses are attributable to tobacco use, which remains the leading cause of preventable death in the United States. There is good news, however, when it comes to tobacco control. The number of American adults who smoke has fallen from about 43% in 1965 to about 18% today.<sup>1</sup> In addition, mortality rates from lung cancer, the leading cause of cancer death in the United States, are declining.<sup>1</sup> The 50th anniversary report stated, "For the United States, the epidemic of smoking-caused disease in the twentieth century ranks among the greatest public health catastrophes of the century, while the decline of smoking consequent to tobacco control is surely one of public health's greatest successes" (p. 1).<sup>1</sup>

To read the 32nd surgeon general's report, *The Health Consequences of Smoking – 50 Years of Progress*, visit <http://www.surgeongeneral.gov/initiatives/tobacco/>

### Reference

1. U.S. Department of Health and Human Services. (2014). *The health consequences of smoking—50 years of progress: A report of the surgeon general*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

## AAFP Policies on Tobacco and Smoking

The AAFP (2014) has several policies aimed at helping to curb the use of tobacco in the United States. The AAFP recently added a policy on electronic cigarettes, or e-cigarettes. The policy states, "There are concerns about the lack of any regulatory oversight by the Food and Drug Administration's Center for Tobacco Products (FDA CTP) on the manufacture, distribution and safety of e-cigarettes. Therefore, the AAFP calls for rigorous research in the form of randomized controlled trials of e-cigarettes to assess their safety, quality, and efficacy as a potential cessation device."<sup>1</sup> To read all of the AAFP's policies on tobacco and smoking, visit [www.aafp.org/about/policies](http://www.aafp.org/about/policies)

### Reference

1. American Academy of Family Physicians. (2014). Electronic cigarettes: Policies. Retrieved from <http://www.aafp.org/about/policies/all/e-cigarettes.html>



# Updates to the 2014 Immunization Schedules

Everett Schlam, MD

Once again, the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) have updated their recommendations to the vaccine schedule for children, adolescents, and adults. Readers will find one significant change to this 2014 report: Rather than having to scroll through a long list of footnotes explaining the schedules, readers now will be able to click on a link to the CDC's online version of the schedules. This new format will facilitate the timely revision of future scheduling information.

With few exceptions, most of the changes to the schedules involve the clarification of existing recommendations. Highlights of the changes are summarized in this document. Additional information can be found in the February 7, 2014, edition of *Morbidity and Mortality Weekly Report* (MMWR; Akinsanya-Beysolow, 2014)<sup>1</sup> or on the CDC website ([cdc.gov/vaccines](http://cdc.gov/vaccines)).

## Schedule Changes Since Last Release: Child and Adolescent Table

- Meningococcal conjugate vaccine footnotes updated to reflect recent recommendations for use of MCV4-CRM in high-risk persons 2 months of age and older.
- Footnotes organized to reflect vaccine recommendations for each high-risk condition.
- Influenza vaccine footnotes updated to provide guidance for dosing for children between the ages of 6 months and 8 years for the 2013-2014 and 2014-2015 seasons.
- Pneumococcal vaccine footnotes updated to provide guidance for vaccination of persons with high-risk conditions.
- Hepatitis A vaccine footnotes updated to provide guidance for unvaccinated persons who are at increased risk of infection.
- Catch-Up Immunization Schedule: *Haemophilus influenzae* type b (Hib) conjugate vaccine, pneumococcal conjugate vaccine, and Tdap vaccine catch-up schedules updated to provide more clarity.

## Schedule Changes Since Last Release: Adult Tables

### Figure Changes

- A row for Hib vaccine was added
- PCV13 vaccine row was moved before PPSV23 as a reminder that PCV13 vaccines should be administered first among patients for whom both vaccines are recommended.

### Footnote Changes

- Hib vaccine recommendations were updated.
  - The vaccine is recommended for certain adults at increased risk for Hib who have not received the vaccine before. The ACIP has also recommended that adults who have had a successful hematopoietic stem cell transplant receive a 3-dose series of Hib vaccine 6 to 12 months after the transplant, regardless of prior Hib vaccination status. Prior Hib vaccine guidance recommended that Hib vaccination of persons infected with HIV be considered, but updated guidance no longer recommends Hib vaccination of previously unvaccinated adults with HIV infection because their risk for Hib infection is low.

- RIV and IIV: Information on the RIV and the use of RIV and IIV among egg-allergic patients was added to the footnote and indicates that RIV or IIV can be used among persons with hives-only allergy to eggs. The RIV contains no egg protein and can be used with persons between the ages of 18 and 49 years who have egg allergy of any severity.
- Td/Tdap vaccine: The footnote was edited to harmonize language between and among pediatric immunization schedules.
  - A single dose of Tdap vaccine is recommended for previously unvaccinated persons who are 11 years of age or older, and Td booster should be administered every 10 years thereafter.
  - The ACIP has also recommended that pregnant women receive a dose of Tdap vaccine during each pregnancy, preferably during 27 to 36 weeks' gestation, regardless of the interval since the prior dose of Tdap or Td vaccination.
- HPV: Information was added to the footnote to clarify the timing between the second and third doses and to harmonize language between the pediatric and adult immunization schedules; no changes in recommendations were made.
- Specific to health care personnel (HCP): Both the HPV vaccine and the zoster footnotes were simplified, with removal of the bullet regarding HCP. Being a health care worker is not a specific indication for these vaccines, but they should be given to HCP and others who meet age and other indications for these vaccines.\*
- PCV13/PPSV23: Because PCV13 is recommended to be administered before PPSV23 among persons for whom both vaccines are recommended, the PCV13 footnote now precedes the PPSV23 footnote and includes wording to remind HCP of the appropriate order of these vaccines when both are indicated.
  - For PCV13 in high-risk patients, the timing is PCV13, with a minimal interval of 8 weeks before administration with PPSV23. If patient has already received PPSV23, then a minimal interval of 1 year since receiving PPSV23 should pass prior to administration of PCV13.
- Meningococcal vaccine: The footnote was edited to clarify which persons need either 1 or 2 doses of vaccine and to provide greater clarity regarding which patients should receive the meningococcal conjugate (MenACWY) versus the meningococcal polysaccharide (MPSV4) quadrivalent vaccines.

### Contraindications Table Changes

The contraindications and precautions table was updated to include information on RIV, an influenza vaccine that contains no egg protein and is indicated for persons between the ages of 18 and 49 years. The Hib vaccine was added to the table.

\*Information on HCP vaccination for all vaccines can be found in the MMWR "Immunization of Health-Care Personnel" (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6007a1.htm>)

### Reference

1. Akinsanya-Beysolow, I. (2014). Advisory committee on immunization practices recommended immunization schedules for persons aged 0 through 18 years - United States, 2014. *Morbidity and Mortality Weekly Report*, 63, 108-109.



# **Recommended Adult Immunization Schedule and Recommended Immunization Schedules for Persons Aged 0 Through 18 Years United States, 2014**

**T**he 2014 ACIP Adult Immunization Schedule was approved by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP), American Academy of Family Physicians (AAFP), the American College of Physicians (ACP), the American College of Obstetricians and Gynecologists (ACOG), and the American College of Nurse-Midwives (ACNM). On February 3, 2014, the adult immunization schedule and a summary of changes from 2013 were published in the Annals of Internal Medicine, and a summary of changes was published in the MMWR on February 7, 2014.

The Recommended Immunization Schedules for Persons Aged 0 Through 18 Years includes recommendations in effect as of January 1, 2014. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines.

Vaccination providers should consult the relevant ACIP statement for detailed recommendations, available on line at <http://www.cdc.gov/vaccines/hcp/acip-recs/index.html>. All clinically significant postvaccination reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or by telephone, 800-822-7967.

**Adult Immunization Schedule** has been approved by:

- **American Academy of Family Physicians (AAFP)** – <http://www.aafp.org/home.html>
- **American College of Physicians (ACP)** – <http://www.acponline.org/>
- **American College of Obstetricians and Gynecologists (ACOG)** – <http://www.acog.org/>
- **American College of Nurse-Midwives (ACNM)** – <http://www.midwife.org/>

**Recommended Immunization Schedules for Persons Aged 0 Through 18 Years**

has been approved by:

- **Advisory Committee on Immunization Practices (ACIP)** – <http://www.cdc.gov/vaccines/acip>
- **American Academy of Pediatrics (AAP)** – <http://www.aap.org>
- **American Academy of Family Physicians (AAFO)** – <http://www.aafp.org>
- **American College of Obstetricians and Gynecologists** – <http://www.acog.org>



## Recommended Adult Immunization Schedule—United States - 2014

Note: These recommendations must be read with the footnotes that follow containing number of doses, intervals between doses, and other important information.

**Figure 1. Recommended adult immunization schedule, by vaccine and age group<sup>1</sup>**

VACCINE ▼	AGE GROUP ►	19-21 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years
Influenza <sup>2,*</sup>					1 dose annually		
Tetanus, diphtheria, pertussis (Td/Tdap) <sup>3,*</sup>				Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs			
Varicella <sup>4,*</sup>				2 doses			
Human papillomavirus (HPV) Female <sup>5,*</sup>		3 doses					
Human papillomavirus (HPV) Male <sup>5,*</sup>		3 doses					
Zoster <sup>6</sup>						1 dose	
Measles, mumps, rubella (MMR) <sup>7,*</sup>		1 or 2 doses					
Pneumococcal 13-valent conjugate (PCV13) <sup>8,*</sup>				1 dose			
Pneumococcal polysaccharide (PPSV23) <sup>9,10</sup>				1 or 2 doses		1 dose	
Meningococcal <sup>11,*</sup>				1 or more doses			
Hepatitis A <sup>12,*</sup>				2 doses			
Hepatitis B <sup>13,*</sup>				3 doses			
Haemophilus influenzae type b (Hib) <sup>14,*</sup>				1 or 3 doses			

\*Covered by the Vaccine Injury Compensation Program

  For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster

Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at [www.vaers.hhs.gov](http://www.vaers.hhs.gov) or by telephone, 800-822-7967.

Information on how to file a Vaccine Injury Compensation Program claim is available at [www.hrsa.gov/vaccinecompensation](http://www.hrsa.gov/vaccinecompensation) or by telephone, 800-338-2382. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 717 Madison Place, N.W., Washington, D.C. 20005; telephone, 202-357-6400.

Additional information about the vaccines in this schedule, extent of available data, and contraindications for vaccination is also available at [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines) or from the CDC-INFO Contact Center at 800-CDC-INFO (800-232-4636) in English and Spanish, 8:00 a.m. – 8:00 p.m. Eastern Time, Monday – Friday, excluding holidays.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

The recommendations in this schedule were approved by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), the American College of Physicians (ACP), American College of Obstetricians and Gynecologists (ACOG) and American College of Nurse-Midwives (ACNM).

**Figure 2. Vaccines that might be indicated for adults based on medical and other indications<sup>1</sup>**

VACCINE ▼	INDICATION ►	Immu-nocompromising conditions (excluding human immunodeficiency virus [HIV]) <sup>14,6,7,8,15</sup>		Men who have sex with men (MSM)	Kidney failure, end-stage renal disease, receipt of hemodialysis	Heart disease, chronic lung disease, chronic alcoholism	Asplenia (including elective splenectomy and persistent complement deficiencies) <sup>8,14</sup>	Chronic liver disease	Diabetes	Healthcare personnel
		HIV infection CD4+ T lymphocyte count <sup>4,6,7,8,15</sup>	< 200 cells/µL							
Influenza <sup>2,*</sup>		1 dose IIV annually		1 dose IIV or LAIV annually		1 dose IIV annually				1 dose IIV or LAIV annually
Tetanus, diphtheria, pertussis (Td/Tdap) <sup>3,*</sup>	1 dose Tdap each pregnancy				Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs					
Varicella <sup>4,*</sup>		Contraindicated				2 doses				
Human papillomavirus (HPV) Female <sup>5,*</sup>		3 doses through age 26 yrs				3 doses through age 26 yrs				
Human papillomavirus (HPV) Male <sup>5,*</sup>		3 doses through age 26 yrs				3 doses through age 21 yrs				
Zoster <sup>6</sup>		Contraindicated					1 dose			
Measles, mumps, rubella (MMR) <sup>7,*</sup>		Contraindicated				1 or 2 doses				
Pneumococcal 13-valent conjugate (PCV13) <sup>8,*</sup>					1 dose					
Pneumococcal polysaccharide (PPSV23) <sup>9,10</sup>					1 or 2 doses					
Meningococcal <sup>11,*</sup>					1 or more doses					
Hepatitis A <sup>12,*</sup>					2 doses					
Hepatitis B <sup>13,*</sup>					3 doses					
Haemophilus influenzae type b (Hib) <sup>14,*</sup>		post-HSCT recipients only			1 or 3 doses					

\*Covered by the Vaccine Injury Compensation Program

  For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster

  Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)

  No recommendation

These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines is commonly indicated for adults ages 19 years and older, as of February 1, 2014. For all vaccines being recommended on the Adult Immunization Schedule, a vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are issued during the year, consult the manufacturers' package inserts and the complete statements from the Advisory Committee on Immunization Practices ([www.cdc.gov/vaccines/acip-recs/index.html](http://www.cdc.gov/vaccines/acip-recs/index.html)). Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.



## Footnotes

### Recommended Immunization Schedule for Adults Aged 19 Years or Older: United States, 2014

#### 1. Additional information

- Additional guidance for the use of the vaccines described in this supplement is available at [www.cdc.gov/vaccines/hcp/acip-recs/index.html](http://www.cdc.gov/vaccines/hcp/acip-recs/index.html).
- Information on vaccination recommendations when vaccination status is unknown and other general immunization information can be found in the General Recommendations on Immunization at [www.cdc.gov/mmwr/preview/mmwrhtml/rr6002a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6002a1.htm).
- Information on travel vaccine requirements and recommendations (e.g., for hepatitis A and B, meningococcal, and other vaccines) is available at <http://wwwnc.cdc.gov/travel/destinations/list>.
- Additional information and resources regarding vaccination of pregnant women can be found at <http://www.cdc.gov/vaccines/adults/rec-vac/pregnant.html>.

#### 2. Influenza vaccination

- Annual vaccination against influenza is recommended for all persons aged 6 months or older.
- Persons aged 6 months or older, including pregnant women and persons with hives-only allergy to eggs, can receive the inactivated influenza vaccine (IIV). An age-appropriate IIV formulation should be used.
- Adults aged 18 to 49 years can receive the recombinant influenza vaccine (RIV) (FluBlok). RIV does not contain any egg protein.
- Healthy, nonpregnant persons aged 2 to 49 years without high-risk medical conditions can receive either intranasally administered live, attenuated influenza vaccine (LAIV) (FluMist), or IIV. Health care personnel who care for severely immunocompromised persons (i.e., those who require care in a protected environment) should receive IIV or RIV rather than LAIV.
- The intramuscularly or intradermally administered IIV are options for adults aged 18 to 64 years.
- Adults aged 65 years or older can receive the standard-dose IIV or the high-dose IIV (Fluzone High-Dose).

#### 3. Tetanus, diphtheria, and acellular pertussis (Td/Tdap) vaccination

- Administer 1 dose of Tdap vaccine to pregnant women during each pregnancy (preferred during 27 to 36 weeks' gestation) regardless of interval since prior Td or Tdap vaccination.
- Persons aged 11 years or older who have not received Tdap vaccine or for whom vaccine status is unknown should receive a dose of Tdap followed by tetanus and diphtheria toxoids (Td) booster doses every 10 years thereafter. Tdap can be administered regardless of interval since the most recent tetanus or diphtheria-toxoid containing vaccine.
- Adults with an unknown or incomplete history of completing a 3-dose primary vaccination series with Td-containing vaccines should begin or complete a primary vaccination series including a Tdap dose.
- For unvaccinated adults, administer the first 2 doses at least 4 weeks apart and the third dose 6 to 12 months after the second.
- For incompletely vaccinated (i.e., less than 3 doses) adults, administer remaining doses.
- Refer to the ACIP statement for recommendations for administering Td/Tdap as prophylaxis in wound management (see footnote 1).

#### 4. Varicella vaccination

- All adults without evidence of immunity to varicella (as defined below) should receive 2 doses of single-antigen varicella vaccine or a second dose if they have received only 1 dose.
- Vaccination should be emphasized for those who have close contact with persons at high risk for severe disease (e.g., health care personnel and family contacts of persons with immunocompromising conditions) or are at high risk for exposure or transmission (e.g., teachers; child care employees; residents and staff members of institutional settings, including correctional institutions; college students; military personnel; adolescents and adults living in households with children; nonpregnant women of childbearing age; and international travelers).
- Pregnant women should be assessed for evidence of varicella immunity. Women who do not have evidence of immunity should receive the first dose of varicella vaccine upon completion or termination of pregnancy and before discharge from the health care facility. The second dose should be administered 4 to 8 weeks after the first dose.
- Evidence of immunity to varicella in adults includes any of the following:
  - documentation of 2 doses of varicella vaccine at least 4 weeks apart;
  - U.S.-born before 1980, except health care personnel and pregnant women;
  - history of varicella based on diagnosis or verification of varicella disease by a health care provider;
  - history of herpes zoster based on diagnosis or verification of herpes zoster disease by a health care provider; or
  - laboratory evidence of immunity or laboratory confirmation of disease.

#### 5. Human papillomavirus (HPV) vaccination

- Two vaccines are licensed for use in females, bivalent HPV vaccine (HPV2) and quadrivalent HPV vaccine (HPV4), and one HPV vaccine for use in males (HPV4).
- For females, either HPV4 or HPV2 is recommended in a 3-dose series for routine vaccination at age 11 or 12 years and for those aged 13 through 26 years, if not previously vaccinated.
- For males, HPV4 is recommended in a 3-dose series for routine vaccination at age 11 or 12 years and for those aged 13 through 21 years, if not previously vaccinated. Males aged 22 through 26 years may be vaccinated.

#### 5. Human papillomavirus (HPV) vaccination (cont'd)

- HPV4 is recommended for men who have sex with men through age 26 years for those who did not get any or all doses when they were younger.
- Vaccination is recommended for immunocompromised persons (including those with HIV infection) through age 26 years for those who did not get any or all doses when they were younger.
- A complete series for either HPV4 or HPV2 consists of 3 doses. The second dose should be administered 4 to 8 weeks (minimum interval of 4 weeks) after the first dose; the third dose should be administered 24 weeks after the first dose and 16 weeks after the second dose (minimum interval of at least 12 weeks).
- HPV vaccines are not recommended for use in pregnant women. However, pregnancy testing is not needed before vaccination. If a woman is found to be pregnant after initiating the vaccination series, no intervention is needed; the remainder of the 3-dose series should be delayed until completion of pregnancy.

#### 6. Zoster vaccination

- A single dose of zoster vaccine is recommended for adults aged 60 years or older regardless of whether they report a prior episode of herpes zoster. Although the vaccine is licensed by the U.S. Food and Drug Administration for use among and can be administered to persons aged 50 years or older, ACIP recommends that vaccination begin at age 60 years.
- Persons aged 60 years or older with chronic medical conditions may be vaccinated unless their condition constitutes a contraindication, such as pregnancy or severe immunodeficiency.

#### 7. Measles, mumps, rubella (MMR) vaccination

- Adults born before 1957 are generally considered immune to measles and mumps. All adults born in 1957 or later should have documentation of 1 or more doses of MMR vaccine unless they have a medical contraindication to the vaccine or laboratory evidence of immunity to each of the three diseases. Documentation of provider-diagnosed disease is not considered acceptable evidence of immunity for measles, mumps, or rubella.

##### Measles component:

- A routine second dose of MMR vaccine, administered a minimum of 28 days after the first dose, is recommended for adults who:
  - are students in postsecondary educational institutions;
  - work in a health care facility; or
  - plan to travel internationally.
- Persons who received inactivated (killed) measles vaccine or measles vaccine of unknown type during 1963–1967 should be revaccinated with 2 doses of MMR vaccine.

##### Mumps component:

- A routine second dose of MMR vaccine, administered a minimum of 28 days after the first dose, is recommended for adults who:
  - are students in a postsecondary educational institution;
  - work in a health care facility; or
  - plan to travel internationally.
- Persons vaccinated before 1979 with either killed mumps vaccine or mumps vaccine of unknown type who are at high risk for mumps infection (e.g., persons who are working in a health care facility) should be considered for revaccination with 2 doses of MMR vaccine.

##### Rubella component:

- For women of childbearing age, regardless of birth year, rubella immunity should be determined. If there is no evidence of immunity, women who are not pregnant should be vaccinated. Pregnant women who do not have evidence of immunity should receive MMR vaccine upon completion or termination of pregnancy and before discharge from the health care facility.

##### Health care personnel born before 1957:

- For unvaccinated health care personnel born before 1957 who lack laboratory evidence of measles, mumps, and/or rubella immunity or laboratory confirmation of disease, health care facilities should consider vaccinating personnel with 2 doses of MMR vaccine at the appropriate interval for measles and mumps or 1 dose of MMR vaccine for rubella.

#### 8. Pneumococcal conjugate (PCV13) vaccination

- Adults aged 19 years or older with immunocompromising conditions (including chronic renal failure and nephrotic syndrome), functional or anatomic asplenia, cerebrospinal fluid leaks, or cochlear implants who have not previously received PCV13 or PPSV23 should receive a single dose of PCV13 followed by a dose of PPSV23 at least 8 weeks later.
- Adults aged 19 years or older with the aforementioned conditions who have previously received 1 or more doses of PPSV23 should receive a dose of PCV13 one or more years after the last PPSV23 dose was received. For adults who require additional doses of PPSV23, the first such dose should be given no sooner than 8 weeks after PCV13 and at least 5 years after the most recent dose of PPSV23.
- When indicated, PCV13 should be administered to patients who are uncertain of their vaccination status history and have no record of previous vaccination.
- Although PCV13 is licensed by the U.S. Food and Drug Administration for use among and can be administered to persons aged 50 years or older, ACIP recommends PCV13 for adults aged 19 years or older with the specific medical conditions noted above.

## **9. Pneumococcal polysaccharide (PPSV23) vaccination**

- When PCV13 is also indicated, PCV13 should be given first (see footnote 8).
- Vaccinate all persons with the following indications:
  - all adults aged 65 years or older;
  - adults younger than 65 years with chronic lung disease (including chronic obstructive pulmonary disease, emphysema, and asthma), chronic cardiovascular diseases, diabetes mellitus, chronic renal failure, nephrotic syndrome, chronic liver disease (including cirrhosis), alcoholism, cochlear implants, cerebrospinal fluid leaks, immunocompromising conditions, and functional or anatomic asplenia (e.g., sickle cell disease and other hemoglobinopathies, congenital or acquired asplenia, splenic dysfunction, or splenectomy [if elective splenectomy is planned, vaccinate at least 2 weeks before surgery]);
  - residents of nursing homes or long-term care facilities; and
  - adults who smoke cigarettes.
- Persons with immunocompromising conditions and other selected conditions are recommended to receive PCV13 and PPSV23 vaccines. See footnote 8 for information on timing of PCV13 and PPSV23 vaccinations.
- Persons with asymptomatic or symptomatic HIV infection should be vaccinated as soon as possible after their diagnosis.
- When cancer chemotherapy or other immunosuppressive therapy is being considered, the interval between vaccination and initiation of immunosuppressive therapy should be at least 2 weeks. Vaccination during chemotherapy or radiation therapy should be avoided.
- Routine use of PPSV23 vaccine is not recommended for American Indians/Alaska Natives or other persons younger than 65 years unless they have underlying medical conditions that are PPSV23 indications. However, public health authorities may consider recommending PPSV23 for American Indians/Alaska Natives who are living in areas where the risk for invasive pneumococcal disease is increased.
- When indicated, PPSV23 vaccine should be administered to patients who are uncertain of their vaccination status and have no record of vaccination.

## **10. Revaccination with PPSV23**

- One-time revaccination 5 years after the first dose of PPSV23 is recommended for persons aged 19 through 64 years with chronic renal failure or nephrotic syndrome, functional or anatomic asplenia (e.g., sickle cell disease or splenectomy), or immunocompromising conditions.
- Persons who received 1 or 2 doses of PPSV23 before age 65 years for any indication should receive another dose of the vaccine at age 65 years or later if at least 5 years have passed since their previous dose.
- No further doses of PPSV23 are needed for persons vaccinated with PPSV23 at or after age 65 years.

## **11. Meningococcal vaccination**

- Administer 2 doses of quadrivalent meningococcal conjugate vaccine (MenACWY [Menactra, Menveo]) at least 2 months apart to adults of all ages with functional asplenia or persistent complement component deficiencies. HIV infection is not an indication for routine vaccination with MenACWY. If an HIV-infected person of any age is vaccinated, 2 doses of MenACWY should be administered at least 2 months apart.
- Administer a single dose of meningococcal vaccine to microbiologists routinely exposed to isolates of *Neisseria meningitidis*, military recruits, persons at risk during an outbreak attributable to a vaccine serogroup, and persons who travel to or live in countries in which meningococcal disease is hyperendemic or epidemic.
- First-year college students up through age 21 years who are living in residence halls should be vaccinated if they have not received a dose on or after their 16th birthday.
- MenACWY is preferred for adults with any of the preceding indications who are aged 55 years or younger as well as for adults aged 56 years or older who a) were vaccinated previously with MenACWY and are recommended for revaccination, or b) for whom multiple doses are anticipated. Meningococcal polysaccharide vaccine (MPSV4 [Menomune]) is preferred for adults aged 56 years or older who have not received MenACWY previously and who require a single dose only (e.g., travelers).
- Revaccination with MenACWY every 5 years is recommended for adults previously vaccinated with MenACWY or MPSV4 who remain at increased risk for infection (e.g., adults with anatomic or functional asplenia, persistent complement component deficiencies, or microbiologists).

## **12. Hepatitis A vaccination**

- Vaccinate any person seeking protection from hepatitis A virus (HAV) infection and persons with any of the following indications:
  - men who have sex with men and persons who use injection or non-injection illicit drugs;
  - persons working with HAV-infected primates or with HAV in a research laboratory setting;
  - persons with chronic liver disease and persons who receive clotting factor concentrates;
  - persons traveling to or working in countries that have high or intermediate endemicity of hepatitis A; and

## **12. Hepatitis A vaccination (cont'd)**

- unvaccinated persons who anticipate close personal contact (e.g., household or regular babysitting) with an international adoptee during the first 60 days after arrival in the United States from a country with high or intermediate endemicity. (See footnote 1 for more information on travel recommendations.) The first dose of the 2-dose hepatitis A vaccine series should be administered as soon as adoption is planned, ideally 2 or more weeks before the arrival of the adoptee.
- Single-antigen vaccine formulations should be administered in a 2-dose schedule at either 0 and 6 to 12 months (Havrix), or 0 and 6 to 18 months (Vaqta). If the combined hepatitis A and hepatitis B vaccine (Twinrix) is used, administer 3 doses at 0, 1, and 6 months; alternatively, a 4-dose schedule may be used, administered on days 0, 7, and 21 to 30 followed by a booster dose at month 12.

## **13. Hepatitis B vaccination**

- Vaccinate persons with any of the following indications and any person seeking protection from hepatitis B virus (HBV) infection:
  - sexually active persons who are not in a long-term, mutually monogamous relationship (e.g., persons with more than 1 sex partner during the previous 6 months); persons seeking evaluation or treatment for a sexually transmitted disease (STD); current or recent injection drug users; and men who have sex with men;
  - health care personnel and public safety workers who are potentially exposed to blood or other infectious body fluids;
  - persons with diabetes who are younger than age 60 years as soon as feasible after diagnosis; persons with diabetes who are age 60 years or older at the discretion of the treating clinician based on the likelihood of acquiring HBV infection, including the risk posed by an increased need for assisted blood glucose monitoring in long-term care facilities, the likelihood of experiencing chronic sequelae if infected with HBV, and the likelihood of immune response to vaccination;
  - persons with end-stage renal disease, including patients receiving hemodialysis, persons with HIV infection, and persons with chronic liver disease;
  - household contacts and sex partners of hepatitis B surface antigen-positive persons, clients and staff members of institutions for persons with developmental disabilities, and international travelers to countries with high or intermediate prevalence of chronic HBV infection; and
  - all adults in the following settings: STD treatment facilities, HIV testing and treatment facilities, facilities providing drug abuse treatment and prevention services, health care settings targeting services to injection drug users or men who have sex with men, correctional facilities, end-stage renal disease programs and facilities for chronic hemodialysis patients, and institutions and nonresidential day care facilities for persons with developmental disabilities.

- Administer missing doses to complete a 3-dose series of hepatitis B vaccine to those persons not vaccinated or not completely vaccinated. The second dose should be administered 1 month after the first dose; the third dose should be given at least 2 months after the second dose (and at least 4 months after the first dose). If the combined hepatitis A and hepatitis B vaccine (Twinrix) is used, give 3 doses at 0, 1, and 6 months; alternatively, a 4-dose Twinrix schedule, administered on days 0, 7, and 21 to 30 followed by a booster dose at month 12 may be used.
- Adult patients receiving hemodialysis or with other immunocompromising conditions should receive 1 dose of 40 mcg/mL (Recombivax HB) administered on a 3-dose schedule at 0, 1, and 6 months or 2 doses of 20 mcg/mL (Engerix-B) administered simultaneously on a 4-dose schedule at 0, 1, 2, and 6 months.

## **14. *Haemophilus influenzae type b* (Hib) vaccination**

- One dose of Hib vaccine should be administered to persons who have functional or anatomic asplenia or sickle cell disease or are undergoing elective splenectomy if they have not previously received Hib vaccine. Hib vaccination 14 or more days before splenectomy is suggested.
- Recipients of a hematopoietic stem cell transplant should be vaccinated with a 3-dose regimen 6 to 12 months after a successful transplant, regardless of vaccination history; at least 4 weeks should separate doses.
- Hib vaccine is not recommended for adults with HIV infection since their risk for Hib infection is low.

## **15. Immunocompromising conditions**

- Inactivated vaccines generally are acceptable (e.g., pneumococcal, meningococcal, and inactivated influenza vaccine) and live vaccines generally are avoided in persons with immune deficiencies or immunocompromising conditions. Information on specific conditions is available at <http://www.cdc.gov/vaccines/hcp/acip-recs/index.html>.

**TABLE. Contraindications and precautions to commonly used vaccines in adults: United States, 2014<sup>1†</sup>**

Vaccine	Contraindications	Precautions
Influenza, inactivated vaccine (IIV) <sup>2</sup>	Severe allergic reaction (e.g., anaphylaxis) after previous dose of any IIV or LAIV or to a vaccine component, including egg protein.	Moderate or severe acute illness with or without fever. History of Guillain-Barré Syndrome within 6 weeks of previous influenza vaccination. Persons who experience only hives with exposure to eggs may receive RIV (if age 18-49 years) or, with additional safety precautions, IIV. <sup>2</sup>
Influenza, recombinant (RIV)	Severe allergic reaction (e.g., anaphylaxis) after previous dose of RIV or to a vaccine component. RIV does not contain any egg protein. <sup>2</sup>	Moderate or severe acute illness with or without fever. History of Guillain-Barré Syndrome within 6 weeks of previous influenza vaccination.
Influenza, live attenuated (LAIV) <sup>2,3</sup>	Severe allergic reaction (e.g., anaphylaxis) after previous dose of any IIV or LAIV or to a vaccine component, including egg protein. Conditions for which the Advisory Committee on Immunization Practices (ACIP) recommends against use, but which are not contraindications in vaccine package insert: immune suppression, certain chronic medical conditions (such as asthma, diabetes, heart or kidney disease), and pregnancy. <sup>2,3</sup>	Moderate or severe acute illness with or without fever. History of Guillain-Barré Syndrome within 6 weeks of previous influenza vaccination. Receipt of specific antivirals (i.e., amantadine, rimantadine, zanamivir, or oseltamivir) within 48 hours before vaccination. Avoid use of these antiviral drugs for 14 days after vaccination.
Tetanus, diphtheria, pertussis (Tdap); tetanus, diphtheria (Td)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. For pertussis-containing vaccines: encephalopathy (e.g., coma, decreased level of consciousness, or prolonged seizures) not attributable to another identifiable cause within 7 days of administration of a previous dose of Tdap or diphtheria and tetanus toxoids and pertussis (DTP) or diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine.	Moderate or severe acute illness with or without fever. Guillain-Barré Syndrome within 6 weeks after a previous dose of tetanus toxoid-containing vaccine. History of Arthus-type hypersensitivity reactions after a previous dose of tetanus or diphtheria toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine. For pertussis-containing vaccines: progressive or unstable neurologic disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized.
Varicella <sup>4</sup>	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, or long-term immunosuppressive therapy <sup>4</sup> or patients with human immunodeficiency virus (HIV) infection who are severely immunocompromised). Pregnancy.	Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product). <sup>5</sup> Moderate or severe acute illness with or without fever. Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination; avoid use of these antiviral drugs for 14 days after vaccination.
Human papillomavirus (HPV)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component.	Moderate or severe acute illness with or without fever. Pregnancy.
Zoster <sup>5</sup>	Severe allergic reaction (e.g., anaphylaxis) to a vaccine component. Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, or long-term immunosuppressive therapy <sup>4</sup> or patients with HIV infection who are severely immunocompromised). Pregnancy.	Moderate or severe acute illness with or without fever. Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination; avoid use of these antiviral drugs for 14 days after vaccination.
Measles, mumps, rubella (MMR) <sup>6</sup>	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component. Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, or long-term immunosuppressive therapy <sup>4</sup> or patients with HIV infection who are severely immunocompromised). Pregnancy.	Moderate or severe acute illness with or without fever. Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product). <sup>5</sup> History of thrombocytopenia or thrombocytopenic purpura. Need for tuberculin skin testing. <sup>6</sup>
Pneumococcal conjugate (PCV13)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component, including to any vaccine containing diphtheria toxoid.	Moderate or severe acute illness with or without fever.
Pneumococcal polysaccharide (PPSV23)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component.	Moderate or severe acute illness with or without fever.
Meningococcal, conjugate, (MenACWY); meningococcal, polysaccharide (MPSV4)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component.	Moderate or severe acute illness with or without fever.
Hepatitis A (HepA)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component.	Moderate or severe acute illness with or without fever.
Hepatitis B (HepB)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component.	Moderate or severe acute illness with or without fever.
<i>Haemophilus influenzae</i> Type b (Hib)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component.	Moderate or severe acute illness with or without fever.

1. Vaccine package inserts and the full ACIP recommendations for these vaccines should be consulted for additional information on vaccine-related contraindications and precautions and for more information on vaccine excipients. Events or conditions listed as precautions should be reviewed carefully. Benefits of and risks for administering a specific vaccine to a person under these circumstances should be considered. If the risk from the vaccine is believed to outweigh the benefit, the vaccine should not be administered. If the benefit of vaccination is believed to outweigh the risk, the vaccine should be administered. A contraindication is a condition in a recipient that increases the chance of a serious adverse reaction. Therefore, a vaccine should not be administered when a contraindication is present.

2. For more information on use of influenza vaccines among persons with egg allergies and a complete list of conditions that CDC considers to be reasons to avoid receiving LAIV, see CDC, Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP) — United States, 2013–14. *MMWR* 2013;62(RR07):1-43. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/r6207a1.htm>.

3. LAIV, MMR, varicella, or zoster vaccines can be administered on the same day. If not administered on the same day, live vaccines should be separated by at least 28 days.

4. Immunosuppressive steroid dose is considered to be ≥2 weeks of daily receipt of 20 mg of prednisone or the equivalent. Vaccination should be deferred for at least 1 month after discontinuation of such therapy. Providers should consult ACIP recommendations for complete information on the use of specific live vaccines among persons on immune-suppressing medications or with immune suppression because of other reasons.

5. Vaccine should be deferred for the appropriate interval if replacement immune globulin products are being administered. See CDC, General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2011;60(No. RR-2). Available at [www.cdc.gov/vaccines/hcp/acip-recs/index.html](http://www.cdc.gov/vaccines/hcp/acip-recs/index.html).

6. Measles vaccination might suppress tuberculin reactivity temporarily. Measles-containing vaccine may be administered on the same day as tuberculin skin testing. If testing cannot be performed until after the day of MMR vaccination, the test should be postponed for at least 4 weeks after the vaccination. If an urgent need exists to skin test, do so with the understanding that reactivity might be reduced by the vaccine.

\* Adapted from CDC. Table 6. Contraindications and precautions to commonly used vaccines. General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices. *MMWR* 2011;60(No. RR-2):40-41 and from Atkinson W, Wolfe S, Hamborsky J, eds. Appendix A. Epidemiology and prevention of vaccine preventable diseases. 12th ed. Washington, DC: Public Health Foundation, 2011. Available at [www.cdc.gov/vaccines/pubs/pinkbook/index.html](http://www.cdc.gov/vaccines/pubs/pinkbook/index.html).

† Regarding latex allergy, consult the package insert for any vaccine administered.



**Figure 1. Recommended immunization schedule for persons aged 0 through 18 years – United States, 2014.**

(FOR THOSE WHO FAIL BEHIND OR START LATE. SEE THE CATCH-UP SCHEDULE (FIGURE 3)).

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule [Figure 2]. School entry and adolescent vaccine age groups are in bold.

This schedule includes recommendations in effect as of January 1, 2014. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Vaccination providers should consult the relevant Advisory Committee on Immunization Practices (ACIP) statement for detailed recommendations, available online at [http://www.cdc.gov/acip/recs/acip-recs\\_index.html](http://www.cdc.gov/acip/recs/acip-recs_index.html). Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS), online (<http://www.vaers.hrsa.gov>) or by telephone (800-822-7967). Suspected cases of vaccine-preventable diseases should be reported to the state or local health department. Additional information, including

This schedule is approved by the Advisory Committee on Immunization Practices (<http://www.cdc.gov/acip>), the American Academy of Pediatrics (<http://www.aap.org>), the American Academy of Family Physicians (<http://www.aafp.org>), and the American College of Obstetricians and Gynecologists (<http://www.acog.org>). This schedule and contraindications for vaccination, is available from CDC online (<http://www.cdc.gov/vaccines/recs/vac-admin/contraindications.htm>) or by telephone (800-232-4636).

**NOTE:** The above recommendations must be read along with the footnotes of this schedule.

**FIGURE 2. Catch-up immunization schedule for persons aged 4 months through 18 years who start late or who are more than 1 month behind — United States, 2014.**

The figure below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. Always use this table in conjunction with Figure 1 and the footnotes that follow.

Persons aged 4 months through 6 years					
Vaccine	Minimum Age for Dose 1	Dose 1 to dose 2	Minimum Interval Between Doses	Dose 2 to dose 3	Dose 3 to dose 4
Hepatitis B <sup>f</sup>	Birth	4 Weeks	8 weeks and at least 16 weeks after first dose; minimum age for the final dose is 24 weeks <sup>2</sup>	4 weeks <sup>2</sup>	Dose 4 to dose 5
Rotavirus <sup>2</sup>	6 weeks	4 weeks			
Diphtheria, tetanus, <sup>8</sup> acellular pertussis <sup>3</sup>	6 weeks	4 weeks	4 Weeks	6 months	6 months <sup>j</sup>
Haemophilus influenzae type b <sup>5</sup>	6 weeks	4 weeks <sup>5</sup> if current age is younger than 12 months and first dose administered at < 7 months old 8 weeks and age 12 months through 58 months (as final dose); if current age is younger than 12 months and first dose administered between 1 through 11 months (regardless of Hib vaccine [PRP-T or PRP-OMP] used for first dose); OR if current age is 12 through 58 months and first dose administered at younger than age 12 months; OR first 2 doses were PRP-OMP and administered at younger than 12 months. No further doses needed if previous dose administered at age 15 months or older	8 weeks only necessary for children aged 12 through 59 months who received 3 (PRP-T) doses before age 12 months and started the primary series before age 7 months	8 weeks (as final dose)	
Pneumococcal <sup>6</sup>	6 weeks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older No further doses needed for healthy children if previous dose administered at age 24 months or older	8 weeks (as final dose for healthy children) if current age is 12 months or older No further doses needed if previous dose administered at age 24 months or older	4 weeks <sup>k</sup>	6 months <sup>l</sup> /minimum age 4 years for final dose
Inactivated poliovirus <sup>7</sup>	6 weeks	4 weeks <sup>7</sup>	See footnote 13	See footnote 13	See footnote 13
Meningococcal <sup>i,3</sup>	6 weeks	8 weeks <sup>j,3</sup>			
Measles, mumps, rubella <sup>8</sup>	12 months	4 weeks			
Varicella <sup>10</sup>	12 months	3 months			
Hepatitis A <sup>11</sup>	12 months	6 months			
Persons aged 7 through 18 years					
Tetanus, diphtheria, tetanus, diphtheria, & acellular pertussis <sup>12</sup>	7 years <sup>d</sup>	4 weeks	4 weeks if first dose of DTaP/DT administered at younger than age 12 months 6 months if first dose of DTaP/DT administered at age 12 months or older and then no further doses needed for catch-up	6 months if first dose of DTaP/DT administered at younger than age 12 months	Routine dosing intervals are recommended <sup>12</sup>
Human papillomavirus <sup>12</sup>	9 years				
Hepatitis A <sup>11</sup>	12 months	6 months			
Hepatitis B <sup>f</sup>	Birth	4 weeks			
Inactivated poliovirus <sup>7</sup>	6 weeks	4 weeks			
Meningococcal <sup>i,3</sup>	6 weeks	8 weeks <sup>j,3</sup>			
Measles, mumps, rubella <sup>8</sup>	12 months	4 weeks			
Varicella <sup>10</sup>	12 months	3 months if person is younger than age 13 years 4 weeks if person is aged 13 years or older			

**NOTE:** The above recommendations must be read along with the footnotes of this schedule.

## **Footnotes — Recommended immunization schedule for persons aged 0 through 18 years—United States, 2014**

For further guidance on the use of the vaccines mentioned below, see: <http://www.cdc.gov/vaccines/hcp/acip-recs/index.html>.

### **Additional information**

- For contraindications and precautions to use of a vaccine and for additional information regarding that vaccine, vaccination providers should consult the relevant ACIP statement available online at <http://www.cdc.gov/vaccines/hcp/acip-recs/index.html>.
- For purposes of calculating intervals between doses, 4 weeks = 28 days. Intervals of 4 months or greater are determined by calendar months.
- Vaccine doses administered 4 days or less before the minimum interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum interval or minimum age should not be counted as valid doses and should be repeated as age-appropriate. The repeat dose should be spaced after the invalid dose by the recommended minimum interval. For further details, see *M/M/R, General Recommendations on Immunization and Reports* /Vol. 60 / No. 2; table 1. Recommended and minimum ages and intervals between vaccine doses available online at <http://www.cdc.gov/mmwr/pdf/trr/r6002.pdf>.
- Information on travel vaccine requirements and recommendations is available at <http://wwwnc.cdc.gov/travel/destinations/list>.
- For vaccination of persons with primary and secondary immunodeficiencies, see Table 13, "Vaccination of persons with primary and secondary immunodeficiencies," in General Recommendations on Immunization (ACIP), available at <http://www.cdc.gov/mmwr/pdf/trr/r6002.pdf>; and American Academy of Pediatrics, Immunization in Special Clinical Circumstances, in Pickering LK, Baker CJ, Kimberlin DW, Long SS eds. *Red Book: 2012 report of the Committee on Infectious Diseases*. 29th ed. Elk Grove Village, IL: American Academy of Pediatrics.
- 1. **Hepatitis B (HepB) vaccine. (Minimum age: birth)**

**Routine vaccination:**

**At birth:**

  - Administer monovalent HepB vaccine to all newborns before hospital discharge.
  - For infants born to hepatitis B surface antigen (HBsAg)-positive mothers, administer HepB vaccine and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth. These infants should be tested for HBsAg and antibody to HBsAg (anti-HBs) 1 to 2 months after completion of the HepB series, at age 9 through 18 months (preferably at the next well-child visit).
  - If mother's HBsAg status is unknown, within 12 hours of birth, administer HepB vaccine regardless of birth weight. For infants weighing less than 2,000 grams, administer HBIG in addition to HepB vaccine within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if mother is HBsAg-positive, also administer HBIG for infants weighing 2,000 grams or more as soon as possible, but no later than age 7 days.

**Doses following the birth dose:**

  - The second dose should be administered at age 1 or 2 months. Monovalent HepB vaccine should be used for doses administered before age 6 weeks.
  - Infants who did not receive a birth dose should receive 3 doses of a HepB-containing vaccine on a schedule of 0, 1 to 2 months, and 6 months starting as soon as feasible. See Figure 2.
  - Administer the second dose 1 to 2 months after the first dose (minimum interval of 4 weeks).
  - Administer the third dose at least 8 weeks after the second dose AND at least 16 weeks after the first dose. The final (third or fourth) dose in the HepB vaccine series should be administered no earlier than age 24 weeks.
  - Administration of a total of 4 doses of HepB vaccine is permitted when a combination vaccine containing HepB is administered after the birth dose.

**Catch-up vaccination:**

  - Unvaccinated persons should complete a 3-dose series.
  - A 2-dose series (doses separated by at least 4 months) of adult formulation Recombivax HB is licensed for use in children aged 11 through 15 years.
  - For other catch-up guidance, see Figure 2.

**Rotavirus (RV) vaccines. (Minimum age: 6 weeks for both RV1 [Rotarix] and RV5 [Rotateq])**

**Routine vaccination:**

  - Administer a series of RV vaccine to all infants as follows:
    1. If Rotarix is used, administer a 2-dose series at 2 and 4 months of age.
    2. If Rotateq is used, administer a 3-dose series at ages 2, 4, and 6 months.
    3. If any dose in the series was Rotarix or vaccine product is unknown for any dose in the series, a total of 3 doses of RV vaccine should be administered.
  - The maximum age for the first dose in the series is 14 weeks, 6 days; vaccination should not be initiated for infants aged 15 weeks, 0 days or older.
  - The maximum age for the final dose in the series is 8 months, 0 days.
  - For other catch-up guidance, see Figure 2.
- 2. **Haemophilus influenzae type b (Hib) conjugate vaccine. (Minimum age: 6 weeks for PRP-T/ACTHIB, DTaP-IPV/Hib (Pentacel) and Hib-MenC (Menitrix); PRP-OMP (PedavaxHib) or COMVAX, 12 months for PRP-T [Hiberialix])**
- 3. **Routine vaccination:**

  - Administer a 2- or 3-dose Hib vaccine primary series and a booster dose (dose 3 or 4 depending on vaccine used in primary series) at age 12 through 15 months to complete a full Hib vaccine series.
  - The primary series with ActHib, Menitrix, or Pentacel consists of 3 doses and should be administered at 2, 4, and 6 months of age. The primary series with PedavaxHib or COMVAX consists of 2 doses and should be administered at 2 and 4 months of age; a dose at age 6 months is not indicated.
  - One booster dose (dose 3 or 4 depending on vaccine used in primary series) of any Hib vaccine should be administered at age 12 through 15 months. An exception is Hibrix vaccine. Hibrix should only be used for the booster (final) dose in children aged 12 months through 4 years who have received at least 1 prior dose of Hib-containing vaccine.

For further guidance on the use of the vaccines mentioned below, see: <http://www.cdc.gov/vaccines/hcp/acip-recs/index.html>.

##### 5. *Haemophilus influenzae* type b (Hib) conjugate vaccine (cont'd)

- For recommendations on the use of MenHibrix in patients at increased risk for meningococcal disease, please refer to the meningococcal vaccine footnotes and also to MMWR March 22, 2013; 62(RR02);1-22, available at <http://www.cdc.gov/mmwr/pdf/rr/rr02.pdf>.

#### Catch-up vaccination:

- If dose 1 was administered at ages 12 through 14 months, administer a second (final) dose at least 8 weeks after dose 1, regardless of Hib vaccine used in the primary series.
- If the first 2 doses were PRP-QM/P (PedvaxHIB or COMVAX), and were administered at age 11 months or younger, the third (and final) dose should be administered at age 12 through 15 months and at least 8 weeks after the second dose.
- If the first dose was administered at age 7 through 11 months, administer the second dose at least 4 weeks later and a third (and final) dose at age 12 through 15 months or 8 weeks after second dose, whichever is later, regardless of Hib vaccine used for first dose.
- If first dose is administered at younger than 12 months of age and second dose is given between 12 through 14 months of age, a third (and final) dose should be given 8 weeks later.
- For unvaccinated children aged 15 months or older, administer only 1 dose.
- For other catch-up guidance, see Figure 2. For catch-up guidance related to MenHibrix, please see the meningococcal vaccine footnotes and also MMWR March 22, 2013; 62(RR02);1-22, available at <http://www.cdc.gov/mmwr/pdf/rr/rr02.pdf>.

#### Vaccination of persons with high-risk conditions:

- Children aged 12 through 59 months who are at increased risk for Hib disease, including chemotherapy recipients and those with anatomic or functional asplenia (including sickle cell disease), human immunodeficiency virus (HIV) infection, immunoglobulin deficiency, or early complement component deficiency, who have received either no doses or only 1 dose of Hib vaccine before 12 months of age, should receive 2 additional doses of Hib vaccine 8 weeks apart; children who received 2 or more doses of Hib vaccine before 12 months of age should receive 1 additional dose.
- For patients younger than 5 years of age undergoing chemotherapy or radiation treatment who received a Hib vaccine dose(s) within 14 days of starting therapy or during therapy, repeat the dose(s) at least 3 months following therapy completion.
- Recipients of hematopoietic stem cell transplant (HSCT) should be revaccinated with a 3-dose regimen of Hib vaccine starting 6 to 12 months after successful transplant, regardless of vaccination history; doses should be administered at least 4 weeks apart.
- A single dose of any Hib-containing vaccine should be administered to unimmunized\* children and adolescents 15 months of age and older undergoing an elective splenectomy; if possible, vaccine should be administered at least 14 days before procedure.

- Hib vaccine is not routinely recommended for patients 5 years or older. However, 1 dose of Hib vaccine should be administered to unimmunized\* persons aged 5 years or older who have anatomic or functional asplenia (including sickle cell disease) and unvaccinated persons 5 through 18 years of age with human immunodeficiency virus (HIV) infection.
- \* Patients who have not received a primary series and booster dose or at least 1 dose of Hib vaccine after 14 months of age are considered unimmunized.

#### Pneumococcal vaccines. (Minimum age: 6 months for inactivated influenza vaccine [IIV], 2 years for live, attenuated influenza vaccine [LAIV])

##### 8. Pneumococcal vaccination with PCV13:

- Administer a 4-dose series of PCV13 vaccine at ages 2, 4, and 6 months and at age 12 through 15 months: (PCV7), administer a single supplemental dose of 13-valent PCV (PCV13).

#### Catch-up vaccination with PCV13:

- For children aged 14 through 59 months who have received an age-appropriate series of 7-valent PCV (PCV7), administer a single supplemental dose of PCV13.

#### Catch-up vaccination with PPSV23:

- Administer 1 dose of PCV13 to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.

#### For other catch-up guidance, see Figure 2.

#### Vaccination of persons with high-risk conditions:

- All recommended PCV13 doses should be administered prior to PPSV23 vaccination if possible.
- For children 2 through 5 years of age with any of the following conditions: chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma if treated with high-dose oral corticosteroid therapy); diabetes mellitus; cerebrospinal fluid leak; cochlear implant; sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; solid organ transplantation; or congenital immunodeficiency:
- 1. Administer 1 dose of PCV13 if 3 doses of PCV (PCV7 and/or PCV13) were received previously.
- 2. Administer 2 doses of PCV13 at least 8 weeks apart if fewer than 3 doses of PCV (PCV7 and/or PCV13) were received previously.

##### 6. Pneumococcal vaccines (cont'd)

- Administer 1 supplemental dose of PCV13 if 4 doses of PCV7 or other age-appropriate complete PCV7 series were received previously.

#### 4. The minimum interval between doses of PCV (PCV7 or PCV13) is 8 weeks.

#### 5. For children with no history of PPSV23 vaccination, administer PPSV23 at least 8 weeks after the most recent dose of PCV13.

- For children aged 6 through 18 years who have cerebrospinal fluid leak; cochlear implant; sickle cell disease; and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiencies; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; generalized malignancy; solid organ transplantation; or multiple myeloma:
  1. If neither PCV13 nor PPSV23 has been received previously, administer 1 dose of PCV13 now and 1 dose of PPSV23 at least 8 weeks later.
  2. If PCV13 has been received previously but PPSV23 has not, administer 1 dose of PPSV23 at least 8 weeks after the most recent dose of PCV13.
- If PPSV23 has been received but PCV13 has not, administer 1 dose of PCV13 at least 8 weeks after the most recent dose of PPSV23.
- For children aged 6 through 18 years with chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure), chronic lung disease (including asthma if treated with high-dose oral corticosteroid therapy), diabetes mellitus, alcoholism, or chronic liver disease, who have not received PPSV23, administer 1 dose of PPSV23. If PCV13 has been received previously, then PPSV23 should be administered at least 8 weeks after any prior PCV13 dose.
- A single revaccination with PPSV23 should be administered 5 years after the first dose to children with sickle cell disease or other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiencies; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; generalized malignancy; solid organ transplantation; or multiple myeloma.

#### Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)

#### 7. Routine vaccination:

- Administer a 4-dose series of IPV at ages 2, 4, 6 through 18 months, and 4 through 6 years. The final dose in the series should be administered on or after the fourth birthday and at least 6 months after the previous dose.
  - Catch-up vaccination:
    1. In the first 6 months of life, minimum age and minimum intervals are only recommended if the person is at risk for imminent exposure to circulating poliovirus (i.e., travel to a polio-endemic region or during an outbreak).
    - If 4 or more doses are administered before age 4 years, an additional dose should be administered at age 4 through 6 years and at least 6 months after the previous dose.
    - A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose.
  - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age. IPV is not routinely recommended for U.S. residents aged 18 years or older.
  - For other catch-up guidance, see Figure 2.

- Influenza vaccines. (Minimum age: 6 months for inactivated influenza vaccine [IIV], 2 years for live, attenuated influenza vaccine [LAIV])
  - Routine vaccination:
    1. Administer influenza vaccine annually to all children beginning at age 6 months. For most healthy, nonpregnant persons aged 2 through 49 years, either LAIV or IIV may be used. However, LAIV should NOT be administered to some persons, including 1) those with asthma, 2) children 2 through 4 years who had wheezing in the past 12 months, or 3) those who have any other underlying medical conditions that predispose them to influenza complications. For all other contraindications to use of LAIV, see MMWR 2013; 62 (No. RR-7):1-43, available at <http://www.cdc.gov/mmwr/pdf/rr/rr0207.pdf>.
    - For children aged 6 months through 8 years:
      1. For the 2013-14 season, administer 2 doses (separated by at least 4 weeks) to children who are receiving influenza vaccine for the first time. Some children in this age group who have been vaccinated previously will also need 2 doses. For additional guidance, follow dosing guidelines in the 2013-14 ACIP influenza vaccine recommendations, MMWR 2013; 62 (No. RR-7):1-43, available at <http://www.cdc.gov/mmwr/pdf/rr/rr0207.pdf>.
      2. For the 2014-15 season, follow dosing guidelines in the 2014 ACIP influenza vaccine recommendations.

- For persons aged 9 years and older:
  1. Administer 1 dose.

For further guidance on the use of the vaccines mentioned below, see: <http://www.cdc.gov/vaccines/hcp/acip-recommendations/>.

- 9. Measles, mumps, and rubella (MMR) vaccine. (Minimum age: 12 months for routine vaccination)**
- Routine vaccination:
    - Administer a 2-dose series of MMR Vaccine at ages 12 through 15 months and 4 through 6 years. The second dose may be administered before age 4 years, provided at least 4 weeks have elapsed since the first dose.
    - Administer 1 dose of MMR vaccine to infants aged 6 through 11 months before departure from the United States for international travel. These children should be revaccinated with 2 doses of MMR vaccine, the first at age 12 through 15 months (12 months if the child remains in an area where disease risk is high), and the second dose at least 4 weeks later.
    - Administer 2 doses of MMR vaccine to children aged 12 months and older before departure from the United States for international travel. The first dose should be administered on or after age 12 months and the second dose at least 4 weeks later.
  - Catch-up vaccination:
    - Ensure that all school-aged children and adolescents have had 2 doses of MMR vaccine; the minimum interval between the 2 doses is 4 weeks.
- 10. Varicella (VAR) vaccine. (Minimum age: 12 months)**
- Routine vaccination:
    - Administer a 2-dose series of VAR vaccine at ages 12 through 15 months and 4 through 6 years. The second dose may be administered before age 4 years, provided at least 3 months have elapsed since the first dose. If the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid.
  - Catch-up vaccination:
    - Ensure that all persons aged 7 through 18 years without evidence of immunity (see MMWR 2007; 56 [No. RR-4], available at <http://www.cdc.gov/mmwr/pdf/rr/rr5604.pdf>) have 2 doses of varicella vaccine. For children aged 7 through 12 years, the recommended minimum interval between doses is 3 months (if the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid); for persons aged 13 years and older, the minimum interval between doses is 4 weeks.
- 11. Hepatitis A (HepA) vaccine. (Minimum age: 12 months)**
- Routine vaccination:
    - Initiate the 2-dose HepA vaccine series at 12 through 23 months; separate the 2 doses by 6 to 18 months.
    - Children who have received 1 dose of HepA vaccine before age 24 months should receive a second dose 6 to 18 months after the first dose.
    - For any person aged 2 years and older who has not already received the HepA vaccine series, 2 doses of HepA vaccine separated by 6 to 18 months may be administered if immunity against hepatitis A virus infection is desired.
  - Catch-up vaccination:
    - The minimum interval between the two doses is 6 months.
  - Special populations:
    - Administer 2 doses of HepA vaccine at least 6 months apart to previously unvaccinated persons who live in areas where vaccination programs target older children, or who are at increased risk for infection. This includes persons traveling to or working in countries that have high or intermediate endemicity of infection; men having sex with men; users of injection and non-injection illicit drugs; persons who work with HAV-infected primates or with HAV in a research laboratory; persons with clotting-factor disorders; persons with chronic liver disease; and persons who anticipate close, personal contact (e.g., household or regular babysitting) with an international adoptee during the first 60 days after arrival in the United States from a country with high or intermediate endemicity. The first dose should be administered as soon as the adoption is planned, ideally 2 or more weeks before the arrival of the adoptee.
- 12. Human papillomavirus (HPV) vaccines. (Minimum age: 9 years for HPV2 [Cervarix] and HPV4 [Gardasil])**
- Routine vaccination:
    - Administer a 3-dose series of HPV vaccine on a schedule of 0, 1-2, and 6 months to all adolescents aged 11 through 12 years. Either HPV4 or HPV2 may be used for females, and only HPV4 may be used for males.
      - The vaccine series may be started at age 9 years.
      - Administer the second dose 1 to 2 months after the first dose (minimum interval of 4 weeks), administer the third dose 24 weeks after the first dose and 16 weeks after the second dose (minimum interval of 12 weeks).
  - Catch-up vaccination:
    - Administer the vaccine series to females (either HPV2 or HPV4) and males (HPV4) at age 13 through 18 years if not previously vaccinated.
    - Use recommended routine dosing intervals (see above) for vaccine series catch-up.

13. Meningococcal conjugate vaccines. (Minimum age: 6 weeks for Hib-MenCY [MenHibrix], 9 months for MenACWY-D [Menactra], 2 months for MenACWY-CRM [Menveo])

**Routine vaccination:**

- Administer a single dose of Menactra or Menveo vaccine at age 11 through 12 years, with a booster dose at age 16 years.
  - Adolescents aged 11 through 18 years with human immunodeficiency virus (HIV) infection should receive a 2-dose primary series of Menactra or Menveo with at least 8 weeks between doses.
  - For children aged 2 months through 18 years with high-risk conditions, see below.

**Catch-up vaccination:**

- Administer Menactra or Menveo vaccine at age 13 through 18 years if not previously vaccinated.

- If the first dose is administered at age 13 through 15 years, a booster dose should be administered at age 16 through 18 years with a minimum interval of at least 8 weeks between doses.

- If the first dose is administered at age 16 years or older, a booster dose is not needed.

**For other catch-up guidance, see Figure 2.**

**Vaccination of persons with high-risk conditions and other persons at increased risk of disease:**

- Children with anatomic or functional asplenia (including sickle cell disease):

- 1. For children younger than 19 months of age, administer a 4-dose infant series of MenHibrix or Menveo at 2, 4, 6, and 12 through 15 months of age.

- 2. For children aged 19 through 23 months who have not completed a series of MenHibrix or Menveo, administer 2 primary doses of Menveo at least 3 months apart.

- 3. For children aged 24 months and older who have not received a complete series of MenHibrix or Menveo or Menactra, administer 2 primary doses of either Menactra or Menveo at least 2 months apart. If Menactra is administered to a child with asplenia (including sickle cell disease), do not administer Menactra until 2 years of age and at least 4 weeks after the completion of all PCV13 doses.

- Children with persistent complement component deficiency:

- 1. For children younger than 19 months of age, administer a 4-dose infant series of either MenHibrix or Menveo at 2, 4, 6, and 12 through 15 months of age.

- 2. For children 7 through 23 months who have not initiated vaccination, two options exist depending on age and vaccine brand:

- a. For children who initiate vaccination with Menveo at 7 months through 23 months of age, a 2-dose series should be administered with the second dose after 12 months of age and at least 3 months after the first dose.

- b. For children who initiate vaccination with Menactra at 9 months through 23 months of age, a 2-dose series of Menactra should be administered at least 3 months apart.

- c. For children aged 24 months and older who have not received a complete series of MenHibrix, Menveo, or Menactra, administer 2 primary doses of either Menactra or Menveo at least 2 months apart.

- For children who travel to or reside in countries in which meningococcal disease is hyperendemic or epidemic, including countries in the African meningitis belt or the Hajj, administer an age-appropriate formulation and series of Menactra or Menveo for protection against serogroups A and W meningococcal disease. Prior receipt of MenHibrix is not sufficient for children traveling to the meningitis belt or the Hajj because it does not contain serogroups A or W.

- For children at risk during a community outbreak attributable to a vaccine serogroup, administer or complete an age- and formulation-appropriate series of MenHibrix, Menactra, or Menveo.

- For booster doses among persons with high-risk conditions, refer to MMWR 2013; 62(RR02):1-22, available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6202a1.htm>.

**Catch-up recommendations for persons with high-risk conditions:**

- 1. If MenHibrix is administered to achieve protection against meningococcal disease, a complete age-appropriate series of MenHibrix should be administered.

- 2. If the first dose of MenHibrix is given at or after 12 months of age, a total of 2 doses should be given at least 8 weeks apart to ensure protection against serogroups C and Y meningococcal disease.

- 3. For children who initiate vaccination with Menveo at 7 months through 9 months of age, a 2-dose series should be administered with the second dose after 12 months of age and at least 3 months after the first dose.

- 4. For other catch-up recommendations for these persons, refer to MMWR 2013; 62(RR02):1-22, available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6202a1.htm>.

For complete information on use of meningococcal vaccines, including guidance related to vaccination of persons at increased risk of infection, see MMWR March 22, 2013; 62(RR02):1-22, available at <http://www.cdc.gov/mmwr/pdf/rr/rr6202.pdf>.



# Striving for A Healthier New Jersey in 2014

Mary E. O'Dowd, MPH

Mary E. O'Dowd, MPH, is the Commissioner of Health for the State of New Jersey

**T**wo important projects designed to create a healthier New Jersey were the focus of the department of health's (DOH) work this winter: (a) a new plan to reduce chronic disease, and (b) an expanded effort to improve maternal and child health. Efforts to improve maternal and child health and ensure that newborns have the healthiest start in life were the focus of two important conferences that the DOH and the National Governors Association (NGA) participated in recently.

Last fall, members of the NGA chose New Jersey and four other states, Alabama, Arizona, Nevada, and Virginia, to participate in a conference, titled, Learning Network on Improving Birth Outcomes. The goal was to assist states in developing, aligning, and implementing key policies and initiatives related to improving birth outcomes. Recently, I joined leaders of these other states for a 2-day conference in Washington, DC. We learned about the best practices and quality improvement principles of other states so that we could use those same strategies to reduce disparities, improve birth outcomes, and reduce costs. I gave an overview of a workshop that the DOH cohosted with the NGA to explore the issue of improving birth outcomes and set the agenda for where we as a state need to focus efforts.

Because improving birth outcomes is a complex and expansive topic, we focused on a few indicators: preterm births, ways to ensure the health of women before pregnancy, and smoking during pregnancy. In addition to presentations from the NGA and the DOH, the departments of education, human services, and children and families shared their efforts to improve birth outcomes.

Representatives from the department of human services spoke about Medicaid performance-based contracting, which was designed to motivate managed-care organizations to demonstrate quality improvement in specific areas, including preterm birth. Medicaid launched this project in July 2013. Preterm births were chosen as an area for improvement because the preterm birth rate among the Medicaid population has been increasing (i.e., from 11.6% in 2007 to 12.1% in 2010), whereas the rate for the non-Medicaid population has been falling (i.e., from 13.2% in 2007 to 11.3% in 2010).

State partners discussed some of their initiatives. Representatives from the New Jersey Hospital Association (NJHA) discussed the association's work to end early elective deliveries. The NJHA's Perinatal Collaborative has shown dramatic success in reducing early elective deliveries through its Hard Stop Campaign. The NJHA has encouraged hospitals to adopt a "hard stop" to the scheduling of elective deliveries prior to Week 39 to reduce poor birth outcomes. In the first quarter of 2012, the rate of early elective deliveries was 4.78%, which was significantly above the national benchmark of 2%. By July of 2013, the rate had declined dramatically to .38%, which was well below that national measure.

We also focused on the indicators of preterm births, ways to

ensure the health of women before pregnancy, and smoking during pregnancy. Participants discussed some promising programs and best practices that could be replicated and expanded. We engaged some new partners in improving birth outcomes, specifically third-party payers. In a time when grant funding is limited, involving payers in thinking about the sustainability of programs is critical.

New Jersey has recently begun its work as part of the network, so the Learning Network Conference on Improving Birth Outcomes provided critical lessons learned from other states that will enhance our work as we move forward.

At a conference at Cooper University Hospital in Camden, I met with stakeholders to discuss Partnering for a Healthy New Jersey: New Jersey Chronic Disease Prevention and Health Promotion Plan 2013-2018, the state's framework for reducing the burden of chronic disease. I outlined the plan to more than 60 executives and public officials representing hospitals, academic institutions, businesses, nonprofit organizations, trade associations, and state government. I explained that reducing chronic disease is the public health challenge of the 21st century. I asked attendees to work on initiatives in their communities to reduce chronic disease and transition from a focus on chronic disease treatment to an emphasis on prevention and wellness. The plan, called *Partnering for a Healthy New Jersey*, outlines evidence-based prevention programs and environmental strategies that support healthy lifestyles. The plan outlines six "winnable battles:"

- Improve environmental health
- Promote self-management
- Increase early detection
- Improve access to quality health care
- Eliminate tobacco use
- Improve nutrition

The DOH is asking all of our partners in public health, business, academia, and government to make a commitment to adopt and promote these strategies within their communities. We have established a series of work groups to report on the progress that is being made around the state. We will convene a larger group so that we can share the data that have been collected and the best practices and strategies that have proven to be the most efficacious in and around the state.

The stakes for success are high. Chronic diseases such as heart disease, stroke, cancer, diabetes, and arthritis are among the most common, costly, and yet preventable of all health care problems in the United States. They currently account for about 70% of all deaths nationally and nearly 10% of disabilities among Americans. In New Jersey, seven of the leading causes of death are chronic diseases: Heart disease, cancer, stroke and diabetes caused an estimated 59% of deaths in the state in 2013. Chronic disease is a major factor in the escalating health care costs. An estimated 83% of health care spending in the United States is related to the treatment of patients with chronic diseases. Unless we substantially reduce the number of people affected by chronic disease, we will not see cost savings. To have an impact, New Jersey must shift the focus from illness to wellness. ▲



# QUIZ

**Instructions:** Read the articles designated with the icon and answer each of the quiz questions. Mail or fax this form within one year from date of issue to: NJAFP CME Quiz, 224 West State Street, Trenton, NJ 08608 • Fax: 609/394-7712

This medical journal activity, *Perspectives: A View of Family Medicine in New Jersey*, has been reviewed and is acceptable for up to 8 Prescribed credits by the American Academy of Family Physicians. AAFP certification begins January 1, 2014. Term of approval is for two years from this date. Each issue is approved for 1 Prescribed credit. Credit may be claimed for two years from the date of each issue. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AAFP Prescribed credit is accepted by the American Medical Association as equivalent to AMA PRA category 1 credit toward the AMA Physician's Recognition Award. When applying for the AMA PRA, Prescribed credit earned must be reported as Prescribed credit, not as category 1.

**Members – To obtain credit:**

1. Complete and return this quiz to the NJAFP
2. Report your credit directly to the AAFP

**Nonmembers – To obtain credit:**

1. Complete and return this quiz to the NJAFP with a check for \$15 made payable to the NJAFP and a self-addressed, stamped envelope to NJAFP CME, 224 West State Street, Trenton, NJ 08608. A certificate of completion will be sent to you.

**Members are responsible for reporting their credit to the AAFP. To report credit, go to <https://nf.aafp.org/cme/> or call 800-274-2237.**

Name: \_\_\_\_\_ AAFP Membership Number: \_\_\_\_\_

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City/State/Zip: \_\_\_\_\_

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Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

1. True or False: Many of the changes to this year's vaccine schedule included recommendations for high-risk persons.
2. The catch-up immunization schedule provided clearer recommendations for administration of:
  - a. *Haemophilus influenzae* type b (Hib) conjugate vaccine
  - b. Pneumococcal conjugate vaccine
  - c. Tdap vaccine
  - d. All of the above
3. True or False: There was no change in the adult vaccination schedule regarding PCV13 vaccine and PPSV23.
4. True or False: ACIP recommends that adults who have had a successful hematopoietic stem cell transplant receive a 3-dose series of Hib vaccine 6 to 12 months after the transplant, regardless of prior Hib vaccination status.
5. True or False: Current guidance states that unvaccinated adults with HIV infection receive a Hib vaccination.
6. ACIP recommends that pregnant women should receive the Tdap vaccine:
  - a. Only if they have never been vaccinated
  - b. With every pregnancy
  - c. Depending on the interval between the last vaccination with Tdap or Td
  - d. ACIP does not recommend pregnant women be vaccinated
7. True or False: Being a healthcare provider (HCP) is a specific indication for receiving both the HPV and zoster vaccines.
8. True or False: When indicated and feasible for persons aged 0 through 18 years, ACIP recommends any vaccine dose not administered at the recommended age should be administered at a subsequent visit.
9. True or False: Combination vaccines are not generally preferred over separate injections of the equivalent component vaccines.
10. True or False: Adults born prior to 1957 are generally considered immune to measles and mumps.

**ANSWERS ON PAGE 28**

The NJAfp has partnered with ArcheMedX to launch the first-ever virtual course, along with educational elements accredited with AAFP-prescribed credit, for family physicians in collaboration with seven state chapters of the AAFP. The 8-week course offers members of the participating state chapter an entirely new way of connecting learning to practice as they dive deeper into the treatment of major depressive disorder (MDD) through a curriculum of self-directed lessons and collaborative learning activities that recreate the critical elements of small, problem-based workshops in a secure online learning environment.

As Ray Saputelli, EVP/CEO at NJAfp, explained, "We are thrilled to announce the launch of the MDD Virtual Course and believe it

signifies a turning point in the way continuing education can and should be delivered to clinicians, especially family physicians

who are constantly challenged to balance their limited time with providing the highest quality care and staying up to date on the latest best practices. By partnering with ArcheMedX to design and deliver this virtual course, we have created a far simpler and more engaging way for primary care teams to acquire new knowledge and apply critical lessons to practice."

The MDD Virtual Course, powered by the ArcheCourse, enables faculty to deliver a flexible curriculum of weekly video-, slide-, discussion-, self-assessment-, and case-based lessons; collaborative exercises; and self-directed learning activities to small, trusted cohorts of learners. The ArcheCourse also makes it simple for faculty to communicate with and engage cohorts and individual learners, and the administrative dashboard provides access to learning data in real time so that faculty can assess course effectiveness immediately and use lesson tools to direct individual learners to engage more actively or to focus on areas where they need more support.

Learners participating in an ArcheCourse can track their progress as they engage in accredited CME activities and collaborative learning exercises; communicate with faculty; and learn from each other in a safe, secure, and private virtual classroom. As they participate in accredited lessons and learning activities, the participant can access learning tools to take, synchronize, share, and archive their own notes; set personal reminders that will be delivered via a spaced-based reminder system to maximize recall and action; discuss planned content and learning activities with faculty and classmates; and quickly search through relevant resources (i.e., journal articles, clinical studies, patient education tools, etc.) that have been carefully selected by faculty.

Recent data have suggested that the majority of clinicians are using new social technologies to engage specifically in life-long learning and professional development. These findings, along with a growing body of literature evaluating the impact of new learning technologies in medical education, provide



a robust body of evidence leveraged to develop the educational design for the MDD Virtual Course, the first in a series of accredited and collaborative learning initiatives delivered by the NJAfp and ArcheMedX.

Brian S. McGowan, PhD, cofounder and chief learning officer at ArcheMedX, stated, "The launch of our first virtual course with NJAfp is the first step in the transformation of team-based and inter-professional learning, which is essential as greater coordination of care is required across the healthcare system." Dr. McGowan added, "The ArcheCourse provides the best of 'small, group-based learning formats' in a secure and trusted online model and by working with NJAfp, we are bringing together primary care physicians and primary care teams to learn collaboratively in a simpler and more efficient manner."

The individual participating state chapters will activate their own classrooms within the virtual course following 1-hour live faculty-led sessions held at the participating state chapter meetings.

The NJAfp thanks the following members for volunteering to act as faculty moderators in the virtual course room: Sal Bernardo, MD; Mary Campagnolo, MD; Richard Corson, MD; Robert Gorman, MD; Christina Medrano, MD; Arnold Pallay, MD; Kathleen Saradian, MD and Thomas Shaffrey, MD.

## In the News...

**Executive Vice President Ray Saputelli, MBA, CAE** (*Trenton*), recently appeared on NJTV News. He spoke about the fact that New Jersey does not have enough primary care physicians in the state. To see the interview, click on the NJTV News link at <http://www.njtvonline.org/news/video/saputelli-says-proposed-program-gives-200000-reimbursement-to-primary-physicians/>

**Robert Eidus, MD, MBA** (*Cranford*), was quoted in a Medical Economics article entitled, "Can the Doctor-Patient Relationship Survive?" To read the article, click on the Medical Economics link at <http://medicaleconomics.modernmedicine.com/medical-economics/news/can-doctor-patient-relationship-survive?contextCategoryId=146>

**Chelsea Brower**, fourth 4th-year student at Rutgers New Jersey Medical School and student trustee for the NJAfp, and Government Affairs Director **Claudine Leone, Esq.** (*Trenton*), appeared in an *NJSpotlight* article on the massive amount of debt incurred by young physicians. The article can be read by clicking the *NJSpotlight* link at <http://www.njspotlight.com/stories/13/12/16/for-young-doctors-drowning-in-debt-legislation-offers-lifeline/>

# Leaders Wanted

*"Innovation distinguishes between a leader and a follower."* – Steve Jobs

Are you considered a leader by your colleagues or your community? The NJAfp is seeking member family physicians to lead and shape Academy policies over the coming years. Interested members are asked to review the nomination criteria at <http://www.njafp.org/SCSA>. Click on the Call for Resolutions and Nominations link on the left menu bar, and scroll down to nominations.

Nominations are being sought for the following positions:

- Board Trustees: three positions
- Resident Trustee: one position
- Student Trustee: two positions
- AAFP Delegate: one position
- AAFP Alternate Delegate: one position

Nominations are due into the NJAfp office by April 30, 2014. Questions? Contact EVP Ray Saputelli, MBA, CAE, at [ray@njafp.org](mailto:ray@njafp.org)

## With Sympathy...

The NJAfp extends condolences to the family of **Dr. Anthony T. Oropollo** of Montclair, NJ, who passed away in December 2013 and to the family of **Dr. Oscar Ruiz** (father of John Ruiz, MD) who passed away in March 2014 in Miami, FL.

## This Is Not The Time To Stand Idly By...

Changes are occurring daily that are going to affect the way that you practice medicine now and into the future. Are you going to stand by and let others decide your fate, or are you going to get involved and let your voice be heard? It is time to speak up.

Help to shape the way that the NJAfp represents you. Bring your ideas and perspectives to the annual House of Delegates. You can author a resolution or simply participate in the debate and dialogue. Either way, don't keep your ideas to yourself. Join us on Friday, June 13, 2014, at the Sheraton Atlantic City. Attendance is free. Be assured that your input can make a difference in the policies not only of the NJAfp but also, in some cases, of the AAFP because many of the resolutions passed at the NJAfp House of Delegates will be brought forward to the AAFP Congress in October. Contact NJAfp EVP Ray Saputelli for more information.

Writing a resolution is a formal, but not difficult, process. Visit <http://www.njafp.org/SCSA>. Click on the Call for Resolutions and Nominations link on the left menu bar, and then follow the instructions for submission. Resolutions are due into the NJAfp office by April 30, 2014. Questions? Contact EVP Ray Saputelli, MBA, CAE, at [ray@njafp.org](mailto:ray@njafp.org).

# SAVE THE DATE!

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# Join us for our Pre-Conference Workshop in Atlantic City!

## **Advanced Topics in Healthcare Delivery 2014: Ensuring a Viable Practice Using Patient-Centered Approaches**

Sheraton Atlantic City Convention Center Hotel • Thursday, June 12, 2014

**A**s physician practices, hospitals, community health centers, and other healthcare entities seek to navigate the ever-changing and dynamically challenging healthcare environment, it is becoming increasingly critical to develop, implement and monitor processes, techniques, communications and tools to help ensure your practice remains prosperous and viable.

The New Jersey Academy of Family Physicians is hosting its second annual one-day symposium designed to provide attendees with access to experts, resources and best practices to assist in key functional areas vital in driving practice success. These include teach back technique and motivational interviewing, integrating additional disciplines into primary care practice, using Medicare Transition Codes, implementing shared decision tools into practice, conducting behavior change readiness assessments, and utilizing electronic communications with patients and external providers. As organizations strive to meet the demands of a patient-centered model and cultivate a patient-centered community, it is paramount that those leading the charge have the resources and access to best practices to assist in the necessary transformational activities. This one-day symposium provides this opportunity.

## **Call for 2014 New Jersey Family Physician of the Year**

The New Jersey Family Physician of the Year Award embodies the principles of excellence, combined with comprehensive and compassionate care, for which family physicians are known. Full details on how to nominate a colleague for this award are available on the NJAfp website at <http://www.njafp.org/SCSA>. Click on the 2014 Call for Family Physician of the Year link on the left menu bar.

The recipient of the NJAfp Family Physician of the Year Award also is presented to the AAFP for consideration for the AAFP Family Physician of the Year Award.



**Nominations are due into the NJAfp office by April 30, 2014.**  
Contact Candida Taylor at [candida@njafp.org](mailto:candida@njafp.org) for more information.

## **Announcing the NJAfp Patient-Centered Innovation Awards**

**THE NJAfp** is a leader in providing patient-centered medical home (PCMH), practice transformation, and quality improvement assistance to primary care practices, residency programs, health systems, health plans, community health centers, and other key healthcare providers and stakeholders. The NJAfp strongly supports and seeks to advance the adoption of the patient-centered care model locally, regionally, and nationally.

Since 2009, the NJAfp has worked with physicians, providers, and healthcare teams to develop innovative approaches to patient-centered care. To highlight practice achievements, the NJAfp seeks to recognize practices through the Patient-Centered Innovation Award. This unique award program gives practice care teams the opportunity to showcase innovations that they have designed and implemented that have had a positive impact on approaches to patient-centered care. The Patient-Centered Innovation Award was designed to recognize and acknowledge practices and practice care teams, their innovative programs and projects, and their commitment to excellence in patient care through innovation.

### **Eligibility**

Any New Jersey practice is eligible to submit an application for the Patient-Centered Innovation Award as long as the following criteria have been met:

- The implemented innovation has been supported with quantitative data.
- The innovation focused on enhancements in the quality of patient care and level of patient satisfaction, cost reduction, staff development, health information technology, patient engagement, or other category that the practice perceived as innovative in supporting the patient-centered care model.

For complete details on the award, contact Cari Miller at [cari@njafp.org](mailto:cari@njafp.org), or visit [www.njafp.org/SCSA](http://www.njafp.org/SCSA) and scroll down to Advanced Topics Symposium. Look for the topic entitled, "Announcing the NJAfp Patient-Centered Innovation Awards."



## Tired of the Snow? Think Flip Flops!

**IT IS TIME** to mark your calendar for the 2014 Summer Celebration & Scientific Assembly. Hopefully, the snow will have melted away by then, and flip flops will be the footwear of choice.

Plan now to attend so that you don't miss out on all the fun. What do you have to look forward to? Read on:

- The Friday plenary session will feature Dr. Peter Anderson, family physician and author, who will discuss his perspective on the perfect storm that marks a sea of change for family medicine.
- On Saturday, Dr. Robert Wergin, AAFP president-elect, will provide the latest information from the AAFP on how the Academy is responding to the current health care environment.
- CME sessions will include speakers from across the state and the nation. The educational sessions will cover a broad scope of topics that you are sure to find of interest. Topics will range from physician burnout to ways to manage an evidence-based practice. You are sure to find a topic that interests you.
- Don't forget the SAM Study Hall. This year's session is all about congestive heart failure. Join your colleagues for this unique opportunity, and leave Atlantic City with your SAM completed and with a passing grade, too.



### Dates to Remember

- Preconference: Advanced Topics in Health Care Delivery: Thursday, June 12, 2014
- Town Hall: Thursday, June 12, 2014
- House of Delegates: Friday, June 13, 2014
- Scientific Assembly: Friday, June 13, 2014, to Sunday, June 15, 2014
- President's Gala: Saturday, June 14, 2014
- SAM Study Hall: Sunday, June 15, 2014

Information on the conference is posted on the NJAfp website and updated as more information becomes available.

Visit [www.njafp.org/SCSA](http://www.njafp.org/SCSA)

## Important Deadlines to Remember



Deadline for resolutions to be considered for the House of Delegates: **April 30, 2014**

Deadline for nominations for board positions: **April 30, 2014**

Deadline for nominations for Family Physician of the Year: **April 30, 2014**

Deadline for Patient-Centered Innovation Awards: **April, 30, 2014**

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# Christie Focuses on Medicaid in FY2015 Budget Message

Claudine M. Leone, Esq.

*Claudine M. Leone, Esq. is the Government Affairs Director for the NJAAPP.*

**O**n February 25, Governor Christie presented his Budget Address for Fiscal Year 2015 before the New Jersey State Legislature. For the fifth year in a row, the Governor has proposed a policy of "no new taxes." The Fiscal Year 2015 budget includes \$34.4 billion in spending, which is 4.2 percent higher than the FY 2014 budget signed by Governor Christie.

The Governor proposed additional funding for New Jersey education, totaling \$12.9 billion with \$9 billion in direct school aid. He proposed more than \$1.2 billion in direct property tax relief to New Jersey's homeowners, seniors and disabled residents. An additional \$4.5 million has been recommended to expand New Jersey's mandatory drug court program and funding for substance abuse treatment centers. Approximately \$8.5 million has been suggested to assist local governments engaged in consolidation and shared service.

Governor Christie discussed the \$12 billion in federal and state funding to provide coverage for 1.4 million New Jerseyans on Medicaid and NJ FamilyCare, with a \$21 million increase to NJ FamilyCare. New Jersey will receive matching dollars from the federal government due to the state's participation in the Medicaid expansion offered through the Affordable Care Act.

The highest costs in Medicaid and FamilyCare come from individuals with chronic emergency room visits, repeat inpatient hospital stays, and those who face complications of treatment for multiple complex behavioral, mental health and substance abuse conditions.

- More than 16,000 Medicaid recipients visited emergency rooms six or more times last year.
- Almost 7,000 Medicaid recipients had 3 or more hospital inpatient stays last year.
- More than 5,000 of the highest use Medicaid recipients had care for a primary behavioral health diagnosis.
- 5% of New Jersey's Medicaid recipients account for 50% of the program's costs.
- More than 27% of New Jersey's Medicaid and FamilyCare spending is dedicated to just 1% of enrollees.

New Jersey will look to address ways in which to make the system more cost effective, while preserving standards.

A three-year accountable care organization pilot program is in place to assess how care management and coordination has assisted in lowering costs. Rutgers Biomedical and Health Sciences, University Hospital and Rutgers Camden will join New Jersey's Medicaid managed care organizations to devise a program to innovate and improve healthcare delivery under Medicaid and FamilyCare. The Center for Medicare and Medicaid Services

(CMS) recently awarded Rutgers with a \$14 million grant to study strategies for "super-utilizers" to decrease costs and improve quality of care. Rutgers' examination will result in recommendations to the Governor and the Commissioners of the Department of Human Services and Department of Health for enhancing New Jersey's programs, improving quality of care, advancing preventative care and lowering costs.

These budget proposals, as well as others, will be considered by the Legislature in April 2014. The budget must be signed before July 1, 2014.



## BOARD OF MEDICAL EXAMINERS DEBATES USE OF "DR."

In February, the New Jersey State Board of Medical Examiners (BME) discussed whether physician assistants with doctoral degrees are permitted to be called "doctor" in hospitals, medical offices and other clinical settings. Many, including BME Board Member Kevin Walsh, a physician assistant, claimed that the proposal would avoid confusion among patients. If approved by the BME, physician assistants would also be barred from using the title on stationary and prescriptions. The BME Executive Committee will consider the proposal and may recommend adoption at a future meeting.

## ACA UPDATE: EMPLOYER MANDATE DELAYED

In February, the Obama Administration announced yet another delay to the Affordable Care Act, this time delaying the mandate for medium size employers. The employer mandate, which was expected to take effect January 2014, has been delayed to 2015.

- Employers with 50-99 employees will not have to comply with the coverage requirement until 2016, but will have reporting requirements.
- Employers with 100+ employees will need to offer coverage to 70% of full-time employees in 2015 and 95% in 2016 and later years, or be subject to tax penalties.
- Employers with fewer than 50 employees are exempt from the requirement to offer coverage or fill out any forms in 2015 or thereafter.

## ALERT: FDA CRACKS DOWN ON SALE OF ILLEGALLY IMPORTED DRUGS

The U.S. Food and Drug Administration and other law enforcement agencies are cracking down on physicians who are buying illegally imported drugs and selling

*continued on next page*

them in the United States.

In November, the Food and Drug Administration's Office of Criminal Investigations announced guilty pleas by several individuals for importing and selling misbranded drugs. This followed an August announcement from the U.S. Department of Justice that seven Ohio doctors were charged with violating the Food, Drug and Cosmetic Act (FDCA) by importing cancer medications that had not been approved by the FDA, as well as the guilty plea of a Florida man for conspiring to import unapproved foreign oncology drugs.

As is the adage, "if it is too good to be true, it probably is," so is the purchasing of illegally imported drugs. This illegal practice, which is driven globally by criminal syndicates, violates Federal and State law and places medical professionals in danger of losing their medical license or litigation if a patient suffers injury from using these illegally imported products.

How does this happen? As is common practice, pharmaceutical companies ship their products all over the globe. Some foreign governments have the ability to apply cost controls to the sale of these products, thus selling them for a cost far below the market dictated price. When these products are delivered to a medical professional wholesaler, they are then being re-sold – in many cases to organized crime – and thus leaving the secure supply chain of custody. Once in the hands of these unscrupulous actors, they are being shipped back to a remote location, often times without the safety precautions that are provided by drug companies and are required by the FDA. Once secured at an undisclosed location, they are illegally imported into the United States, many times through a "Canadian Pharmacy."

Why is this a concern? First and foremost, the aforementioned

practice violates several Federal and State laws - and as has happened - could subject a medical professional to prosecution and/or loss of their medical license. Patient safety is also an enormous concern. The FDA places several specific requirements on pharmaceutical companies to ensure that the public is going to receive products that are safe to ingest/inject. By removing these products from the chain of custody, there is little assurance that these products have not been tampered with or adulterated in some manner.

In the last several months, we have witnessed these illegal actors going to great lengths in an attempt to make their business practices look legitimate. This includes using counterfeit packaging, false advertising and in some cases actually hiring a sales staff to visit medical professionals.

As a result, the Food and Drug Administration ("FDA") and Department of Justice ("DOJ") have started to track down these illegal actors. There have been instances where illegal importing companies have been raided and have had their operations destroyed. More importantly, law enforcement is also investigating medical professionals and, as a result, several indictments have been issued against those who have shown a blatant disregard for the law.

If you are emailed/faxed/approached to purchase a pharmaceutical product and it seems "to good to be true" make sure you contact the maker of that product to ensure its legitimacy.

If you believe you have been sold, or solicited to purchase, illegally imported drugs, you can report this suspected criminal activity to the FDA's Office of Criminal Investigations (OCI) by calling 1-800-551-3989 or visiting the OCI website. ▲

## A World of Difference

*continued from page 3*

- Immunization saves money: While it is true that a strong immunization program requires funding, the amount of money saved in morbidity and mortality costs far outweighs the cost of putting an immunization program in place.
- Preventing antibiotic resistance: Vaccines reduce the need for antibiotics, thereby reducing the chance of the development of resistant strains. When the conjugate pneumococcal vaccine for infants was introduced in 2000, there was a 57% decline in invasive disease caused by penicillin-resistant strains.
- Protection against bioterrorism: Vaccine preventable disease surveillance and response play a critical role in the identification and response to potential biological weapons such as smallpox or anthrax.
- Promoting economic growth: Health is fundamental to the economic growth of countries. Poor health has been shown to stunt economic growth, while good health has been shown to promote it. Vaccination programs provide the foundation for public health programs.

There were many more benefits to immunization than can be explored here. But even this brief overview provides evidence for

the importance of a comprehensive vaccination program. NJAfp understands the importance of vaccines. We will be working with the New Jersey Immunization Network to ensure a strong immunization program for New Jersey, for the benefit of you and your patients.

Happy Reading,

Theresa J. Barrett, MS  
Managing Editor



### References

1. Andre, F. E., Booy, R., Bock, H. L., Clemens, J., Datta, S. K., John, T. J., . . . Schmitt, H. J. (2008). Vaccination greatly reduces disease, disability, death and inequity worldwide. *Bulletin of the World Health Organization* 86(2). Retrieved from <http://www.who.int/bulletin/volumes/86/2/07-040089/en/>
2. Barrett, T. J. (2013). The Under Vaccination Risk. *Perspectives: A View of Family Medicine in New Jersey*, 12(4), 12-13.

# Extension of the Electronic Health Record Exception to the Stark Law

Susan B. Orr, Esq.

*Susan B. Orr, Esq., is a health law attorney with the firm of Rhoads & Sinon, LLC, located in Exton and Harrisburg, PA*

**F**or those physicians relying on hospitals to assist them in their purchase of electronic health records, the good news is that on December 27, 2013, the Office of the Inspector General (OIG) of the U.S. Department of Health and Human Services (HHS), and the Centers for Medicare & Medicaid Services (CMS) extended (with certain modifications) the electronic health record (EHR) exception to the Stark Law and the analogous safe harbor to the Anti-Kickback Statute that permits certain arrangements involving the donation of EHR items and services. The final regulations amend the rules regarding EHR donations in five ways:

1. They extend the expiration dates of the exception and safe harbor from December 31, 2013, to December 31, 2021.
2. They exclude laboratory companies from the types of entities that can donate EHR items and services.
3. They update the provisions under which software is deemed interoperable.
4. They clarify the prohibition against any actions that limit or restrict the use, compatibility, or interoperability of donated items.
5. They remove the requirement related to electronic prescribing capability.

## I. Background

The Stark Law prohibits physicians from making referrals for certain designated health services (DHS) payable by Medicare to entities with which the physicians or their immediate family member(s) have a financial relationship (i.e. ownership or compensation), unless an exception applies. The companion federal Anti-Kickback Statute is a criminal statute that imposes civil money penalties for violations that proscribe the exchange (or offer to exchange) of remuneration (anything of value) in an effort to induce or reward the referral of federal health care program business. To promote the adoption of electronic health records, in 2006, the CMS promulgated an exception to the Stark Law, and the OIG correspondingly adopted a safe harbor to the Anti-Kickback Statute, subsequently allowing permissible donors to donate interoperable EHR items and services to physicians.

## II. December 2013 Revisions to the EHR Exception and Safe Harbor

The final rules issued by the OIG and the CMS impose no new

requirements on donors or physicians involved in EHR transactions. Conversely, the laws extend the protection for EHR donations and relax the requirements related to interoperability and e-prescribing capabilities. However, lab companies are disqualified from making EHR donations under the final rules, and clarification has been provided with respect to prohibited donor restrictions and/or limitations on software.



### A. Exclusion of Lab Companies

The final regulations exclude lab companies as permissible donors of EHR items and services. Notably, hospital laboratories are still covered by the exception and safe harbor.

### B. Interoperability Revisited

Donated EHR software must be interoperable, defined by the *Code of Federal Regulations* as "[being] able to communicate and exchange data accurately, effectively, securely, and consistently with different information technology systems, software applications, and networks, in various settings; and exchange data such that the clinical or operational purpose and meaning of the data are preserved and unaltered" (p. 778).

Under the old rules, software was deemed interoperable if "a certifying body recognized by the Secretary has certified the software within no more than 12 months prior to the date it is provided to the recipient." The final rules eliminated the 12-month period and now state that donated software is deemed interoperable "if, on the date that it is provided to the physician, it has been certified by a certifying body authorized by the [ONC] to an edition of the electronic health record certification criteria identified in the then-applicable [regulation]" (*Federal Register*, 2010, p. 2018).

Therefore, physicians can now ensure compliance either by meeting new relaxed certification requirements or by simply complying with the definition of interoperable.

### C. Clarifications Regarding Restrictions on the Use of Donated EHR

The goal of preventing misuse of the exception and safe harbor that could result in data and referral lock-ins was reaffirmed. Arrangements involving the donations of software with limited or restricted use resulting from actions taken by physicians or others on their behalf would not satisfy the requirements because to do so would be inconsistent with the purpose of the exception, which is to promote the use of technology that can communicate with products from other vendors.

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# State of the Union for Family Medicine Residents

Gerald Banks, MD

*Gerald Banks, MD, is a family physician at Capital Health in Trenton and a resident trustee on the NJAfp Board of Trustees.*

**H**ello, family medicine resident colleagues! My name is Gerald Banks, and I am your NJAfp resident trustee. I am also the AAFP resident delegate to the Congress of Delegates. In these capacities, I have had the opportunity to attend most AAFP National Conferences. I was in Kansas City recently to attend the Winter Cluster meeting, and I would like to share with you what I learned about the status of resident education and funding going forward.

When I arrived in Kansas City, the conference was already buzzing about the possibility of the sustainable growth rate (SGR) formula repeal. The day was Thursday, February 6, 2014, and congressional lawmakers had finally unveiled a bicameral, bipartisan agreement to repeal Medicare's physician payment formula and replace it with a system that would provide stable payment updates for 5 years and shift Medicare to a payment system that rewards value and quality care. In addition to repealing the SGR formula, the proposed bill includes automatic positive payment updates of 0.5% for 5 years, a consolidated and restructured Medicare quality reporting program, and transitions to alternative payment models.

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***Over the last 12 years, Congress has spent \$153.7 billion on SGR patches, far more than the cost of permanently reforming the Medicare physician payment system.***

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For those of you who are not familiar with the SGR, it is an antiquated 17-year-old system designed to control Medicare spending by limiting annual increases to reimbursements for physicians. That system was widely seen as broken, and year after year, Congress refused to hold the line on those fee limits. In fact, over the last 12 years, Congress has spent \$153.7 billion on SGR patches, far more than the cost of permanently reforming the Medicare physician payment system.

On your behalf, the NJAfp and I have been lobbying for this repeal

in Washington, DC. Last April, we (i.e., Thomas Shaffrey, NJAfp president; Krishna Bhaskarabhatla, president-elect; Richard L. Corson, AAFP delegate; Raymond Saputelli, executive vice president, and I) were in Washington, DC, as part of the Family Medicine Congressional Congress to lobby New Jersey federal legislators in support of this important SGR repeal. As recently as Monday, February 10, 2014, the AMA and 111 other medical associations, including the AAFP, sent a joint letter to both chambers of Congress in an effort to urge lawmakers to seize this opportunity to eliminate the SGR formula. It appears that we are finally approaching a positive outcome regarding the SGR, but I would encourage you all to closely follow this legislation, the SGR Repeal and Medicare Provider Payment Modernization Act, and urge your lawmakers to seize this opportunity to strengthen Medicare and end the costly pattern of short-term patches. Tell them to vote as soon as possible in support of repealing the SGR formula and reforming the Medicare physician payment system.

Although the buzz regarding the SGR repeal certainly set the tone of the Winter Cluster, the Commission on Education approved many important resident-related issues. As the AAFP resident delegate, I also sit on and am a voting member of the AAFP's Subcommittee on Resident and Student Issues (SRSI) and the Subcommittee on Graduate Curriculum (SGC). Following is a brief summary of what was covered in both subcommittees and the outcomes in the Commission on Education (CoE).

The AAFP's SRSI is exactly what it sounds like, namely, a committee devoted to family medicine residents and students. One issue coming out of this subcommittee was 2013 COD Resolution No. 609 – Medical School Feedback to Students Choosing Family Medicine, which asked that the AAFP survey all new family medicine residents for feedback, positive and negative, that they received from medical school faculty about their choice of family medicine as a specialty and that the AAFP work with medical schools to encourage educational environments that are more supportive of students' choice of family medicine. SRSI members discussed the optimal vehicles for a survey to PGY-1 residents as well as potential opportunities to collect the input that this resolution requested from 4th-year student members, some of whom will not have matched into family medicine. The group also discussed the types of questions that should be included in a survey, including questions about issues and optimal timing. Ultimately, we requested that the staff experts from marketing research and education submit a concrete recommendation to the board.

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# When Templates Fail

Monali Desai

Monali Desai is a 4th-year medical student at Rutgers New Jersey Medical School in Newark and a student trustee for the NJAfp.

**I**t was one of the last dog days of 3rd year...and it felt good. I came floundering and bumbling into clinical rotations, unable to find the fax machine, let alone diagnose patients, but 11 months later, I emerged a history-elicitating, chart-reviewing, note-typing diagnosis-attempting machine. The beauty of 3rd year is how quickly we can adapt, how quickly we get used to an algorithm...and also how quickly we can be reminded that people's lives do not follow an algorithm.

I was called for my final consult of the day: a 71-year-old man with depression who came in in septic shock, was refusing to take his medications, and wanted to be left alone. A quick dive into his records revealed that he lived in a nursing home and had rampant, poorly controlled diabetes that had left him with bilateral amputations. His closest family member was in Nevada. A nice and neat picture was forming in my head based upon these concrete details. Textbook reasons for his depression appeared like bullet points on a PowerPoint: old age, residence in a nursing home, medical conditions, disability, and no close family members nearby. I was determined to solve the puzzle, get his life story, write one fantastic note, and perhaps enjoy some May sunshine. Like any good, eager-to-please medical student, I had risk assessments and history templates all ready to go.

He was lying in bed, feigning sleep. His head stubbornly tilted to the left side. He had grizzled gray hair and large, black aviator glasses. I reached deep into my toolbox of ways to get people to open up, but no matter how much I coaxed, cajoled, gently inquired, or forcefully inquired; no matter whether I stood up, crouched down, or leaned over, and no matter how long I waited, he refused to talk to me. Occasionally, he would open his eyes and shout out some mumbling, incoherent answer (most likely a "No."), but as I sat at my computer, frustrated and disappointed, I overheard a phone conversation between the nurse and the patient's sister. I went over to her, and she underlined the word "Asperger's" on her notepad. I phoned the sister back immediately. It was then that my patient's real story, not the neat PowerPoint version, appeared before my eyes.

He had been diagnosed with Asperger's syndrome when he was a child. He was always a little "different" from the other kids and had his "quirks." He lived with his parents all their lives. They trained him to take care of himself in the hope that he could survive without them. That terrible day came in 1985, when his father died, leaving him parentless at last, and it was from then on, his sister said quietly, that things started going downhill. A hired cleaning service would notice a fine layer of dust in the bathtub: He no longer took showers. The job that he had held for many years as an electronics tester ended when the owner of the company, who had long been accustomed to the patient's idiosyncrasies, retired and sold the business. This man, my patient, became more and more withdrawn, refusing nursing aids. In

2006, a cleaning service worker found the patient lying on the floor of his apartment in a diabetic coma and suffering with necrotic legs.

After that episode, he was placed in a nursing home facility. For years, his baseline communication now has been to say "No," lie in bed, and talk little. However, with some clever bribery, he could be persuaded to communicate a bit more openly. He was a big fan of animated movies. A comment such as, "Sarah won't send you any more DVDs if you don't take your medication!" would get the staff as least 1 or 2 weeks of compliance. "He's brilliant," his sister noted; he had a photographic memory and a love of classical music. When asked about his mood lately, she said, "I really don't know...I talk to him once a week...but he won't ever confide in me, you know?" with a slightest trace of bitterness.

Suddenly other stories emerged from his story, blooming like drops of watercolor on a blank page. His parents struggled to understand this awkward child, who started to grow up so different in temperament from other children; who did not want to be touched; who did not say, "I love you," and who wanted to be left alone in his room. His sister, whom he hardly interacted with growing up, either by choice or by circumstance, lives in Nevada and sends his favorite DVDs in the mail and learns from strangers the cataclysmic events in her brother's decline. When we are young, we resent the slightest disappointments and the slightest deviation from the normal. I wonder how she felt not having a typical relationship with her brother, a brother who would never, as she remarked, confide in her.

My patient is 71 years old. He is grizzled and gray, and he wears eyeglasses from the 1980s. I can write under past medical history, "Depression, diabetic, Asperger's," but there is so much more to my patient. He used to be a boy who became a man, and he has felt grief and loneliness. The fate that his parents so adamantly did not want for him is upon him now: growing up alone in a nursing home, no longer willing or able to take care of himself, and limbs chopped off. Were the reasons for his amputations ever explained to him? Did someone comfort him, or did he wake up to one day to find that his legs were gone, just like his job was gone and his parents were gone?

There is so much that I wonder about him, and there is so much more that I want to know. My paltry history-taking template feels unseemly, even ludicrous. His life does not fit into a template, and for him, there is no clear solution and no May sunshine to escape to. In medicine, we want problems to be defined and then resolved, but messy details of people's lives get in the way. They are like overgrown foliage that simply cannot be ignored. We want to follow the template and be told we are good at what we do, but our patients continue to lie quietly in their beds with ghost limbs and grief, and only they know the truth of our successes and failures. ▲



# State of the Union

*continued from page 30*

The scope of work of the SGC includes the development and review of the curriculum guidelines; discussion of regulatory issues from the ACGME, ABFM, and other regulatory agencies; review of AAFP policy; and discussion of any other issues pertinent to the training of family medicine residents. Another issue coming from the SGC was 2014 COD No. 512 – Revised Current CMS Regulations Limiting Resident-In-Training Prescribing for Medicaid Patients, which suggests that the AAFP notify family medicine residencies and state chapters to be aware that there might be technical problems with resident-in-training prescriptions until those prescribers are enrolled in their states' Medicaid ordering/referring/prescribing provider databases and that those family medicine residencies and state chapters need to work with their state Medicaid directors to ensure a smooth transition. A one-page document with detailed information will be sent to all family medicine residency programs apprising them of this new requirement. The ability to write prescriptions is especially relevant to residents because the roll-out of the ACA will affect our ability to write prescriptions, even if they are cosigned by faculty. The document will make residency programs aware of this new requirement so that they can address it before it becomes problematic.

The mission of the CoE is to provide a venue for the development of recommended policy and the dissemination of expertise and new information related to the education and professional development of family physicians until completion of the residency training period. The CoE acted accordingly at its meeting by approving the aforementioned action items. The CoE also heard intriguing reports from liaisons, especially in regard to the ACGME. It was reported that milestones for core family medicine have been finalized and posted to the ACGME website, with an effective date of July 2014. Milestone development on the family medicine fellowships (i.e., sports medicine, geriatric medicine, hospice and palliative medicine, and sleep medicine) will begin in 2014.

It also was noted that the RRC for Family Medicine, in partnership with the American Board of Family Physicians, received approval from the ACGME Board of Directors for a pilot project that will examine the length of training in family medicine. Specifically, although the project was not designed to provide a definitive answer as to which length of training is "the best" for residency education in family medicine, the data gleaned from the project will help to tailor future conversations regarding the fundamentals (taken from both 3- and 4-year formats) required to prepare residents in family medicine to enter the practice of medicine with the medical knowledge and skills necessary to treat the most broad-based patient population. Thirteen programs began the pilot on July 1, 2013.

There were many other interesting and debates focusing on liaison reports, including those from the ABFM, AMA, AOA, AFMRD, and STFM. I will be happy to fill you in on these and other emerging family medicine resident-related issues. Please email me at [GBanks@capitalhealth.org](mailto:GBanks@capitalhealth.org) for more information.

As always, keep your head up, and remember that WE are the future of family medicine. ▲

# Electronic Health Record

*continued from page 29*

Following are two examples of EHR donation transactions that would not qualify for protection: (a) a transaction in which the donor requires a written agreement restricting the use or interoperability of the donated EHR items or services, precluding competitors from interfacing with the donated EHR, and (b) an action taken by a physician limiting the use of the donated EHR items or services by charging fees to prevent nonrecipient providers and/or the donor's competitors from interfacing.

## D. Elimination of the E-Prescribing Requirement

There is no longer a requirement that the donated software have electronic prescribing capabilities.

## III. Conclusion

The final regulations have afforded protection to qualified EHR donations for an additional 7 years, and the rules about software requirements and interoperability standards have been relaxed. Laboratory companies and those hoping for quid pro quo arrangements appear to be the only parties adversely affected by the revisions to, and clarification of, the prior regulatory scheme. Notwithstanding, all parties to EHR donations should be diligent in planning such transactions because of the complicated nature of fund allocations and the parameters regarding business dealings.

*For more information about or assistance with an EHR donation, please contact either Susan B. Orr, Esq., or Nicole Radziewicz, Esq., at Rhoads & Sinon, LLP, at 610-423-4200 or [sorr@rhoads-sinon.com](mailto:sorr@rhoads-sinon.com) and [nradziewicz@rhoads-sinon.com](mailto:nradziewicz@rhoads-sinon.com)*

## Diabetes Screening During Pregnancy



Finally aligning with organizations such as the American Diabetes Association, the American College of Obstetricians and Gynecologists, and the American Association of Clinical Endocrinologists, the U.S. Preventive Services Task Force recommends that all pregnant women be screened for gestational diabetes at 24 weeks of pregnancy, even in the absence of symptoms.

To read the full recommendation, visit:  
<http://www.uspreventiveservicestaskforce.org/uspstf/uspsgdm.htm>

# Thank You!

FOUNDATION  
VIEW

**In this space** every First Quarter of *Perspectives* we thank those who have provided support to the Foundation to enable it to carry on its vision:

- Increase interest in Family Medicine among medical students and college students through scholarship and grant programs
- Assist new physicians entering into the practice of Family Medicine in New Jersey through preceptor programs and resident repayment opportunities
- Enhance the specialty through encouragement and support of research by medical students and family physicians.

We thank these important stewards of our Foundation – our philanthropic arm. These are the Academy members who have quietly contributed to the NJAfp Foundation throughout 2013 because they value and recognize the important impact that the Foundation can provide by enhancing the experience of our residents and students who have chosen family medicine for their career path.

**So THANK YOU to David Swee, MD; Mike Doyle, MD; Robert Maro, MD; John Ruiz, MD; Everett Schlam, MD; Terry Shlimbaum, MD; Mary Campagnolo, MD and George Leipsner, MD for your 2013 donations to the New Jersey Academy of Family Physicians Foundation.**

We also extend a very important and special thank you to Ruth Corson and Sue Zlotnick for their continued support and dedication to making the Foundation booth a success at the annual meeting.

Everyone's generosity and support is greatly appreciated. Won't you please join your colleagues by donating to the Foundation in 2014 to help us better serve those who wish to stay and practice Family Medicine in New Jersey?

Consider providing a monthly gift – donating over time provides continual support to these important programs and enables us to better plan the future of the Foundation and expand its outreach.



## ***YES! I would like to support the NJAfp Foundation!***

- Enclosed is my check in support of the *Resident and Student Trustee initiative* for \$ \_\_\_\_\_.
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# Advice From the Trenches

## *Involvement is Key to a Better Perspective on the Future of Family Medicine*

NJAFP Editorial Staff

### **MEMBER HIGHLIGHT: Dr. Lauren Carruth-Mehnert**

Dr. Mehnert is a family physician at a special care center affiliated with the AtlantiCare Regional Medical Center. She also serves as a trustee on the NJAFP Board.

***"Love what you do and do what you love. Don't listen to anyone else who tells you not to do it."***

This sentiment aptly describes Lauren Carruth-Mehnert's attitude toward family medicine. While in her 3rd year of medical school, Lauren shadowed three family physicians, all of whom reinforced her impression of family medicine as an engaging and challenging specialty. Watching as her mentors interacted with patients and focused on treating their conditions in the context of the biological, psychological, and social factors that influenced their lives, Lauren realized that family medicine remains one of the few specialties that can still present diverse and complex professional challenges while supporting long-term patient relationships.

Lauren's initial enthusiasm for family medicine was dampened by the attitudes of classmates and colleagues, who encouraged her to

trusting relationships with their patients. Establishing trust takes time and effort, and it is essential to understanding the factors that are impacting your patients' [lives] and health. These relationships make family medicine so fulfilling."

Although she derives immense satisfaction from her work, Lauren is candid about the specialty's challenges. Aware that many of her colleagues are disillusioned by ongoing salary issues, time constraints, bureaucratic requirements and paperwork, she remains a fervent advocate of family medicine. She attributes her positive attitude to her involvement with the New Jersey Academy of Family Physicians (NJAFP).

Lauren serves on the NJAFP Board and is involved with initiatives that not only will change but also improve the environment in which family physicians practice. Her excitement was evident in her comment that "involvement with a change agent like NJAFP is key. "I know how disheartening it can be to hear colleagues complain about family medicine's future, but NJAFP's work will make a difference." Lauren feels that she can play a positive role in influencing the future of family medicine. She stated, "I realize that it is easy to slip into negativity when you feel powerless in the face of events that are taking place.



***"I know how disheartening it can be to hear colleagues complain about family medicine's future, but NJAFP's work will make a difference."***

consider other specialties. Despite the pervasive antifamily medicine bias that she encountered, Lauren was resolute and persevered with her decision. A graduate of Rutgers Robert Wood Johnson Medical School, Lauren completed her residency in family medicine at Hunterdon Medical Center. After working as a family physician for 7 years in the specialty, Lauren still loves what she does and values the relationships that she has established with her patients. She commented, "Effective family physicians are committed to nurturing

Working with NJAFP, I see potential solutions, and little by little, I expect to see the practice environment improve."

Lauren practices 4 days/week at one of the special care center locations affiliated with the AtlantiCare Regional Medical Center. She also is the mother of two children. Lauren summed up her attitude toward family medicine by stating, "Practicing family medicine resonates with me. I am happy to work with patients who may feel disenfranchised to help them receive care that will improve their quality of life." ▲

# CALL FOR NEW JERSEY FAMILY PHYSICIAN OF THE YEAR

The New Jersey Family Physician of the Year Award embodies the principles of excellence, combined with comprehensive and compassionate care, for which family physicians are known.

## Guidelines for Selection

- Provides his/her community with compassionate, comprehensive and caring medical service on a continuing basis
- Is directly and effectively involved in community affairs and activities that enhance the quality of life in his/her home area
- Provides a credible role model, emulating the family physician as a healer and human being to his/her community, and as a professional in the service and art of medicine to colleagues, other health professionals, and especially to young physicians in training and to medical students.

## Specific to New Jersey:

- Has been in Family Medicine in NJ for at least 10 consecutive years
- Must be Board Certified in Family Medicine
- Must be a member in good standing in his/her community

Full details on how to nominate a colleague for this award are available on the NJAFP website at <http://www.njafp.org/SCSA>. Click on the **2014 Call for Family Physician of the Year** link on the left menu bar.

The recipient of the NJAFP Family Physician of the Year Award also is presented to the AAFP for consideration for the AAFP Family Physician of the Year Award.



Members wishing to place a candidate in nomination should submit materials to: **NJAFP Selection Committee, 224 W State St., Trenton, NJ 08608**. Nominations must be received in the NJAFP office by

**April 30, 2014**

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