

Minimizing costs and maximizing reimbursement
can make immunizations profitable.

IMMUNIZATIONS: How to Protect Patients and the Bottom Line

JAMIE LOEHR, MD, FAAFP

Immunizations are a common health care need for patients, but they also have become a common source of financial concern for practices. I often hear physicians say that the profits are too small to justify the cost and effort associated with offering them – or that immunizations have actually become a money loser – and that they cannot continue to provide them.

However, my practice of three physicians and two nurse practitioners enjoys steady revenue from immunizations, with vaccine reimbursement sometimes exceeding that for the rest of the visit. About 35 percent of our patients are younger than 18 years old, but we also have a large number of patients who are older than 65 as well as families we have treated for four generations. In this article, I will suggest ways that you too can provide the nationally recommended immunizations and improve your practice's financial viability at the same time.

Vaccine costs

Many factors comprise the true cost of providing immunizations:

- The price of the vaccine plus the cost of supplies and clinical staff time to dispense it,
- The cost of vaccine storage equipment (a separate refrigerator and freezer is the current recommendation),
- Other administrative overhead, such as monitoring temperature, ordering, maintaining supply, and minimizing waste.

Given the wide range of ways practices handle and

administrate vaccines, I will focus largely on controlling the cost of the vaccine itself.

The easiest way to lose money on vaccines is to pay too much for them. When my staff researched prices for common vaccines in October 2014, the differences between the lowest and highest prices from our suppliers ranged from \$6 to more than \$57 per dose (see “Sample vaccine dose comparison,” page 26). That means that in the worst-case scenario, we could be paying \$57 more than necessary for each dose of vaccine.

I consider myself a savvy vaccine shopper, but it was only after I reviewed my staff's spreadsheet that I realized I was paying too much for certain vaccines.

Systematically comparing prices and ensuring that we are purchasing vaccines at the lowest costs possible also keeps me from losing money because of low insurance payments. My worst payer still reimburses about \$2 more than the cheapest possible cost of the vaccine. Payment for other vaccines may be \$5 to \$10 more than the vaccine cost – not high, but it is a profit. If I find that a payer is reimbursing me for less than my cost, I find a lower cost supplier, if available. If not, I have had good luck sending my invoices to the insurance companies and persuading them to increase reimbursement.

Manufacturers often increase prices for vaccines, and, in the past, our payers could take up to six months or more to increase their reimbursement. More recently, our payers have done a better job of tracking vaccine prices and matching price increases immediately or, in most cases, within three months.

Note that providers treating low-income patients can receive free vaccines through the federal Vaccines for Children (VFC) program (<http://www.cdc.gov/vaccines/programs/vfc/index.html>). In addition, some states have universal vaccine purchasing programs, meaning they buy all or some childhood vaccines from the federal government at cost and distribute them to individual providers, similar to the VFC program. To find out if your state has a universal purchasing program, consult your state's immunization program manager; contact information is online at <http://www.immunizationmanagers.org/?MemPage>.

Vaccine ordering

As the price comparison chart shows, it generally costs less to order directly from the manufacturer than to buy from a resupplier. This might not always be true, but it is worthwhile to start with the vaccine manufacturer when comparing prices.

Most of the vaccines used in the United States are



made by one of five manufacturers (see “Key vaccine manufacturers,” page 29). The good news is that each of these manufacturers makes it easy to order and pay for vaccines online, although you must register for each website separately. In addition, most of the manufacturers don’t discriminate against small practices. My practice can usually order as few as 10 doses of a vaccine without incurring

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an additional cost. One manufacturer, however, requires a minimum order of \$600 to avoid a \$25 penalty.

Another benefit of ordering directly from manufacturers is that they usually offer a 2 percent discount if the invoice is paid within 90 days, helping your practice’s cash flow. You can automate this process by leaving a credit card on file, and the manufacturer will charge the card just before the 90-day due date.

Some manufacturers also have a discount program for ordering multiple vaccines, yielding lower prices or a quarterly rebate. In some situations, a 10 percent discount is offered for certain vaccines.

Finally, taking advantage of cash-back programs offered through credit card companies can produce significant savings. I pay for the practice’s vaccines by credit card and then pay the credit card company by electronic transfer directly from the practice checking account. My small practice spent more than \$130,000 last year on vaccines. My card has a 2 percent rebate for all purchases, generating a \$2,600 return to the practice.

Coding for immunizations

Keeping vaccine costs down allows me to make money on the administration fees, especially for pediatric immunizations. The key to doing this is understanding how to properly code for the service. The first two steps are routine for most practices, but the others are not:

1. Bill for the vaccine itself. For example, if you gave an MMR (measles-mumps-rubella) vaccine, you would use CPT code 90707. ►

About the Author

Dr. Loehr is the owner of Cayuga Family Medicine, a small family medicine practice in Ithaca, N.Y. He is also the American Academy of Family Physician’s liaison to the Advisory Committee on Immunization Practices. Author disclosure: no relevant financial affiliations disclosed.

2. Add a diagnosis code. In the MMR example, you could use V06.4, “Need for prophylactic vaccination and inoculation against measles-mumps-rubella.” But for children, many clinicians use V20.2, “Routine infant or child health check.” The latter code reminds the insurance company that this is part of the routine immunization schedule.

3. Add a National Drug Code (NDC). Many insurance companies are now requiring a NDC along with the CPT code. The NDC identifies the specific type of immunization you gave to the patient. This is particularly important when a single CPT code can cover multiple brands of the vaccine. For example, several manufacturers make quadrivalent influenza vaccine for patients 3 years of age or older, the vaccine represented by code 90688. If you happen to use a quadrivalent flu vaccine that costs a few dollars more than the others, the NDC tells the insurer to reimburse you at the higher rate.

4. Bill for the immunization administration. The fee for the administration code is supposed to cover the time, energy, and supplies required to administer the vaccine as well as the overhead associated with managing the vaccines (see “Immunization administration codes,” page 28).

To choose which administration code to use, you need to know the following information:

- Is the patient 18 years old or younger?
- Did a qualified health professional provide specific counseling to the patient or parent/guardian on the date the vaccine was administered?
- How many vaccines were given, and how many components were in each vaccine?
- Does the patient’s insurance have different codes or modifiers for the same procedure?

Answering that final question admittedly requires some trial and error as well as research, learning the new rules when a code is rejected and making sure to keep up with new codes when vaccines change.

From a financial point of view, the most important immunization administration codes for my practice are 90460 and 90461. These codes, which include a counseling component, were introduced in 2011 and can be used only for patients 18 years old or younger. The reason these codes are so valuable is that they pay per vaccine component. For example, if you administer an MMR vaccine, you may bill for three components (measles,

SAMPLE VACCINE DOSE COMPARISON

Vaccine	Manufacturer direct	Suppliers							
		1	2	3	4	5	6	7	8
1	\$66.97	—	\$82.27	—	\$70.05	\$72.91	\$120.00	\$70.05	\$95.28
2	\$27.99	—	\$38.60	—	\$28.46	\$29.63	\$40.00	\$28.46	\$40.83
3	\$14.23	—	\$19.40	—	\$14.98	\$22.02	\$30.08	\$14.98	—
4	\$18.71	—	\$27.84	—	\$20.77	\$22.10	\$30.10	—	—
5	\$35.30	—	\$48.71	—	\$37.20	\$38.71	\$57.50	\$37.20	\$41.49
6	\$45.00	—	\$56.93	—	\$47.55	\$49.48	—	—	—
7	\$53.89	\$65.07	\$63.52	—	\$59.15	\$58.48	—	\$57.26	\$60.18
8	\$93.39	\$108.97	\$102.99	—	\$100.15	\$98.07	—	\$95.96	\$98.69
9	\$132.19	\$149.66	\$151.01	—	\$150.40	\$147.28	—	\$138.26	\$145.29
10	\$68.50	\$83.56	\$84.58	—	\$80.00	\$78.34	—	\$73.57	—
11	\$154.64	\$182.56	\$183.61	—	\$166.88	\$164.22	—	\$160.73	\$211.93
12	\$173.98	\$204.74	\$196.50	—	\$183.23	\$181.23	—	\$180.94	—
13	\$68.29	—	\$77.10	—	\$71.20	\$71.13	—	\$71.02	—
14	\$24.04	\$31.55	\$35.33	—	—	\$32.42	—	\$28.42	\$30.85
15	\$20.85	—	\$26.85	\$24.34	\$21.20	\$23.33	\$33.90	\$24.08	—
16	\$25.46	—	\$31.69	\$28.60	\$26.31	\$27.41	—	\$29.22	—
17	\$23.73	—	\$33.20	\$28.29	—	\$27.11	—	\$26.03	—
18	\$26.69	—	\$32.93	\$29.88	\$27.49	\$28.63	\$37.80	\$29.93	—
19	\$52.72	—	\$65.86	\$54.38	\$52.75	—	\$67.75	—	—
20	\$135.06	\$155.08	\$154.07	\$142.00	\$142.59	\$146.03	—	\$135.81	\$158.18
21	\$99.92	—	\$156.66	—	—	\$108.17	—	\$105.08	\$119.25

mumps, and rubella). If you administer a DTaP/IPV vaccine (Kinrix) you may bill for four components (diphtheria, tetanus, pertussis, and polio).

Let's see how this works in real life. In my practice, our largest payer reimburses around \$50 for administering the first vaccine or component (90460 or 90471) and around \$25 for administering an additional vaccine (90461 or 90472). Now imagine a two-month well-child

three in DTaP (diphtheria, tetanus, pertussis) plus one for IPV and one for Hep B. Because the counseling codes pay per component, the total reimbursement is \$300 – an extra \$175 for providing brief counseling.

Let's consider another common scenario. If you discover an ear infection during a four-month well-child visit and prescribe an antibiotic, you likely would not give any vaccines at that time. Instead, you might have the child

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visit where the recommended immunizations are given: DTaP, polio, Hep B (Hepatitis B), HIB (Haemophilus influenzae type B), PSV13 (pneumococcal conjugate), and rotavirus. In our office, we give Pediarix (DTaP/IPV/HepB) as our preferred combination vaccine.

If for some reason I did not counsel the family about the vaccines (see “Coding example A,” page 28), I would need to bill the administration codes starting with 90471 for the first immunization. Note that the second and third injections each receive code 90472. The rotavirus vaccine, because it is oral, is coded separately with 90474. The total reimbursement is \$125.

However, if in the previous example I provide the vaccine counseling that is part of the normal well-child exam, I can bill very differently, using codes 90460 and 90461 (see “Coding example B,” page 28). Note that there are five total components to the DTaP/IPV/Hep B vaccine:

come back after he or she recovers for a nurse visit to receive the vaccines. In the past, my nurse would give the vaccines based on the orders seen in the chart at the well visit, and I would not see the patient during that visit. The billers would use codes 90471 and 90472 and the reimbursement would total \$125 as seen in example A.

However, with a bit of additional work on my part, an extra \$175 is available to us. One of the features of codes 90460 and 90461 is that the counseling has to be provided on the same day as the immunizations and by a qualified health professional, which has been defined as a physician, nurse practitioner, or physician assistant. It does not include counseling provided by a nurse. Knowing this, I now schedule a short vaccine-counseling visit with the parents instead of the nurse visit. I review the risks and benefits of the vaccines as I did at the two- and four-month visits and then can use the 90460 and 90461 codes and receive the higher reimbursement.

I don't want to oversell the benefits of 90460 and 90461. The results are most dramatic for vaccines with multiple components like DTaP or MMR. If you are only giving one vaccine on a given day (a flu vaccine, for example), there is no difference between reimbursement for 90460 and 90471, at least not with my payers. Also remember that 90460 and 90461 are used only for patients 18 years old or younger. They are not very helpful for practices with small pediatric populations. However, if you see teenagers and provide Tdap (tetanus, diphtheria, and pertussis), HPV (human papillomavirus), or meningitis immunizations to them, the counseling codes can be helpful.

Finally, meeting the counseling requirement of 90460 and 90461 can be disruptive in some cases. For example, when our practice has flu clinics and sees patients for five-minute visits, we don't usually pull a physician or nurse practitioner into the room to counsel each pediatric flu patient, even if the patient is getting more than one vaccine at the visit. ►



IN THE AUTHOR'S OWN WORDS

Dr. Loehr provides additional perspective on how practices can reduce the financial strain of offering immunizations in a video available with the online version of this article (<http://www.aafp.org/fpm/2015/0300/p24.html>).

For adults, you would routinely use the 90471-90474 codes or the G0008 (for influenza) or G0009 (for pneumococcal) codes when appropriate for Medicare insurance. Although these are not as lucrative as the pediatric codes, they can still provide a steady stream of income for your practice. And the \$50 my payers provide for vaccine administration seems like a good deal to me.

Other issues affecting payment

One important recent update affecting payment for immunizations involves the use of pneumococcal vaccines for elderly patients. In August 2014, the Advisory Committee on Immunization Practices (ACIP) recommended that all adults 65 years or older receive both PPSV23 (Pneumovax) and PCV13 (Prevnar 13). There are very specific

timing recommendations that can be found in the following Morbidity and Mortality Week Report: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6337a4.htm>. A major concern was that, despite the ACIP recommendation, Medicare initially only authorized one pneumococcal vaccine for patients older than 65. However, Medicare recently modified its pneumococcal policy, more closely aligning with the ACIP recommendation: <http://go.cms.gov/1BLMdy7>. The key language is “A different, second pneumococcal vaccine may be administered 1 year after the first vaccine was administered (i.e., 11 full months have passed following the month in which the last pneumococcal vaccine was administered).” Note that the ACIP recommendation allows a second vaccine as early as six months in some circumstances, but Medicare won’t reimburse unless the two vaccines are given a year apart.

Regularly comparing prices from several suppliers ensures you’re getting vaccines for the lowest cost.

Vaccine manufacturers often offer the cheapest prices and even discounts.

Proper coding for administering vaccines can dramatically increase reimbursement.

IMMUNIZATION ADMINISTRATION CODES

CPT code	Description
90460	Immunization administration through 18 years of age (any route) with counseling by physician or other qualified health care professional, first vaccine/toxoid component
90461	Immunization administration through 18 years of age (any route) with counseling by physician or other qualified health care professional, each additional vaccine/toxoid component
90471	Immunization administration (percutaneous, intradermal, subcutaneous, intramuscular), first vaccine
90472	Immunization administration (percutaneous, intradermal, subcutaneous, intramuscular), each additional vaccine
90473	Immunization administration (nasal or oral), first vaccine
90474	Immunization administration (nasal or oral), each additional vaccine
G0008	Administration of the influenza vaccine, Medicare insurance
G0009	Administration of the pneumococcal vaccine, Medicare insurance

CODING EXAMPLE A

Vaccine	Code	Reimbursement
DTaP/IPV/HepB	90471	\$50
HIB	90472	\$25
Prevnar	90472	\$25
Rotavirus	90474	\$25
	Total	\$125

CODING EXAMPLE B

Vaccine	Code	Reimbursement
DTaP/IPV/HepB	90460	\$50
2nd component	90461	\$25
3rd component	90461	\$25
4th component	90461	\$25
5th component	90461	\$25
HIB	90460	\$50
Prevnar	90460	\$50
Rotavirus	90460	\$50
	Total	\$300

KEY VACCINE MANUFACTURERS

GlaxoSmithKline PLC

<http://www.GSKVaccinesDirect.com>

Merck & Co., Inc

<http://www.MerckVaccines.com>

Novartis AG

<http://www.NovartisVaccinesDirect.com>

Pfizer Inc.

<http://www.PfizerPro.com/VaccineOrdering>

Sanofi Pasteur Inc.

<http://www.VaccineShoppe.com>

Finally, when providing travel vaccines to your patients, verify the patient's coverage up front so that you can collect any amount due from the patient before he or she leaves the office. The Affordable Care Act requires insurance companies to cover any ACIP-recommended vaccines without copays or deductibles; however, that does not always apply to travel vaccines such as typhoid or

Hepatitis A for adults. My experience is that this is still a gray area and insurance companies will often deny coverage, leaving you to collect the cost directly from the patient.

Implementation

Remember to create a vaccine cost spreadsheet at least annually and order vaccines at the lowest possible price. Be aware of possible discounts when ordering vaccines, and use your credit card wisely to generate rebates. Make sure you code correctly for the vaccines you give, and use 90460 and 90461 appropriately to greatly increase your immunization administration revenue. Do these things, and you can make it much more financially viable to offer vaccines in your practice. **FPM**

■ Administration codes 90460 and 90461 pay more but require a brief vaccine counseling visit.

■ Medicare now allows elderly patients to receive more than one pneumococcal immunization.

Send comments to fpm@aaafp.org, or add your comments to the article at <http://www.aaafp.org/fpm/2015/0300/p24.html>.

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