When this community took a more organized approach to providing vaccinations rather than simply reacting to public demand, everyone benefited.

Most offices are well aware of the hassles involved in administering flu vaccines. By November, the phone lines become jammed with patients asking, “When will it be available?”

“How much will it cost?” “Do I need an appointment?” and “Can my sister get one even if she’s not a patient of yours?” Meeting this demand ties up resources and makes it hard to get regular business done.

The vaccine shortage we experienced during the 2004-2005 flu season brought to light other challenges in our system. When a grocery store pharmacy received its vaccine shipment, it would hang a sign in the window and begin offering vaccine to the public. Though the intention was good, it was done without any regard to the effect on other sites that had no vaccine yet. As a result, elderly patients with diabetes waited weeks for their flu shots, while their healthy young neighbors across the street got theirs simply by going to the grocery store.

We have encouraged people to get flu shots for decades now, and the one thing that finally drove up demand was to tell them they couldn’t have one. The “run on the bank” mentality that resulted exposed a lack of community-wide organization that made everyone look bad.

It seemed irresponsible for a community to have multiple groups of providers administering flu shots in isolation just because they happened to have received their vaccine shipments. There had to be a better way, and it would require that the community as a whole take responsibility for vaccinating its citizens. In 2006, our community...
There had to be a better way, and it would require that the community as a whole take responsibility for vaccinating its citizens.

coordinated our efforts, with positive results. Here’s how we did it:

**Mobilizing the community**

Our goal was to help develop a proactive, systematic approach to providing vaccinations throughout our community rather than simply reacting to public demand. This meant organizing all vaccination sites so that shots could be offered at an agreed-upon time in accordance with vaccine supply and so that vaccine could be shared if some providers did not receive their shipments. It also necessitated a public awareness campaign to educate the community about the new system, to prevent confusion and to cut down on unnecessary phone calls.

The CDC and our state health department do a pretty good job educating us and the public about who should get a flu shot, but they fall short in offering guidelines or recommendations about how to administer vaccinations systematically and effectively. I brought these issues up at a meeting between the Oklahoma Physicians Resource/Research Network and the Oklahoma State Department of Health in hopes of enlisting more help but did not get very far, mainly because a community-wide plan had never been undertaken. We would have to go it alone.

The first step was to contact everyone involved with flu vaccinations in our county. Grove is in Delaware County, Okla., a relatively isolated, non-metropolitan area with only one hospital, a county health department, an Indian Health Service clinic and about a dozen primary care offices serving a population of about 40,000. I knew that getting buy-in from all the stakeholders would take some doing, but if the majority of these providers would agree to a more effective way of doing things, then maybe we could create a better system.

I explained why it was important to work together, emphasizing the concept of herd immunity (i.e., immunity that occurs when you vaccinate a portion of the population, which in turn protects unvaccinated individuals) and the need to vaccinate individuals at relatively the same time. It proved to be a fairly easy sell. Physicians’ offices were frustrated with the status quo, and they bought in to the idea without much trouble. A few weren’t eager to be quite so proactive, but that’s human nature. Change is hard. We dealt with individual issues and tried to keep everyone focused on the broader goals. The coordinators at the Indian Health Service clinic and the county health department were quick to come aboard.

Retail pharmacies and grocery stores agreed to cooperate, although we waited to approach them until after the clinicians were involved (more on this later). It took a little peer pressure and reasoning, but they were happy to comply.

**Establishing operating principles**

The next step in the process was to set some operating principles for our network. We agreed on these:

- **Set a start date and don’t offer any vaccine until that date.** We agreed to wait to begin offering vaccinations until as close to the first of November as possible. The logic behind this was that the shots begin to have

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**About the Author**

Dr. Bechtol is a family physician in solo practice in Grove, Okla. This year he was recognized as Family Physician of the Year by the Oklahoma Academy of Family Physicians. Author disclosure: nothing to disclose.
an effect in two weeks, with the peak effect lasting up to four months, and we rarely had flu show up before late December. Each site was able to check with its vendor on shipment dates and confirm that it would have ample vaccine by the start date. We determined that those who didn’t have supply could borrow from others within the network and then repay the stock when their shipment came in.

• Avoid unnecessary competition. Most primary care doctors feel an obligation to order and save vaccine for the hundreds of at-risk sick and elderly patients who rely on them for care. If these same patients go to the county health department, a retail pharmacy or a grocery store and get vaccinated, then the doctor is not only out of the loop but often left with an expensive vaccine that he or she can’t use. That’s a huge waste of resources. Even worse, the doctor may not be willing to take the risk the next year and will order less vaccine. This decreases the total vaccination effort and reduces herd immunity.

To better coordinate our efforts, we asked the county health department and retail and grocery store pharmacies to delay offering vaccine until at least two weeks after the doctors’ offices started. We didn’t ask them not to offer vaccine. On the contrary, we very much want the health department and pharmacies to offer vaccine to individuals who can’t or often do not go to the doctor. Our study of vaccine administration the first year of the network found that more than half of the flu vaccine in the county was given outside the doctor’s office. For our plan to work, we needed other providers to vaccinate the half of the population that doesn’t already have a doctor waiting to give them a shot.

• Have an organized process and direct traffic. Supply and demand is what drives our economy. If you want the latest and greatest Elmo doll or gaming system during the holiday shopping season, you’d better be in line on time or you’re going to miss out. That’s not the mentality you want the public to have when seeking flu shots. Rather, you want the people who need them most to have priority and for the public to cooperate with this effort. To encourage cooperation, we knew education would be needed. We used the hospital’s public relations department and local media outlets including public radio and the newspaper, which offered free public service announcements, to get the word out about when and how to receive a vaccination. Doctors’ names were listed in alphabetical order in the newspaper ad, which, along with the radio ad, ran repeatedly prior to the vaccination start date. We enlisted the hospital student governing board to post copies of the newspaper ad on bulletin boards at senior centers, churches, grocery stores and banks throughout the county.

The entire start-up effort took about two and a half months to complete in between seeing patients at my solo practice, delivering babies and working two emergency department shifts at the local hospital. The most labor-intensive part of the process was making time to talk with other providers by phone. Now that the network is established, it takes just a few hours each year to establish the vaccination start dates and organize the public awareness campaign.

The results

So how did it go? The first year, two doctors’ offices did not receive their vaccine shipment, and the network arranged for them to have several vials on loan so that they could get started with the rest of us. One doctor’s office began offering vaccinations before the agreed-upon start date due to an unavoidable scheduling conflict. The health department did a disaster planning drill a few days before the start date at which free flu shots were given, but staff there encouraged high-risk and elderly patients to go to their doctor’s office for the shots since Medicare pays for the vaccine. Wal-Mart was out of the loop the first year, but we had 100-percent participation among providers the second year.

Patients showed up at the designated times, and phone calls were minimal. Most offices offered special flu shot clinics, and most patients followed the instructions in our advertisements and were happy not to have to worry about where or when they could get their shot. My staff were much happier than in previous flu seasons – another significant measure of success.

The final step was to evaluate the impact of our efforts. Up to this point, I was unable to get anyone to provide a hard number on how many patients got vaccinated in my county – one symptom of the problem that our network was created to solve. Now that we were tracking almost every entity providing flu
vaccination in the county, we had real data but nothing to compare it with. By getting flu network members to provide “vaccine ordered” and “vaccine given” numbers, I was able to calculate much more precisely how many total shots were given. In addition to enabling us to track our progress, having this data will allow us to respond effectively should a member of the network stop providing vaccinations in the future. If this happens we will be immediately aware of the vaccine deficit represented by that particular site and can make plans to adjust for those missing shots.

Research about herd immunity led us to shoot for a vaccination rate of 25 percent to 35 percent. In the first year, more than 8,250 vaccines were given in the county, for a vaccination rate of 21 percent. More than half of these were given at local physicians’ offices. In the second year we increased that number by more than 600 shots. As part of our special effort to vaccinate elementary school children, our hospital public relations department organized a flu shot clinic at the elementary school. We gave almost 300 shots there, plus second doses for those who needed them.

The community’s rate of flu vaccination has increased for each of the program’s two years, and physicians, their staff and their patients are more satisfied overall.

No going back

Each community should develop a network of influenza vaccination providers who coordinate their efforts. By agreeing on a start date, sharing information and vaccine (as needed) and having a strong public education campaign, providers can handle flu vaccination more effectively. Having such a network also simplifies future mass immunization efforts. For example, with a click of a mouse, I can contact everyone in the county who has anything to do with vaccinations. This gives me some confidence that we could respond appropriately to a pandemic or biological event.

After two flu seasons’ experience, we have a much better understanding of flu vaccine supply and demand, and no one can imagine going back to the way we did it before. Now the right patients get vaccinated at the right time and at the right place, and patients in general are better informed and happy not to have to worry about the process. And did I mention we have fewer phone calls?

Send comments to fpmedit@aafp.org.