



asures during an outbreak will be very limited. One of the key lessons of the current H5N1 outbreak is the importance of having in each country the clinical, scientific, and technical capacity to identify a problem and the knowledge necessary to respond to it. Notwithstanding the crucial role played by international and regional centers of excellence in coordinating surveillance and defending against global pandemics, it is people on the ground in affected countries who need to have the necessary infrastructure at their immediate disposal to respond quickly to rapidly evolving epidemics.

In response to the 1997 outbreak, surveillance for influenza in poultry in Hong Kong has been intensified, permitting early recognition of outbreaks of other avian influenza strains; together with other preventive measures, such surveillance has helped to keep Hong Kong free of H5N1 in 2004. This response may serve as a model for cur-

rently affected countries, but wider implementation of Hong Kong's approach will require a global effort.

There are also strong arguments against the artificial separation of the people and institutions that deliver clinical care and those that monitor public health. We believe that uniting these structures in single institutions would enhance cooperation and encourage the interchange of information. In addition, people and countries should be encouraged, through reasonable compensation schemes, to report potential epidemics promptly and honestly.

Few countries or regions in the developed or developing world have responded optimally to recent epidemics and health scares. The continued circulation of H5N1 in poultry in Asia, with sporadic transmission to humans, suggests that we are far from controlling the current epidemic. It is probable that the next influenzavirus capable of causing a global pandemic will arise and spread from a developing country in Asia. Further investment in health care infrastructure and consideration of new paradigms for public health are required to address the emergence of such threatening diseases. Considering the potential death toll of a 1918-like influenza pandemic, such collective global investments must be a top priority.

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## Rationing Influenza Vaccine

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It was two days after the presidential election and only a week after the Red Sox won the World Series, but all anyone could talk about at my Boston hospital was influenza shots. I saw 12 outpatients and

1 inpatient that Thursday morning, and all but one asked whether they could get the influenza vaccine.

I told them all no. Our hospital, which logged more than 200,000 outpatient visits for primary

care last year, had only 2000 doses for primary care patients, and there was no way we could come close to covering all our patients who were part of the priority groups designated by the Centers for Disease Control and Prevention (CDC). We were still working out how we were going to choose among the elderly, the sick, and the not-so-sick. I told the patients who inquired to call back next week, when we could tell them whether we had a flu shot for them. To three of them — elderly patients with heart failure or cancer — I said I was optimistic that they would qualify, but I was careful not to offer a guarantee.

Outside my office, I could hear other physicians, nurses, and secretaries at the hospital having the same conversation. I realized that we were doing something new — performing a clinical function that we had, until now, only heard about and feared. We were rationing.

In the past, with incentives from various kinds of managed-care contracts, we had made earnest efforts to become more efficient — but this was different. Before, we had tried to eliminate care that was likely to offer no value to our patients. Now, we were withholding care that we knew to be beneficial for the patient in front of us, because there was another patient out there who would benefit even more.

We had some encouragement from the Commonwealth of Massachusetts, which, like many other states, instructed physicians to withhold flu shots from patients who do not meet the criteria outlined in the CDC guidelines. Just in case we missed the point, our state issued a notice that “whoever violates any provision of this Order shall be punished by a fine of not less than fifty dollars nor more than two hundred dollars or by imprisonment for not more than six months, or both.”<sup>1</sup>

The threat of prison time (presumably minimum security) wasn’t really necessary. We were so far short of an adequate supply that we needed to be far more restrictive than the CDC guidelines permitted. At some of our practices, physicians are being asked to identify their 10 highest-risk patients and let them know that they can come in for their vaccination.

Now here is the first surprise of this experience: hardly anyone is complaining. Some physicians mutter that someone somewhere should pay for the incompetence that created this shortage — after all, we know that people are going to die unnecessarily this year because they didn’t get flu shots. Nevertheless, most doctors are focusing on the work

at hand, aware that we are doing something important — trying to care for our overall population, not just the person before us.

Surprise number two is how natural the work seems. As hard as this triaging is, most physicians understand that they are better trained to do it than anyone else. Prior research has shown that, when we have to do it, physicians are amazingly effective at figuring out which patients really need scarce resources.<sup>2</sup> We quickly learned to tell patients, “The good news is that you are too healthy to get a flu shot this year.”

We already joke about the personality types associated with flu-shot requests. There are the Optimists (“I think I’ll have my flu shot today”), the Ashamed (“I hate to ask, but my wife is insisting . . .”), the Fatalists (“I don’t qualify for a flu shot, do I?”), and the Survivors (“Tell me what I have to do to get one”).

Are there lessons about rationing to be learned from this experience that might be relevant to our longer-term challenges in health care? For as medical progress races ahead, resources remain constrained. We are sure to face more and more situations in which we cannot provide treatments such as implantable defibrillators and high-cost chemotherapies or antiviral agents to all who could benefit from them.

With the flu-shot crisis, everyone — including the patients — knows that the shortage is not artificial. The problem is not some company’s unwillingness to pay for care or society’s reluctance to suffer a tax increase. Patients are not questioning physicians’ financial motives. And most patients say they want their flu shots to be saved for patients who are sicker than they are.

The flu-shot shortage may never be repeated, and we may never again be as successful in persuading doctors and patients that the rationing of care is appropriate. After all, the American Way is for each person to try to get everything that might be beneficial. However, this season’s experience suggests that, if the need is genuine and clearly understood, physicians and patients can deal with limited resources and unlimited demand with grace and dignity.

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