Ethical Issues: Rationing Flu Vaccines

There is general concern that if a mass casualty event leading to critical injuries or illness were to occur tomorrow, many people with survivable conditions would have to forgo life-sustaining interventions owing to present day deficiencies in supply and staffing. This estimate was made at the Task Force for Mass Critical Care Summit that met in Chicago in January 2007 and evolved out of an extensive review of evidence, an assessment of available resources, and a prediction that our global health delivery system will be limited in being able to handle an emerging public health threat. The reality is that some people affected will be sacrificed who could otherwise be saved under normal circumstances. From an ethical standpoint this is a population based utilitarian response to emergency mass triage that must naturally occur if rationing is required and when all cannot be saved. One of many challenges for the task force was to create an ethical framework that ensures dignified care for everyone when the focus of health care transitions from individual treatment to population algorithms of care and treatment.

With any form of rationing amongst those who otherwise might benefit from limited resources available comes the obligation of fairness in how every individual is treated during the triage process. This means that the selection policies and procedures deployed must be applied equitably to the population affected, not be unfairly biased (nondiscriminatory) in individual selection, and ensure compassion and maximal comfort to everyone but especially those who will surely die without treatment. Ethically this calls for the universal application of fairness, compassion and beneficence. "Palliative care triage" is new terminology being inserted into this discussion, and the Altered Standards of Care Taskforce of the Missouri Department of Health and Senior Services is deep into a planning process for palliative triage for our state, notably when there are not enough ventilators, medication, or vaccine to go around during a feared influenza pandemic.

If an influenza pandemic were to hit the U.S. it would be devastating, resulting in 1.9 million deaths, 90 million sick, and nearly 10 million hospitalized, of which 1.5 million would require an ICU bed.² In Missouri the most likely scenario is that one in three would be affected resulting in 27,000 or more hospital admissions and around 6000 deaths over a two month period of time.³ The hardest hit, of course, will be the very old, the very young, and those with chronic conditions. Of the nearly 22,000 staffed non ICU beds, 1600 staffed ICU beds, and 386 ventilators available in Missouri, ICU capacity will be exceeded by week 4 and all ventilators will be in use up by week 2, the need far exceeding ventilator capacity for the duration of the epidemic.

Influenza vaccines will also be in short supply. The National Vaccine Advisory Committee on Immunization Policy (NVAC) and the Advisory Committee on Immunization Policy (ACIP) have jointly recommended that healthcare providers and the ill elderly get priority while healthy people ages 2 to 64 be last in line to be vaccinated. The goal of this policy is to save the most lives possible while minimizing the societal and economic impact of illness. The ethical conflict of such a policy, however, pits providers' beneficent concern for the most vulnerable against a more utilitarian argument that systems and society should select out and treat those most likely to survive and ultimately benefit society. Emanuel and Wertheimer argue that clear ethical justification for vaccine and treatment priorities will be essential to the acceptability of priority ranking during a pandemic. They argue further that a "life-cycle principle of allocation"

should be considered based on the idea that each person should be given an opportunity to live through all the stages of life. Though this principle requires that health care workers and those producing the vaccine should still be vaccinated first due to the need for maintaining a healthy healthcare work force and to maximize vaccine production, the life cycle principle next favors those between adolescence and middle age because their interests and hopes are more established (compared to younger children) and they potentially have more productive years ahead of them (compared to older persons). In this principle the very young and old are justifiably triaged to nontreatment when vaccine and ventilators are in short supply. The question ultimately rests on if and how some groups with certain characteristics are considered more or less worthy of treatment or vaccination compared to other groups with different and perhaps more or less desirable characteristics, while attempting to make the selection process fair and nondiscriminatory.

The ethical legitimacy of any triage policy requires an interest in fair treatment for all who are affected and mechanisms must be in place to prevent the corruption of discrimination, self interest, or power mongering that place the more vulnerable in an unfair situation. Triage to nontreatment should therefore strive to maximize palliative care interventions, comfort, and care for those who will die and their families who will grieve. Pandemics will engender the unavoidable necessity to ration treatment that would otherwise be available as standards of care. As "alternative" standards are created for such purposes they must be crafted with compassion and a sense of fairness and universal concern for those who will be affected. Ethical implementation will naturally follow as such alternative standards are applied.

¹ Deveraux A. et al. Summary of Suggestions From the Task Force for Mass Critical Care Summit. *Chest*. 2007; 133:1S-7

² U.S. Department of Health and Human Services (HHS). HHS Pandemic Influenza Plan. HHS, Washington, DC, 2005, supp E. www.hhs.gov.pandemicflu/plan

³ Center for Disease Control 2006 and Hospital Industry Data Institute ASF file 2006

⁴ Emanuel E, Wertheimer A. Who Should Get Influenza Vaccine When Not all Can? *Science*. 2006;312:854-855