

# Virtual Mentor

American Medical Association Journal of Ethics  
April 2011, Volume 13, Number 4: 224-227.

## MEDICAL EDUCATION

### Teaching Resource Allocation—And Why It Matters

Meina Lee, LLB, and Elizabeth Geelhoed, PhD

Health care rationing—whether to do it, how to do it—is a highly debated topic, especially in light of health care reforms currently being pursued. The unavoidable truth is that society’s resources are limited even in the United States and we can no longer pretend that we can offer every patient every medical treatment. Health systems around the world face the same predicament, and difficult choices have to be made to ensure that money spent on health care is used to best effect.

Much news coverage is given to often-political “big-ticket” resource allocation decisions made by governments. There is a disconnect between the decision makers at the system level and those at the bedside. But the high-level decisions ultimately influence the day-to-day decisions made by physicians, nurses, and other health professionals.

The statistics are well publicized: the United States spends two and a half times the average on health care [1] and is predicted to spend 25 percent of its GDP on health care by 2025 [2]. Last year a Gallup-Healthways poll found that 1 in 6 adults in the U.S. did not have health insurance [3]. How are these figures relevant to medical students when they graduate and begin to practice? For a number of reasons, it is important for future medical decision makers to understand how resource allocation decisions further up the chain of command are being made. Medical decision making does not exist in a vacuum. It affects—and is affected by—the economic and social environment of the health system.

In this article, we describe the experience of teaching health economics to students at the School of Population Health at the University of Western Australia. In particular, we discuss how an understanding of ethics can inform resource allocation decisions.

### Health Systems and Economics

The study of health economics is well established in Australia. A health economics course that focuses on issues relating to scarcity in the allocation of health resources has been taught at the School of Population Health since the 1990s. The course is compulsory for undergraduate health science students, master of public health students, and nursing and pharmacy students. It is not, however, compulsory for medical students, even though doctors have the greatest influence on how health dollars are spent.

Students are taught basic theoretical and conceptual frameworks from economics and other disciplines that enable them to analyze the functioning of a health system critically. Importantly, they learn how to apply economic theories of demand, supply, and markets. They are taught methods and techniques to evaluate the cost effectiveness of health care programs. The aim is practical: rather than being an academic exploration of the topic, students are expected to be able to integrate these evaluations into resource allocation decision making. They are also taught how to compare international health systems, specifically in terms of efficiency and equity. Such comparisons explore the extent to which additional resources can improve overall health under different scenarios and the importance of the distributional effects.

### **The Roles of Ethics in Resource Allocation**

Health economics provides a range of measures to help in deciding whether to allocate resources to a particular area or another. Cost-benefit analyses distill the “cost” and the “benefit” into purely dollar terms. However, students are introduced to other concepts such as cost effectiveness, in which the value of a particular program is expressed not in dollar terms, but rather in terms of health outcomes such as life years gained.

One reason for using a cost-effectiveness approach is that we value health so highly and hesitate to view it in purely dollar terms. Good resource allocation decisions must involve more than a money-based analysis; they must reflect what society thinks is worth investing in.

This is where ethics can contribute. Ethics provides a framework for examining and ordering our values. We can value things such as respect for personal autonomy, doing no harm, value for money, or privacy. If enough individuals value the same things in the same way, we can determine a general set and ranking of community values. (At the same time, ethical values are not universal and what is considered highly important, e.g., respect for autonomy, will depend on culture, time, and place.)

Almost all health resource allocation decisions have ethical consequences because they promote particular values while minimizing others. Indeed, ethical norms are so embedded in resource allocation decisions that we can take them for granted. For example, will we prefer to fund preventive measures or cures? Will we prefer to put more resources into fighting diseases that affect the young or those that affect the elderly? Is “life years gained” the most important outcome? Knowing how well a particular resource allocation aligns with a society’s priorities can help decision makers gauge how acceptable it is going to be to that community.

Therefore students are also taught ethics, in particular the trade-off between ethics and efficiency when making resource allocation decisions. Although we value efficiency, sometimes we might prefer to fund a program that is less efficient

because it reflects something more important to us. Ethics sets out a systematic way to tease out these elements.

Once students are introduced to the fundamentals of common (Western) ethical theories, they apply them to examples taken from health systems around the world. Consider, for example, co-payments. Western cultures generally place great value on individual rights and self-determination (autonomy). Understanding this, private health insurers often allow subscribers more choice of treatments or physicians in return for higher co-payments. It is thought that, by making individuals responsible for a share of their health costs, they will more thoroughly investigate all possible treatment options and prices. In this way, patients enjoy more choice while being delegated more responsibility for their health care. Conversely, there is the risk of “moral hazard” if there are no co-payments. In essence, if individuals don’t have to pay for their own health care they’re more likely to have treatments they don’t really need.

Another example of resource allocation decisions studied in the health care economics course is the public and private insurance arrangements in Canada and Australia. Both countries provide universal health coverage, but their structures reveal different approaches to defining “universal.” In Canada, the law establishes a universal maximum on coverage. Private insurers are generally prohibited from covering any services that are also publicly covered. In other words, if procedure A is publicly covered then there is only one waiting line—and everyone who wants that procedure joins that line. Regardless of wealth, people can’t buy their way to the front through private insurance.

By contrast, the Australian Medicare system provides a universal minimum. There is a uniform floor of publicly covered services. However, individuals have the freedom to supplement with private insurance and join a different, shorter line for that service—provided they are willing to pay for it.

Both Canada’s and Australia’s systems reflect a societal preference for equality. Nevertheless, health and income disparities worldwide continue to increase, as seen in the United States. Health inequality could theoretically save money because of lower life expectancy, but it can cause greater disability in marginalized socioeconomic groups and also cost the nation through productivity losses and possibly political unrest. Because current reforms designed to ensure minimum health coverage for all depend on increased taxes for higher wage earners, such changes have been contentious.

### **Other Observations**

The course curriculum continues to evolve over time. An important challenge is thinking of ways to better engage students on the topic. Students tend to think that learning about the economic aspects of supply and demand and strategic expenditure decisions are far less important than their clinical coursework.

The recent global financial crisis has put additional pressure on health systems around the world. More than ever, we need to make sure that money spent on health care is used to best possible effect. This will require effort on the part of everyone in the health system—from the government down to the patients and doctors. An understanding of how their actions affect the wider context of the health system will provide future doctors with the grounding to make the health system they inherit better.

### References

1. Pearson M. Disparities in health expenditure across OECD countries: why does the United States spend so much more than other countries? Organisation for Economic Co-operation and Development (OECD). <http://www.oecd.org/dataoecd/5/34/43800977.pdf>. Accessed March 15, 2011.
2. US Congressional Budget Office. *Budget Options Volume 1: Health Care*; December 2008: 1. <http://www.cbo.gov/ftpdocs/99xx/doc9925/12-18-HealthOptions.pdf>. Accessed March 15, 2011.
3. Mendes E. In US, 16.4% of Adults Uninsured in 2010. Gallup. January 18, 2011. <http://www.gallup.com/poll/145661/Adults-Uninsured-2010.aspx>. Accessed March 15, 2011.

Meina Lee, LLB, is a lawyer and bioethicist and a regular guest lecturer at the University of Western Australia School of Population Health in Perth. She holds bachelor of science and bachelor of laws degrees from the University of Western Australia and a master of bioethics from the University of Pennsylvania.

Elizabeth Geelhoed, PhD, is a professor of health economics in the school of population health at the University of Western Australia in Perth. She lectures in health economics at both the undergraduate and postgraduate levels and conducts research on the economic implications of health interventions and health policy.

### Related in VM

[Patient Requests for Nonindicated Care](#), April 2011

[Oregon's Experiment with Prioritizing Public Health Care Services](#), April 2011

*The viewpoints expressed on this site are those of the authors and do not necessarily reflect the views and policies of the AMA.*

Copyright 2011 American Medical Association. All rights reserved.