

# Virtual Mentor

Ethics Journal of the American Medical Association  
February 2005, Volume 7, Number 2

## Policy Forum

### The Oregon Plan and QALY's

by Fritz Allhoff

#### The Oregon Plan

In 1989, the state of Oregon began work on a controversial plan for the allocation of health care resources. The goal, noble enough, was to provide Medicaid benefits for *more* people than had previously been covered. But how? One option would obviously be to raise more money for health services, though the corresponding tax increases would have been unpopular. Oregon chose another approach: to make *fewer* services available to an enlarged pool of Medicaid recipients. So, by restricting services, they could afford to grant access to *more* people.

This plan instantly gave rise to controversy. Liberals accused this system of discriminating against the poor, specifically women and children who are most likely to use the program, since Medicaid would not cover certain treatments for them [1]. These criticisms were at least partially misguided since there was not *necessarily* any reason to believe that private health care would provide better financial coverage than Medicaid, though the former did tend to cover more medical services. Regardless of the controversy, we can still ask whether this plan is morally defensible. If the goal was to maximize coverage to the poor, it could be reasonable to think that this would be best accomplished by expanding coverage to *more* people even if this required restriction of some (potentially exotic and esoteric) treatments to some patients. Of course, we might think that, in an ideal world, *all* needed treatments should be provided for *all* patients but, given the political and economic realities, the Oregon plan sought a responsible rationing system.

#### What Is Covered?

Once Oregon came up with its plan, it had to determine which treatments to cover and which to exclude. The mission of the plan, to provide fewer treatments to more people, now needed teeth. How were they to decide what to cover and what not to cover? In 1991, Oregon developed a list of more than 700 diagnoses and treatments and ranked these in order of merits. For example, "Diagnosis: severe or moderate head injury, hematoma or edema with loss of consciousness; Treatment: medical and surgical treatment" was ranked at the top of the list and "Diagnosis: mental disorders with no effective treatment; Treatment: evaluation" was ranked near the bottom (#741) [2]. The state then decided it would extend Medicaid coverage for treatment of the top 587 items, though this list and the cutoff point has shifted slightly over the years. If the diagnosis/treatment for a particular patient was above the cutoff line,

which is currently at about 578, the treatment would be covered and, if not, coverage would be denied.

The fundamentals of the system should now be clear, except for the obvious question: how were these diagnoses/treatments ranked? What factors, for example, led to the determination that a given diagnosis/treatment was #231 and would be covered while another was #612 and would not? First, the commission established 17 categories of health problems, such as “conditions that can be fatal and for which treatment provides full recovery, acute conditions that are treatable and unlikely to be fatal, maternity and newborn services, and preventive care of proven efficacy” [3]. After diagnoses and treatments were assigned to 1 of these categories, the categories were ranked according to 13 criteria which included: life expectancy, quality of life, the cost and effectiveness of a treatment, and whether it would benefit many people. Treatments that prevented death with a full chance of recovery were ranked first, maternity care was ranked second, treatments that prevented death but did not guarantee full recovery were ranked third, and treatments that led to minimal or no improvements in quality of life were ranked last [3].

### **QALYs**

While any of these elements could warrant further discussion, let's focus on quality of life and life expectancy, the theme of this month's *Virtual Mentor* issue. “QALY” represents “quality-adjusted life years,” and the idea is that life expectancy should be weighted to reflect the quality of life that would be experienced. For example, if treating a patient would lead to a life expectancy of 20 years with a high quality of life (eg, hypertension, which only requires daily pills and rarely manifests negative symptoms), coverage for this patient's treatment should presumably have priority over treatment for a patient who would have a life expectancy of 20 years with a comparatively low quality of life (eg, diabetes, which requires daily injections and often manifests symptoms such as neuropathy, blindness, etc). Conversely, *ceteris paribus*, longer life expectancy should be given priority over shorter life expectancy. Where there is a quality-of-life difference, we might adopt a “quality-of-life coefficient,” ranging between 0 and 1, which could be multiplied by life expectancy to yield QALYs, and we could then prioritize treatments that would promote the maximization of QALYs.

While life expectancy is an objective, biological assessment, measuring quality of life is more challenging. Remember that this measurement is going to be *central* to the legitimacy of the Oregon plan since the quality-of-life coefficient plays a substantial role in the determination of QALYs, which in turn are one of the elements that leads to rankings of treatments/diagnoses. This quality-of-life coefficient has the potential to determine which treatments are going to be covered and therefore is of tremendous importance.

First, let's look at what the Oregon plan commission actually did (through a series of 50 community meetings attended by those in a range of health states): the commission had to consider the quality of life that would attach to any specific diagnosis and an associated treatment. A quality-of-life assessment, unlike a life-expectancy assessment,

is necessarily *subjective* since it reflects the merit (as experienced by the patient) of a life in a specific state. The commission, through community feedback, had to determine the subjective values of various lives (eg, one with diabetes versus one with leukemia), and this is certainly an onerous project. In many cases, the assessments might be obvious, but, in others, they could be less so. Imagine, for example, assessing the quality of life after a leg amputation for an avid runner versus assessing it for a comparatively sedentary individual: presumably the former would suffer more than the latter, and therefore his quality of life might be comparatively lower. Since the Oregon plan ranked health care outcomes based upon generic suppositions, it was not able to be sensitive to such considerations.

One criticism offered against the commission's ultimate rankings was that the invocation of quality-of-life assessments discriminated against the sick and handicapped by saying that their lives were less valuable than those of healthy persons. It could be argued that healthy persons might discount the worth of sick or handicapped lives *more* than the sick or handicapped would discount their own lives because the former group might find the latter group's condition more depressing than those in that state find it. If so, the commission's procedures might be viewed as problematic insofar as healthy people rendered at least part of the assessments and therefore unfairly discounted the lives of the sick and handicapped.

However, I think that we can show that this criticism is misguided: it is only the *relative* assessments and not the *absolute* ones that count because, ultimately, all that matters is the *ordering* of treatments/diagnoses since Oregonians will presumably fund as much as they can afford to without considerations for absolute welfare. Imagine, for example, that a healthy person rates a certain health care outcome with a quality-of-life coefficient of 0.6, and that a person with that outcome rates the quality-of-life coefficient as 0.8. Would these disparities discriminate against the sick and handicapped? Arguably not, because the lower coefficient would not lead to an outright denial of treatment, but merely a lower QALY assessment. So long as these assessments were rendered *consistently* (even if comparatively lower than other procedures would produce), the overall rankings of treatments/diagnoses would be *unchanged*. In other words, the “healthy-person bias” would be present in *each* ranking and, therefore, would make no statistical difference to the comparative ordering; it would cancel out.

### **Conclusion**

While there are some elements of the Oregon plan that might be criticized, the plan as a whole has a certain intuitive appeal. The proximate goal of the plan was to make Medicaid available to more people and, given budgetary and political limitations, this goal was realized by cutting some services which were judged to be expensive or inefficacious, to produce small or no gain in quality of life, to lead to small or no gain in life expectancy, etc [4]. While I surveyed the system as a whole, its incorporation of QALYs has been my focus: quality of life and life expectancy were 2 of the elements used to rate the merits of various treatment strategies. Quality-of-life assessments are intrinsically subjective and are not without moral hazards, but the Oregon plan

arguably takes a responsible attitude toward these considerations or, at a minimum, concludes with defensible results.

### **Acknowledgments**

*I would like to thank Allison Grady for her invaluable contributions to the research effort for this article. I would also like to thank Drs Faith Lagay and Matthew Wynia for helpful conversations regarding these topics.*

### **References**

1. See, for example, Friedman E. Out of the frying pan. *Healthc Forum J.* 1990;33:11-4.
2. State of Oregon. *Oregon health plan administrative rules.* Salem, Oregon: Oregon office of medical assistance programs;1995. As quoted by: Bodenheimer T. The Oregon health plan lessons for the nation. *N Engl J Med.* 1997;337:651-655.
3. Bodenheimer, 652.
4. Another point worth noticing is that many treatments which fell below the cutoff line were nevertheless covered because Medicaid uses a capitated payment system rather than fee-for-service. In many cases, it was cheaper for health care providers to pay for non-covered treatments which would restore patients to full health rather than to provide covered but less effective treatments which would require the patient to make indefinite or perpetual visits

To correspond with other listserv members about this article email House Calls.

To join the House Calls discussion listserv e-mail us at [virtualmentor@ama-assn.org](mailto:virtualmentor@ama-assn.org). If you are already a member you need not join again.

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

Copyright 2004 American Medical Association. All rights reserved.