

A Brief History of Health Services Prioritization in Oregon

By Bob DiPrete and Darren Coffman

Abstract: Aware of the need for accountable and effective funding of health care, Oregon established a set of policy objectives to guide the development of a methodology for setting health care priorities. In 1989, the Oregon Legislature created the Health Services Commission and directed it to develop a prioritized list of health services ranked in order of importance to the entire population to be covered. The Commission first tested a formulaic approach using a cost/utility analysis, but the results were unsatisfactory. Subsequent successful approaches rank-order general categories of health services (e.g., Maternity and newborn care; Comfort care) based on relative importance as gauged by public input and on Commissioner judgment. Within these general categories, individual condition/treatment pairs are prioritized according to impact on health, effectiveness and (as a tie-breaker) cost. The resulting prioritized list is used by the Legislature to allocate funding for Medicaid and SCHIP, but the Legislature cannot change the priorities set by the independent Commission. The benefits based on the prioritized list are administered primarily through managed care plans, and approximately 1.5 million Oregonians have gained health coverage due to the expanded access made possible by explicitly prioritizing health services.

BACKGROUND

In 1987, the Oregon Legislature realized that it had no method for allocating resources for health care that was both effective and accountable. Over the next two years, policy objectives were developed to guide the drafting of legislation to address this problem. These policy objectives included:

- Acknowledgment that the goal is health rather than health services or health insurance
- Commitment to a public process with structured public input
- Commitment to meet budget constraints by reducing benefits rather than cutting people from coverage or reducing payments to levels below the cost of care
- Commitment to use available resources to fund clinically effective treatments of conditions important to Oregonians
- Development of explicit health service priorities to guide resource allocation decisions

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- Commitment to maintain the integrity of the prioritization process, including a prohibition against changes to the priorities as part of Legislative funding decisions

The strategy was to move away from “rationing” by excluding people from health coverage or reducing access through underpayment. Instead, when budget limits required reductions in budget costs, health services would be eliminated according to explicit priorities established by an independent commission through an accountable, public process.

Based on these policy objectives, legislation was passed in 1989 creating the Health Services Commission, which was charged with developing a list of health services prioritized from most important to least important to the entire population to be covered.¹ Commission membership is stipulated in statute and must include 5 physicians, one public health nurse, and one social worker with the remaining 4 representing purchasers and consumers of health care.

METHODOLOGY

In setting about its work, the Commission immediately realized that it required the best available information on clinical effectiveness in order to set meaningful priorities, and that specificity would be necessary in defining a particular service for a particular condition. A review of outcomes studies revealed that clinical experience and judgment would need to be the basis for identifying outcomes for most treatments. Accordingly, the Commission worked with hundreds of specialists and sub-specialists to gauge the relative effectiveness of thousands of condition/treatment (CT) pairs defined in terms of ICD-9-CM and CPT-4 codes. Probable health outcomes for a given condition were compared for a) a given treatment, b) alternative treatments, and c) no treatment at all. Also, the Commission obtained information on the cost of the services being prioritized from providers, hospitals, and claims data.

In addition to this information on clinical effectiveness, the Commission also requested information on public values concerning health care. Three methods were used to gather this public input: 1) twelve public hearings in which testimony was taken from Oregonians concerning their health care experiences and preferences; 2) approximately 50 focus groups around the state in which facilitators helped citizens to identify health values on which there was some degree of consensus; and 3) a survey of 1001 Oregonians to identify the impact on overall health resulting from a broad range of hundreds of conditions such as shortness of breath, limited range of motion, social dysfunction, and hearing loss. These three methods provided the Commission with a sense of the relative importance of treating a condition as expressed by those who would be covered by the benefit package resulting from the prioritization of services.

Finding no other examples of such an attempt at health care prioritization anywhere else in the world from which to borrow, the Commission began from scratch. Its first approach to prioritization used the formula shown in Figure 1 to derive cost/utility values for each CT pair, and then ranked these CT pairs as health services accordingly.

¹ Although it was envisioned at this time that the prioritized list would determine the minimum acceptable benefit package for all Oregonians, in fact the only application has been to determine covered benefits for those on Medicaid and SCHIP.

Figure 1. Cost/utility formula used in first prioritization attempt

$$B_n = \frac{c}{Y * [\sum_{i=1}^5 (p_{i1} * QWB_{i1}) - \sum_{i=1}^5 (p_{i2} * QWB_{i2})]}$$

[With Treatment]
[Without Treatment]

$$\text{with } QWB_{ik} = 1 + \sum_{j=1}^{30} d_{ijk} w_j \quad k=1,2$$

where:

- B_n = the net benefit value ratio for the nth condition/treatment pair to be ranked.
- c = cost with treatment, including all medications and ancillary services as well as the cost of the primary procedure.
- Y = the years for which the treatment can be expected to benefit the patient with this condition.
- [term] = the difference in probability weighted QWBs with and without treatment.
- QWB = subjectively weighted sum of health limitations associated with a specific outcome.

The result was deemed unacceptable because it conflicted substantially with the judgment of all Commission members, both physicians and non-physicians. In brief, the problem was that very inexpensive, very effective treatments for relatively unimportant conditions (e.g. malocclusion due to thumb sucking) ranked higher than moderately expensive, moderately effective treatments for very serious conditions. The lesson learned was that while a cost/utility analysis can gauge the cost of remedying a condition, it cannot address the importance of treating the condition in the first place. The Commission's response was to abandon the cost/utility formula and base its prioritization on general categories of treatment, which were ranked to reflect relative importance based on public input first, and effectiveness and cost secondarily. These categories are:

- Category 1: Acute fatal condition, treatment prevents death with full recovery
- Category 2: Maternity care
- Category 3: Acute fatal condition, treatment prevents death without full recovery
- Category 4: Preventive care for children
- Category 5: Chronic fatal condition, treatment improves life span and quality of life
- Category 6: Reproductive services (excluding maternity and infertility services)
- Category 7: Comfort care
- Category 8: Preventive dental care
- Category 9: Proven effective preventive care for adults
- Category 10: Acute non-fatal conditions, treatment causes return to previous health state
- Category 11: Chronic non-fatal condition, one-time treatment improves quality of life
- Category 12: Acute non-fatal condition, treatment does not result in a return to previous health state
- Category 13: Chronic non-fatal condition, repetitive treatment improves quality of life
- Category 14: Self-limiting conditions where treatment expedites recovery
- Category 15: Infertility services

- Category 16: Less effective preventive care for adults
- Category 17: Fatal or non-fatal condition, treatment causes minimal or no improvement in quality of life

Within these ranked categories, specific services were prioritized based on effectiveness and cost. The Commission also established three subcommittees: the Mental Health Care and Chemical Dependency Subcommittee, the Subcommittee on the Aged, Blind and Disabled, and the Health Outcomes Subcommittee. These subcommittees helped to ensure that the needs of vulnerable populations were fully taken into account, and that the best information on health outcomes was continually available to the Commission as it established and maintained the prioritized list.

As a final step in prioritizing health services, Commission members moved CT pairs “by hand” to assure that the prioritized list reflected their best judgment as clinicians and as representatives of those to be covered under the resulting benefit package.

At this point in the development of the first prioritized list, an unforeseen political problem emerged. Attorneys within the federal Department of Health and Human Services (DHHS) interpreted the Americans with Disabilities Act (ADA) in such a way that they construed the Commission’s methodology for setting priorities to be in conflict with that law. Put briefly, the perceived problem was that in asking the public for input on social values, the Commission may have come under the influence of biases against people with disabilities. As a result, the Commission was required to remove all public input obtained from the survey described above. The federal position was that in order to avoid problems with the ADA, priorities could only be based two objective factors: 1) whether the treatment prevents death and, 2) the cost of the treatment. While the Commissioners did not feel that their original methodology was biased against any group, they reluctantly agreed to modify it in order to achieve the goal of greater health care access. Because most objective measures representing health outcomes were not allowed, the subjective collective judgment of the Commissioners became more of a factor. As a result, many of the public values on health that had been expressed through the community meetings, the telephone survey, and in public testimony were reflected through the application of Commissioner judgment in the final prioritization process.

Since its inception in 1993, the prioritized list of health services has been revised every two years as part of Oregon’s biennial budget process. An example of a change resulting from these biennial revisions is the movement of cochlear implants to a higher position based on improved outcomes information. Additionally, interim modifications can be made to the list between biennial reviews to account for changes in medical codes and medical advancements that need immediate attention. Examples of the latter include a higher placement for chronic hepatitis C with the treatment of interferon and the inclusion of services related to physician assisted-suicide (which became legal in the state of Oregon in 1997). The Commission also establishes guidelines for those instances where over-utilization is a known problem (e.g. back surgery, hysterectomy) or where ICD-9-CM codes do not provide the necessary differentiation between conditions with significantly varying severity levels (e.g. psoriasis).

In 2006 the Commission completed the first revision in the methodology since implementation, resulting in a complete reprioritization of the entire list. Like the methodology that produced the 1991 list, a ranked set of broad categories defines the framework of the list. This time greater emphasis is placed on preventive services and chronic disease management, reflecting the fact that providing health care before reaching crisis mode will prevent avoidable morbidity and mortality. The nine categories in the methodology in ranked order (with weights which are discussed below), are:

- Category 1: Maternity and newborn care (100)
- Category 2: Primary and secondary prevention (95)
- Category 3: Chronic disease management (75)
- Category 4: Reproductive services (70)
- Category 5: Comfort care (65)
- Category 6: Fatal conditions where the focus of treatment is on disease modification or cure (40)
- Category 7: Nonfatal conditions where the focus of treatment is on disease modification or cure (20)
- Category 8: Self-limiting conditions (5)
- Category 9: Inconsequential care (1)

To sort and rank the line items assigned within categories, the Commission decided that the following measures best capture the impacts on both individual health and population health, considered essential in determining the relative importance of a condition-treatment pair:

- Impact on Health Life Years - to what degree will the condition impact the health of the individual if left untreated, considering the median age of onset (i.e., does the condition affect mainly children, where the impacts could potentially be experienced over a person's entire lifespan)? *Range of 0 (no impact) to 10 (high impact)*
- Impact on Suffering - to what degree does the condition result in pain and suffering? Effect on family members (e.g. dealing with a loved one with Alzheimer's disease or needing to care for a person with a life-long disability) should also be factored in here. *Range of 0 (no impact) to 5 (high impact)*
- Population Effects - the degree to which individuals other than the person with the illness will be affected. Examples include public health concerns due the spread of untreated tuberculosis or public safety concerns resulting from untreated severe mental illness. *Range of 0 (no effects) to 5 (widespread effects)*
- Vulnerability of Population Affected - to what degree does the condition affect vulnerable populations such as those of certain racial/ethnic descent or those afflicted by certain debilitating illnesses such as HIV disease or alcohol & drug dependence? *Range of 0 (no vulnerability) to 5 (high vulnerability)*
- Tertiary Prevention - in considering the ranking of services within new categories 6 and 7, to what degree does early treatment prevent complications of the disease (not including death)? *Range of 0 (doesn't prevent complications) to 5 (prevents severe complications)*

These impact measures were combined with two additional factors,

- Effectiveness - to what degree does the treatment achieve its intended purpose? *Range of 0 (no effectiveness) to 5 (high effectiveness)*
- Need for Medical Services - the percentage of time in which medical services would be required after the diagnosis has been established. *Percentage from 0 (services never required) to 1 (services always required)*

using the following formula to arrive at a total score,

Category	+ Suffering					
Weight	+ Population Effects	X	Effectiveness	X	Need for	Service
	+ Population Vulnerability					
	+ Tertiary Prevention					

where the category weight is between 1 and 100 as identified on the previous page in parentheses after the category title. The net cost of treatment (*0=high cost, 5=cost saving*) was used to break any ties. While this new list looks significantly different in its rankings, the set of nonfunded services will remain virtually unchanged should it be funded at a level equivalent to funding for the current list. The new list will be implemented no sooner than January 1, 2008 pending State legislative acceptance and DHHS approval. The Legislature will allocate funding based on the new prioritized list, but cannot change the methodology or the priorities.

IMPACT

The prioritized list has succeeded in guiding decisions about the allocation of public resources for health coverage and in making these decisions more explicit and accountable. It has also succeeded in making health policy more reflective both of the best evidence available on clinical effectiveness and of the preferences of those affected by these health policy decisions. Also, physician practice has altered over time to reflect the benefits defined by the prioritized list.

The prioritized list has not succeeded in shifting responses to budget constraints entirely to reductions in benefits, although this was a major policy objective from the beginning. This is because the federal government has been reluctant to allow Oregon to reduce benefits when revenues decline, forcing the state to make adjustments in eligibility and in payment levels to keep within budget. This political constraint has prevented a full exploration of the effectiveness of the prioritization of services in meeting budget limits while maintaining the commitment to cover all those in need and the commitment to pay providers at levels sufficient to cover the cost of care. Even if Oregon were free to move the line further, the range just above line 530 begins to include some serious but treatable conditions. Reducing benefits to within this range would present serious medical and ethical difficulties, as this population would likely not be able to afford the care otherwise.

The prioritized list has had a modest impact on costs per member per month. The actuary has estimated that the costs associated with the funded portion of the list are approximately 90% of the cost of funding the entire list. The reason the impact is not greater is that much of the more expensive care is found high on the list. In fact, diagnostic services - which are very expensive

and growing even more costly every year - are in effect ranked at line zero in the sense that the care required to arrive at a diagnosis is always covered.

Public support for the prioritization process was strong at the outset and has never weakened, and the integrity of the prioritized list has never been questioned by providers or consumers of health services. Moreover, the legislators who make the decisions on allocating public resources for health care have accepted the independence of the prioritization process from the legislature.

In 2002, at the Governor's request, the Commission developed a second prioritized list at a much more summary level to be used in further expanding health coverage. This list prioritizes broad categories of service (e.g. hospital inpatient, physician, prescription drugs, and mental health) and identifies cost sharing levels for each category of service at each priority level (so that a given category of service may appear more than once on the list with two or more levels of cost sharing). This methodology does not require analysis at the ICD-9-CM/CPT-4 level, and its goal was to develop a public program benefit package that approximates the typical private insurance benefits purchased by Oregon businesses for employees.

A reduced benefit package, called "OHP Standard" was created by overlaying the more detailed prioritized list of CT pairs with the prioritized categories of services so that within a category (e.g. physician care) nothing is covered that is not "above the line" on the larger prioritized list of health services. This package is available to the optional Medicaid populations that gained eligibility under Oregon's Medicaid Demonstration. The "original" prioritized list of CT pairs is still used exclusively to define the "OHP Plus" benefits provided to the mandatory Medicaid populations.

Coverage under the prioritized list has been primarily in managed care, and many participating managed care plans have developed mechanisms for accommodating practice patterns to the benefit package defined by the list. Participating health plans have included Oregon's Blue Cross & Blue Shield HMO, hospital-based plans, and IPA-based plans. In addition, the delivery system has included partial-capitation health plans and primary care case managers outside major population centers.

Since its inception, over 1.5 million Oregonians have been covered under the prioritized list. Over that same time period, between 5 and 6 million people have lived in the state. In effect, roughly one-third of the state's population has been touched by the expanded access made possible by setting explicit health service priorities.