servative approach, incorporating some of this judgment into the insurer's own policy process, is equally feasible. In the case of a new technology, the policy options for third-party payers are more numerous than they are in the case of procedures that have already been widely diffused and employed. The major difference is that in the case of a new technology such as BMT, a third-party intermediary maybe able to specify the sites at which the procedure will be reimbursed, as well as patient characteristics of those entitled to coverage. In the case of BMT, six centers currently perform the procedure on a significant scale; given its high degree of complexity and reliance on various subsystems (tissue-typing, laboratory, radiology, etc.), one might wish to discourage this technology's widespread diffusion, while at the same time accepting current or somewhat altered treatment levels.

Another role for third parties in the case of a new technology is to define a procedure as either "treatment" or "research' '-depending on either its success or cost (or a combination of the two) —with the implication that "research" should be supported in demonstration-type settings, on limited numbers of patients, and from a totally separate budget from the budget for "treatment" (which, morally, might be offered to all in need). One would define a procedure as being

treatment rather than research as soon as its efficacy or costs (or both) approached some frequently observed level. Little of this sort of policy analysis is currently being done. The degree of freedom open to the third parties is far greater than typically practiced, and more judicious use of the reimbursement instrument would certainly have an enormous impact on the diffusion and distribution of new technology.

One last caveat is in order as one translates a CEA into the language of policy. Analyzing a new medical procedure is inherently difficult because the data tend to be obsolete as soon as the procedure is analyzed. New developments occur rapidly. With regard to BMT, for example, altered protocols appear to be leading to improved results, though more recent data do not lead themselves to long-term extrapolation.

For these reasons, a CEA of a particular technology is somewhat like a single brick, which, no matter how well made, cannot provide shelter. A single piece of analysis cannot indicate how resources might be allocated until it is put beside other pieces, Only after many comparable studies are analyzed can one see where limited resources might best be put. Our CEA of BMT therapy, therefore, is little more now than a single element in the entire technology assessment picture.

## REFERENCES

- Barnes, B., "An Overview of the Treatment of End-Stage Renal Disease and a Consideration of Some of the Consequences," in costs, Risks, and Benefits of Surgery, J. P. Bunker, et al. (eds.) (New York: Oxford University Press, 1977).
- Benedixen, H. H., "The Cost of Intensive Care," in Costs, *Risks*, and Benefits of Surgery, J. P. Bunker, et al. (eds.) (New York: Oxford University Press, 1977).
- 3. Cahan, M., and Lyddane, N., "Bone Marrow Transplantation at UCLA," *Cancer Nursing* 1:47, 1978.
- **4.** Cline, M., et al., "Bone Marrow Transplantation in Man," *Ann. Int*, Med. 83(5): 691, 1975.
- National Center for Health Statistics, Vital Statistics of the United States: 1976, vol. II, sec. 5—Life Tables (Washington, D. C.: Department of Health, Education, and Welfare, 1978).

- 6. Neuhauser, D., "Elective Inguinal Herniorrhaphy Versus Truss in the Elderly," Costs, *Risks*, and *Benefits of Surgery*, J. P. Bunker, et al. (eds.) (New York: Oxford University Press, 1977).
- 7. "OTA Issues Report on CT Scanners," COTH *Report* **12(9):7**, **1978**.
- 8. UCLA Bone Marrow Transplant Team, "Bone Marrow Transplantation in Acute Leukemia," *Lamet 2:1197, 1977.*
- 9, \_\_\_\_ "Bone Marrow Transplantation in Severe Aplastic Anemia," *Lancet 2:921, 1976.*
- 10. Weinstein, M. C., et al., "Coronary Artery Bypass Surgery: Decision and Policy Analysis," in Costs, *Risks, and Benefits of Surgery*, J. P. Bunker, et al. (eds.) (New York: Oxford University Press, 1977).