

Individual Exercise 7

Cost Benefit Analysis

The State of Maryland has had second thoughts about starting two new programs (a CABG surgical center and a statewide prenatal care program) at the same time.

You are an evaluator/policy analyst for the Maryland State Legislature. The Subcommittee on Health and Environmental Matters has asked you to design a cost benefit analysis (CBA) to help them choose between the two programs.

The crux of any CBA is a determination of the "Costs" and "Benefits" to be considered in the analysis.

For each of the two programs, identify some key direct costs associated with the program. As appropriate, you should consider costs that accrue to the state, the patient, or to other parties.

1. For the CABG program, the direct costs are:
 - a. State-funded building expenses
 - b. State funds for hiring new staff
 - c. Lost days of work of patients undergoing surgery
 - d. Increased private insurance costs to pay surgical fees
 - e. A and B
 - f. C and D
 - g. A, B, and D
 - h. B, C, and D

2. For the prenatal insurance program targeted at near poor women, the direct costs are:
 - a. Salary of caseworkers and program administrators
 - b. Total salaries of physicians and nurses billing for services
 - c. Cost of insurance claims paid by the State
 - d. A and B
 - e. A and C
 - f. B and C

3. For the CABG program, indirect costs include:
 - a. Overhead at hospital
 - b. State costs associated with administering grant
 - c. Increased Medicaid fees for patients getting CABG
 - d. A and B
 - e. B and C
 - f. A, B, and C
 - g. None of these

4. Some indirect costs for the prenatal care insurance program are:
 - a. Insurance costs for target women's medical care unrelated to prenatal care
 - b. Women's time away from work
 - c. Services given by providers that are subsidized by State-paid fees, which are lower than commercial fees
 - d. A and B
 - e. B and C
 - f. A, B, and C
 - g. None of these

Identify some major potential benefits that are likely to accrue from each program. Attempt to consider personal health benefits, health resource benefits, non-health benefits, and other non-financial benefits.

5. For the CABG program, some major benefits may include:
 - a. Quality of life of persons with heart disease
 - b. Increased working years of patients
 - c. Avoided nursing home costs
 - d. Higher income for the hospital to subsidize other services
 - e. A, B, and C
 - f. A, B, C, and D
 - g. A, C, and D
 - h. B, C, and D

6. For the prenatal insurance program, some major benefits may include:
 - a. Decreased neonatal intensive care unit (NICU) costs for babies.
 - b. Political credit for the governor and legislators for helping mothers and babies
 - c. Insurance helps to support rural and inner-city clinic providers who previously gave free care.
 - d. a and b
 - e. b and c
 - f. a, b, and c

7. What approach(es) would you use to attach monetary values to improved quality of life for persons with heart disease in the region?
 - a. Do a survey of persons with heart disease to assess their "willingness to pay"
 - b. Use earnings of people now able to work
 - c. Use "quality of life year" (QALY) units rather than monetary values
 - d. a and b
 - e. b and c
 - f. a, b, and c

ANSWERS

1. **G:** C is an indirect cost. Note that increased insurance cost for surgical fees is a direct expense to society, but from the perspective of a hospital, it can be viewed as "benefit" to offset the fixed salary of staff.
2. **E:** Physician and nurse salaries, although a direct health care cost, are not relevant in this instance because those costs derive from services provided to women outside the insurance program as well as program participants.
3. **F:** All are indirect costs, although it is possible that the State could view increased Medicaid fees as direct costs.
4. **G:** This is a trick question of sorts. All of these could philosophically be considered indirect costs in an evaluation, but given the context, it is likely that insurance costs would be considered a direct cost by the State while work time lost and the value of subsidized services would not be on the State's 'radar screen.'
5. **F:** All of a through d are potential benefits, though for a limited study, quality of life (a) and avoided nursing home costs (c) are probably the most appropriate focus.
6. **F:** All are potentially appropriate benefits to address in the evaluation. though NICU costs would likely be the main focus, while political capital would not likely be overtly acknowledged.
7. **F:** All are potentially appropriate, although the use of QALYs is not completely responsive to the question. However, using non-financial units is gaining popularity in "cost/consequence" evaluations.