

Individual Exercise 1

Introduction to Health Services

Read the following 5 study scenarios and then answer the questions below.

- A. The Medicaid program in the State of Maryland serves more than 200,000 persons. There is concern that a large proportion of Medicaid-eligible persons use hospital emergency rooms for minor programs that could be better treated in a clinic or private physician's office. A study is proposed to determine the amount of emergency room use for selected conditions and the effects this utilization has on cost and quality of care.
- B. Baltimore City has a high teenage pregnancy rate. One theory is that teenage girls who get pregnant have lower self-esteem than those who do not get pregnant. A 5-year study is proposed to examine the relationship between self-esteem and pregnancy in teenage girls aged 12 to 17.
- C. The usefulness of established educational interventions is being examined through a randomized trial being conducted in several U.S. cities. Participants are randomly assigned either to a group that receives nutrition, exercise, and smoking education as well as blood pressure and cholesterol screening, or to a group that received no special services. Researchers are interested in the effect of this intervention on rates of heart disease and mortality.
- D. A school-based asthma program has been operating in 4 Baltimore City Schools in the area of Johns Hopkins Hospital. The objective of the program is to teach children with asthma and their families more about the disease and how to control it, thereby reducing acute attacks and visits to the emergency room. A study is proposed to evaluate whether this program is meeting its objectives.
- E. The payment schedule for Medicare has rewarded health providers who perform procedures such as surgery and has kept rates low for health providers, such as internists, who spend time in talking with patients to diagnose and manage illness. To rectify this, a group from Yale University developed, and HCFA subsequently implemented, a "resource-based relative value scale" (RBRVS) which weighs time, skill, and resource costs, as well as regional adjustments in setting payment.

1. Which of these examples is health services research?
2. Which of these are "basic" research?
3. Are any of these evaluation studies?
4. Which studies are observational versus having an intervention?

ANSWERS

1. **(A)** Examination of the rates of emergency room use for participants in the Medicaid program is classic HSR. It seeks to understand the relationship between a service use and two outcomes, cost and quality of care. This may also be classified as evaluative policy research, since the program is operating. Because of the costs and the number of persons involved, it is highly policy relevant. **(C)** An intervention to test the effectiveness of education in decreasing heart disease can be classified as HSR, primarily because it is testing a new service, and not just evaluating an existing program. **(E)** Development of RBRVS is "basic" HSR.
2. **(B)** The study of the relationship between self-esteem and pregnancy is really a basic behavioral science study, rather than a study of the effect of a service delivery. Therefore, while it is basic research, it is not strictly HSR. **(E)** Development of RBRVS is "basic" HSR. It was development of a methodology. When this methodology was implemented, the study would become HSR.
3. **(A)** Usually an evaluation has the goal of determining if program objectives are met. To the extent that this study is gathering new knowledge, and there were no program goals, it is HSR. However,

in such a large study, it would seem reasonable that Medicaid managers had some targets in mind for emergency room use. **(D)** The school-based asthma program had a set of objectives, and the study will evaluate whether these were met. While this program may not be highly policy relevant because of the few children involved, if such a program can be replicated on a larger scale with good outcomes, it becomes policy relevant.

4. **(A)** There is no new intervention in this study, simply observations about the emergency room use. The study becomes analytical, because it collects data on service use and then determines the effect of this use of future cost and quality of care. **(B)** This behavioral study does not propose an intervention. If a relationship is found between self-esteem and pregnancy rates, perhaps an intervention could be developed to strengthen self-esteem. A study of this would become health services research if a health service is delivered (such as health education).