

Special Communication

Distribution of Variable vs Fixed Costs of Hospital Care

Rebecca R. Roberts, MD; Paul W. Frutos, BS; Ginevra G. Ciavarella, RN, MPH, MBA; [et al](#)

» [Author Affiliations](#)



JAMA

Published Online: February 17, 1999

1999;281;(7):644-649.

doi:10.1001/jama.281.7.644



Abstract

Context Most strategies proposed to control the rising cost of health care are aimed at reducing medical resource consumption rates. These approaches may be limited in effectiveness because of the relatively low variable cost of medical care. Variable costs (for medication and supplies) are saved if a facility does not provide a service while fixed costs (for salaried labor, buildings, and equipment) are not saved over the short term when a health care facility reduces service.

Objective To determine the relative variable and fixed costs of inpatient and outpatient care for a large urban public teaching hospital.

Design Cost analysis.

Setting A large urban public teaching hospital.

Main Outcome Measures All expenditures for the institution during 1993 and for each service were categorized as either variable or fixed. Fixed costs included capital expenditures, employee salaries and benefits, building maintenance, and utilities. Variable costs included health care worker supplies, patient care supplies, diagnostic and therapeutic supplies, and medications.

Results In 1993, the hospital had nearly 114,000 emergency department visits, 40,000 hospital admissions, 240,000 inpatient days, and more than 500,000 outpatient clinic visits. The total budget for 1993 was \$429.2 million, of which \$360.3 million (84%) was fixed and \$68.8 million (16%) was variable. Overall, 31.5% of total costs were for support expenses such as utilities, employee benefits, and housekeeping salaries, and 52.4% included direct costs of salary for service center personnel who provide services to individual patients.

Conclusions The majority of cost in providing hospital service is related to buildings, equipment, salaried labor, and overhead, which are fixed over the short term. The high fixed costs emphasize the importance of adjusting fixed costs to patient consumption to maintain efficiency.

[Get Access](#)

[View Full Text](#) | [Download PDF](#)