Utilization of Hospital Services by the Older Adult

A look at today’s trends, and projections for tomorrow

The fastest rising population category in the United States is the 65 years and over group. In 1970, the U. S. Census Bureau reported slightly under one million persons 65 years of age or over living in Texas. According to population projections by the Joint Committee on Long-Term Care Alternatives, the state will experience a 60 percent increase in its elderly population in the next 30 years. According to this same report, an even more striking increase will be seen in the group called “frail elderly”, those 75 and over. This group is projected to increase by 96 percent by 2000.1

The impact on demand for health care services will be significant when consideration is given to the fact that the per capita health care expenditures of the 65 and over age group are nearly three times that of the age group from 19 to 64 years.2 To identify those demographic, social and economic factors which affect the use of health care services among older adults, the Center for Studies in Aging at North Texas State University has conducted several studies.

This article will present selected findings from the studies, specifically related to factors influencing hospital utilization in comparison with factors related to use of physicians and dentists. The first section describes the conceptual framework for the analysis. Part two provides a summary review of the literature. A description of the sample and selected findings of the Texas study are presented next. Finally, implications for future policy are discussed in the conclusions.

Conceptual Framework
In 1973, Anderson and Newman presented a framework for the study of the individual characteristics which determine the health care services utilization of a given population. The framework assumes that there is a sequence of conditions which affects the health care services utilization. The framework contains three basic components: predisposing variables, enabling variables and illness level.

Predisposing variables exist prior to the onset of illness and affect the probability of the use of health care services. These variables include age, sex, marital status, education, retirement status, number of people living in a household and race/ethnicity.

The enabling variables provide the means for the individuals to use health care services and include family income, health insurance including Medicare, Medicaid and private insurance, and access to transportation. Urban/rural residence also is used as a proxy measure since the availability of health care services are available more readily in urban areas than in rural areas.

The most immediate stimulus to use of health care services is actual illness level, both as it is perceived by the individual and as it is evaluated by health care practitioners.

This framework is quite comprehensive and has been used widely in previous research on the utilization of health care services. Thus, it was adopted as the conceptual framework for studies on health services utilization among older adults in the U. S. and on utilization of health services by elderly Texans.

Literature Review
A review of the literature provides evidence to suggest that the predisposing, enabling and illness level variables in Anderson and Newman’s model do influence health care utilization in the elderly.4 These findings suggest that
these effects differ for each of the different types of health care, i.e. physician use, hospitalization and dental care. Selected results of this review are discussed below, particularly focusing on hospitalization.

Previous research found that physician utilization increases with age and is slightly greater among older people who lived alone. In addition, use of physicians is positively related to income, Anglo ethnicity, health insurance coverage and urban residence. Need for services usually is found to have the strongest direct effect on physician utilization among the elderly.

Generally, hospital utilization is influenced in essentially the same ways by the predisposing, enabling and illness level determinants. However, unlike physician utilization, use of hospitals usually is greater among males than among females, and is higher for non-Anglos than for Anglos. Also, because of the greater coverage of hospital as compared to physician expenses in the Medicaid and Medicare programs, hospital utilization is influenced more by the presence of these insurance programs than is physician utilization.

Unlike hospitalization and physician utilization, use of dental services declines with age. Because most dental services are elective and must be paid for out-of-pocket, use of dental services is likely to be influenced much more strongly by social structure and income variables than are hospital or physician use.

Data

The data for the research were taken from interviews with 8,065 Texans, age 60 years or older.

Approximately 500 interviewers were recruited by the participating agencies. Nearly 75 percent of the interviewers were 60 years of age or over. In addition to the older interviewers, agency employees and local college students also were used. Demographically, the final sample consisted of 3,495 males and 4,557 females: 1,263 Blacks, 421 Mexican-Americans, 6,345 Whites and 36 of other ethnic identities; 4,511 urban and 3,120 rural residents; 4,075 age 60-69 and 3,972 age 70 years or older.

Selected Findings

Hospital visits were measured dichotomously by asking the respondents whether or not they had been admitted to a hospital within the past year. The major predictive variable was subjective evaluation of health. Three times as many respondents with poor health (49 percent) had had hospital admissions within the previous year as those with good health status (only 14 percent).

Among the predisposing variables, only employment (working/not working) was influential in predicting hospital admissions, with 18 percent of those who were working having had a hospital admission in the past year compared to 30 percent of those not working, reflecting the poorer health of the unemployed older people. Also, a greater proportion of those who had difficulty with transportation had had hospital admissions within the last year than among those who had no difficulty with transportation, indicating that those people in poorer health are likely to have more difficulty getting transportation than those in better health.

Of the predictor variables which predict the use of doctors among older people, the major factor was the subjective evaluation of general health. Older people who perceived themselves in good health had only an average of 1.02 doctor visits during the previous six months, while those perceiving themselves in poor health had 2.60 visits.

Education and income were the variables which were most predictive of the average number of dentist visits. Respondents with at least some education beyond high school averaged more dentist visits the previous year than those with a high school education or less. Older adults with incomes above the median were twice as likely to have had a dental visit in the past year as were the older
adults with incomes below the median.

Conclusions

This research on older Texans indicates that the use of physicians and hospitals was influenced most strongly by the illness-morbidity variables, while the use of dentists was influenced most strongly by income and education.

The research findings on the older adult population have several implications for health care policy. First, these data indicate that older adults are using physician and hospital services primarily in response to poor health and illness. This result is an indication that the Medicare and Medicaid programs have succeeded in making health care, especially expensive hospital care, more accessible to older adults based on need rather than ability to pay, although these results should not be interpreted as indicating that the services that are available are as easily available to everyone or that the quality of services is the same. In fact, if true equity were attained we might expect to find an inverse relationship between socioeconomic status and use of services, since it is the lower socioeconomic groups who have the poorest health.

The data on dentist utilization indicate that dental care needs of older adults are responsive mainly to social structural and income variables. Medicare and Medicaid coverage of dental services is very limited. Finding dentists who will accept Medicaid payment for services that are available under that program is also problematic.

There has been comparatively little research on the need for and use of dental services, especially among older adults. Health care researchers need to examine the need for dental care among the elderly and the effect of that need on the health and quality of life of the older adult, as well as cost-effective ways of increasing the delivery of dental services to older adults.

These results suggest that access to dental care is not equitable under the present health care system for older adults, and that means for overcoming this inequity should be addressed. Suggestions for means of redressing the inequity include increasing Medicare and Medicaid coverage of those services, government encouragement of private dental insurance coverage for older adults, and government encouragement of courses and/or specialties in geriatric dentistry, perhaps through scholarships or model projects.


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