

The Nursing Home Market

Supply and Demand for the
Elderly

Jeffrey A. Rhoades



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JEFFREY A. RHOADES

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Preface

While previous studies have explored factors affecting the utilization of nursing home care by the elderly, few have used a nationally representative sample, and fewer still have investigated how price as well as supply affects utilization. The major purpose of this study is to model the effects of supply and demand for nursing home care on the utilization of such care by the elderly. A price elasticity of demand for nursing home care is estimated and factors affecting the supply and demand for nursing home care, and ultimately its utilization, are elucidated.

This study's strength lies in the data to be analyzed. The data available for analysis from the 1987 National Medical Expenditure Survey (NMES), represent a national probability sample of those at risk for entering a nursing home, while other investigations may have been limited because they utilized data from specific populations. NMES has greater external validity and generalizability. NMES contains accurate and complete price information for individuals in the community and institutions as well as demographic data such as age, sex, race, income, and living arrangements (Alecxih and Kennell 1992). Thus a determination can be made between private and public (Medicaid) consumers when estimating price elasticity. Previous studies did not have such expenditure information available. A better understanding of price elasticity of demand is essential for forecasting the impact of different long-term care policy proposals. In addition this research attempts to take state and county level characteristics into account in analyzing both the supply and demand for nursing home care.

Only by understanding the determinants of supply and demand for nursing home care can one expect to have any hope of understanding the potential impact of proposed nursing home care policy on utilization. Findings contribute to and refine the current body of knowledge concerning the utilization of nursing home care by the elderly.

This study is described in the following five chapters. The first chapter presents a brief outline of the research and a discussion of its significance to health care policy. In Chapter 2, background on the role of supply and demand for nursing home care is provided along with a discussion of the nursing home care market. Chapter 2 also provides a review of literature that discusses prior nursing home care studies of price elasticity, and determinants of supply and demand for nursing home care. Chapter 3 discusses how nursing home care is investigated in this study, and the conceptual framework and study hypotheses are provided. Also Chapter 3 describes the data sources, sample selection, dependent and independent variable definitions, and the methods used for analysis. Chapter 4 presents the descriptive, bivariate, and multivariate results as well as a summary. The concluding chapter, Chapter 5, summarizes the research results in relationship to the study hypotheses, discusses and interprets the study findings with respect to prior research, and presents policy implications of the study. In concluding, the limitations of the study are discussed and suggestions for future investigations are given.

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Introduction

With increasing life expectancy, an aging population, and the functionally impaired population growing, how best to meet long-term care needs continues to challenge policy makers. Legislation introduced in Congress reflects a wide range of views. Some take an incremental approach, while others propose a comprehensive public sector approach. Still others seek to expand the role of private long-term care insurance in the financing of nursing home care as is evidenced by the recent passage of the Kassebaum-Kennedy tax provisions for long-term care insurance (Reschovsky 1996). The issue of financing nursing home care is and will remain a major health and social issue in the decades to come; evaluation of nursing home care policy is urgently needed (Phillips and Gaylord 1985; Rivlin and Wiener 1988; Soldo and Agree 1988).

Changes in nursing home care financing would in all likelihood change the way individuals and families plan for, purchase and utilize nursing home care (EOA 1991). Unfortunately insufficient research has been conducted on the impact of induced demand on the utilization of nursing home care (Fama and Kennell 1990; Headen 1993; Pepper Commission 1990). The few existing studies of nursing home care demand have found a highly elastic response to price; an increase in price has been shown to have a significant negative effect on the quantity of nursing home services demanded. An increase of 10 percent has resulted in an decrease in demand ranging from 7 to 23 percent (Chiswick 1976; Headen 1993; Nyman 1989a; Scanlon 1980).

Additionally there is the issue of increased demand in the face of a constrained nursing home bed supply (Fama and Kennell 1990). Induced demand becomes less pertinent when access to nursing home beds is restricted (Pepper Commission 1990). Lowering price for nursing home care would not necessarily lead to increased nursing home care utilization when supply is constrained (EOA 1991).

Using various policies, states have acted to constrain the nursing home bed supply, and thus control utilization and in turn expenditures (Doty et al. 1985; Nyman 1989b). For nursing home care, the process of adjusting price to equate demand and utilization does not take place. The nursing home market is in disequilibrium (Harrington and Swan 1987; Harrington et al. 1988; Miller et al. 1992; Scanlon 1980). This can cause the impact of a national nursing home care proposal to vary from state to state. Accurate analysis from a national perspective can be enhanced by state-specific analyses.

Previous research has not attempted to link supply and demand in determining private and public utilization of nursing home care. This research attempts to model nursing home care utilization by elucidating the determinants of both supply and demand.

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