Health Care of Vulnerable Populations Covered by Medicare and Medicaid

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This overview discusses articles published in this issue of the Health Care Financing Review, *entitled "Health Care Needs of Vulnerable Populations." Articles cover the following vulnerable population subgroups: pregnant women and children, persons with AIDS, the disabled, and the elderly. Issues covered in this collection include: expenditures, demographic factors, Medicaid and Medicare policy, service use, medical procedures, and data collection.*

The focus of this *Health Care Financing Review* is on issues related to the health care of vulnerable populations. There is currently considerable interest in finding better ways to meet the health needs of these populations. Who are vulnerable populations, with respect to health? Vulnerable populations are groups of people who have, are likely to have, are on the verge of having, or could have health problems that make it difficult for them to function or provide for themselves. Cause and effect can go either way—individuals may develop health problems and thus be unable to function, or the inability to take care of health needs may lead to health problems.

Vulnerable populations include groups across the age spectrum. The elderly are, or may become, too old or sick to care for themselves. In addition, because they are too old to work, their income may decline. Children are too young to care for themselves and must depend on others to serve their best interests. Individuals with incurable illnesses are vulnerable. As their health deteriorates, they may become poorer and sicker and not have the resources to care for themselves. Individuals with disabilities may not be able to work, and thus have little income. Other vulnerable population subgroups that have been identified include minorities, low-income persons, high-risk pregnant women and their infants, uninsured and underinsured individuals, and underserved individuals (including those who reside in inner cities, rural areas, or health professional shortage areas; migrant workers; refugees; and frontier residents).

The articles in this issue of the *Review* focus on four vulnerable population subgroups: pregnant women and children; persons with acquired immunodeficiency syndrome (AIDS); disabled persons; and the elderly. These groups are all significantly covered by the Medicaid and Medicare programs administered by HCFA.

Two articles deal with services for the maternal and child population. A large percentage of this vulnerable population subgroup is served by Medicaid. In 1988, about 20 percent of women who experienced a birth, infant death, or fetal death obtained prenatal care that was paid for by Medicaid. In the same year, 18.4 percent of all children under 6 years of age and 13.2 percent of all children 6-18 years of age were covered by Medicaid. With recent expansions for pregnant women and children, the numbers covered by Medicaid in both groups have increased. In 1992, 26.7

The author is with the Health Care Financing Administration (HCFA), and any opinions are those of the author and do not necessarily reflect the views or policy positions of HCFA.

percent of all children under 6 years of age and 16.7 percent of all children 6-18 years of age were covered by Medicaid. Almost one-half of the users of Medicaid services in fiscal year (FY) 1992 were low-income children. Thus, pregnant women and children are an important part of the Medicaid program.

The article by Chaulk addresses preventive services for children and pregnant women. He focuses on the characteristics of health delivery systems and the ways in which these systems address selected preventive services for this subgroup in six industrialized nations, in order to determine how best to deliver these services in the United States. Chaulk finds many different systems to be effective. A common theme for all is the high priority they give to preventive services. Evidence suggests that these systems, which can serve as models for the United States, have avoided significant numbers of uninsured, provided a wide range of preventive services, and have not compromised health outcomes.

Henderson focuses on one service, prenatal care, in one county in Texas. Data from the late 1980s are used to examine the association between prenatal care and birthweight and the implications for hospital charges for newborn infants. Prenatal care was found to have a positive relationship with birthweight. Actual hospital charges for newborns were approximately $1,000 lower for those whose mothers had prenatal care, compared with those whose mothers did not have prenatal care.

Medicaid serves at least 40 percent of the vulnerable population subgroup of persons with AIDS. It serves up to 90 percent of all children with AIDS. Medicaid is the largest single payer of direct medical care services for persons with AIDS. It pays about 25 percent of the aggregate cost of national expenditures for AIDS care. Medicare's share of medical expenditures for persons with AIDS is only 1 to 2 percent of the cost of direct medical care for people with AIDS. However, Medicare's role in financing care for individuals with AIDS is expected to increase in the future, as new medical technologies and drugs enable persons with AIDS to survive the 24-month waiting period for Medicare coverage under the Social Security Disability Insurance (SSDI) program. Two articles focus on persons with AIDS and address issues that affect vulnerable populations, access to care, and health care-related expenditures.

Buchanan and Kircher analyze Medicaid policies for hospital care provided to Medicaid recipients with AIDS. The authors find that hospital reimbursement differs among States and that this nonuniformity can affect who is treated. A number of States reimburse hospitals using a prospective payment method that does not vary with the Medicaid patient's diagnosis or care needs, although costs to hospitals do vary by such factors. Hospitals that are reimbursed prospectively may be less likely to admit Medicaid recipients with complex, medically intensive, and expensive conditions such as AIDS. In addition, a number of States limit the number of annual inpatient hospital days that Medicaid will pay for adult recipients. This also limits access to care for persons with AIDS. On the other hand, access is increased by using diagnosis-related group payment methods that reimburse hospitals based on diagnosis and take into account how costly it is to provide care to patients with specific diagnoses. This payment method could reduce the financial burdens hospitals encounter when providing care to those who require medically intensive and complex services.

Markson, McKee, Mauskopf, Houchens, Fanning, and Turner use the Severity Index for Adults with AIDS (SIAA), a four-category

clinical severity measure designed to be predictive of patient survival, to examine Medicaid expenditures for persons with AIDS who survived at least 6 months after their first AIDS-defining diagnosis. The authors find that seriously ill patients who are likely to have more intense demands for health care services can be identified using SIAA. The authors suggest that SIAA offers an important tool for policymakers and clinicians to equitably allocate resources for patients with significant demands for care. SIAA can also facilitate the targeting of programs designed to manage care by specifying case-management programs tailored to the initial severity of illness of the patient population.

Disabled individuals make up another vulnerable population subgroup of great interest to HCFA. Individuals who receive SSDI benefits are automatically eligible to receive Medicaid benefits. After individuals have received SSDI cash benefits for 24 months, they are eligible to receive Medicare benefits. In FY 1992, 14.4 percent of Medicaid beneficiaries were low-income disabled individuals, and 37.3 percent of Medicaid expenditures were for this group. Medicaid payments per user rose sixfold from 1975 ($1,276) to 1992 ($7,588) for this group. In 1992, 3.6 million disabled individuals under 65 years of age were covered by Medicare; this represents 10.1 percent of Medicare beneficiaries. Medicare payments for the disabled in that year totaled $17.4 billion, out of overall program expenditures of $120.7 billion.

McCoy and Iams examine factors influencing health outcomes for disabled workers. All the individuals in the analysis were covered by Medicare. Outcomes included survival status, inpatient hospitalization, and Medicare inpatient charges. Factors examined included age, gender, marital status, race, educational attainment, economic status, auxiliary health insurance coverage, major health disorders, and functional limitation. One of the most important findings of their analysis indicates the relative impact of auxiliary health insurance as an access mechanism to inpatient care. Given that the disabled have limited finances and resources, auxiliary health insurance appears to increase their likelihood of receiving additional inpatient care.

The last six articles deal with issues that affect the elderly. In 1992, there were 30,589,996 persons in the United States 65 years of age or over. Most of these individuals (86.6 percent) were covered solely by Medicare. Only 0.1 percent were covered by Medicaid alone, and 9.4 percent were enrolled in both programs. Two articles examine medical procedures among the elderly, one examines disability among the elderly, two articles relate to nursing home care, and one article describes a survey of the Medicare population conducted by HCFA.

McBean and Gornick analyze 1986 and 1992 administrative data from the Medicare program to compare, by race, the use of and 30-day post-admission mortality rates for 18 inpatient surgical procedures. These procedures were selected for their high frequency, cost, or importance to the elderly. Nine of the procedures are "referral-sensitive procedures" because their performance depends upon referral by the physician who sees the patient first. In both years, black beneficiaries were less likely than white beneficiaries to have received the selected procedures. In general, mortality rates were higher for black persons than for white persons. The authors conclude that the consistency of the differences by race across many procedures suggests that there are barriers to these services.

The article by Blumberg and Binns focuses on one procedure, Swan-Ganz catheter (SGC) use, and mortality. The authors find that hospitals with higher SGC

use had higher mortality from acute myocardial infarction (AMI). The same relationship was found when hospitals were stratified by the number of fresh AMI cases. Hospitals vary greatly in their reported SGC rates in similar cases. The authors suggest that this variation is strong evidence that the likelihood of SGC procedure is dependent on the general likelihood of the admitting hospital to do SGC procedures.

Hallfors, Leutz, Capitman, and Ritter test the stability of disability among social/health maintenance organization members who were judged to be eligible for admission into a nursing home. Assessments were conducted on a quarterly basis. By the end of 1 year, less than 50 percent were still considered nursing home eligible. The authors conclude that considerable variation does exist in the stability of disability among the elderly. The authors discuss the implications of the findings for service eligibility, service delivery, and payment rates.

The next two articles relate to care delivered in nursing homes. Williams, Fries, Foley, Schneider, and Gavazzi develop an index of activities of daily living (ADL) from the federally mandated Minimum Data Set (MDS) that is used to predict costs in nursing facilities. The index, based on limitations in eating, bed mobility, transferring, and toileting, explains 30 percent of the variance in nursing cost among nursing home residents. The authors conclude that their index is a readily determined measure of functional status that could be useful in allocating nursing staff within nursing homes and in comparing the functional status of groups of residents. It has advantages over other measures of ADL function because it can be constructed from information on the MDS, includes relatively few measures of ADL limitations, and corresponds well to actual measurements of nursing time among nursing home residents.

The effect of excess demand on nursing home costs is examined by Davis and Freeman, using 1989 data for a sample of 179 Kentucky nursing homes. The authors find that the average costs of facilities located in surplus bed (overbedded) markets were significantly higher than that of facilities in tight bed (underbedded) markets, an analysis which lends only partial support to the excess demand argument. The Medicaid cost relationships that were found conflict with excess demand predictions. The model was strong in predicting decreased expenditures in underbedded markets, but not in increasing expenditures in overbedded markets. The authors suggest measurement and policy issues that need to be addressed before the policy implications of excess demand theory can be derived.

The last article in this issue presents the logic, methods, and capabilities of a major new source of data on the Medicare population, the Medicare Current Beneficiary Survey (MCBS), conducted by HCFA. This is a continuous, multipurpose survey of a representative sample of the entire Medicare population. The sample, interview process, pilot test response rates, data preparation steps, MCBS products, and uses of the data are described.

This collection of articles uses data from multiple sources and covers issues relevant to vulnerable population subgroups that are beneficiaries of the financing programs HCFA administers. Many issues, including expenditures, demographic factors, Medicaid and Medicare policy, service use, medical procedures, and data collection, are covered. Many health issues that affect vulnerable populations are discussed. Some general conclusions regarding health care and its financing can be drawn from this set of articles. The articles addressing the maternal and child

population suggest that many successful models for the delivery of preventive care services exist and that these services may reduce medical costs and costs of associated conditions. The articles discussing coverage of the AIDS population suggest that reimbursement policy and identification of severity of illness can be important factors in encouraging appropriate care. The article by McCoy and Iams on the disabled population indicates the importance of complete insurance coverage on access to care. The articles on the elderly population suggest that procedures performed are dependent on factors other than need, such as race and general practice patterns. Several measurement issues, as well as nursing home costs, are also addressed. Clearly, many more research and policy issues for vulnerable populations need to be studied. This discussion should continue in many forums.

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