

State preadmission screening programs for controlling utilization of long-term care

by Cynthia Longseth Polich and Laura Himes Iversen

This article explores the issue of whether state-administered nursing home preadmission screening (PAS) programs are an effective means of controlling the utilization of long-term care. It is suggested that, overall, PAS may be increasing rather than decreasing the use of long-term care. Utilization control through PAS may be ineffective because it occurs too late in the placement decision process, there are insufficient

placement alternatives, assessment tools do not adequately identify who is at risk of institutionalization, and policymakers and program administrators may have conflicting goals. Recommendations for improving the screening process include, among others, that States more clearly define program goals and that screening be conducted within a managed-care system.

Introduction

A growing number of States are establishing comprehensive programs to screen nursing home applicants prior to admission to assure that nursing home care is necessary and appropriate. These preadmission screening (PAS) programs are a significant component of many State long-term care systems and represent one of the few utilization control mechanisms developed especially for long-term care. The success or failure of PAS to control utilization could therefore have a significant impact on long-term care costs and on insurers¹ who are hesitant to offer a full continuum of long-term care services because the risk of increased utilization and costs appears uncontrollable.

The purpose of this article is to explore whether PAS is an effective means of controlling the utilization of long-term care. The article is not intended to empirically and conclusively evaluate whether PAS does control costs—at present, an insufficient amount of research has been conducted to permit such an analysis. However, even at this point, it is important to explore these issues. Most States develop PAS programs under the assumption that PAS is an effective means of controlling utilization and costs. A careful examination of this assumption is therefore crucial in considering whether PAS is meeting its intended goals and how it might best be configured to do so.

Our discussion of whether PAS is an effective utilization control mechanism is based on whether PAS appears able to control the utilization and cost of all long-term care services, not just nursing home care. Long-term care here refers to “a wide variety of services and assistance—including health, social, housing, and income services—provided to chronically ill and physically disabled [older] people over an extended period of time” (Metropolitan Council, 1986). The discussion begins with background

information that sets PAS in the context of current attempts by public and private payers to provide and control long-term care services. This is followed by a brief review of pertinent research and a discussion of major factors that may affect the ability of PAS to control utilization. We conclude with a consideration of options and recommendations that might be implemented to improve the ability of PAS programs to control the utilization and cost of long-term care.

Background

The flaws of the current health and long-term care system have been widely discussed and acknowledged in the last decade. Most notably, the system has been faulted for its dramatically rising costs, fragmentation, and bias toward acute and institutional care (Levit et al., 1985; Davis and Rowland, 1986; Oriol, 1985). Consequently, an increasing number of policymakers, advocates, researchers, and older persons are pushing for the development of a system that controls costs and provides a comprehensive, coordinated continuum of acute and long-term care services (Farrow et al., 1981; Callahan and Wallach, 1982; Crystal, 1982; Iversen et al., 1986). Yet the development of this system has been slow because few providers or insurers believe that there are adequate mechanisms to control the use of long-term care benefits. Without such controls the risk of financing and providing comprehensive long-term care benefits is generally considered prohibitive by both government payers and private insurers.

There are many reasons why insurers are skeptical about their ability to assess need and control long-term care utilization. The need for acute care is usually attributable to a specific illness or condition, such as a fractured hip or pneumonia, which gives insurers a relatively objective medical measure of an individual's need. Long-term care needs, however, are less easily defined because they involve both medical and nonmedical services. Diagnosing the need for long-term care includes an evaluation of such nebulous factors as family and community supports, mental health, the home environment, and cognitive functioning. These factors are often difficult to assess because of their complexity and because they can

¹Throughout this article, “insurers” refers to both the private insurers and public programs such as Medicare and Medicaid.

NOTE: Support for this research was provided by the Pew Memorial Trust.

Reprint requests: Noel Baker, InterStudy, 5717 Christmas Lake Road, Excelsior, Minnesota 55331.

change frequently. Determining the amount of support a family can provide is further complicated because the inconvenience and expense of providing informal care can lead families and other caregivers to try to substitute formal, insured services for informal support. This conflicts with the goal of many insurers to assure that paid services do not become a substitute for care that could be provided by informal sources.

Another factor that makes the risk of insuring acute care relatively low is that such care is, by definition, limited to the short term. Long-term care needs, in contrast, result from chronic conditions that can last decades and become more severe or complicated by other conditions. Predicting the risk of long-term care is also difficult because insurers have had little experience with financing long-term care. The actuarial data base for acute care, conversely, is relatively well established. Providers and insurers of acute care can rely on fairly well defined practice patterns of care to predict utilization. However, service needs and treatments for chronic conditions vary tremendously. Often, long-term care patients who are similar to each other in general health and social status, and who experience similar conditions, receive different services in very different settings. Until practice patterns become more established, predicting and controlling the utilization of long-term care will continue to be difficult.

In an effort to control risk in the face of these problems, insurers have relied primarily on acute care utilization control measures when offering long-term care coverage (e.g., deductibles and copayments). Insurers also attempt to link long-term care needs to more definable, acute conditions. Public programs and private insurance policies, for example, generally provide home care only after discharge from a skilled nursing facility or hospital (Davis and Rowland, 1986; ICF, 1985). Another frequently practiced utilization control measure in the public sector involves limiting the supply of care (e.g., moratoriums on nursing home construction). Unfortunately, none of these measures results in the provision of comprehensive coverage or the assurance that the people in greatest need will receive it. It is clear that more effective utilization control mechanisms must be developed before a full continuum of long-term care benefits will be offered by either government or private funders.

Program development

One of the few utilization control methods that have been developed especially for long-term care is State-administered preadmission screening (PAS) programs. These programs are designed to screen applicants prior to nursing home admission to assure that nursing home care is needed and appropriate. In most cases, PAS attempts to control costs and utilization by identifying those "at risk" of nursing home placement and substituting less expensive home care for costly nursing home care.

Cost control, particularly the reduction of Medicaid expenditures, is the primary goal of many of these

State programs. Many States limit screening programs to Medicaid eligibles, often as a prerequisite to receiving Medicaid-funded nursing home or in-home services. Cost control is not, however, the only goal. PAS also attempts to improve the quality of life among older persons and their families by assisting them in making appropriate long-term care decisions and in maintaining independence.

These programs vary tremendously from State to State (Iversen, 1986). Generally, however, applicants receive a comprehensive on-site assessment of their needs, and then are offered a recommendation concerning what long-term care services are needed and where they should be provided (e.g., in the home or an institution). Assessments generally include an evaluation of the client's physical and mental health, functional status, and formal and informal social supports. In some cases, home care services are then provided to those at risk of nursing home placement in order to prevent institutionalization.

The number and scope of PAS programs has increased considerably in the last decade. As can be seen in the following lists, a recent study indicates that in early 1986 there were 31 programs operational in 29 States and the District of Columbia (Iversen, 1986). Statewide programs were in operation in:

- Colorado.
- Georgia.
- Idaho.
- Illinois.
- Indiana.
- Iowa.
- Kansas.
- Maine.
- Massachusetts.
- Minnesota.
- Missouri.
- Montana.
- Nevada.
- New Jersey.
- North Dakota.
- Oregon.
- Rhode Island.
- South Carolina.
- Virginia.
- Washington.
- District of Columbia.

In addition, the following States had partial State programs:

- Arkansas.
- California.
- Connecticut.
- Delaware.
- Florida.
- New York.
- Ohio (two programs).
- Pennsylvania.
- Wisconsin.

As PAS programs become more prevalent and affect a growing number of clients, personnel, and

money, it becomes increasingly important to evaluate whether PAS is an effective means of controlling long-term care utilization. An evaluation of PAS is also very important because if proven effective, these screening programs could be important in encouraging insurers to finance long-term care.

Past research

At present, a conclusive quantitative analysis of the effectiveness of PAS programs is not possible because few studies in this area have been completed. One reason for the lack of research is that most programs are relatively new. Also, States rarely have the time and staff to conduct comprehensive data analysis. Results of studies that have been conducted must also be viewed cautiously because of the complex and constantly changing nature of the long-term care system. Within recent years, this system has been affected by a significant number of changes, including a growing number and proportion of older persons needing care, diagnosis-related groups (DRG's) and other prospective payment arrangements for acute care, an increased awareness and supply of nursing home alternatives, nursing home certificate of need requirements and construction moratoriums, and shrinking State and Federal budgets.

Determining what effect PAS has had on long-term care admissions and costs in the midst of these changes is extremely difficult. The few studies that have been conducted regarding PAS do not allow many generalizations because of the tremendous variation among States in how and why PAS is implemented. In some States, for instance, PAS is only one component of a comprehensive home- and community-based case-management system in which services are coordinated, funded, or provided. In other cases, there are no formal linkages between PAS and community-based programs. Even in these instances, however, programs may vary in the amount of informal contact they have with health and long-term care providers.

Another important variation among States that makes evaluation difficult is whether the screening teams' recommendations are binding or advisory. Given the limited data and the variations, therefore, it is likely that current studies at best only hint at the effect PAS can have on overall utilization of long-term care services.

The few studies that have directly or indirectly addressed the question of whether PAS and other case-management programs can control costs or utilization show mixed results and reflect the limited data and analysis that are available for PAS at this time (Carnes and Cook, 1977; Polich, 1984; Kramer et al., 1984; Garrick, Rubin, and Wilke, 1983; General Accounting Office, 1982; Kemper et al., 1985). There is some evidence, however, that PAS and related home care programs increase the use of community-based services without reducing nursing home utilization.

Mixed results have also been reported in a more subjective study of the perceived impact of PAS on long-term care. In 1986, InterStudy, a nonprofit health policy research organization in Excelsior, Minnesota, conducted a national study of PAS programs. Medicaid directors and PAS program administrators in all States and the District of Columbia were contacted to determine whether or not they conducted such programs. PAS was defined as an on-site assessment of the need or appropriateness of nursing home placement that goes beyond financial eligibility criteria and physician review. These assessments had to be conducted by a disinterested third party prior to nursing home admission to be considered PAS. Using this definition, 31 PAS programs were identified. Program administrators were interviewed in a brief phone interview, and then asked to complete a comprehensive mail survey. Twenty-five of these 31 administrators returned questionnaires (81 percent). As one part of the survey, respondents were asked to report how they felt PAS had affected community services, nursing homes, and the overall long-term care system (Iversen, 1986). Results are shown in Table 1.

Eighty-six percent of the respondents felt that the utilization of community services had increased due to PAS, and 33 percent felt that PAS had increased community service costs. None of the respondents felt that PAS had decreased the utilization or cost of community services. As for the effect on nursing homes, respondents most frequently reported that the costs and utilization of nursing homes had not been affected. Nearly half (43 percent) of the respondents, however, felt that PAS had reduced the cost of long-term care, with 10 percent perceiving an increase, and 48 percent perceiving that there was no change or they "didn't know."

Table 1
Perceived impact of preadmission screening on community services, nursing home care, and overall costs

| Affected aspect | Total respondents ¹ | Perceived impact | | | |
|-----------------------------------|--------------------------------|------------------|------------|-----------------------|------------|
| | | In-creased | De-creased | Stayed about the same | Don't know |
| Utilization of community services | 21 (100%) | 18 (86%) | 0 (0%) | 2 (10%) | 1 (5%) |
| Cost of community services | 21 (100%) | 7 (33%) | 0 (0%) | 10 (48%) | 4 (19%) |
| Utilization of nursing home care | 23 (100%) | 1 (4%) | 7 (30%) | 8 (35%) | 7 (30%) |
| Cost of nursing home care | 23 (100%) | 7 (30%) | 1 (4%) | 10 (43%) | 5 (22%) |
| Overall cost of long-term care | 21 (100%) | 2 (10%) | 9 (43%) | 5 (24%) | 5 (24%) |

¹ Excludes persons who did not respond to this question.

NOTE: The percents of respondents are shown in parentheses.

These mixed results show the need for additional research on PAS to more accurately determine its effect on costs and utilization of long-term care services. These studies also indicate, however, that PAS may be increasing, rather than decreasing, the overall cost of long-term care, due to an increase in the cost and use of home and community services without a corresponding reduction in nursing home utilization. (PAS could, however, be slowing the increase in long-term care costs.)

Controlling costs

It is possible that the effectiveness of PAS in controlling utilization is reduced because basic assumptions underlying the programs are invalid. Specifically, most programs are developed under the assumption that there are many people at risk of nursing home placement who could be diverted to less expensive home care. This assumption may be erroneous for several reasons. First, it may well be that few persons applying for nursing home admission can be diverted. Surveys have shown that older persons overwhelmingly prefer home care to nursing home care (American Association of Retired Persons, 1985). It is therefore likely that many nursing home applicants and their families have considered nursing home placement option only after other alternatives have been exhausted. This is especially true if applicants are aware of the options available to them. Diversion might be more likely if PAS were conducted well before nursing home admission was applied for or considered.

Diversion may also be difficult if home or community services are not available. In some cases, the individual may not have family or friends who are able to assist them in living at home. In other cases, the supply of community services may be inadequate to meet the needs of the older population. The implementation of DRG's and other prospective payment arrangements has resulted in shorter hospital days. This has reportedly resulted in a greater number of individuals in need of home care services, and many communities apparently have not been able to meet this demand (Pritchard, 1986). Formal community assistance may also be unavailable to some persons because overall demand in the community is too low to warrant the development of a service network. Some rural areas, for example, may not have agencies that provide home health care or other supportive services.

A second problem that may hinder the cost effectiveness of PAS is that it must be assumed that only those persons at risk of nursing home placement are receiving PAS-related services. PAS generally provides clients with both a comprehensive assessment and information about alternatives to nursing home placement. It may also provide home care services to prevent institutionalization. These services are valuable and may be sought out by many persons, not only those at immediate risk of nursing home placement. It is possible that considerable resources

are being spent on assessing and advising persons who are not at risk of institutionalization. This is an especially important factor for programs that coordinate and fund services in conjunction with the screening.

Although important to the success of PAS, evaluating who is at risk of institutionalization is not easily done. Numerous studies have suggested that age, gender, medical health, functional and psychological status, and informal support systems may be indicators of risk (see Secord, 1986, for a review of this literature). However, these variables may interact with one another, and their relative importance appears to vary from study to study. Moreover, several of the factors, such as informal support status, are very difficult to consistently measure or predict.

Although all of these issues are important, perhaps the major factor that adversely affects the ability of PAS to control long-term care utilization lies in the fact that PAS policymakers, administrators, and screening personnel perceive and emphasize different, sometimes conflicting, program goals. Policymakers are likely to be pressured by shrinking State and Federal budgets and escalating long-term care costs. Line staff, however, encounter the pressures of individual clients with long-term care needs. To them, home care may be seen as a benefit for frail older persons in general rather than only for those persons who are at immediate risk of institutionalization. If PAS staff view home care services only as a substitute for institutional care, they may be forced to deny time and services to persons who are not at immediate risk of nursing home placement, but who may need home care services to improve their quality of life.

Results of InterStudy's examination of PAS highlight this difference in program goals. Respondents were asked to indicate what they felt various groups perceived to be the primary purpose of PAS. Considering all groups, "improving the quality of life for the elderly" was perceived to be the most important reason for implementing PAS. Government policymakers, however, were perceived to regard containing or reducing the cost of long-term care as the most important reason. Differences in goals at the policy level versus goals at the implementation level may also explain the previously discussed finding that almost no respondents felt that nursing home costs had decreased as a result of PAS; none felt that community costs had decreased, yet 43 percent felt the overall cost of long-term care had been reduced. Respondents may feel that PAS is supposed to reduce general costs, but when specific costs are considered, they perceive no reduction. Open-ended responses to the survey also strongly indicated that PAS administrators felt that there was a need for more funding and more community services. These results again indicate that policymakers may see PAS as a way to control utilization of services, while PAS administrators see screening as a way to expand the provision of services.

Improving cost control

It appears that, at present, PAS is not an effective utilization control measure for long-term care. While PAS in some States may divert nursing home candidates to home care, the increased utilization of home care may offset any potential cost savings. There are many ways to address this issue.

One method to improve PAS programs' ability to control utilization and costs is to set spending caps. Some States are already doing this. In Ohio, for example, community services may be offered as part of PAS only if the cost of those services is less than 60 percent of the expected cost of nursing home care. Spending caps might be an effective method of controlling costs and utilization if it were certain that only persons at risk of nursing home care were receiving services. As discussed, the ability of current methods to accurately identify these individuals is questionable, however. Also, spending caps provide no assurance that funds will be targeted to those in greatest need.

A second option is to concentrate efforts on developing better methods to predict who is at risk of nursing home care and to provide services only to those individuals. The improvement of these methods is obviously very important in controlling and planning for long-term care costs and utilization, and continued research in this area is essential.

It should be noted, however, that even if more accurate measures of risk were available, problems in employing them would remain. There may be problems, for example, in determining the best time to evaluate whether an individual is at risk. Currently, most programs attempt to screen and provide services only to those persons who are at imminent risk of nursing home placement (e.g., the individual has applied for admission to a nursing home). Risk at this point is most reliably ascertained. As nursing home placement becomes imminent, however, the chances of successfully intervening with supportive services to help the client stay in the community are reduced. This may be one reason why diversion rates appear low. In the InterStudy survey, for example, 60 percent of the programs reported that at least two-thirds of the individuals screened were referred to nursing homes. In 40 percent of the programs, over 90 percent of the PAS clients were recommended for nursing homes. Although earlier screening may improve these rates, this may be inhibited by limited resources and fears of moral hazard.

Another possible way to improve PAS is to maintain tighter control over clients' service use. Better control might be obtained by requiring the screening of all clients, regardless of Medicaid status. Some programs, for instance, screen only those eligible for Medicaid or those expected to soon be Medicaid eligible. Thus, in many States there is no control of service utilization for private pay individuals who eventually "spend down" to Medicaid.

Making screening team recommendations binding rather than advisory is a third way in which more control of service utilization might be achieved. That is, clients could be required to follow the screening teams' recommendations in order to be admitted to a nursing home or to receive Medicaid funds. The InterStudy survey found that as of October 1985, screening team recommendations were binding for all program participants in just under half of the State programs reporting these data. Medicaid eligibles and expected Medicaid eligibles were more likely to be subject to binding recommendations than private pay clients. Requiring the screening of all applicants and making screening team recommendations binding may also be politically difficult in some States. It may be argued that clients—especially private pay clients—should not be required to be screened or to follow the team's recommendations. It appears, however, that these types of controls are important in improving the effectiveness of PAS.

Another option is to recognize that there are benefits to PAS and related home care programs that go beyond cost containment. In this case, the primary goal of PAS would be to increase the awareness of community alternatives, provide families/clients with assistance in making long-term care decisions, and improve the quality of life of the elderly by assisting them in maintaining their independence. Cost considerations, while also important, would be secondary. Community care might be viewed as "a new service directed to a new population" (Weissert, 1984). Weissert advocates this view in his review of research on home and community-based long-term care programs and concludes that "despite unwarranted and destructive, if well-motivated, claims to the contrary, it is not as a substitute for nursing home care that community care has functioned over the past decade since its take-off in this country. It has functioned primarily, and all but exclusively, as a support system for family caretakers . . . The challenge for community care supporters must be to find ways to finance this new mode of care for this new class of patients, not to continue to try fruitlessly to justify community care as something it is not—a substitute for nursing home care or a way to save money." This scenario suggests that those involved with PAS should push for increased funding and program expansion, including the provision of case-management services and community-based long-term care.

The above option is laudable in its concern for the welfare of older persons and their families. The value of PAS in providing a needed and humane public service should not be underestimated. At the same time, however, limited resources dictate that all programs make a serious effort to contain costs and use resources efficiently. Services should be targeted to those who need them most. It is also important to recognize that resources will become increasingly scarce as the elderly population grows.

Although the expansion of current programs is advocated by many, there may be more effective ways

to provide and control adequate services. What may be needed is a restructuring of programs. For example, a fifth, as yet unexplored option for creating an appropriate screening and utilization control program is to provide PAS and related long-term care services within a managed-care system, such as a health maintenance organization (HMO). Programs could be expanded to include the coordination, provision, and funding of a large range of acute and long-term care services. Expanding the program may initially increase costs and utilization. Maintaining control over service use in the long run, however, would appear to be contingent on managing many or all aspects of the client's needs. It is unlikely that utilization could effectively be controlled in a program that assesses clients but provides no follow-up management of services.

Specifically, HMO's could be encouraged to enroll older persons and provide these enrollees with assessment services during their length of enrollment. HMO's may provide cost-effective, high-quality acute care to older persons (Iversen and Polich, 1985). HMO's may also be especially appropriate for the assessment, coordination, and provision of long-term care, because they are designed to coordinate a wide range of services for their enrollees. Such coordination is important for older persons with multiple medical and nonmedical needs and is essential for controlling utilization. A knowledge of many aspects of enrollees' needs also can facilitate the targeting of services to those who most need them. Control of long-term care utilization and costs in HMO's may also be effective because the HMO coordinates care for the individual for a length of time—not only when nursing home care is imminent. The HMO may therefore be in a relatively good position to divert persons from institutions as long as desirable.

One promising set of demonstration projects in the area of managed care for the elderly is the social HMO (SHMO). Four SHMO's were established in 1985 as part of the 1984 Deficit Reduction Act. Like HMO's, SHMO's have a voluntary membership, provide services for a fixed prepaid fee, and have a centrally managed delivery system (Kodner, 1985). Unlike HMO's, however, SHMO's are specifically designed to serve both the frail and independent elderly by providing a broader array of benefits, by placing a greater emphasis on managing and preventing chronic illness, and by emphasizing home and community care. Preliminary results on the SHMO's are mixed, showing considerable variation in cost effectiveness, utilization control, and financial viability by site. A final evaluation is expected to be completed after the projects' planned end in 1988. This evaluation should provide valuable information on the cost and feasibility of providing acute and long-term care to older persons in prepaid plans. The projects may continue into 1991 if the Health Care Financing Administration (HCFA) extends the demonstration period or if individual sites receive funding from other sources to continue.

Although the option of providing screening and case-management services to older persons through HMO's or other managed-care systems deserves serious consideration, more information such as that being collected in the SHMO demonstrations is needed before this option can be evaluated. Data are needed regarding the desirability and feasibility of offering PAS and long-term care services through HMO's. The development of more effective utilization control methods is also necessary before HMO's will expand their services to include long-term care. Further, models need to be developed that demonstrate how long-term care services might be most appropriately funded and delivered in a managed-care system.

Conclusion

In conclusion, PAS appears to be an effective way to provide families and individuals with information about long-term care and to assist them in making appropriate long-term care decisions. At present, however, PAS does not appear to be an effective means of controlling the cost and utilization of long-term care services. The effectiveness of PAS to control utilization may be reduced because it occurs too late in the placement decision process, because there are insufficient placement alternatives, and/or because assessment tools do not adequately identify those who are at risk of institutionalization.

Ineffectiveness may also result from conflicting goals of policymakers to contain costs and of program administrators to provide needed services to the frail elderly. There does not seem to be agreement among those involved with PAS concerning whether home care services are a benefit to frail persons in need of the services or are only a substitute for institutional care. Thus, PAS may result in overall cost increases as the demand for assessment and community care services increases. This may also occur because PAS does not occur in the context of a managed continuum of care.

These observations do not suggest that PAS programs should be reduced or eliminated. A significant goal of PAS is to provide assistance to persons making very difficult decisions about where and how they should receive long-term care services. The value of PAS in meeting this goal should not be underestimated. Even if PAS is not effective in controlling utilization, the humane and necessary service it provides is very valuable in and of itself.

At the same time, however, if PAS can be improved to be both humane and cost effective, then efforts should be made to do so. States should understand that PAS programs as currently configured may not reduce overall long-term care utilization or costs. To a large extent, PAS programs have been implemented and maintained on the basis of assumed cost savings. States are strongly encouraged to support or refute these assumptions through their own program evaluations.

The apparent inability of PAS to control costs might be addressed by emphasizing the benefits of PAS beyond cost containment, setting spending caps, improving methods for identifying individuals who are at risk of nursing home placement, more clearly defining and enforcing program goals, increasing care coordination, making recommendations binding, screening all nursing home applicants regardless of income, and providing screening services within a managed-care system. Consideration of the latter option may be particularly important.

References

- American Association of Retired Persons: Long-term care study shows preference for home care. *Caring* 4(3):22, 1985.
- Callahan, J., Jr., and Wallach, S.: Major reforms in long-term care. In Callahan, J., Jr., and Wallach, S., eds.: *Reforming the long-term care system*. Lexington, Mass. Lexington Books, 1982.
- Carnes, C., and Cook, A.: Nursing home pre-admission screening in Virginia. *Journal for Medicaid Management* 4(1):1-8, 1977.
- Crystal, S.: *America's Old Age Crisis*. New York. Basic Books, Inc., 1982.
- Davis, K., and Rowland, D.: *Medicare Reform*. Baltimore, Md. Johns Hopkins University Press, 1986.
- Farrow, F., Joe, T., Meltzer, J., and Richman, H.: The framework and directions for change. In Meltzer, J., Farrow, F., and Richman, H., eds.: *Policy Options in Long-Term Care*. Chicago. University of Chicago, 1981.
- Garrick, M., Rubin, D., and Wilke, D.: *Long-Term Care System Development Project: Final Report*. Olympia, Wash. Washington Department of Social and Health Services, 1983.
- General Accounting Office: The Elderly Should Benefit from Expanded Home Health Care But Increasing These Services Will Not Insure Cost Reductions. Report to the Chairman on Labor and Human Resources, U.S. Senate. Gaithersburg, Md. General Accounting Office, 1982.
- ICF, Inc.: *Private Financing of Long-Term Care*. Washington, D.C. ICF, Inc., 1985.
- Iversen, L.: *A Description and Analysis of State Pre-Admission Screening Programs*. Excelsior, Minn. InterStudy, 1986.
- Iversen, L., and Polich, C.: *The Future of Medicare and HMOs*. Excelsior, Minn. InterStudy, 1985.
- Iversen, L., Polich, C., Dahl, J., and Secord, L.: *Improving Health and Long-Term Care for the Elderly*. Excelsior, Minn. InterStudy, 1986.
- Kemper, P., Applebaum, R., Brown, R., et al.: *Channeling Effects for an Early Sample at 6-Month Follow-up: Executive Summary*. (Report No. 85-05). Princeton, N.J. Mathematica Policy Research, Inc., 1985.
- Kodner, D.: *Delivery of Comprehensive Long-Term Care to Older Adults*. Chicago, Hospital Research and Educational Trust, 1985.
- Kramer, A., Pettigrew, M., Carter, D., et al.: Colorado Medicaid Long-Term Care Program Level of Care Assessment, Center for Health Services Research. Denver. University of Colorado Health Services Center, 1984.
- Levit, K., Lazenby, H., Waldo, D., and Davidoff, L.: National Health Expenditures, 1984. *Health Care Financing Review*. Vol. 7, No. 1. HCFA Pub. No. 03206. Office of Research and Demonstrations, Health Care Financing Administration. Washington. U.S. Government Printing Office, Nov. 1985.
- Metropolitan Council of the Twin Cities Area: Community-Based Long-Term Care. Unpublished paper prepared for public hearing. Minneapolis, Minn. 1986.
- Oriol, W.: *The Complex Cube of Long-Term Care*. Washington, D.C. American Health Planning Association, 1985.
- Polich, C.: The Pre-Admission Screening and Alternative Grant Programs: A Description and Analysis of Minnesota's Experience. Minneapolis, Minn. Health Futures Institute, 1984.
- Pritchard, R.: Senior-citizen agencies don't help enough. *American Medical News* 29(11):25, 1986.
- Secord, L.: *Institution or Home Care? Predictors of Long-Term Care Placement Decisions*. Excelsior, Minn. InterStudy, 1986.
- Weissert, W.: Seven reasons why it is so difficult to make community-based long-term care cost effective. *Health Services Research* 20(4):423-433, 1984.