The Development of Long Term Care Insurance in the United States

Robert J. Dymowski, F.S.A., M.A.A.A.

Insurance products providing coverage for Long Term Care (LTC) services are being developed and marketed at a rapid pace in the United States. This paper will provide an overview of this activity. The emergence of products related to Long Term Care services in the United States must be understood within the background of the current public and private financing system for such services in the United States.

Health care (including LTC services) in the United States is financed through a combination of private insurance and public programs. To date, the financing of acute care has been the primary focus of both of these sources. The recognition of the growing need for, and cost of, LTC services has resulted in the consideration of ways to finance such care. Concerns about future program costs and limitations of current public programs have resulted in considerable interest in the development of private insurance programs. This paper will focus primarily on this developmental activity.

This paper will describe the products which have been developed, and will discuss some of the actuarial issues raised by these product designs. Finally, it will include some comparative data related to the issue of aging populations in other countries and comments concerning differences between the U.S. and other developed countries with regard to Long Term Care services.

Financing of Health Care in the U.S.

It may be helpful to review some background information concerning the financing of health care in the U.S. before considering the specific developments related to LTC. As noted above, the primary orientation of this financing is directed toward the provision of treatment for acute conditions.

The U.S. does not have a single universal program for the provision of health care services to all citizens. Instead, health care is provided through a combination of public programs and private insurance:

1) Private Insurance - This is provided primarily by employers to their employees on a group basis, but there is also a market for health insurance purchased by individuals. Insurance or prepaid health care can be obtained through insurance carriers, non-profit organizations such as Blue Cross/Blue Shield Plans, Health Maintenance Organizations, or Preferred Provider Organizations. In addition, many employers currently have adopted self-insurance programs through which benefits are administered by third party administrators, but with the full risk of the program being borne by the employer. Financing of private insurance is through a combination of employer contributions and individual premium payments or contributions toward employer sponsored programs.

2) Medicare - This is a Federal program which provides health care services for individuals who are age 65 or older, or who are determined to be permanently disabled or in need of kidney dialysis. Coverage is provided for a wide range of medical care services provided by hospitals, physicians, and other medical providers. This program is financed by Social Security taxes which are contributed equally by employers and employees.

3) Medicaid - This refers to state programs which are financed by a combination of state and Federal funds. These programs provide care for individuals who are considered medically indigent, i.e., having incomes or assets below some specified amount, or who fall into other specified categories of assistance. These programs provide a broad range of services from hospital, physician, and other providers.

An in-depth discussion of these elements of the U.S. health care financing system is beyond the scope of this paper. Each of these elements has specific concerns with regard to the financing of LTC services, which are generally associated with chronic, rather than acute, conditions:

1) Private Insurance - Individuals, employers, and insurers are concerned about the availability and affordability of LTC services and insurance coverage, tax treatment of contributions and reserves, and the future economic value of benefits provided.

2) Medicare - The recent "catastrophic" benefits added to Medicare did not address the issue of Long Term Care. The primary focus of the Federal government has been on reducing the rate of increase in Medicare program costs. Increasing program costs to include LTC services would represent a major change in this focus, and seems unlikely given current concerns over the U.S. budget deficit.

3) Medicaid - As discussed below, Medicaid programs provide the primary source of public financing of LTC services, and are likely to continue to do so. The states are concerned about their ability to finance these services, and are considering ways to integrate their programs with insurance coverage.

Cost, Usage, and Financing of LTC Services

The focus of this paper is on LTC services, which most frequently provide treatment for chronic conditions, and which are provided almost entirely to older individuals. These services are currently financed from two primary sources -- private expenditures and Medicaid programs. Chart 1 indicates that Medicaid provided financing for 43.9% of the total $40.6 billion cost of nursing home care services in the U.S. in 1987, and that private expenditures represented 54.7%. This amount includes 0.9% provided by private health insurance. Only 1.4% was provided by Medicare, which provides the overwhelming portion of financing for all other medical services for the elderly population. The lack of Medicare coverage for such services results in their representing a significant portion of the out-of-pocket health care expenditures for Medicare eligibles.

Past studies of consumer awareness and concerns related to LTC have determined that a substantial majority of individuals believe that Medicare will provide LTC services which they may need in the future. More recent studies indicate a greater awareness of the limitations of Medicare with regard to LTC, however. Medicare does provide coverage for skilled nursing facilities and home health care services, and these benefits have recently been liberalized as a result of legislation relating to catastrophic expenses for the Medicare population. These services are provided only in connection with acute conditions, however, and therefore do not provide coverage for the chronic conditions and loss of independent living capabilities which generate the need for such a significant volume of LTC services.

Concern by individuals about the costs of LTC services have increased interest in the availability of insurance coverage. The average annual cost of confinement to a nursing care facility is currently in the range of $22,000-$30,000, and costs for home care services may range from $20-$60 per visit. Since Medicaid benefits are provided only to individuals who are considered medically indigent, individuals can qualify for benefits under these programs only after spending down their assets to the level required for eligibility.

The likelihood of confinement of an individual to a nursing care facility and the need for utilization of home health care services both increase significantly with age. Chart 2 illustrates the probability of confinement to a nursing care facility by age. These probabilities are based on population data. The chart shows that the probability increases from less than 1% at age 65, to 5% at age 85, and reaches 9% by age 90. Current estimates are that at least 20% of all individuals are likely to be confined to a nursing care facility at some point during their lifetime. The pattern of utilization of home care services is somewhat steeper at ages up to 70, but shows a much more gradual rate of increase thereafter.

The combination of these increasing utilization patterns, and the increasing proportion of older individuals in the U.S. population has raised concerns over both the availability of sufficient facilities and the total cost of providing necessary LTC services in the future. Chart 3 shows the distribution of the U.S. population by age in 1985 and as projected for 1990-2080. The chart indicates that while only 11.8% of the population was

aged 65 or older in 1985, the population proportion is expected to increase to 13.2% in the year 2000, and 17.7% in the year 2020. The proportion is projected to level at about 22% by 2040. Total LTC costs are projected to increase to $80 billion by 1995, and to $175 billion by 2030.

The level of health care costs in the U.S. has been a matter of concern and public debate for some time. Total health care costs represented about 11% of the total GNP of the U.S. in 1987. The comparable percentage in 1965 prior to the introduction of the Medicare program, was about 6%. In addition to concerns over the absolute value of costs and the continued rate of increase, there are concerns with the quality and comprehensiveness of the current health care system in the U.S.. One of these concerns is related to the fact that an estimated 37 million individuals out of a population of about 250 million currently have no form of health coverage. The debate concerning the future financing of LTC service must therefore be seen within this context of overall concern over the level of health care costs within the U.S.. While there is considerable discussion at this time concerning the desirability or likelihood of some form of extension of the Medicare program which would provide such services, it seems unlikely this issue will be addressed before the immediate concerns raised by the health care system as a whole.

Reliance on Medicaid programs provides one response to this issue. Individuals without significant assets can meet the income or asset requirements. The spend down process is not desirable for individuals with assets which they wish to preserve, however. It can result in the loss of an individual's home, the impoverishment of a spouse, and future dependence on the state. In addition, the increases in Medicaid costs for acute care which will be caused by the projected aging of the population will create difficulties in the financing of these public programs even without the added pressures of LTC.

The development of insurance coverage for LTC services represents a response of the private sector to the perceived needs for this coverage. It also recognizes a significant market opportunity represented by the growing segment of the population which is at a high risk of need for LTC services, and has a base of assets which it desires to protect.

Definition of Long Term Care Services

LTC services generally provide treatment for chronic conditions. They also provide assistance to individuals who have experienced some reduction their functional abilities, as opposed to treating a specific diagnosis. They thus represent a broader, less-defined category of services than those provided for acute conditions.

The services to which reference is made in this paper fall into two broad categories. The first of these, institutional care, relates to services which are provided in a nursing care facility. Such facilities must be recognized by the State and Federal governments as providing one or more levels of care including:

1) Skilled Nursing Care - This represents a specified program of care provided on a daily basis under the continuing supervision of a physician and qualified nursing personnel. It may often be provided to an individual as an alternative for continuation of a hospital stay. As such, it is often associated with the treatment of acute conditions.

2) Intermediate or Custodial Care - This level of care is provided primarily in connection with chronic or continuing conditions, although it may also include care performed by skilled medical personnel. The primary recipients of this level of care are individuals who have lost some or all of their capabilities for unassisted living. Care provided is generally based on a physician's orders.

Non-institutional care, or Home Health Care (HHC) services, are provided by a variety of community-based services to individuals who continue to reside in their own homes. Some of these services represent specialized medical care services, such as those provided by visiting nurses, physical therapists or occupational therapists. Such services will normally be provided under the direction of a physician, and maybe related to acute conditions or other specific medical conditions. A broader category of services is provided to allow an individual to continue some degree of unassisted living in his or her own residence. They provide assistance in the activities of daily living (ADL) or instrumental activities of daily living (IADL). The ADLs are largely personal care functions, such as bathing, feeding, or toileting. IADLs are related to home management, such as shopping, money management, or homemaker services. At present, about 75% of such assistance is provided by families or friends rather than paid providers.

The wide array of services provided under the LTC umbrella, combined with the difficulty of determining the initial need for, and continuation of, such services on a precise basis, has complicated the development of LTC products. Both the cost and volume of utilization of these services in the future are difficult to predict without considerable uncertainty.

Long Term Care Product Development

As discussed below, data on the experience of individuals insured for LTC services has not been available. It has therefore been necessary to draw on population experience in order to develop assumptions necessary for product design and pricing of LTC insurance benefits. This lack of data has not prevented the rapid evolution of several generations of LTC products. In addition, marketing pressures and the transference of experience from either some earlier products or other forms of coverage have contributed to a liberalization of the product offerings. These can generally be categorized as follows:

1) Limited Nursing Care Indemnity Products - The first generation of products provided benefits for institutional services only. These were typically provided in limited amounts such as $30-$50 per day, with maximum periods of confinement of 2 to 3 years. Benefits were generally provided under these policies only if the nursing care facility confinement followed immediately on discharge from a hospital stay of at least 3 days, and required that this initial confinement be in a skilled care facility.

2) Richer Benefits, Including Home Health Care - The second generation of policies introduced various categories of home health care services (following a skilled care confinement) and increased both the amount and duration of benefits available for nursing care facilities. In addition, the prior hospitalization requirement was frequently eliminated or made optional. Benefits provided still were required to be medically necessary.

3) Richer Benefits With Managed Care - The most recent generation of products continued the trend of richer benefits established in the second generation. It also introduced concepts of managed care (borrowed from medical treatment of acute conditions) regarding approval for, and utilization of, services provided under the insurance contract. These concepts were reflected in the identification of "gatekeepers" intended to determine the need for, and nature of, services to be provided. They also began to use benefit eligibility definitions based on the failure of individuals to function independently with regard to a specified number or combinations of ADLs. These products also introduced inflation adjustments in order to maintain the economic value of the contracts.

A report of the Task Force on Long Term Health Care Policies reporting to the Secretary of Health and Human Services in May, 1987 indicated that about 423,000 policies of LTC insurance issued by 73 companies were inforce as of April, 1987. Companies selling these products ranged from large national insurers to specialized niche marketers. Articles in insurance publications and discussions at industry meetings indicate that this is an area of product development which is significant to many companies, and that more companies are continuing to enter it.

The products which have been developed have incorporated traditional concepts underlying individual Life and Health insurance products as currently provided in the U.S. The initial thrust of product development has been for policies issued on an individual as opposed to group basis, subject to medical underwriting. They incorporate policy features such as:

1) Level Premiums - For the most part these products incorporate the level premium concept used in Life insurance. This takes maximum advantage of the long time periods involved to create reserve funds for payment of the benefits costs which increase with age. These products are generally being offered on a Guaranteed Renewable basis. This means that insurers guarantee the availability of the product for future renewals, although they retain the right to increase premiums for an entire class of policies as needed. Premium increases may not be implemented without prior approval by State insurance departments.

2) Elimination Periods - This concept was adapted from disability income insurance. It provides that benefits will be payable only following the completion of some period of confinement or some number of home care services. Elimination periods for nursing care coverage generally range from 20 days to 180 days. Elimination periods associated with home health care services may range from 0-100 visits or services, or may be waived if preceded by a nursing home stay. They are intended to provide risk-sharing by the insured, and to discourage excess utilization.

3) Maximum Benefit Periods or Lifetime Maximum Benefits - Maximum benefit periods for confinement to nursing care facilities might range from 2 to 5 years, although some benefits may be provided on a lifetime basis. Home care services might be provided on a similar basis, with 1 home care visit counting as the equivalent of one-half day of confinement in a nursing care facility. Some policies also incorporate a maximum lifetime benefit such as $100,000 or $150,000. This maximum normally relates to the combined amount of nursing care and home health care services payable under the policy. It serves to limit the aggregate risk of the insurer.

4) Benefit Amounts - Most policies provide for payment of benefits on an indemnity basis. At least one Blue Cross/Blue Shield Plan is currently offering coverage on a service basis, however, on a contract in which the Plan covers the full cost of services provided. Benefits are being offered with either an automatic indexing provision or a contractual arrangement under which the indemnity amounts can be increased by a specific amount on a predetermined basis in order to maintain the economic value of the benefits being provided.

5) Waiver of Premium - Most policies provide for a waiver of premiums required under the contract if an individual becomes confined to a nursing care facility for 90 days or more. Premium payments are required to resume if the individual is discharged from the facility. The waiver of premium provision does not normally apply in the case of receipt of home health care services.

6) Nonforfeiture Provisions - The use of the level premium method and the establishment of active life reserves under these policies has raised the issue of whether some form of nonforfeiture provision should be required. At this point, such provisions are not required, although some are offered. The prospect of individuals paying substantial premiums for long time periods with no recognized equity has raised consumer concerns. Some policies have included a reduced paid-up option which provides some defined portion of the original benefit amount if premium payments are discontinued after some specified minimum time period. Extended term and return of premium approaches have also been developed.

Table 1 illustrates the relative cost factors associated with a number of typical product variations. These were developed from the limited population experience data available, combined with judgment.

The preceding discussion has related to the most common form of LTC coverage, which is a health insurance policy issued on the basis of individual underwriting. Alternative approaches and products are also being developed and offered. One of these is the introduction of a LTC rider to a life insurance contract. The rider provides that a specified portion of the face amount of the life insurance policy can be paid out in advance of death, upon confinement of the insured to a nursing care facility. The policy rider specifies the maximum amount of benefits which can be paid on this basis. These payments are subtracted from the face amount of the policy, and the balance is payable on the death of the insured.

A major development in this product area within the last two years has been the rapid development of products being offered on a group basis, as opposed to the individual contract basis discussed above. The form of coverage available to each individual is generally the same as that described on the individual contract basis. Underwriting requirements differ, however, with coverage being provided to all active employees on a guaranteed issue basis. Coverage is also generally provided through the group to dependents of employees and may also be available to parents of employees. Individual underwriting usually is required for such applicants, however. Employers have generally not made any contribution to the cost of these programs. Thus, the group concept relates primarily to the sponsorship of the program by an employer, and the opportunity for the insurer to reduce distribution costs through direct solicitation of large groups of

employees. While the number of programs of this kind is still small, participation levels have ranged from 5%-15%. The level of penetration among younger employees, i.e., less than age 50, has been particularly significant. This indicates an increasing awareness of the eventual need for this coverage, and a willingness to take advantage of a long horizon for funding the associated costs.

These group programs provide for conversion of the group coverage to an individual contract upon termination of the employee relationship, or on termination of the group contract by the employer. Further development of LTC coverage on a group basis may be encouraged by the inclusion of LTC coverage as an option in flexible benefit programs sponsored by employers.

Continuing Care Retirement Communities (CCRC) represent a specialized form of LTC services. These organizations are residential communities which generally provide some guarantee to their residents of a complete range of LTC services, as needed, including confinement to a nursing care facility operated by the organization. Most of the original organizations of this kind provided substantial guarantees concerning such services. Some of the newer organizations offer less comprehensive guarantees, and in some cases have made insurance coverage available to their residents for purposes of financing the LTC risk. This has led to the development of specialized insurance products for use in such situations.

Actuarial Concerns

The lack of insured experience data from which to develop pricing assumptions represented the initial concern of actuaries involved in the development of LTC products. The data available comes from "snapshot" studies of nursing home populations and users of community-based home care services as observed in the general population. Such data does not reflect the increased demand for services which can be expected in the presence of insurance, or the likelihood of replacing family or volunteer services by paid services. Data required to develop prices includes frequency and length of confinement, nature and cost of services provided, reasons for confinement or discharge, and the demographic characteristics of the observed population. More recently, longitudinal data providing a history of usage by individuals over a multi-year period has become available for both institutional and non-institutional care, although data for the latter is still very limited.

This data must be interpreted carefully, however, and adjusted to consider the effects of underwriting, benefit design, and claim administration practices on utilization levels. The data available often did not lend itself to analysis for purposes of developing the pricing effects of the features which have been introduced into LTC products.

One of the major concerns in the development of assumptions regarding utilization is the extent to which future utilization will be changed from the levels observed in population data due to the availability of insurance coverage. This is referred to as the moral hazard or induced demand which might be represented by the availability of insurance coverage. It is also recognized that a significant portion of care for individuals in need of LTC services is currently provided on an unpaid basis by relatives, friends, or volunteers. The availability of insurance benefits for such services may cause a significant increase in their utilization.

A similar concern relates to projections of the future costs of such services. As noted above, most policies issued to date have avoided or limited the inflation risk by providing indemnity benefits or limited increases in benefits to offset some portion of the expected increase in the cost of services. There is a significant concern that the pattern of high rates of increase in cost of services observed in connection with U.S. hospital costs following the introduction of Medicare in 1965 will be repeated with regard to the expansion of available nursing care and community service facilities. It is expected that the availability of reimbursement through insurance programs will attract additional investors to the development of these facilities, and that competition to develop and maintain attractive facilities and services will create continuing cost pressures.

While LTC products may be insulated from the inflation risk with regard to their pricing assumptions they still need to be able to maintain their economic value. Even if partial provision for inflation is contained in a product, the continuation of a significant differential between the assumed inflation adjustment and actual inflation over an extended time period will have a severe impact on the economic value of the benefit. For example, an average annual difference of 3% between the inflation protection available in a benefit and the actual increase in the cost of services over a 10 year period would reduce the economic value of the benefits by 26%. The comparable value for an average difference of 5% would be 39%. These differences would be much greater if longer time periods are considered.

The definition of the occurrence of the insured event creates a major difficulty in developing prices for LTC products. Unlike Life insurance or Medical insurance, a considerable amount of subjectivity may be involved in the determination of what services a particular individual needs, and the length of time over which these services will be provided. As noted above, considerable effort is now being addressed to the development of products which incorporate managed care approaches. These involve the assessment of individuals on a case by case basis, and the establishment of a treatment plan. The intent of this treatment plan is to identify the level of services needed, and the appropriate combination of institutional and community-based services. One of the objectives of this process is to enable individuals to remain outside an institutional setting for as long as possible. This reflects the stated desires of most individuals to avoid confinement to a nursing care facility. The results of a demonstration project sponsored by the Health Care Financing Administration were somewhat discouraging in this regard, however, since they indicated that total program costs were not able to be reduced by an increased emphasis on community-based services as opposed to institutional services. While this has been attributed to the nature of the populations served in the demonstration project, it has raised some questions about the long-term cost-effectiveness of such an emphasis.

These elements combine to create a considerable amount of uncertainty with regard to prices currently being developed for LTC products. The actuary's concern in the future will therefore be the careful monitoring of the experience under these products and the maintenance of adequate reserves. A considerable range of prices appears to exist for current products. These prices reflect differences in corporate philosophies and objectives, as well as differences in their underlying assumptions. Maintenance of adequate premium rate levels for such products in the U.S. is complicated by the need for approval by State insurance departments. These regulators have made it very difficult for insurers to obtain necessary rate increases in connection with individual health insurance products. The long term nature of LTC products, and the expectation that experience may be slow to emerge, are likely to be significant problems in justifying future rate increases for these products.

Comparisons to Other Countries

The increasing awareness of the need for, and cost of, LTC services is wide-spread among developed countries. The existence of comprehensive health and social service systems in virtually all countries except the U.S. results in a transfer of these concerns primarily to the public sector. Opportunities for the development of supplemental insurance products may arise, but these are likely to be limited.

The demographic pattern projected for the U.S. is repeated for many other countries as well. Chart 4 displays the projected growth of the population aged 65 and over between 1960 and 2000 in relative terms (1980 = 100). The unweighted average of the ratios of the indices for 2000 vs 1960 for the countries shown in Chart 4 is 2.05, with a range of from 1.31 for Ireland to 3.60 for Mexico. The U.S. ratio of 1.84 is slightly less than the average.

Most developed countries are addressing their concerns over LTC services within the framework of existing national insurance or health service systems. While these have had a significant emphasis on medical care related to acute conditions, they have also developed significant elements of coverage for long term needs. LTC services have not yet become a concern to developing countries, since their immediate priority is to develop and provide adequate funding for basic health programs.

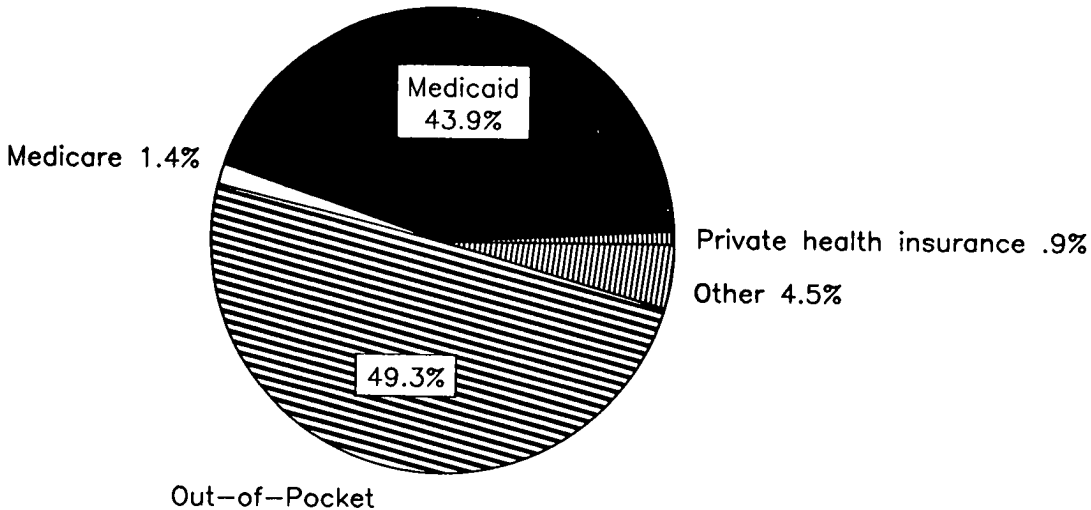
There does appear to be a recognition of the additional resources which will be required by an aging population. This has caused analysis of the nature of the services provided in an attempt to provide the most effective balance between community and institutional services. In general, the emphasis appears to be on community - based services intended to maintain individuals in their own residences. This requires a consideration of the proper allocation of resources between health and social programs. Such concerns are illustrated by the following excerpt from a report issued by a U.K. Royal Commission on the National Health Service (1970, p. 79):

> "Services for the elderly will make increasing demands on health and local authorities for the rest of this century. We are concerned that without greater shift of resources that are yet evident neither health nor local authority services will be able to cope with the immense burden these demands will impose."

Based on these considerations, the role of the actuary in the development of LTC programs in other countries will most likely be through the analysis and projection of experience for national health or social security systems. LTC benefits may be viewed as a combination of health, disability income, social service, or pension benefits. The combination of the aging population and the age-related utilization patterns will increase the importance of accurate projections of expenditures for these programs.

From the perspective of a U.S. practitioner, it appears that the development of LTC services and insurance programs in the U.S. might draw on the experience and examples of other systems more than it has to date. The Canadian system, in particular, has provided some experience which has been used in developing pricing assumptions. Despite the current level of product development in the U.S., expectations are that insurance products will provide only a small portion of total LTC financing requirements. The need for effective use of the funds available for public programs will cause the U.S. to seek models from the experience of other countries.

Chart 1
Nursing Home Care Expenditures (1987)
Total Expenditures: $40.6 billion



SOURCE: HCFA, Office of the Actuary

Chart 2

Nursing Care Confinement and Home Health Care Utilization Frequencies

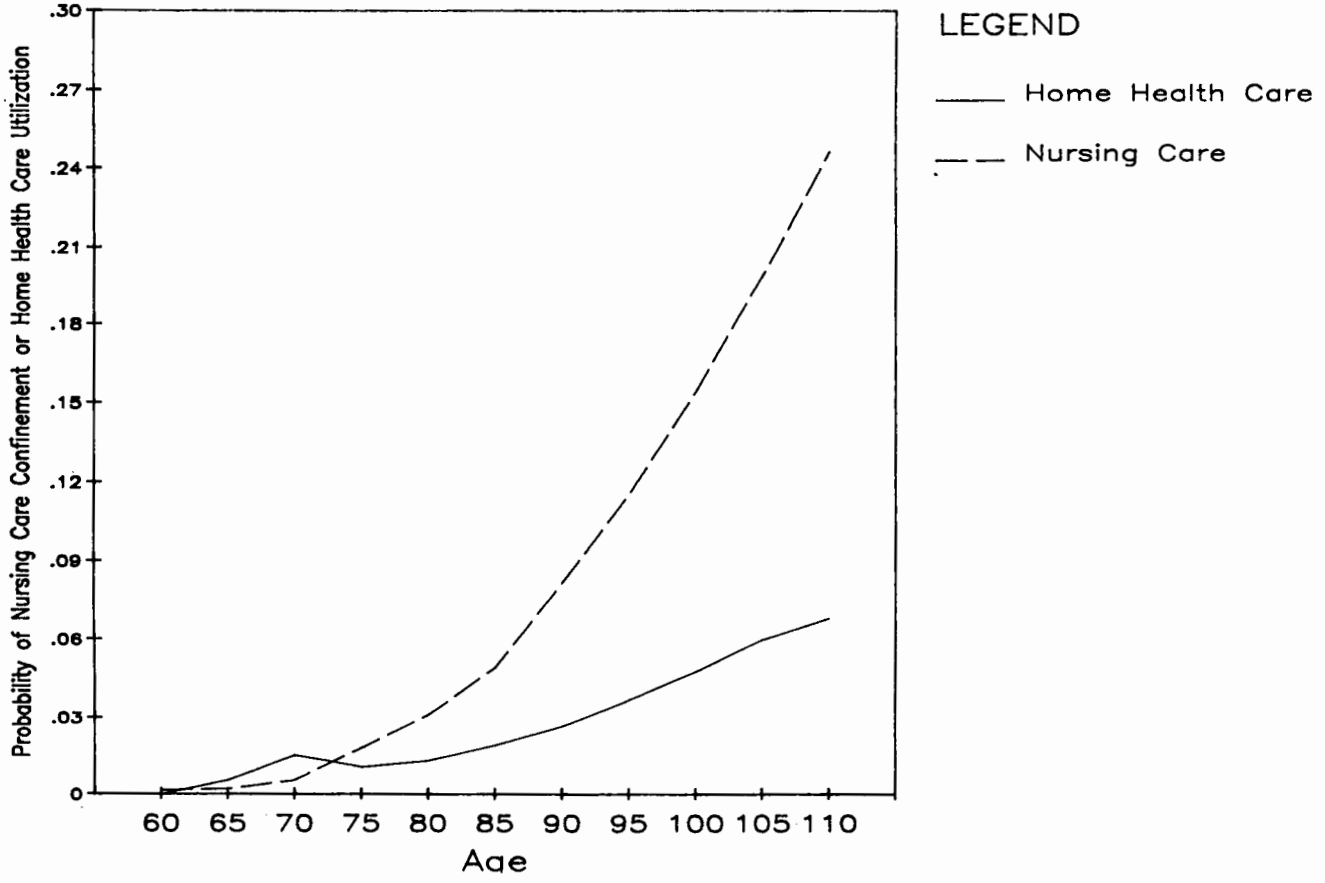


Chart 3
Distribution Change of U.S. Population

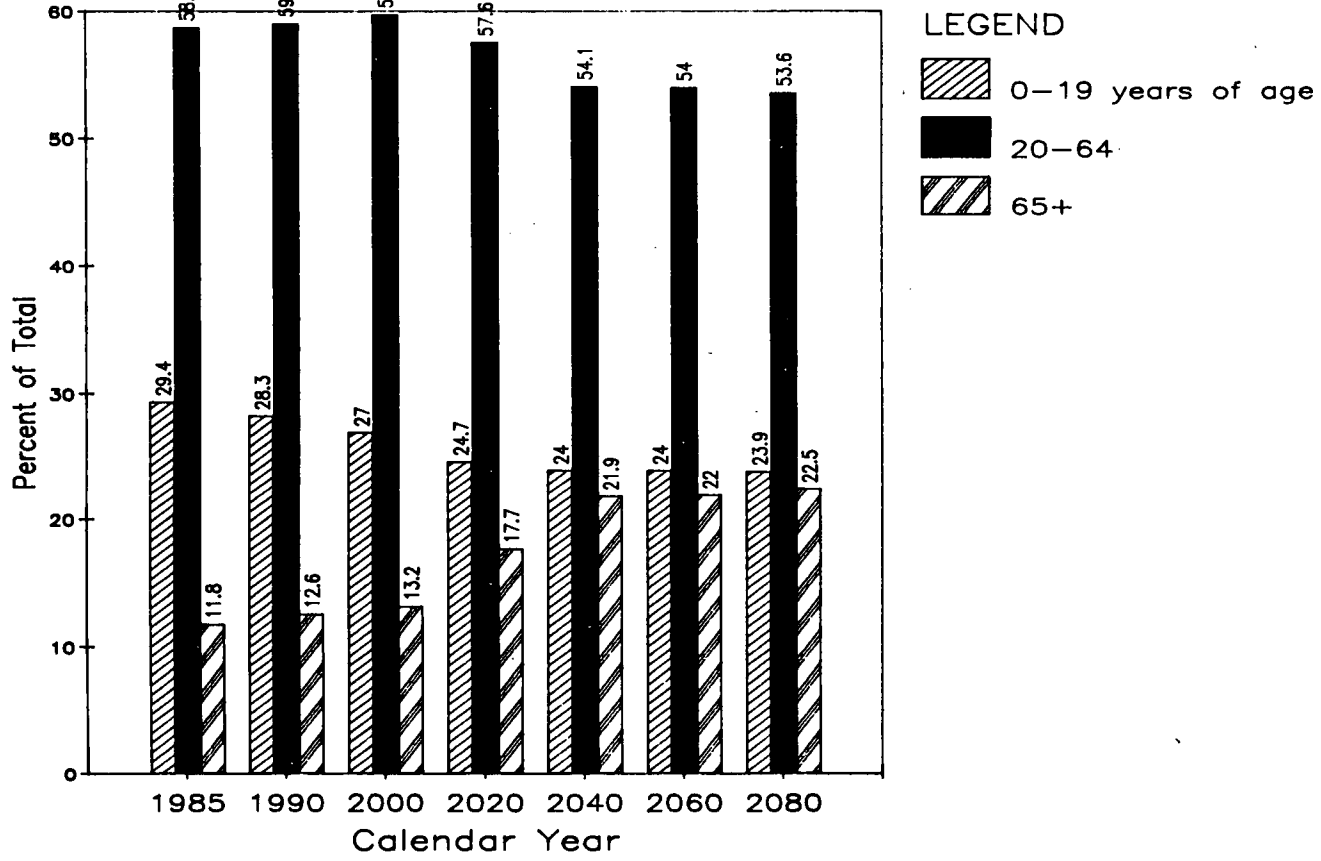


Table 1
Relative Cost Factors for Nursing Care Coverage

1. Definition of Base Benefit (Cost Factor = 1.00)

   - Nursing Care Coverage only
   - Indemnity benefits with no inflation indexing
   - 30-day elimination period
   - 3-year maximum benefit period
   - No premium waiver provision
   - Level premium, lifetime payment period, issue age 67

2. Factors for alternative combinations of elimination periods and maximum benefit periods (days/years):

Elimination Period/Maximum Benefit	Related Cost Factor
0 / 2	.81
60 / 3	.96
120 / 4	1.09
90 / 4	1.12
60 / 4	1.16
120 / 5	1.23

3. Factor for waiver of premium after 90 days' confinement: 1.01

4. Factor for annual inflation adjustment of 5% per year: 1.37

5. Factor for limited payment period:

Payment Period (years)	Relative Cost Factor
20	1.02
15	1.06
10	1.21

Note: All factors relate only to base benefit cost, and may not be combined with other benefit combinations without further adjustment.

Chart 4

Index Numbers for Relative Sizes of 65+ Age Groups

(Size of 65+ Age Group in 1980=100)