

# Long Term Care Insurance Purchase: An Alternative Approach

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*Due to uncertain future income and premium increases as well as the negative ramifications of letting a policy lapse, educators and advisors should consider the advantages of the self insurance option for long term care. Self insurance offers the flexibility of using funds for long term care or basic living expenses if other funds are depleted, and allows assets to be passed onto heirs if no or little long term care is required.. However, self insuring would provide only approximately one third of the insurance coverage provided by a competitive long term care insurance policy.*

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## Introduction

Deciding whether to buy long term care insurance (LTCI) presents a dilemma. Will you need it? Can you afford it? Can you afford *not* to purchase the insurance? Long term care insurance is being aggressively marketed by sales persons anxious to motivate potential buyers by citing high nursing home costs and alarming statistics on the likelihood of needing long term care. As with life insurance, LTCI is often “sold rather than bought.” Sales commissions are substantial (Consumers Union 2003) so consumers should be wary of aggressive sales tactics. Consumers need to conduct a thorough analysis of their retirement assets and anticipated income sources in relation to their projected living costs in retirement before considering purchasing LTCI.

Too often the decision on LTCI is presented by consumer educators and mass media articles (e.g., Driscoll, 2003; Franklin, 1999) as a two stage decision making framework; first, are the premiums affordable, and, second, which company and options to choose. Low income, low asset consumers simply cannot afford LTC insurance and must rely on family or friends to provide needed care or on Medicaid to pay for a nursing home. Medicaid is a federal-state partnership; federal regulations do not mandate community-based or in-home care so coverage varies greatly among states and can change at any time (O’Brien & Elias, 2004; Driscoll, 2003). High income, high asset consumers have sufficient resources to self insure for the costs of long term care but still may choose to purchase insurance in order to preserve their assets for a bequest. For consumers in the middle, who fear an extended nursing home stay depleting their assets and potentially impoverishing a spouse, the decision to purchase LTCI calls for guidance beyond

what can be found in existing literature or from industry sales representatives.

This study will provide practitioners with the background to develop educational programs and individual planning strategies. The question of whether to buy long term care insurance is similar to that for a home mortgage--“should I pay off my loan early?” Both questions require a through analysis of multiple financial goals, risk management strategies, and long term financial projections. In addition, a longevity analysis is essential to planning for long term care.

## Decision Framework

To buy or not to buy--should that be the question? Most discussions of whether to buy LTCI simply focus on a dichotomous “yes or no” framework. This paper presents one alternative decision making framework for funding long term care based on the risk management principle of self insurance. There are many problems with the one-dimensional emphasis on either buying insurance or simply going without and hoping you won’t need it. Insurance is only one option for paying for long term care expenses. Self-insurance can be used to expand coverage.

Although LTCI is marketed primarily as a means of paying for expensive nursing home care, policies generally cover assisted living facilities and home health care, but often at a lower rate than for nursing home care. For example, many policies pay 50% of the nursing home benefit for home health care expenses (Consumers Union, 2003). However, extensive home care can exceed the cost of a nursing home (Driscoll, 2003). What is often omitted from the discussion on long term care is another option; that is, to self insure by investing the annual premium. This paper illustrates

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an alternative approach to financing long term care expenses through self insurance using the basic principles of risk management and a time value of money analysis. The decision making framework builds on the extensive literature documenting baby-boomers' lack of resources to pay for the expenses of a lengthy retirement with much higher health care expenses than the current generation of retirees. If consumers purchase LTCI during their working years without considering the affordability of premiums after retirement, many purchasers will let their policies lapse because they cannot afford the premiums. According to Merlis (2003, p. 12) LTCI is "a 'lapse-driven' product, because its pricing is so heavily dependent on the assumption that many purchasers will drop out before incurring claims."

### **Risk Management**

The need for LTC is a pure risk scenario with only potential losses resulting from the cost of care, both direct expenses and indirect opportunity costs for non-paid caregivers. Depending upon the individual's level of risk tolerance, risk management provides a framework to address the potential risks, or costs, associated with LTC needs. Dorfman (1987) offers six alternatives to purchasing insurance: risk avoidance, loss prevention, loss reduction, risk transfers, risk assumption, and self-insurance. A risk management plan to address potential LTC needs should include multiple strategies to minimize the potential costs. However, a risk avoidance component to the strategy is not considered a viable option because the potential need for LTC may arise through normal aging as well as normal and routine daily activities, both of which would be impossible to avoid.

Loss prevention and loss reduction measures may provide other effective strategies to minimize potential costs. Certainly the individual's lifestyle choices, ranging from diet and exercise to recreational and leisure activities may prevent or reduce the potential need for LTC. However, LTC needs may arise in spite of healthy lifestyle choices and may not be effectively controlled by individual action.

Risk transfer can also be used to manage the potential costs of LTC. Pre-arranged family agreements may effectively transfer the costs of LTC to children or other family members. For low-income individuals and households, LTC costs may be transferable to Medicaid, although the planned and intentional transfer of risk to Medicaid is not an option.

Risk assumption and self-insurance may also be effective risk management tools for the individual. The conscious decision to assume the potential costs of LTC is one alternative. In order for this alternative to be successful the individual must first have the

resources to cover any potential costs. If the individual lacks the current resources to cover potential costs, yet still desires to manage the risk of LTC needs by assuming the risk, a self-insurance program must be implemented.

Conceptually, an individual has several strategies available to manage the potential cost of LTC. The individual's values and attitudes, including risk tolerance, will restrict which options the individual chooses to manage LTC costs. This paper focuses on self-insurance versus purchased insurance as one alternative to manage the potential costs of LTC.

### **Background and Review of Literature**

Long term care insurance is being aggressively marketed to baby boomers and pre- and early-stage retirees who are concerned about the potential cost of long term care. Sales people have a powerful incentive to sell policies considering the commissions involved: 50% of the first year's premium and 10% per year thereafter (Consumers Union, 2003). The number of companies selling LTCI grew dramatically from 30 insurers in 1986 who sold about 200,000 policies, to 125 insurers in 1995 (McNamara & Lee, 2003). In 2000 about 4 million LTCI policies were in affect (Merlis, 2003). Over 100 companies of varying financial status now offer policies (Health Insurance Association of America, 2003). With nursing home costs averaging \$50,000/year (Health Insurance Association of America, 2003) to \$66,000/year (Metlife Mature Market Institute, 2003) with higher costs in many urban areas, a lengthy nursing home stay for one spouse could deplete a couple's retirement assets. Many midlife boomers are now experiencing the LTC costs incurred by their aging parents. Numerous mass media articles play heavily on the scare tactics of escalating nursing home costs and the high likelihood of a lengthy nursing home stay. Most of these sales pitches present a dichotomy: buy insurance or go bare and risk depleting one's assets and becoming dependent on Medicaid.

#### *Likelihood of Needing LTC*

The projected cumulative need for long term care for the elderly is growing steadily from 7 million persons today to 9 million elderly by 2005 and 12 million by 2020; persons age 65 and older face a lifetime risk of 40% of needing nursing home care according to the U.S. Department of Health and Human Services (Health Insurance Association of America, 2003). Along with increasing longevity comes a higher risk of needing long term care. While LTC typically is associated with nursing homes, most care is provided in the person's home by an unpaid family member (U.S. Department of Labor, 2000). A potential moral hazard exists with LTCI. If more individuals were

covered by LTCI policies, demand for nursing homes and home health care may be much higher than current statistics suggest. It is not clear what role affordability plays in the decision to care for an elderly person in their home rather than placing them in a nursing or assisted-living home. Medicaid coverage varies among states, but may pay only for nursing home care, thus affecting the number of seniors receiving care in nursing homes when assisted living or home health care might be more appropriate.

The average age at which Americans enter nursing homes is 83 (Consumers Union, 2003). No data were found on the age at which Americans enter assisted living facilities or start paying for in-home care. For elders who have the resources to pay, there may be a continuum of care from in-home to assisted living to eventually a nursing home.

LTCI marketers typically cite statistics that for persons age 65, the lifetime risk of needing nursing home care is 43% and the average nursing home stay is 2.3 years (Liang, Liu, Tu, & Whitelaw, 1996) which, at \$50,000 per year would cost \$115,000. A variety of sources cite the likelihood of needing LTC as one in two or 50% (Driscoll, 2003). However, analysis by a CPA of 1999 data from the National Center for Health Statistics for persons age 45 and older indicates that the length of nursing home stay for discharged patients is just over one year; 74% of female and 79% of male nursing home patients stay one year or less (How long will you stay?). Liu, McBride, and Coughlin (1994) report that one-third of nursing home stays are for 90 days or less. Most nursing home stays are brief, with more than half lasting six months or less; only 7 - 8% of residents remain more than three years (Matthews, 2004).

Cohen, Tell, and Wallack (1986) calculated that 13% of the elderly account for 90% of nursing home expenditures. While 9% of nursing home residents stay five years or more, 68% reside in a nursing home for less than three months (Kemper, Spillman, & Murtaugh, 1991). However, current statistics on nursing home use may not accurately predict use 20 to 25 years in the future, the time line for many consumers currently considering purchasing LTCI. With more alternatives to nursing home care available in most urban areas in the form of assisted living centers and in-home care, the likelihood and duration of nursing home stays may decrease, particularly for those who have the resources to pay for their care. However, residents of rural areas have far fewer options in both number and variety of caregivers (Rider, 2003).

By analyzing data from the National Long-Term Care Survey and the National Nursing Home Survey, Manton and Gu (2001) concluded that the disability rate is declining at an accelerating rate and that institutional residence declined from 1982 to 1999 despite a 30% increase in the population age 65 and older. More elderly are being accommodated in assisted living facilities and at home, with relatively fewer elderly living in nursing homes. This trend toward in-home care and in less expensive residential facilities should be considered when contemplating purchase of LTCI. A study of the eight largest insurance companies selling LTCI revealed that 47% of policy beneficiaries were receiving benefits while being cared for at home (Cohen, Weinrobe, & Miller, 2000). Home care for a couple hours a day typically costs less than a nursing home so policy benefits are often paid at one half of the nursing home rate. Perhaps less is being spent on in-home care because relatives and friends are helping out and seniors living at home require limited care. However, round-the-clock paid care at home is more expensive than a nursing home (Driscoll, 2003; Lankford, 2004). Insurance companies have an incentive to encourage less expensive alternatives to nursing home care at the same time that aging-in-place is highly desired by elders. Family and friends are the sole caregivers for 70% of the elderly (Health Insurance Association of America, 2003).

#### *Gender and Long Term Care Needs*

While the data show that 50% of persons age 65 and older will need care, gender differences need to be considered. There is a large disparity in longevity and nursing home residence between men and women. A visit to a nursing home will confirm that women far outnumber men. Most elderly men are cared for by their spouses in their own homes; it is the widowed wives who end up in the nursing home. "Long-term care is overwhelmingly a woman's issue. Women live longer than men. They become primary caregivers for LTC service and in the end they are the primary recipients of LTC. Women also have more financial barriers to LTC than men" (U.S. Department of Labor, 2000, p. 3). Many Caucasian, middle- and upper-income women can expect to live into their nineties. According to a study by the New York State Medicaid Office (cited in LTCI Decision Assistance Center), 80% of nursing home admissions are female with an average age of 82, most of whom are widowed; Women stay 50% longer than men. Stum (2003) provides convincing evidence that women are most likely to need long term care, especially those projecting a lengthy lifespan.

*LTCI Costs and Purchasing Behavior*

The cost of a year in a nursing home averages \$50,000 (Health Insurance Association of America, 2003) to \$66,000 (Metlife Mature Market Institute, 2003). Assisted living facilities vary considerably in services and costs with an average monthly cost of \$2,159 or \$25,908 per year in 2002 (Metlife Mature Market Institute, 2002). Jackson, MS reported the lowest monthly assisted living cost at \$592; New York City topped the price list at \$3,697/month.

LTCI is costly and premiums vary considerably, based on age at the time of purchase and the policy options. The Health Insurance Association of America (2003) provided 2001 premium estimates for a policy that provides \$150 per day benefit, a 90-day elimination period (deductible), and four years of coverage. The premiums were: \$510/year at age 50, \$1,263/year at age 65, and \$5,265/year at age 79; with an inflation feature the respective premiums would be: \$1,009, \$2,273, and \$7,588.

Using the Health and Retirement Study (HRS) data from 1996, 1998, and 2000 McNamara and Lee (2003) reported a substantial policy lapse rate from 1996 to 2000. Of the 700 subjects out of 6,220 reporting LTCI policies in 1996, only 23% maintained their policies through 2000. The researchers attribute this high lapse rate to a lack of information on the risks of LTC and lack of knowledge about affordable policy options. An industry report published in 2004 stated that seven out every ten LTCI policies sold are still in force (America's Health Insurance Plans, 2004).

The difference in observed lapse rates is likely a result of the different samples. McNamara and Lee used predominantly older individuals and a nationally representative sample. The industry sample may have a much younger average age and also includes group sales, both of which may affect the lapse rate. McNamara and Lee's findings provide a glimpse of the policy lapse rate among a certain segment of the population, yet may not be indicative of the entire population.

*Recommendations for Consumers*

A severity and frequency risk assessment provides a framework for deciding whether to buy insurance or self insure. Consumer educators recommend that insurance be purchased for high severity exposure, whether low or high frequency (Garman & Fogue, 2003). Individual consumers need to estimate their likelihood of needing LTC based on a longevity calculator, family and personal medical history, and gender and then determine whether to buy LTCI or self insure. Persons who have a spouse to protect have a different decision framework than singles. For married couples, the wife will most likely outlive the husband;

therefore, one could approach the decision as if one were single.

The Purdue Cooperative Extension (2000) web course "Planning for a Secure Retirement" provides two life expectancy calculators to help assess longevity and, thus, the likelihood of needing long term care. The longer the expected life span, the more likely the need for care, particularly for women with projected life spans of 85 or more.

A number of guidelines have been developed as to who should consider purchasing LTCI and at what age one should buy. According to Consumers Union (2003), consumers should consider purchasing LTCI only if they meet the following criteria: age 55 or older with a chronic medical condition or family history that indicates the need for nursing home care, assets of \$200,000 to \$1.5 million, the desire to protect assets for a spouse or relatives, capacity to absorb potentially high premium increases, and no family member who is willing to provide care. Other guidelines for determining whether to buy LTCI are considerably less stringent (e.g., Driscoll, 2003; Stum, 2003).

Due to steep increases in initial premiums based on age, policies often appear to be most affordable for persons in their mid 50s to early 60s, because this age group is often near its peak earning years. However, a combination of factors make premiums less affordable once one retires: lower income, less income security, increasing health care expenses, and inevitable premium increases. Although delaying purchase results in substantially higher premiums, consumers need to recognize that actuaries have calculated premiums so that persons who purchase early at lower premiums pay for a longer period (Driscoll, 2003). Considering the time value of money, each consumer pays a similar amount on average. However, the early purchaser buys more years of protection and peace of mind.

The main problem facing LTCI purchasers is whether they will be able to continue to afford rising premium payments for the decades between initial purchase and potential use. The problem is particularly acute for persons who make the purchase when they are in their prime earning years and enjoy employee health and retirement benefits. A premium that is affordable during earning years with steady and predictable income may become unaffordable once retired, particularly for a woman after the death of her husband. A lapse in policy coverage because of failure to pay premiums negates the advantage of having purchased the insurance.

While long term care may be required by younger persons due to disability caused by accident or illness, the majority of policies are marketed to cover the costs

of care for the dependent elderly who are the focus of this analysis. Many seniors prefer to age in place in their own homes and may choose to pay a relative to provide care. Care by a family member is excluded from coverage by most policies except the Federal LTCI Program (Driscoll, 2003). Further, tax qualified policies will not pay when the insured is expected to require care for less than 90 days; this requirement is separate from the elimination period (Driscoll, 2003). Another complicating factor is that an elderly person may need assistance with shopping, transportation, meal preparation, laundry, money management, etc. in order to stay safely in their home, but may not qualify for policy payments due to not needing help with at least two of the standard six activities of daily living (ADL): bathing, continence, dressing, eating, toileting, transferring (Driscoll, 2003).

Ironically, purchasers of LTCI risk buying coverage that may not be there when they need it. The recent Consumers Union (2003) analysis of 47 policies offered in California by seven companies concluded that the insurance is complicated and “fraught with uncertainties” (p. 21). Some of the companies are unlikely to remain financially viable. Consumers Union reports that National Association of Insurance Commissions data reveal that LTC policies paid out only 35% of premiums in 2001. One could argue that is because so many policy holders are in the early stages of ownership and not likely to need care for decades, but the low pay out ratio is another concern about the product. Matthews (2004) reinforces concerns about the industry.

#### *Retirement Funding Needs*

As became apparent after the stock market bust of 2000, most baby boomers and pre-retirees need to allocate more of their financial resources toward building up their retirement accounts rather than buying an insurance policy that they may never use. Extensive research on retirement savings adequacy of Americans indicates that most boomers and pre-retirees are woefully behind in preparing for the overall expenses of a potentially lengthy retirement (Fore, 2003; Weller, n.d.; Wolff, 2002). Recent studies of residents of Massachusetts, Kansas, and Oregon (Employee Benefit Research Institute, 2003) reveal that most single women and many single men will have insufficient financial resources to fund even basic living expenses in retirement. Although married couples are less at risk of not being able to support themselves in retirement, many married women will eventually become widows at risk. Merlis (2003) concluded that only 20% of workers should consider purchasing LTCI; the rest are inadequately insured for more immediate risks such as life, health, and disability or need to save for retirement. Before considering

LTCI, the consumer needs to conduct an analysis of their retirement resources, beginning with a longevity analysis.

#### *Long Term Care and Retirement Planning*

Fuller, Zietz, and Calcote (1997) provide a comprehensive overview of payment options for long term care and the rising need for care based on the needs of aging baby boomers. They recommend financial counselors take a more active role in helping clients assess their needs for LTCI. However, as is true for much of the literature on planning for long term care, the tradeoff between buying LTCI and using the same resources to meet minimum living expenses in retirement were overlooked. Stum (1999) recognized the need to integrate planning for long term care costs with retirement planning education. Stum’s review of over 80 LTC resources identified the need to link these two topics. The research on retirement preparation adequacy of baby boomers (Fore, 2003; Weller, n.d.; Wolff, 2002) clearly indicates that, despite the need to prepare for the costs of LTC, most boomers must first build a solid foundation to fund basic retirement costs. Without a strong foundation, many purchasers of LTCI will inevitably end up dropping their policies because they are unaffordable.

Consumers with low incomes and assets cannot afford LTCI and will have to depend on relatives or Medicaid to cover expenses if they need LTC. The viability of Medicaid funding is a separate public policy concern not addressed in this paper. The wealthy have sufficient assets to self-insure as well as the resources to purchase insurance if they choose. It is the members of the middle income and asset group that face decisions on providing for long term care. This analysis focuses on one option, self-insurance, to finance long term care.

#### **Self Insurance Analysis**

Most consumer oriented sources on LTCI recommend waiting until one is at least 50 to 60 years old to purchase a policy (Consumers Union, 2003; Franklin, 1999). The average age of entry into a nursing home is 83 years old (Consumers Union, 2003), suggesting the need to pay premiums for two to three decades. This analysis calculated the future value of the monthly premiums if they were invested rather than used to purchase insurance. Three alternative rates of return on hypothetical mutual fund portfolios were assumed: a conservative fund yielding 6% average annual total return, a moderate risk portfolio with an 8% annual return, and an aggressive portfolio invested primarily in stocks with an average return of 10%. A tax-managed fund, which seeks to minimize taxation of returns to shareholders through low investment turnover and offsetting gains with losses, is recommended for this account.

As recent history illustrates, investment markets do not provide steady, predictable rates of return over time. Because a long time horizon is involved, constant annual returns were used which regularize erratic investment returns. Although this analysis focuses on covering the cost of nursing home care, the funds would be available to pay for whatever care is needed, whether at home, in assisted living or any other setting. The high cost of nursing home care is typically emphasized by LTCI sales persons and represents the extreme cost scenario that an individual is insuring against.

Premiums from the Federal Long Term Care Insurance Program's website were used because the program is a joint operation of John Hancock and Met Life and is one of the largest providers of LTCI in the country. Premiums were calculated for an individual at ages 55, 60 and 65. Several options for coverage were available. The policy options selected for this analysis were: 3 year benefit period, 90 day waiting period, \$200 daily nursing home benefit, comprehensive coverage (includes 100% of daily benefit for home hospice care and 75% of daily benefit for home care and adult day care services), and 5% automatic annual compound inflation protection.

#### *Policy Options*

A benefit of \$100/day amounts to \$36,500/year, which is less than the average nursing home cost of \$50,000 - 66,000; \$200/day = \$73,000 which is above the current average yearly cost. Two authoritative sources (Health Insurance Association of America, 2003; Metlife Mature Market Institute, 2003) provide substantially different estimates for the average current cost of nursing home care, \$50,000 and \$66,000. Both dollar amounts are used in this analysis. Only persons anticipating living in a high cost area such as Alaska, Hawaii or New York City would be advised to select the \$300/day benefit.

As shown in Table 1, the premium for a \$100/day benefit with 5% inflation is similar to the cost of \$200/day benefit with a periodic inflation adjustment. The \$100 benefit would not cover average costs today nor would it likely cover costs in the future. However, a \$100/day benefit with 5% inflation adjustment may be a suitable choice for a person wanting to insure for part of the cost of LTC. Consumers need only to plan for the additional marginal cost of care beyond routine living expenses, not necessarily the entire cost of the nursing home or assisted living facility. When an individual enters a nursing home, some living expenses may no longer be necessary. The money used for these expenses can then be directed towards the LTC costs. Individual planning will determine which living expenses will persist. The \$200 benefit would more

than cover expenses in the average cost nursing home today. The 5% inflation adjustment provides automatic coverage for future cost increases compared to the periodic adjustment which occasionally allows the insured to purchase additional coverage for an increased premium.

Comprehensive coverage which provides benefits for home care was selected for the analysis. Facilities-only coverage was also an option; however, someone who wants to stay in their home as long as possible and is willing to pay a higher premium should select the comprehensive policy, or one which provides benefits for home care. Since the average stay in a nursing home for current residents is 2.5 years and 75% of residents stay for less than one year, the three year benefit period was selected. A mid-range waiting period of 90 days was chosen since a person should have sufficient financial reserves to cover the cost of the first three months care. Some LTCI policies exclude coverage for short term stays. The Federal Long Term Care Insurance Program offers the option of a "periodic" increase in costs or an annual 5% increase. Although the 5% inflation rider resulted in more than a doubling of the premium, nursing home costs are projected to increase at 5.6% per year from 2004 to 2008 according to the Centers for Medicare and Medicaid Services (Consumers Union, 2003). Thus, the 5% inflation option would be a prudent choice.

This analysis is based on fixed annual premiums reflecting the age at which a policy is purchased; however, premiums are likely to increase in the future but the rate of increase is unknown. Future nursing home costs at age 80 are shown in Table 2 for two current cost levels (\$50,000 and \$66,000), three time periods (age 55, 60 and 65 years old at first purchase; assume use at age 80), at 5% inflation. While the average age of incoming nursing home residents is 83, age 80 was chosen for this analysis because seniors may need in-home care or reside in an assisted living facility prior to entering a nursing home.

Assuming an average cost of a year in a nursing home is \$50,000, at 5% annual inflation, in 15 years the annual nursing home bill would be \$103,946; at \$66,000 per year the future bill in 25 years would be \$223,499. The projected cost of assisted living facilities, which averaged \$25,908 per year in 2002, would be \$87,734 in 25 years, assuming a 5% rate of inflation. The projected costs of in-home care may be less than or greater than the costs of assisted living facilities depending on the amount of care purchased. This wide range in future costs requires careful attention to the assumptions in the projections and should be individualized for each client.

**Table 1**  
LTCI Annual Premiums for Selected Ages

Policy features	Age when policy purchased		
	55	60	65
\$100 / day benefit:			
periodic inflation adjustment	355	487	706
5% inflation adjustment	912	1,118	1,421
\$200 / day benefit:			
periodic inflation adjustment	710	974	1,411
5% inflation adjustment	1,824	2,237	2,842

**Table 2**  
Projected Annual Nursing Home Costs  
at Age 80 at 5% annual inflation

Current annual cost	Age when policy purchased		
	55	60	65
\$50,000	169,318	132,665	103,946
\$66,000	223,499	175,118	137,209

Table 3 shows the future values of the self insurance fund at age 80. If the annual premiums of \$1,824, \$2,237, and \$2,842 at age 55, 60, and 65, respectively, are invested at 6%, 8% or 10% until the individual is 80 years old, the amounts shown in Table 3 would be available for LTC costs at age 80.

**Table 3**  
Projected Value of Self-Insurance Fund at Age 80

Average annual rate of return*	Age when policy purchased		
	55	60	65
6%	100,073	82,289	66,150
8%	133,345	102,370	77,166
10%	179,385	128,124	90,297

\*\$200/day benefit; 5% inflation adjustment, annual premium invested at the end of each period.

Because the single individual's living expenses may be significantly offset by residence in a nursing home, their annual income should also be factored into the analysis. The marginal cost of a nursing home is a key indicator of whether self insurance is viable. A simplifying assumption of this analysis is that once the individual enters a nursing home, all other living expenses cease. Individual planning can determine which expenses would continue or cease upon entering a nursing home. As a result of the simplifying assumption, all retirement income is applied towards the cost of nursing home care. Other assets, such as home equity and retirement accounts, are not included directly in the analysis, however, they are indirectly accounted for by including the retirement income, which may be produced by those assets. For example, if someone is spending \$30,000/year on living expenses outside a nursing home and if the nursing home costs \$50,000, then the marginal cost of the

nursing home is \$20,000, which becomes the additional amount needed from the insurance policy or the self insurance fund.

To evaluate the viability of self insurance, three annual incomes were used and inflated over the respective periods. The incomes for retirees shown in Table 4 were selected based on data on household income of single 80-years olds from the 2000 Health and Retirement Study in order to represent middle-income households. The estimated future marginal cost of nursing home care was then calculated by subtracting the future income from the future cost of nursing home care. Future income was calculated using a 3% growth rate, the long term average increase in the Consumer Price Index (CPI). While retired persons are often assumed to be living on a fixed income, Social Security benefits increase each year with the CPI and moderate investments should keep pace with inflation. While private company pensions often lack cost of living adjustments, public employee pensions may include COLAs. Table 4 shows the projected annual income for current incomes of \$23,000, \$28,000 and \$34,000.

**Table 4**  
Projected Annual Income at Age 80

Current annual income*	Age when policy purchased		
	55	60	65
\$23,000	48,157	41,541	35,833
\$28,000	58,626	50,571	43,623
\$34,000	71,188	61,408	52,971

\* Inflated at 3% annually.

Table 5 shows the estimated years of nursing home covered by the self insurance fund which earned 8% per year. The amount of the self insurance fund at age 80 is treated as a lump sum withdrawal for simplicity. Estimates are provided for current nursing home cost of \$50,000 and \$66,000 increasing at 5% per year.

**Table 5**  
Estimated Years of Nursing Home Care Coverage at Age 80 using Self-Insurance Portfolio \*

Current annual income*	Age when policy purchased		
	55	60	65
	50,000 current cost		
\$23,000	1.10	1.12	1.13
\$28,000	1.20	1.25	1.28
\$34,000	1.36	1.44	1.51
	66,000 current cost		
\$23,000	0.76	0.77	0.76
\$28,000	0.81	0.82	0.82
\$34,000	0.88	0.90	0.92

\* Assuming marginal cost of nursing home care at age 80, nursing home care costs rising at 5% annually, and an annual rate of return on investments in the self-insurance portfolio of 8%.

According to Table 5, self insurance plus annual income would cover between one and one a half years (1.10 to 1.51) years in a nursing home currently charging \$50,000, and between three-fourths and one year (.76 to .92) in a nursing home that currently charges \$66,000. Three-fourths of nursing home patients stay only one year or less; one-third of stays are for 90 days or less (Liu, McBride, & Coughlin, 1994). Only 10% stay more than 36 months (LTCI Decision Assistance Center).

It is essential to understand that this is a marginal analysis for the additional cost of long term care beyond usual living expenses. It assumes that the self insurance fund is the only liquid investment. Home equity could also be tapped to pay for long term care. A higher rate of return, perhaps 10%, on the self insurance investment would cover a longer period. A longer time horizon prior to using the funds would also increase the amount of nursing home costs covered.

Clearly, buying a policy from a highly rated company and paying the premiums diligently each year should ensure that the protection is available if needed. However, after a recent analysis of 47 LTC policies Consumers Union (2003) concluded that “for most people, long-term-care insurance is too risky and too expensive” (p. 20). The high lapse rate of 75% observed among elderly households over a 4 year period further reinforces concerns about LTCI (McNamara & Lee, 2003).

An argument against the “invest the premium yourself” approach is that most people would not invest the money every year because of lack of discipline and because other expenses might interfere. However, it is easy to set up an automatic monthly deposit into a low cost, tax efficient mutual fund, thus taking care of the discipline “problem.” A second concern arises if care is needed much sooner than age 80 so that investment returns are insufficient to cover costs (Driscoll, 2003). In that case one would be better off with insurance from a reliable company as long as the policy covers the circumstances of the individual and the type of care desired. While investment returns are not guaranteed, neither is the ability of the consumer to pay premiums for decades.

In addition to “peace of mind,” another sales pitch in favor of buying LTCI is the income tax break for the premiums paid and benefits received. However, taxpayers must itemize deductions to take advantage of the tax break for premiums. Only about one-third of taxpayers itemize their deductions and retirees would be less likely to itemize with low or no mortgage interest deduction and thus would be unable to take advantage of the deduction. In addition to having enough deductions to justify itemizing rather than

taking the standard deduction, medical expenses, including the LTCI premium, must exceed 7.5% of adjusted gross income to qualify. Further, the tax break is limited to expenses that exceed the 7.5% threshold. Another potential tax advantage of LTCI is that benefits (up to \$210/day in 2002) are not taxable income; they are treated in the same way as health insurance benefits (IRS Pub. 525 Taxable and Nontaxable Income). In addition to federal tax breaks, 24 states offer tax deductions or credits for the purchase of LTCI (Driscoll, 2003). With rising standard deductions and declining tax rates, income tax concerns should be a minor factor in this decision.

Advantages of the self-insurance approach include:

- greater flexibility in use of financial resources so that new care options may be used even if not covered by current policies
- no worries about having a policy lapse from failure to pay the premium
- no problems with policy restrictions; the money can be used to pay for needed expenses not covered by the policy such as paying a relative to provide care
- no concerns about insurance company insolvency
- heirs can inherit the remainder of the self insurance fund not needed for long term care.

However, based on the low level of preparedness for lengthy and expensive retirements (Wolff, 2002), most retirees will need the money simply to pay living and uninsured medical and prescription expenses in retirement. The majority of middle income Americans will not be able to pay rising LTCI premiums for decades during retirement.

#### Limitations of the Analysis

Premiums from only one company were used and decisions about policy provisions that affect premiums were made. Individual consumers might make other choices so premiums could vary widely. Premiums may also vary depending on the type of plan available. Income taxes on the self insurance fund were ignored because it is recommended that the funds be invested in a tax managed mutual fund. Naturally, investment returns could vary from the stated assumptions based on past returns. Nonetheless, the tables show the potential value of self insuring for LTC costs in lieu of purchasing insurance.

The findings are also limited by the number of assumptions that were required in order to carry out the analysis. Simplifying assumptions, including the availability of all of the individual’s income for nursing home costs, the immediate need for nursing home care at age 80, level LTCI premiums, policy consistency over time, individual health, inflation rates, and investment returns, were made in order to provide a



clear and easily followed methodology. In addition, other assets and balances were not considered since the marginal benefit of self insuring was examined. If other assets were included in the analysis, self insuring may become more attractive; however, the identification of these other assets is best left to individuals and financial professionals based on their unique situations.

Finally, long term care is a much larger subject than dollars and cents. Choice and flexibility of service providers, location, and types of services provided are also unique to the individual and are not accounted for in this modeling. The values and attitudes of parents, children, and grandchildren must also be considered when evaluating potential options to meet long term care needs.

### Recommendations

The self insurance option demonstrates a viable alternative for middle-income, moderate-asset consumers who are deciding how to cover long term care costs and are considering purchasing LTCI. In light of the potentially high lapse rate on policies, self insurance is an option that also should be considered by consumers who have recently purchased LTCI policies as well.

Because of the uncertainty of future income, the high likelihood of letting a policy lapse, and the negative ramifications of dropping a policy after paying premiums for years, educators and advisors should explain and illustrate the self-insurance option to consumers who are contemplating LTCI. Buying insurance and then letting the policy lapse is a big mistake that could undermine financial security. It is critical that persons who are currently employed full-time with benefits project their income and expenses into retirement to determine if a policy that is affordable today will also be affordable two decades into the future. Projections for married couples should consider the impact on the surviving spouse of the loss of income at the death of the first to die, typically the husband.

This alternative approach to financing LTC adds an additional dimension to the consideration. Self insurance is a fundamental principle of risk management that is almost universally overlooked in discussions of financing long term care for moderate income and asset consumers. Investing the money that would have been paid for the insurance premium through an automatic monthly investment in a balanced (stock and bond) or conservative stock mutual fund is a viable option for many consumers concerned about the costs of long term care. Self insurance offers more flexibility in care and payment options than insurance since many policies restrict payments for home care

and refuse to pay a relative. Further, the assets can be passed onto heirs in the event that little or no long term care is required.

Despite the advantages of self insurance, research on retirement preparation of baby boomers overwhelmingly shows that most retirees will likely need their income and assets to finance routine living expenses. While this situation may appear to undermine the strategy, it is far better to dip into this reserve for living expenses than to drop a policy after paying for many years because the premium is no longer affordable.

This analysis is intended to explain and illustrate the self insurance alternative to purchasing LTCI and not how to buy a policy. An excellent background resource for examining the broad future of long term care from a public policy and financial planning perspective is provided by Anthes and Lee (2001). Detailed information on making decisions about long term care insurance policies, with a strong bias in favor of insurance, is provided by Driscoll (2003). The University of Minnesota Extension Service (2002) offers an excellent website “Financing Long Term Care” which provides comprehensive treatment of this topic with a strong emphasis on family systems analysis. It provides extensive coverage of almost all aspects of the long term care decision, including family dynamics. This site provides some coverage on self insuring using a check list with links to a variety of worksheets including: net worth statement, income and expenses, estimate your retirement income and Social Security benefits, and cost of care in your community. A link to the Federal Long Term Care Insurance Program website (United States Office of Personnel Management, n.d.) includes a “self funding” analysis to calculate the gap between projected savings and cost of care. A limitation of this analysis is that there is no discussion of the benefits of having control over your money, nor is there any reference to concerns about or shortcomings of LTCI policies. Driscoll (2003), a strong advocate for LTCI, dismisses self insurance in one paragraph in a 300 page book. Despite the dearth of attention to the self insurance option, these three resources provide extensive information and perspectives needed to understand the complexities of assisting clients with long term care planning.

The University of Minnesota web site (2002) emphasizes the need for multigenerational planning for long term care and goes far beyond the financial aspects of the decision. Driscoll (2003) suggests that since most long term care is provided for free by relatives, often at great cost to themselves, that children may be willing to help purchase LTCI for their parents. The decision on how to fund long term care should be

part of a thorough risk management analysis that includes self insuring. For most pre-retirees, this exercise is likely to reveal inadequate life and disability insurance. Thus, a discussion on LTCI may lead to addressing other more immediate financial needs. Like the question on pre-paying a mortgage, a thorough LTC analysis is likely to open up other insurance and investment issues. For most Americans the primary issue is the lack of sufficient assets for retirement, regardless of the need for long term care.

To conclude, most Americans cannot afford LTCI for the lengthy period during retirement in which they would need to pay premiums. Most boomers and pre-retirees need to invest more aggressively in tax-advantaged retirement accounts in order to finance a lengthy retirement. Like many current seniors, the boomer generation may have to rely on unpaid care from relatives and Medicaid if they need long term care. The potential impact on Medicaid may stress the system's ability to pay LTC costs for the baby boomer generation.

Financial educators should include numerical illustrations of the self insurance option in their presentations on long term care. Financial advisors would be remiss to overlook the self funded option when helping clients decide how to plan for the potential costs of long term care. Reverse mortgages may be a more realistic option for funding long term care than the current insurance policies. Consumers need to recognize that insurance sales people have strong incentives in the form of commissions to sell them a policy. "People who are paying for their care with personal funds have the ultimate in flexibility and choices" (Driscoll, 2003, p. 103).

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