# Using Reverse Mortgages To Manage the Financial Risk of Long-Term Care

by Barbara R. Stucki, PhD Kenning Group barbstucki@bendnet.com

Presented at Managing Retirement Assets Symposium Sponsored by the Society of Actuaries Las Vegas

March 31-April 2, 2004

Copyright 2004 by the Society of Actuaries.

All rights reserved by the Society of Actuaries. Permission is granted to make brief excerpts for a published review. Permission is also granted to make limited numbers of copies of items in this monograph for personal, internal, classroom or other instructional use, on condition that the foregoing copyright notice is used so as to give reasonable notice of the Society's copyright. This consent for free limited copying without prior consent of the Society does not extend to making copies for general distribution, for advertising or promotional purposes, for inclusion in new collective works or for resale.

### 1. Introduction

A penny saved is a penny earned. Poor Richards Almanack (1737)

This sage advice of Benjamin Franklin highlights the fact that the basic strategy for ensuring retirement security has changed little over the past 200 years. The traditional formula is simple: accumulate assets during one's working years and systematically draw down these assets after retirement. In recent years, however, more and more Americans are finding it difficult to save enough for retirement from earnings. The dramatic fall of the stock market has exacerbated the problem, reducing retirees' personal wealth by an estimated \$3.5 trillion in the past two years (Ernst and Young 2003).

These trends are troubling at a time when rising longevity places seniors at greater financial risk due to a chronic illness or disability. In our faltering economy, however, there is one bright spot—home equity continues to rise. Average home equity in the United States increased more than 8 percent between 2000 and 2001 (Joint Center for Housing Studies of Harvard University 2002). Many households age 62 and older have substantial amounts of untapped housing wealth, including families whose other retirement resources may be very modest. With an estimated \$2.1 trillion tied up in home equity, this financial asset has the potential to dramatically increase the ability of seniors to pay for long-term care at home.

Unlocking illiquid assets such as housing wealth requires us to look more closely at asset decumulation in retirement. Typically, elders sell their home to access the equity they have built up over time. When they move to a more appropriate living situation, the sale of a house can be very beneficial. Those elders who are forced to sell their home to pay for long-term care, however, could face serious problems. Relocating often entails the loss of familiar activities along with support from family and friends. This can reduce quality of life and accelerate cognitive decline (Bassuk 1999). For physically or mentally impaired elders, a better approach would be to use the equity in the home to purchase services and devices that could enable them to stay at home. A new type of financial tool—the reverse mortgage—can help older Americans achieve this goal.

Little work has been done to examine the role of reverse mortgages in managing the financial risk of long-term care among older households. This paper will address this issue by examining the use of reverse mortgages to help impaired elders continue to live at home. It will also identify the potential links between reverse mortgages and long-term-care insurance. The research presented here is part of a study conducted by the National Council on the Aging, which is funded by grants from the Robert Wood Johnson Foundation and the Centers for Medicare and Medicaid Services. The analysis is based on the 2000 Health and Retirement Study and data from the housing and mortgage industries. In this study I focus specifically on households where the youngest homeowner is at least age 62, since this is the minimum age to qualify for a reverse mortgage.

The results of this research suggest that liquidating housing wealth through reverse mortgages can play an important role in improving the way we pay for long-term care in this country. Elders who need assistance activities of daily living (ADLs) or instrumental activities of daily living (IADLs) have, on average, substantial amounts of home equity that could be used to support informal caregivers and purchase a meaningful amount of services to promote aging in place.

# 2. Financing Long-Term Care at Home

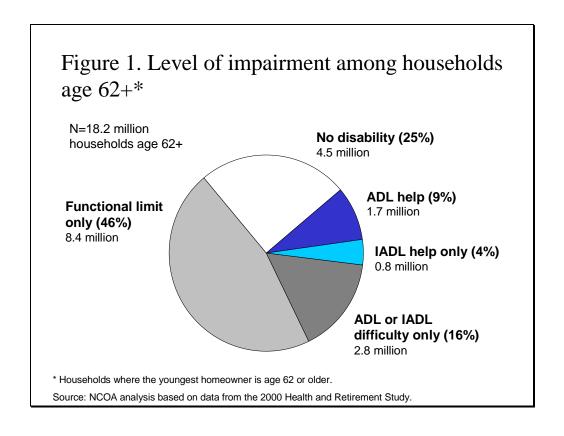
"Demand for long-term care service under the Medicaid program is growing so rapidly that it will bankrupt state budgets unless another form of financing is found, and because of this, Mr. Chairman, I am here to tell you that the Medicaid program is indeed broken and unsustainable." Testimony by the Hon. Paul Patton, Governor of Kentucky at a 2002 Hearing of the Senate Special Committee on Aging.

To evaluate the potential role of reverse mortgages, it is important to first understand the challenges of paying for home- and community-based long-term-care services. Under the current system, long-term-care expenses are primarily funded by government, through Medicare or Medicaid. However, neither of these public programs is designed to meet the needs of impaired elders who live in the community. When it comes to long-term care, Medicare primarily pays for rehabilitative care in a nursing facility following a hospital stay. This program only covers a limited amount of help at home for certain homebound seniors. Most state Medicaid programs target impoverished or low-income elders who need nursing home care, with modest coverage for services in the home and community. Elders who do not qualify for long-term care under these programs must use a substantial portion of their assets to pay for long-term care, either out-of-pocket or through a private long-term-care-insurance policy.

In addition to limited financing options, impaired seniors who want to live at home face strict eligibility requirements when accessing government or insurance benefits for long-term care. This makes it difficult for elders to get help before they face a debilitating—and costly—crisis. To receive services under the Medicaid Home and Community Based Services (1915c) waiver program, impoverished elders must be so severely impaired that they would otherwise require nursing home care. Long-term-care-insurance policyholders typically must need help with two or more ADLs (including bathing, dressing, toileting, transferring or eating) to trigger their policy benefits.

Only a small proportion of homeowners meet this level of impairment. In 2000, about 9 percent of older households (single homeowners, or in the case of couples, at least one spouse) reported needing help performing one or more ADLs (Figure 1). An additional 4 percent of these households only needed help with IADLs (such as using the telephone, preparing meals or taking medications). This leaves at risk is a large segment of the senior population whose impairments are not severe but who may have difficulty in continuing to live at home safely.

The typical 75-year-old in the United States has three chronic conditions and takes on average 4.5 medications (Alliance for Aging Research 2002). Nearly half of older households (46 percent) are dealing with functional limitations, such as difficulty with climbing stairs or carrying groceries. While these impairments are modest, they can have serious consequences if they lead to bigger problems such as malnutrition or debilitating injuries. In fact, more than one-third of seniors fall each year, and of those who fall, up to 30 percent suffer serious injuries (such as hip fractures) that make it hard for them to continue to live at home (Hausdorff 2001, Sterling 2001). Elders age 75 and older who fall are four to five times more likely to need nursing home care for a year or longer (Donald 1999).



One unintended consequence of this system is that it places seniors at risk for institutionalization due to conditions that may have started as relatively minor physical or mental impairments. This financing strategy is costly, not only because of the expense of nursing home care (over \$57,000 per year in 2003), but also because it can deprive older Americans of their most cherished resource—their independence (Mature Market Institute 2003).

Demand for long-term care is growing in our rapidly aging society, placing an increasing burden on state Medicaid programs. In this tight fiscal environment, it is unlikely that government programs will expand to meet the needs of impaired elders who live at home (Eggers 2002). Instead, Americans are being encouraged to take greater personal responsibility for their long-term care. However, most older people have not accumulated sufficient assets to pay for expenses beyond their basic retirement needs (Wu 2002, Social Security Administration 2003).

Nor are Americans shifting the risk of long-term care expenses to private insurance. Though awareness of long-term care insurance is rising, the number of Americans of all ages who have purchased a policy remains modest. As of 2001, there were 5.8 million long-term care policies in force (Coronel 2003). In recent years, the biggest growth in sales of this protection has been among buyers under age 65. While these trends show promise for the future, long-term care insurance will not meet the needs of most of today's seniors.

Demographic shifts in the older population will present additional challenges to paying for home care. Rising longevity, particularly among men, appears to be reducing demand for nursing home care as more surviving spouses are able to provide help at home (Redfoot and Pandya 2002). Only 7 percent of impaired, older persons who have family supports live in a nursing home compared to 50 percent of those with no family caregivers (Stone 2000). The growing ability for married seniors to continue to live independently is an encouraging trend. However, elderly couples who live at home face additional financial strains. Many older families may find it difficult to stretch their already limited retirement assets even further when both spouses need help due to chronic conditions.

To fill these gaps in the financing system for long-term care, we need a new source of funds that is both widely available and has the flexibility to meet the diverse challenges of living at home with a disability. For many older families, home equity is their single, biggest financial asset. Using home equity, particularly through a reverse mortgage, could be an important strategy to address the unmet financial needs of impaired elders who want to live at home.

# 3. Home Equity as a Retirement Resource

Across market segments, multiple affordable approaches will need to be developed, because planning for retirement is not a one-size-fits-all exercise. Ernst and Young (2003)

Home ownership rates are high in the United States, even in the elderly population. Almost 80 percent of Americans age 65 and older own a home. A recent study indicates that this trend will continue to grow in the next 20 years, making home equity one of the most widespread forms of household wealth (Table 1).

Based on the 2000 Health and Retirement Study, the 18.2 million households age 62 and older held an estimated \$2.1 trillion in housing equity in 2000. For individual households, the amount of home equity can be substantial—almost \$118,000 on average. In contrast, the average income of men age 65 and older was \$28,597 and that of elderly women was \$15,197 in 2000 (EBRI 2002). These findings suggest that a significant proportion of the elderly can be characterized as "house rich and cash poor." Older homeowners could potentially improve their well-being, including paying for long-term care, by liquidating home equity over time.

The concept of using home equity to supplement retirement resources, particularly through a reverse mortgage, has interested researchers since at least the 1960s in the United States (Chen 1967, Guttentag 1975, Sholen and Chen 1980). Much of the research has focused on the role of housing equity in alleviating poverty among the elderly (Kutty 1998). Results of these studies show that liquidating housing wealth through a reverse mortgage can significantly reduce the number of elders in poverty (Morgan et al. 1996, Bronfenbrenner Life Course Center 1996).

Table 1
Household Growth Projections 2000-2020

	Owner	Renter	Total	Ownership			
	Households	Households	Households	rate			
Age Groups and Year							
2000							
Age 65-74	9,470,000	1,972,000	11,442,000	82.80%			
Age 75+	8,784,000	2,637,000	11,421,000	76.90%			
2000 Totals	18,254,000	4,609,000	22,863,000	79.80%			
2020							
Age 65-74	16,880,000	2,790,000	19,670,000	85.80%			
Age 75+	12,424,000	2,838,000	15,262,000	81.40%			
2020 Totals	29,304,000	5,628,000	34,932,000	83.80%			
Source: Joint Center for Housing Studies of Harvard University (2002).							

7

Work by Rasmussen and his colleagues (1996, 1997) has looked more broadly at reverse mortgages as a mechanism for meeting a wide array of elder needs. They argue that "reverse mortgages for the elderly can also serve as an asset management tool to finance extraordinary expenses, transfer assets between generations or purchase long-term care insurance while preserving more liquid assets." The potential for this financing option can extend even further by supporting family caregivers and long-term-care services, assistive devices, home modifications and for special vehicles or other forms of transportation that enable elders with a disability to live at home for as long as possible.

There are unique features about the way seniors treat the home equity that may make this retirement asset particularly appropriate to fund long-term care. One intriguing finding is that seniors typically do not draw down their housing wealth to support general non-housing consumption needs. Instead, home ownership continues to be high in very old ages and home equity does not appear to fall with age (Venti and Wise 2001). Home equity among seniors has risen by almost 7 percent over the last 10 years while the amount of debt they are carrying on the home declined by 10 percent during this period (Table 2).

Table 2

Home equity and leverage, by age

	Under 35	35-44	45-54	55-64	65 & over
Home equity*					
1989	\$57,100	\$83,400	\$100,500	\$108,400	\$104,700
1999	\$49,200	\$71,600	\$93,400	\$112,100	\$111,500
% change	-13.8%	-14.1%	-7.1%	3.4%	6.5%
Leverage**					
1989	53.2%	42.4%	32.5%	20.1%	8.9%
1999	57.5%	49.5%	37.5%	23.4%	8.0%
% change	8.1%	16.7%	15.4%	16.4%	-10.1%

<sup>\*</sup>Equity per household in 1999 dollars.

Source: HUD analysis of American Housing Survey data for the Consumer Federation of America (2000)

<sup>\*\*</sup>Aggregate loan-to-value ratio.

When older people sell their home, it is often to access these funds for an emergency (Megbolugbe et al. 1997). Researchers have found that unexpected health problems are a major reason why older people sell their homes (Heiss et al. 2003). These findings suggest that older homeowners may be holding onto their house as a kind of "insurance" against high-cost events in old age. As an alternative to selling the home, impaired homeowners may be interested in using a reverse mortgage as a way to liquidate their housing wealth without having to move or relinquish control over this asset.

# 4. Accessing Home Equity through a Reverse Mortgage

Effectively meeting the needs of the elderly requires foresight, sensitivity, understanding and the highest levels of collaboration. It also requires innovative financing approaches.... <u>Aging in Place</u>. Neighborhood Reinvestment Corp. (2002)

A reverse mortgage is a special type of loan that allows homeowners age 62 and older to convert some of the equity in their homes into cash. These types of loans are called "reverse" mortgage because payments flow from the lender to the homeowner. Since the loan is based on the equity in the home, the borrower's income and credit history are not factors in determining eligibility for a reverse mortgage.

There are three types of reverse mortgages available in the market. The most popular is the Home Equity Conversion Mortgage (HECM). This type of reverse mortgage is government-insured by the FHA to protect borrowers in case a lender defaults. Consumers can also get a Home Keeper loan from Fannie Mae. Financial Freedom Senior Funding Corporation offers reverse mortgages that are designed for homeowners who have a large amount of home equity.

Reverse mortgages can be an valuable source of financial assistance to impaired, older homeowners because these types of loans:

- Are available to most older homeowners.
- Offer flexibility in how and when borrowers can use the money.
- Include risk protections, especially for spouses.

<u>Availability</u>: Homeowners age 62 and older are eligible for a reverse mortgage. These loans do not require borrowers to make any payments for as long as they (or in the case of spouses, the last remaining borrower) continue to live in the home as their primary residence. When the last borrower permanently moves or dies, the debt becomes due. Heirs may elect to repay the loan and keep the house, or sell it and keep the balance remaining after paying off the reverse mortgage.

Prior to closing, the house is appraised to determine its value and to make sure that it meets FHA minimum property standards. In cases where repairs are needed, the cost of these repairs may be financed as part of the loan. Reverse mortgage borrowers continue to own the home and are responsible for paying property taxes, hazard insurance and any repairs needed to maintain the home.

The amount that a homeowner can borrow is based primarily on the age of the youngest homeowner, the equity in the home and the current interest rate. Older owners (because of their limited life expectancy) and those with expensive homes are able to get higher loan amounts.

<u>Flexibility</u>. Borrowers can select to receive payments as a lump sum, line of credit, fixed monthly payments (for up to life) or in a combination of payment options. Borrowers can change payment options at any time for a small fee.

Proceeds from a reverse mortgage are tax-free and borrowers can use these funds for any purpose. Payments from this loan do not affect Social Security payments. However, these payments can limit the benefits seniors might receive from government programs such as Medicaid or Supplemental Security Income (SSI).

<u>Risk protections</u>. There are important protections for older consumers who decide to take out this type of loan. Since reverse mortgages are non-recourse loans, the borrower or heirs never owe more that the value of the home at the time of sale. This is important to protect surviving spouses from being impoverished due to the cost of the loan.

Loan costs typically include an origination fee, appraisal fee, mortgage insurance fee and other closing costs. There are usually caps on these upfront costs, which may be financed as part of the reverse mortgage. Borrowers are protected by FHA mortgage insurance if the lender defaults. Borrowers pay the mortgage insurance premium, which is usually financed as part of the loan.

Under the HECM program, all borrowers must first receive counseling to ensure that they understand the advantages and limitations of this type of loan. Organizations such as counseling agencies and area agencies on aging (approved by HUD) usually provide this information, either in person or by telephone.

Lenders typically charge interest for a reverse mortgage at an adjustable rate on the loan balance. To protect borrowers against skyrocketing interest rates, the HECM program sets a 2 percent annual cap and a 5 percent lifetime cap for ARMs with annual adjustments. ARMs that are adjusted monthly have a lifetime cap established by the lender. Monthly payments that a borrower receives are not affected by changing interest rates. Interest rate fluctuations do determine how rapidly the loan grows over time.

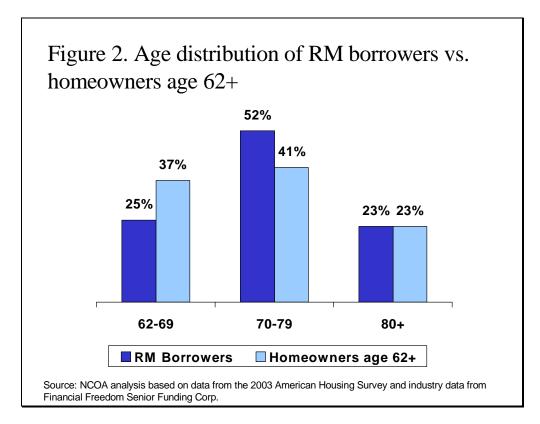
# 5. Market Potential of Reverse Mortgages for Impaired Elders

"Reverse mortgages can give millions of older Americans choices about how they want to receive long-term care." Thomas Scully, Former CMS Administrator (2003)

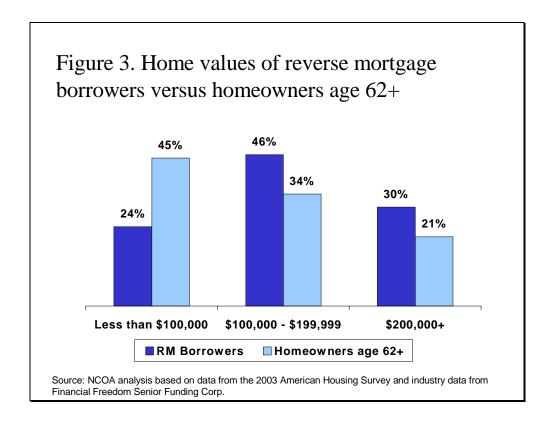
The market for reverse mortgages has been modest. From the time the first HECM was closed in 1989 and 2003, about 80,000 of these loans have been made (NRMLA 2003). Part of the lack of demand may be due to limited awareness of this financial tool among seniors. But this situation appears to be changing. Between 2002 and 2003, the number of HECM loans that lenders closed increased by 39 percent (NRMLA 2003). Growth in the reverse mortgage market is also constrained by limits on the HECM program. Congress initially authorized HUD to insure only 2,500 reverse mortgages. The number of allowable HECM has since increased to 150,000.

Three-quarters of borrowers (75 percent) are age 70 or older at the time of application for the loan (Figure 2). They are usually older than the general

population of elderly homeowners age 62 and older, particularly the 70 to 70 age group. The predominance of relatively older borrowers among the reverse mortgage population is not surprising. This is because the amount that borrowers can get from their home is greater at older ages.



On average, reverse mortgage borrowers are more likely to be "house rich" than typical older homeowners (Figure 3). Close to half of reverse mortgage borrowers (46 percent) have homes worth \$100,000 to \$199,999, compared to only about one-third of general homeowners (34 percent). Elders who take out a reverse mortgage are also more likely than the general homeowner population to own expensive homes, worth \$200,000 or more.



A study of borrowers who originated an HEMC loan between 1990 and 1998 (Rodda et al. 2000) found that elders who take out a reverse mortgage tend to be disproportionately older, single and female when compared to other senior homeowners. The majority (56 percent) of the borrowers are females living alone. In comparison, only about 28 percent of the general population of elderly homeowners consists of women living alone.

Reverse mortgage borrowers have many characteristics in common with elders who need long-term care. The likelihood of disability increases with age and occurs more in women than men (Stone 2000). This is because women tend to live longer than men, and they are more likely to experience chronic health conditions. In addition, people age 85+ tend to be poorer than the other older age groups, largely because most of the oldest old group are widowed women living alone (Wu 2003). These similarities between reverse mortgage borrower and the long-term care populations suggest that there is considerable market potential for increasing the use of reverse mortgages to help seniors pay for long-term care at home.

## 6. Using Reverse Mortgages to Fund Long-Term Care

No older person should have to sacrifice his or her home or an opportunity for independence to secure necessary health care and supportive services. <u>Needs for Seniors in the 21st Century.</u> Commission on Affordable Housing and Health Facility(2002)

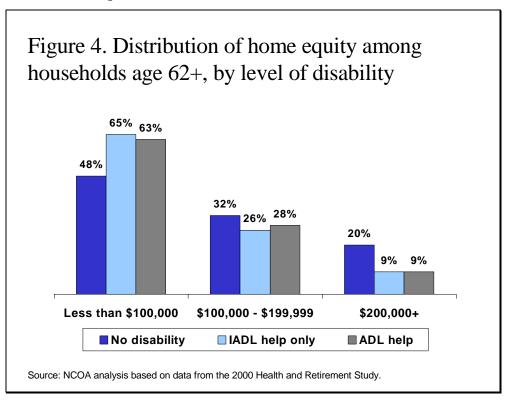
Most elders who need long-term care would prefer to stay in their own homes. A 2000 consumer survey found that over 90 percent of people 65 and older strongly or somewhat agree that they wish to remain in their homes as long as possible (Bayer and Harper 2000). With today's innovative technology and inhome services, this is increasingly possible. Sometimes modest changes, such as grab bars, touchless faucets and light switches or a ramp can make the difference between staying home and having to move to a nursing facility. Even severely impaired elders can now continue to live at home if they receive appropriate assistance.

Without adequate financial support, however, even modest costs for home care can be prohibitive to many older Americans. In a survey of people age 65 and older, 36 percent of respondents indicated that they could not afford to modify their home to make it safer or more accessible, or modify it as much as they would have liked (AARP 2000). The cost of help at home for physically or mentally impaired elders can range dramatically, from an average of \$200 per month in out-of-pocket expenses by family caregivers to over \$6,000 per month for elders who need round-the-clock care from home-care professionals (National Alliance for Caregiving 2004, MetLife Mature Market Institute 2003).

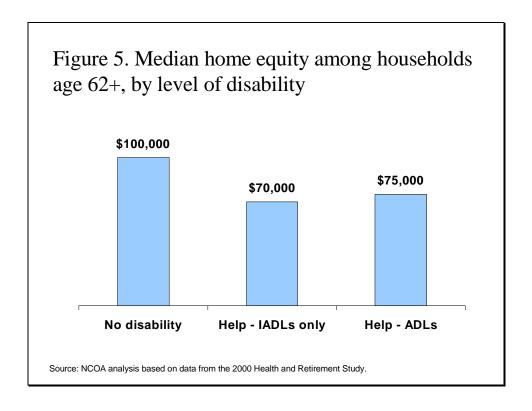
One way to assess the value of a reverse mortgage for long-term care is to determine the amount of money that would be available to impaired elders. Since disability is an important determinant of home equity, I looked at three groups of homeowners: 1) households who reported having no disability; 2) households where the homeowner (or in the case of couples, at least one of the spouses) indicated that they needed help with one or more IADLs only; and 3) households where the homeowner or at least one spouse reported needing help performing one or more ADLs.

The results are presented in Figure 4. These show that elder households where the homeowner(s) are not impaired tend to have higher housing wealth

that those with impaired homeowners. Twenty percent of non-disabled households hold home equity of \$200,000 or more, compared to only 9 percent of households were a homeowner needs help with ADLs or IADLs. "Impaired" households are more likely to have modest amounts of home equity. Almost two-thirds of households who need help with ADLs (63 percent) or who need help with IADLs (65 percent) held home equity amounts less than \$100,000. These results are not surprising, since there is a two-way relationship between socioeconomic status and disability. Having a physical or mental impairment makes it more difficult to accumulate financial assets or build up substantial home equity. Elders who had to retire early or pay significant out-of-pocket costs due to a disability may not be able to maintain a large house. Similarly, elders who live in conditions at or near poverty are at increased risk for experiencing a chronic illness or impairment.

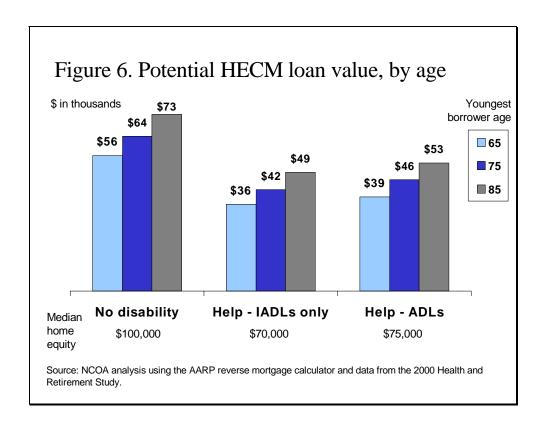


Looking more closely at the distribution of median home equity (Figure 5) reveals that households who report needing help with ADLs typically have more home equity than those who only need help with IADLs. This may be due to the fact that only households with adequate resources can care for a severely impaired elder at home.



Because reverse mortgages have relatively high closing costs, this financial tool offers a better value for people who expect to live at home for a long time. They can be very expensive for borrowers who opt for monthly payments and then move out, sell the home or die within a few years of taking out the loan. Currently, the reverse mortgage loan becomes due if the last remaining borrower requires care in a nursing home or assisted living facility for more than a year. For severely impaired elders who take out a reverse mortgage, there is a risk that they will not be able to remain at home for many years.

A lump-sum payment may be most helpful for severely impaired borrowers, who can use these funds immediately to make major home modifications or pay for a high level of home-care services. Impaired borrowers who live alone, and who lack informal caregivers, may also benefit from having a large sum available to pay for professional help at home.



By liquidating their housing wealth through a reverse mortgage, elder homeowners, especially those who are "house rich and cash poor," could access a significant amount of cash to pay for long-term care (Figure 6). For example, households who are dealing with ADL limitations could convert a home they own free and clear worth \$75,000 into a loan ranging in value from about \$39,000 to \$53,000, depending on the age of the youngest homeowner.

These amounts will fund a significant amount of paid home care to help impaired seniors avoid or delay the need for institutionalization. For example, the average home health aid charges about \$72 per visit (MetLife Mature Market Institute 2003). Adult day care services cost about \$50 per day (Stucki 2000). At these rates, a 75-year-old borrower with ADL impairments would be able to receive daily home care visits for almost two years (21 months) or attend an adult day care program for about 3.5 years. Borrowers who are less impaired, or who can get some help from family or friends, could significantly increase the amount of time that they might be able to continue to live at home. For example, elders who require only three days of paid home care per week would be able to use their loan to pay for assistance for over four years.

Many older people find that the need for long-term care arises slowly, as they gradually require more help with everyday activities at home. For these elders, it may be more appropriate to receive payments from a reverse mortgage through a credit line or tenure payment (which pays for as long as the borrower lives in the home). In fact, most HECM borrowers elect to receive their payments through a line of credit, either alone (68 percent) or in combination with a tenure or term payment plan (20 percent (Rodda et al. 2000)).

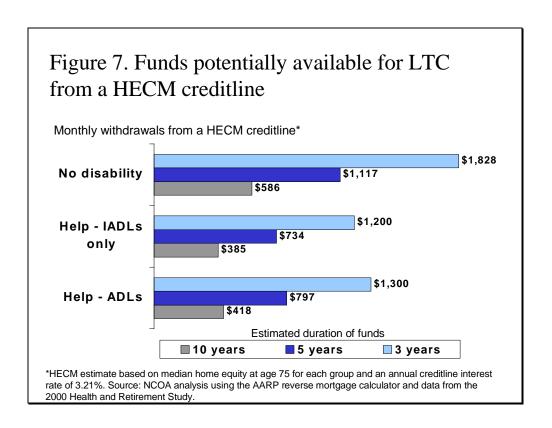


Figure 7 gives some examples of the amount that a borrower age 75 could withdraw from an HECM line of credit each month. Since impaired elders who live at home may need assistance for a long time, these amounts were calculated so that the credit line would last for approximately three to 10 years. The amounts that would be available monthly to "impaired" households vary from about \$385 to \$1,828, depending on the expected duration of the funds.

These funds could have a significant impact on the well-being of impaired elders and their families. By having money of their own to pay for long-term care, elders can maintain their dignity, as well as retain some independence and control over their lives. For spouses and other family caregivers, these supports

can help reduce the financial, emotional and physical strain that often comes with caring for an impaired elder (Stucki 2000).

# 7. Reverse Mortgages and Long-Term-Care Insurance

"In thinking about financing, we should first remember that long-term care is a risk, not a certainty... As a risk (not a certainty), long-term care should be insured against, not saved for." William Scanlon, former Director, Health Care Issues, U.S. General Accounting Office (2003).

The findings presented in the previous section suggest that the equity that most elders have accumulated in their home would not be sufficient to pay the entire cost of long-term care should they require a high level of assistance for a long time. These funds may also be inadequate to meet the needs of couples if both spouses became severely impaired. To shield homeowners from potentially catastrophic costs of long-term care, they will need additional resources. One important option is long-term care insurance.

Private long-term care insurance is an important financial tool for protecting the retirement assets of seniors. This type of insurance offers comprehensive coverage in all care settings, including nursing homes, assisted living facilities and in the home. Today's policies cover a wide range of homecare services, including respite care, home health aids, home modifications and even payments for family caregivers. By 2000, the cumulative amount paid by insurance companies for long-term-care benefits had reached \$11 billion (Stucki 2003).

Reverse mortgages could significantly increase the affordability of long-term care insurance. By tapping home equity, homeowners can purchase a policy without having to sacrifice their current lifestyle. There are several options to increase the affordability of long-term care insurance using funds from a reverse mortgage. One strategy uses the proceeds of a reverse mortgage to pay for insurance premiums. Another approach would limit the amount of insurance purchased by elders by increasing the amount of long-term care self-funded through a reverse mortgage.

Using a reverse mortgage to pay for long-term care insurance premiums would reduce up-front expenses for this coverage. But this strategy can also be very costly because borrowers would be paying both insurance premiums and

interest on the loan for many years. In order for reverse mortgages to be a viable source of funds for long-term care insurance, this financing strategy must meet three key criteria.

- Reverse mortgage borrowers should have sufficient funds to purchase a meaningful amount of long-term care coverage.
- Payments from a reverse mortgage should pay for a substantial proportion of the insurance premiums, and for any future premium increases. This would be particularly important for "house rich and cash poor" elders who have few other resources with which to pay for coverage.
- 3. Reverse mortgage proceeds must last long enough to pay premiums until a policyholder needs long-term care. Otherwise, a policyholder is at risk of lapsing their coverage without getting any benefits from the insurance.

Each of these criteria raises important issues that need to be addressed about the potential market for this approach and the cost versus the value of the benefits to borrowers.

It is difficult to determine how much long-term-care coverage a person should purchase. Some people will never become disabled. Others, such as elders with Alzheimer's disease or other common forms of dementia, may need assistance lasting six years or longer (Alzheimer's Association 2003). The average duration of family caregiving is 4.3 years (National Alliance for Caregiving, 2004). In 1994, the average duration of policies selected by individual long-term care policyholders was about five years (LifePlans 1995).

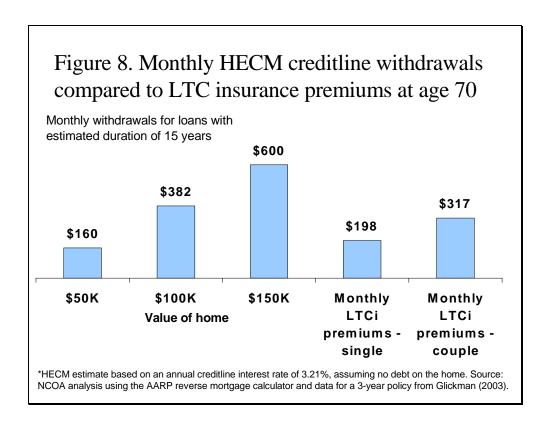
The cost of purchasing private insurance increases significantly with age. This could be a problem given the advanced age of most borrowers. However, 24 percent of reverse mortgage borrowers are under age 70 (see Figure 2). This suggests that there may be a segment of borrowers for whom this approach might work. In 2001, the average age at purchase was 66 for individual long-term care policies (Coronel 2003). But even at relatively younger ages, the cost of comprehensive long-term care insurance can be substantial.

In 2003, a three-year policy with inflation protection and a 90-day elimination period, that pays \$100 per day in benefits and includes home-care coverage, could cost on average of about \$135 per month for a single person and \$217 for couples at age 65 (averages calculated from data in Glickman 2003). At age 70, the average cost of this coverage increases to approximately \$198 per month for singles and \$317 for couples. Lifetime benefits at age 70 would cost a single person \$334 in monthly premiums and couples \$518 per month.

Affordability is a key barrier to purchasing long-term care coverage among seniors. A study by the American Council of Life Insurers found that only 31 percent of Americans age 65 and older could afford comprehensive long-term care insurance, even if they were willing to spend up to 10 percent of their income on premiums (Mulvey and Stucki 1998).

Figure 8 shows the potential amount that 70-year-old borrowers could withdraw monthly from an HECM credit line to pay long-term care insurance premiums for 15 years. These estimates suggest that both single elders and couples who own homes worth at least \$100,000 would be able to use the proceeds of a reverse mortgage to buy a three-year policy. Singles with a home worth \$100,000 and couples with housing wealth of about \$150,000 could also afford lifetime coverage. However, using most of the proceeds from a reverse mortgage to pay for long-term- care coverage might be risky for many households. After paying for insurance premiums, they would have little left from their monthly HECM cash withdrawal to pay for expenses not covered by the \$100 per day long-term care benefit or for any premium increases. Since private insurance only pays when policyholders are severely impaired, these homeowners could also face financial problems if they needed help to stay at home prior to triggering their insurance benefits.

For elders with modest amounts of housing wealth, using reverse mortgages for long-term care insurance is not likely to be an option. Single homeowners age 70 with a home worth \$50,000, who use the entire monthly withdrawal from their HECM line of credit for long-term care insurance, would be able to pay about 80 percent of the cost of premiums. For couples in this group, cash withdrawals from an HECM would cover the cost of about 50 percent of their policy premiums.



Duration of the loan is a critical factor in linking reverse mortgages and private insurance. The risk of needing long-term care increases significantly after age 85. For the typical reverse mortgage borrower, who takes out a loan in his 70s, this could mean holding onto the loan for five to 15 years or longer. Because the HECM program is relatively new, we do not have a good understanding of how long reverse mortgage borrowers keep their loans. Preliminary evidence, however, suggests that HECM borrowers are repaying their loans at a faster rate than would be expected from mortality and moveout rates among older homeowners in general (McConaghy 2003). Further research will be needed to determine the reasons why borrowers terminate their loans and the potential impact this could have on funding long-term care insurance.

Congress passed a provision within the American Homeownership and Economic Opportunity Act of 2000 that encourages the use of reverse mortgages for the purchase of long-term care insurance. Under this new law, HUD is authorized to waive the up-front mortgage insurance premium for HECM borrowers who use all the proceeds of their reverse mortgage to purchase a tax-qualified long-term care insurance policy. Regulations have not yet been published by HUD to implement this new HECM provision. An analysis of the new law (Rodda et al. 2003) suggests that there is likely to be low demand for

this financing option. This is primarily due to the lack of overlap in the economic and demographic characteristics of typical HECM borrowers and long-term care insurance buyers. Implementing this new HECM provision could also present many challenges to HUD. For example, it would be difficult to track whether borrowers are using all the proceeds of their loan to pay for private long-term care insurance.

Given the limitations of using reverse mortgages to pay directly for long-term care insurance, a better approach may be to use the loan proceeds to increase the amount of long-term care that homeowners fund out-of-pocket. This would make private insurance more affordable because elders could buy less long-term care coverage. For example, homeowners could select a policy with a lengthy waiting period (such as one year) and use loan proceeds to cover expenses until the insurance starts paying benefits. Alternatively, they could purchase a limited amount of long-term care coverage (such as a two-year policy) and pay for any care they needed beyond this time period. Borrowers may also opt for long-term care insurance that does not offer "Cadillac" coverage and use loan payments as needed for expenses (such as paying for family caregivers) that may not be covered by less costly policies.

There are several benefits to this approach. When the purchase of long-term care insurance is not directly linked to the use of reverse mortgages, homeowners may be more inclined to buy a policy before age 62, when premiums are considerably less expensive. Any future premium increases also may be more manageable for elders who opt for less costly policies. Not having to waiting until the homeowner (and in the case of married couples, both spouses) is at least age 62 offers other benefits. As people grow older, they are at greater risk for being uninsurable due to a pre-existing chronic health condition. In addition, elders who needed little or no long-term care during their lifetime would be able to protect a higher amount of their assets. By using this "wait and see" approach to tapping home equity, elders can pay for long-term care needs as they arise rather than using a reverse mortgage to buy additional amounts of insurance coverage.

#### 8. Conclusions

Use of home equity, particularly through a reverse mortgage, can be an important retirement resource to help impaired elders pay for long-term care

services in the home and community. As a new tool for managing the risks of long-term care expenses in retirement, reverse mortgages can benefit seniors in a variety of ways. Due to the widespread availability of home equity, using reverse mortgages is an inclusive strategy that strengthens the long-term care safety net for all elders. This is especially important for moderate income elders whose financial needs in retirement often go unaddressed. Funds from reverse mortgages are available in several payment plans and can be used without restrictions. This flexibility can promote greater consumer direction and choice.

Tapping housing wealth through reverse mortgages has the potential to fill some critical gaps in our nation's long-term care financing system. Most importantly, by liquidating home equity, impaired seniors can get access to an important new source of funding to pay for services and supports at home. This enables impaired elders to receive earlier intervention that can promote aging in place.

To realize the potential of using home equity for long-term care, we will need to address many challenges. Currently, there is still little awareness of this product among seniors. Many older Americans are reluctant to take out a loan on their home after having spent many years paying off their mortgage. Government incentives to reduce the upfront cost of these loans may be able to play an important role in promoting such an approach to financing long-term care. The appropriate use of these funds—whether to purchase services or private insurance—also needs to be examined further to ensure that seniors make wise decisions with their limited housing resources. But with education and counseling, growing numbers of older Americans will be able to continue to live at home with dignity through the use of reverse mortgages.

#### References

- Alliance for Aging Research. 2002. *Ten reasons why America is not ready for the coming age boom.* Washington, D.C.: Alliance for Aging Research.
- Alzheimer's Association. 2003. *Facts: Statistics about Alzheimer's disease*. Washington, D.C.: Alzheimer's Association.
- Bassuk, S. 1999. Social disengagement and incident cognitive decline in community-dwelling elderly persons. *Annals of Internal Medicine* 131 (3).
- Bayer, A.H., and Harper, L. 2000. Fixing to stay: A national survey of housing and home modification issues. Washington, D.C.: AARP.
- Bronfenbrenner Life Course Center. 1996. *Reverse mortgages A solution to poverty in old age? Issue Brief* 1 (2).
- Chen, Y.P.1967. Potential income from homeownership: An actuarial mortgage plan. *A compendium of papers, part II: The aged population and retirement income programs*. Subcommittee on Fiscal Policy, Joint Economic Committee, 90<sup>th</sup> Congress, First Session. Washington, D.C.: U.S. Government Printing Office, pp. 303-311.
- Consumer Federation of America. 2000. While homeownership rises, home equity stagnates. Press release November 16, 2000.
- Coronel, S.A. 2003. *Long-term care insurance in* 2000-2001. Washington, D.C.: Health Insurance Association of America.
- Eggers, W.D. 2002. *Show me the money. Budget cutting strategies for cash-strapped states.* Washington, D.C.: American Legislative Exchange Council.
- Employee Benefit Research Institute. 2002. Income of the elderly 2000. *Facts from EBRI*. June 2002.
- Ernst & Young. 2003. The new frontier of retirement: Cash flow management. New York: Ernst & Young.
- Glickman, J.M. 2003. Fifth annual long-term care insurance survey. *Broker World*, July 2003.

- Guttentag, J. 1975. *Creating new financial instruments for the aged*. New York University, Graduate School of Business Administration, Center for the Study of Financial Institutions.
- Heiss, F, Hurd, F., and Börsch-Supan, A. 2003. Healthy, wealthy and knowing where to live. Paper for the Conference on the Economics of Aging, Carefree, Ariz., May 2003.
- Hausdorff, J.M., Rios, D.A., and Edelber, H.K. 2001. Gait variability and fall risk in community-living older adults: A 1-year prospective study. *Archives of Physical Medicine and Rehabilitation* 82 (8): 1050–6.
- Joint Center for Housing Studies. 2002. *State of the nation's housing 2001*. Cambridge, Mass.: Harvard University.
- Kutty, N. 1998. The scope for poverty alleviation among elderly homeowners in the United States through reverse mortgages. Bronfenbrenner Life Course Center Working Paper No. 95-03.
- LifePlans. 1995. Who buys long-term care insurance? Washington, D.C.: Health Insurance Association of America.
- McConaghy, R.W. 2003. *Mortality, moveout and refinancing as factors in HECM reverse mortgage payoffs*. Ph.D. Dissertation, University of Massachusetts, Boston.
- Megbolugbe, I., Sa-Aadu, J., and Shilling, J. 1997. Oh, yes, the elderly will reduce housing equity under the right circumstances. *Journal of Housing Research* 8:53-74.
- Mature Market Institute. 2003. *The MetLife market survey of nursing home & home care costs*. Westport, Conn.: MetLife Mature Market Institute.
- Morgan, B.A., Megbolugbe, I., and Rasmussen, D.W. 1996. Reverse mortgages and the economic status of elderly women. *Gerontologist* 36: 400-405.
- Mulvey, J.M., and Stucki, B.R. 1998. Who will pay for the baby boomers' long-term care needs? Washington, D.C.: American Council of Life Insurers.

- National Alliance for Caregiving. 2004. *caregiving in the U.S.* Bethesda, Md.: National Alliance for Caregiving and AARP.
- National Reverse Mortgage Lenders Association. 2003. Larger reverse mortgages to be available to seniors in 2004. Press release, December 3, 2003.
- Rasmussen, D.W., Megbolugbe, I., and Simmons, P.A. 1996. *The reverse mortgage as an instrument for lifetime financial planning: An analysis of market potential.* Washington, D.C.: Fannie Mae Research Foundation.
- Rasmussen, D.W., Megbolugbe, I., and Morgan, B.A. 1997. The reverse mortgage as an asset management tool. *Housing Policy Debate* 8 (1): 173-194.
- Redfoot, D.L., and Pandya, S.M. 2002. *Before the boom: Trends in supportive services for older Americans with disabilities*. Washington, D.C.: AARP.
- Rodda, D.T., Herbert, C., and Lam, H.K. 2000. Evaluation report of FHA's home equity conversion mortgage insurance demonstration. Cambridge, Mass.: Apt Associates Inc.
- Rodda, D.T., Youn, A., Ly, H., Rodger, C.N., and Thompson, C. 2003. *Refinancing premium, national loan limit, and long-term care premium waiver for FHA's HECM program*. Cambridge, Mass.: Apt Associates Inc.
- Scholen, K., and Chen, Y.P., eds. 1980. *Unlocking home equity for the aged*. Cambridge, Mass.: Ballinger Publishing Company.
- Social Security Administration. 2003. *Income of the aged chartbook,* 2001. Washington, D.C.: Social Security Administration.
- Sterling, D.A., O'Connor, J.A., and Bonadies, J. 2001. Geriatric falls: Injury severity is high and disproportionate to mechanism. *Journal of Trauma-Injury Infection and Critical Care* 50 (1): 116–9.
- Stone, R.I. 2000. Long-term care for the elderly with disabilities: Current policy, emerging trends, and implications for the 21st century. New York: Milbank Memorial Fund.
- Stucki, B.R. 2000. *Can aging baby boomers avoid the nursing home?* Washington, D.C.: American Council of Life Insurers.

- Stucki, B.R. 2003. *Passing the trust to long-term care insurance*. Washington, D.C.: American Council of Life Insurers.
- Venti, S.F., and Wise, D.A. 2001. Aging and housing equity: Another look.

  Prepared for the conference on the Economics of Aging May 17-20, 2001.
- Wu, K.B. 2002. *Income and poverty of older Americans in 1999: A chartbook.* Washington, D.C.: AARP.
- Wu, K.B. 2003. Poverty experience of older persons. Washington, D.C.: AARP.