

A REPORT ON THE ACTUARIAL, MARKETING, AND LEGAL ANALYSES OF THE CLASS PROGRAM

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APPENDIX Ja:

**A PROFILE OF DECLINED LONG-TERM CARE
INSURANCE APPLICANTS**



A Profile of Declined Long-Term Care Insurance Applicants:
A View of Selected Socio-Demographic Characteristics

Prepared for

Department of Health and Human Services
Office of the Assistant Secretary for Planning and Evaluation
Office of Disability Aging and Long-Term Care Policy

Prepared by

LifePlans, Inc.

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Background

The Patient Protection and Affordable Care Act was signed by the President on March 23, 2010. This act establishes a national voluntary insurance program, the CLASS Independence Benefit Plan, to provide community living assistance services and supports to working individuals who have functional limitations and require ongoing assistance in the community. Individuals would pay a premium to participate in the program, and these premiums must be set to assure actuarial solvency for a 75 year period. Because the program is designed to serve working people regardless of functional status at enrollment, the pool of participants is likely to be comprised of a high proportion of employed individuals with disabilities for whom the insurance would be a particularly attractive benefit. Another group who would find the program attractive would be those who have sought to purchase private long-term care (LTC) insurance but been precluded from doing so because of their health status. Current estimates are that slightly less than 20% of all applicants for private LTC insurance are not able to buy policies due to their health status.

A key assumption underlying the development of actuarially fair premiums is that the risk profile of people enrolling in the program matches the profile that has been priced for; put another way, in developing premiums, the Secretary will need to take into account the fact that the population enrolling in CLASS will look very different from a cross-section of the population, or from individuals who enroll in other voluntary insurance programs, like private LTC insurance. This is because in the insurance market, companies are able to underwrite “bad risks” out of the risk pool at the time of application whereas the government will not have the ability to do so. Therefore, obtaining a profile of likely early enrollees and providing descriptive information to inform projections is particularly important for policymakers.

Purpose

The purpose of this project is to provide general background on LTC underwriting practice in the private insurance sector and to obtain a profile of individuals applying for private LTC insurance policies who have not been able to purchase policies due to their health status. More specifically we intend to do the following:

1. Describe in general terms underwriting practices in the LTC insurance industry.
2. Estimate underwriting rejection rates by specific age classes across the major LTC insurance carriers;
3. Identify the primary reasons why individuals are not accepted into the risk pool and develop a distribution based on these reasons. More specifically, we will focus on primary diagnoses, cognitive status, and functional status;

4. Understand the relationship between age, gender, marital status and the reasons for decline in order to identify how underwriting declination distributions look for individuals in these various sub-groups.
5. Compare the profile of individuals not able to purchase LTC insurance due to health reasons to new purchasers in terms of age, gender and marital status.

Importance of Study

Currently, there is no aggregate industry-wide knowledge about the population of individuals who have applied for LTC insurance but not been able to purchase policies due to health status. Thus, the study makes an important contribution to the knowledge base. Second, obtaining a profile of these individuals would provide important insight into likely CLASS participants. These are individuals who have actively sought to protect themselves against catastrophic LTC costs through an insurance mechanism but have not been able to avail themselves of private alternatives. Given that they understand the risk, they are likely to be among the first to enroll in the CLASS program. Third and closely related, the information provided herein should assist the Department in modeling what early program participants may look like so that there is a more informed basis for setting premiums to assure program solvency. Finally, obtaining a profile of these individuals may also assist in the development of customized benefit eligibility tools for specialized populations that are not typically served by the private long-term care insurance market.

Data

To accomplish these goals, we contacted major private LTC insurance companies currently selling in the market to solicit their participation in the study. We asked them to provide us with data on the total number of individuals that had applied for insurance between January 1, 2009 and June 30th, 2010 and had not been accepted into the risk pool due to reasons related to medical underwriting. For each individual we requested the following:

- Date of application
- Company to which individual is applying for LTC insurance
- Age at application
- Gender
- Marital status at application
- Employment status: A few companies were able to provide this data
- Functional status: Results of any functional screens applied
 - ADL status
 - IADL status
- Cognitive status: Results of any cognitive screens applied
- Medical Status: Primary and secondary diagnoses identified

The following companies participated in the study and agreed to provide information on as many of the data elements that they capture in their underwriting and policyholder administration systems:

- Bankers Life and Casualty
- Blue Cross and Blue Shield of Alabama
- Genworth Financial
- John Hancock
- Knights of Columbus
- MedAmerica
- MetLife
- Sterling Life Insurance

These companies accounted for roughly 70% of all new sales over the study period. In total, these companies contributed a sample of 55,070 individuals who applied for LTC insurance and did not pass the medical underwriting screens used by the companies.

This data was also supplemented with contextual information derived from a survey of 21 private LTC insurers focused on their underwriting practices. The study, entitled “Results of the Long-Term Care Underwriting Survey for the Individual Market in 2009” summarizes in detail the way in which companies conduct the business of underwriting.

Table 1 arrays the data elements according to the number of valid cases in the data file. Companies vary in the extent to which they capture all of the data that they actually use in the underwriting decision making process. What is common across all companies however is that information on medical diagnoses is captured. For that reason, while we have some level of detail on all 55,070 individuals, not all information is uniform. Some of the analyses will exclude large numbers of individuals. Even so, given the size of the sample, the smallest cells still contain over 18,000 observations.

Table 1: Sample Size by Data Element

Data Element	Number of Cases with Information	Percent of All Cases
Age	54,638	99%
Gender	46,172	84%
Marital Status	34,455	63%
Employment Status	18,494	33%
Functional Status		
ADL Status	23,006	42%
IADL status	21,106	38%
Cognitive Status	34,360	62%
Medical Status (Primary Diagnosis)	53,782	98%
Total Cases	55,070	100%

Because companies do not use conventional standards for summarizing diagnostic information, clinical underwriting staff at LifePlans reviewed all of the cases to assure that appropriate and broad diagnostic categories could be used to characterize the entire sample. In the analyses that follow, thirteen broad diagnostic categories are used, thus ensuring consistency across the entire sample.

Findings

A. Background on Long-Term Care Underwriting

There are a variety of ways that companies approach the underwriting process. The specific strategy can reflect attitudes toward risk selection, competitive positioning, sales and marketing, and pricing philosophy. Regardless of the specific approach used by companies, the overall purpose of underwriting is to assure that individuals purchasing insurance are representative of the anticipated risk profile that has been assumed in the underlying pricing of the product. More specifically, the underwriting process is all about risk selection and enabling companies to guard against adverse selection; that is, underwriting is used to protect against the likelihood that individuals presenting with a “riskier profile” than anticipated, will not end up dominating the risk pool. The potential for adverse selection is always a factor to be dealt with since those who would likely place the highest value on having insurance protection are also the ones who believe they are most likely to receive benefits. Clearly, some companies are more successful at underwriting than others and in fact, poor underwriting practice and experience has

resulted in a number of major LTC insurance carriers having to exit the market or request significant rate increases.

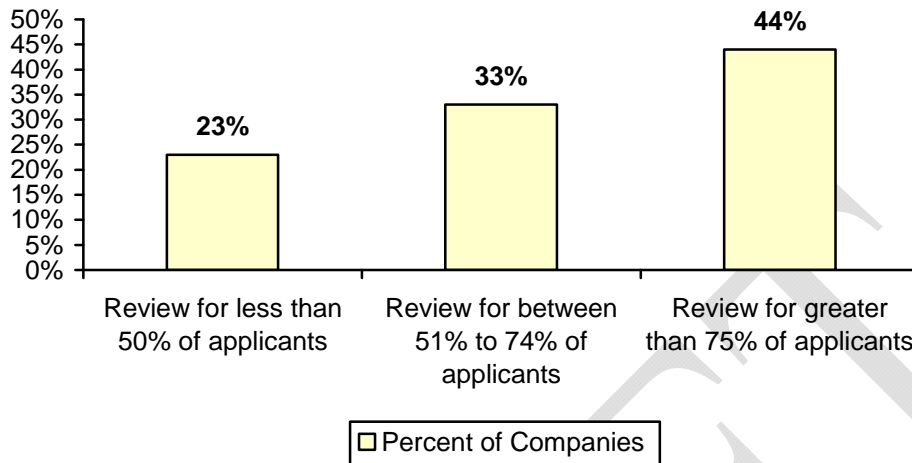
In general, underwriting practice can be characterized in terms of two broad dimensions: (1) medical criteria and (2) tools and requirements gathering. Regarding medical criteria, there are three domains on which companies focus their attention and these are the medical, functional, and cognitive status of individuals. In essence, the company is trying to identify those factors that put the individual at immediate or near term need for the services that are being insured for, namely, human assistance required to compensate for an individual's inability to perform Activities of Daily Living (ADLs) due to functional deficits or to cognitive issues. Diagnoses are actually markers for current or future manifestations of functional need. Thus, having a particular diagnosis, like acute heart disease, would not automatically disqualify someone from buying a policy. Rather, what is important is whether that diagnosis is likely to lead to a functional deficit necessitating ongoing human assistance. As such, the factors that are typically taken into account in evaluating the status of applicants for LTC insurance include:

- Age
- Gender
- Medical History
- Build
- Cognition
- Home Environment
- Social Support
- Activities of Daily living (ADLs)
- Physical Conditions
- Instrumental Activities of Daily Living (IADLs)

The second dimension, Underwriting Requirements, relates to the specific type of information that a company needs to obtain in order to make the determination of insurability. There are multiple sources of such information. The most common tools include information provided from the application, telephone interviews, medical records or attending physician statements, medical exams, in-person assessments and pharmacy databases. When and how companies choose to deploy these tools varies greatly. By way of example, the graph below, derived from an analysis of a national survey of LTC insurance carriers, shows the frequency of use of Attending Physician Statements or Medical Records.¹ As shown, there is a great deal of variation across the roughly 20 companies participating in the study. Not shown in the graph is that roughly half of all companies view medical history for up to three years whereas the other half, focus on a longer window of at least four or more years. Both underwriting criteria and requirements vary across companies.

¹ Results of the Long-Term Care Underwriting Survey for the Individual Market in 2009. LifePlans, Inc. Waltham, MA November, 2010.

**Figure 1: Use of APS or Medical Records Across Companies
(2009)**



In terms of the impact of underwriting on pricing, most actuaries assume that the impact of being able to select out those who are at immediate or short-term future risk will reduce anticipated claims costs during the first five to seven years after policy issue. After that time, the independent impact of underwriting on the risk profile of policyholders is assumed to diminish. Put another way, an age 65 applicant who undergoes underwriting is assumed to have superior claims experience during the first five to seven years after policy issue compared to a similarly aged individual who does not go through underwriting. However, by age 70 to 72, the anticipated claims experience of both individuals -- assuming everything else is constant -- will converge and be roughly equivalent.

The underwriting process actually begins with the development of the insurance application. Most applications typically include a number of “knock-out” questions that if answered in the affirmative, lead to an automatic declination. Such questions are focused on issues that indicate a more immediate need for term-care services. Some of the more common questions include:

1. Do you require human assistance or supervision to perform any of your activities of daily living?
2. Are you currently receiving home health care or have you recently been in a nursing home?
3. Have you ever been diagnosed with, treated for, or consulted with a medical professional for the following:

- Acquired immune deficiency syndrome (AIDS) or HIV positive, or AIDS related complications (ARC)
 - Alzheimer's disease
 - Amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease)
 - Cystic fibrosis
 - Cirrhosis of the liver
 - Diabetes requiring insulin (other than during pregnancy)
 - Huntington's chorea
 - Memory loss, senility, dementia, confusion or organic brain syndrome
 - Metastatic Cancer (Cancer that has spread from the original organ)
 - Multiple sclerosis or Demyelinating disease
 - Muscular dystrophy
 - Neurogenic bladder
 - Parkinson's disease
 - Polycystic Kidney Disease
 - Post polio syndrome
 - Schizophrenia
 - Systemic lupus Erythematosus
 - Mini-stroke, transient ischemic attack (TIA), stroke, Cerebrovascular Accident (CVA)
4. Do you currently use or need any of the following: Wheelchair, Walker, Chair/Stair lift, Oxygen, Respirator, Dialysis, Multi-pronged Cane, Motorized Cart or Hospital Bed?
 5. Do you currently receive disability benefits, Social Security disability benefits or Medicaid?

If an individual's answers in the affirmative to these questions, it is likely that they will not be able to purchase a policy.

Most policies are sold by agents and many companies provide an "Agent Guide," which is a tool the agent uses to pre-screen potential applicants even before they complete an application. Given that the sale of LTC insurance is challenging, agents do not want to go through the trouble of taking an application and then having it rejected during the underwriting process. Therefore, a certain amount of "field underwriting" occurs. The agent guide is a tool that allows the agent to obtain some very basic information and in some sense "pre-qualify" a potential applicant. Agent guides can consist of a few pages of diagnoses that represent automatic-declines or a large booklet containing a great deal of medical underwriting information. The implication is that individuals who make application and go through the underwriting process are already a "select" group; they are

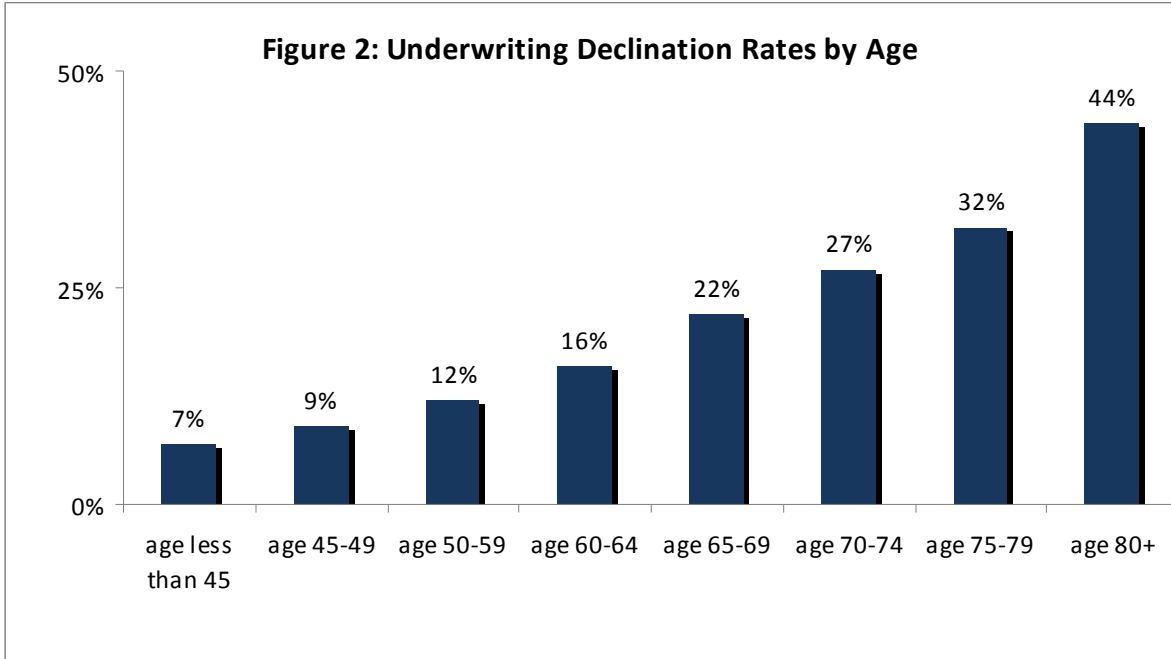
the people that the agents have pre-screened into the applicant pool.² Thus, data in subsequent analyses is not representative of the entire pool of individuals likely to apply for the CLASS program, but rather, those that are more likely to represent near term future need rather than immediate need for LTC services. This latter group will have already been screened out of the pool of applicants through agent activity.

Typically underwriting standards and protocols are considered to be a company asset and are treated confidentially. A company that is particularly strong at underwriting and able to balance sales and marketing needs with risk selection requirements is clearly at a competitive advantage in the marketplace. Thus, it is not surprising that there remains variation in the marketplace regarding precise practice. Moreover, unlike life insurance, where there is much greater experience and knowledge about factors related to mortality risks, in LTC, such knowledge is still evolving. Put simply, most LTC underwriters are hard-pressed to be able to consult a morbidity table that allows them with certainty to predict unfolding LTC needs. The need for LTC in general, and the demand for specific service modalities in particular, is characterized by the intersection between health and functional status as well as lifestyle preferences and views of family responsibility. This makes underwriting for LTC a particular challenge.

B. Underwriting Declination Rates by Age

In 2009, underwriting rejection rates across the industry were at 19.4%. As shown in Figure 2 below, declination rates are highly sensitive to age. This data is based on a recently completed survey of 21 LTC insurance companies representing the vast majority of sales in 2009. For applicants under age 45, declination rates are below 10% whereas for those over age 80, rates increase to slightly more than two in five or 44%. This is not surprising given that functional and cognitive decline – and associated need for LTC services -- is related to age.

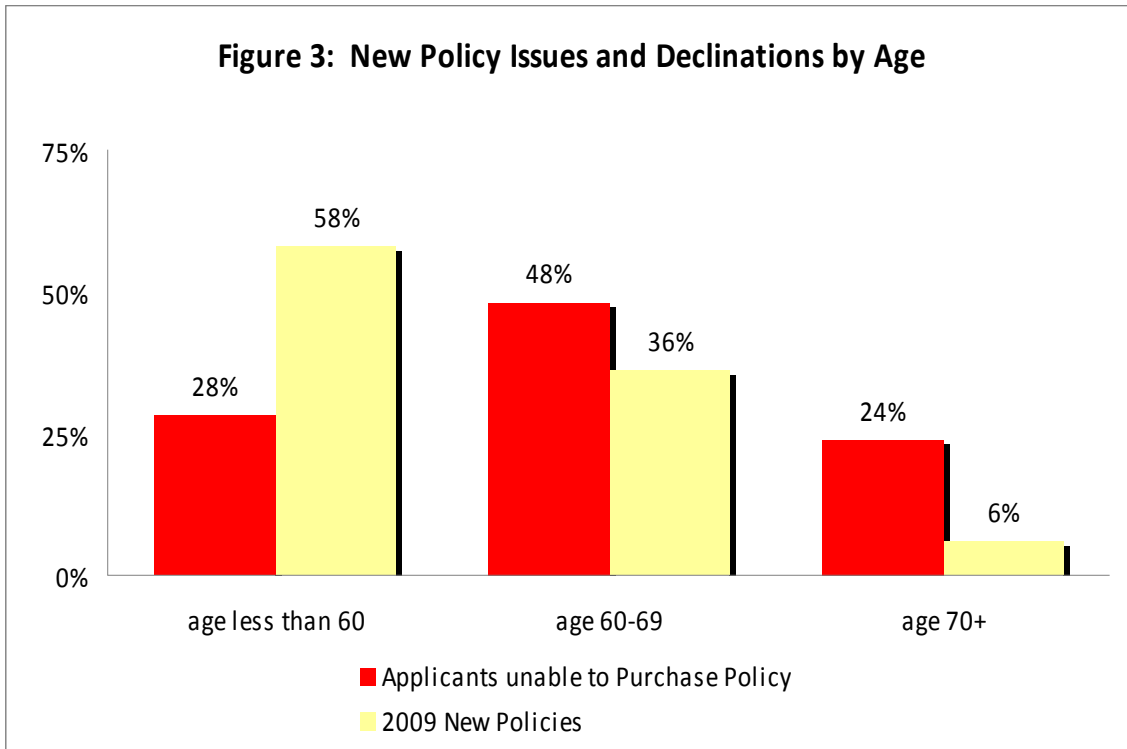
² Note that in roughly 8% of the cases individuals are still declined based solely on information found in the application alone. This suggests that agent pre-screening is not always effective.



Source: Results of the Long-Term Care Underwriting Survey for the Individual Market in 2009. LifePlans, Inc. Waltham, MA. November, 2010.

Note: Data weighted to represent market share of participating companies.

If we compare the age profile of individuals unable to purchase insurance due to health reasons with those who were issued policies during the same period, we find that the former tend to be older. In fact, the average age of individuals declined for coverage in the underwriting process in 2009 was 64 years whereas the average age of new purchasers was 57 years.



C. Socio-Demographic, Functional, and Cognitive Characteristics of Individuals Declined from Purchasing LTC Insurance

Table 2 summarizes additional socio-demographic characteristics of individuals who were declined from purchasing LTC insurance compared to individuals who were issued policies. As shown, compared to new buyers, declined individuals tend to be somewhat older, more male, and much less likely to be employed. Regarding employment, the results suggest that in general, being employed – which is also typically correlated with younger ages -- is negatively associated with underwriting declinations. **The implication is that as a potential underwriting screen, the employment requirement does provide some level of protection.**

Table 2: Socio-Demographic Characteristics of Individuals Declined from Purchasing LTC Insurance and New Buyers of Insurance

Characteristics	Percent Declines	Percent New Issues
Age ²	64	57 ^{***}
Less than 50	5%	7%
50-54	8%	15%
55-64	40%	45%
65-69	24%	17%
70-74	12%	9%
75 and over	12%	7%
Gender ¹		
Male	48%	43% ^{***}
Female	52%	57%
Marital Status ²		
Married	76%	76%
Single	24%	24%
Employment Status ²		
Employed	51%	71% ^{***}
Not Employed	49%	29%

Source: Analysis of 2010 Underwriting Declination Database.

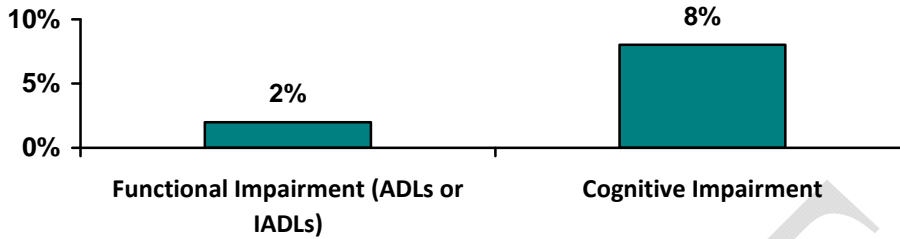
¹ Results of the Long-Term Care Underwriting Survey for the Individual Market in 2009. LifePlans, Inc. Waltham, MA November, 2010.

² Who Buys Insurance in 2005: A Fifteen Year Profile of Buyers and Non-Buyers of Long-Term Care Insurance, AHIP, Washington, D.C. 2006.

Note: *** Significant at the .001 level.

As mentioned, companies tend to focus on the medical, functional and cognitive status of individuals when deciding whether or not to issue a policy. Figure 4 below shows the percentage of individuals who were declined due to a functional or cognitive impairment.

Figure 4: Percentage of Applications Declined Due to Functional and Cognitive Issues



Clearly, agents are doing a good job in terms of pre-screening; only 2% of applicants present with ADL or IADL limitations. As well, individuals with current dementia are for the most part screened out of the applicant pool by agents. For the most part, the 8% of applicants who are declined due to cognitive impairment, are not yet exhibiting outward signs of dementia, but instead, are at the very earliest stages of cognitive decline.

Table 3 shows the relationship between age and various socio-demographic characteristics of individuals not able to purchase a policy due to health issues. Each age grouping is assigned a letter so that in the table itself, one can identify those variables which are significantly different from similar variables in other age groups. Thus, for example, the percentage of female declines in the under age 60 age group is significantly higher than what is found in the 60-69 and over 70 age groups. The key findings from the data are that:

- Although relatively small, there is a higher percentage of individuals in the over age 70 group who are declined from insurance due to ADL and IADL limitations.
- The rate of declines due to cognitive impairment is less than 2% for the under age 60 group, but more than one-in-four (27%) for the over age 70 group.
- The rate of employment among declines is 74% for the under age 60 group and 26% for the over 70 age group.

Table 3: Relationship between Age and Socio-Demographic Characteristics of Underwriting Declines

		Age category					
		Less than age 60 (A)		age 60-69 (B)		age 70 or above (C)	
		Count	Column N %	Count	Column N %	Count	Column N %
Gender	Male	5992	40.5%	11658	50.4%A	4070	51.8%A
	Female	8794	59.5%BC	11455	49.6%	3786	48.2%
Marital Status	Married	8802	76.4%C	13735	78.0%AC	3458	68.6%
	Single	2336	20.3%	3385	19.2%	1352	26.8%AB
	Divorced	158	1.4%BC	160	.9%	46	.9%
	Widow	141	1.2%	175	1.0%	153	3.0%AB
	Partner	83	.7%	148	.8%	26	.5%
ADL Loss	No	7733	99.8%C	11411	99.8%C	3666	99.5%
	Yes	17	.2%	25	.2%	20	.5%AB
IADL Loss	No	7012	99.4%C	10650	99.3%C	3285	98.6%
	Yes	43	.6%	70	.7%	46	1.4%AB
Cognitive Status	Normal or No Screen	8663	81.6%BC	12263	67.9%C	3050	54.9%
	Pass	1763	16.6%	4848	26.9%AC	1024	18.4%A
	Impaired	188	1.8%	938	5.2%A	1485	26.7%AB
Employment Status	Employed	4583	73.8%BC	4131	44.6%C	798	26.4%
	Not Employed	1627	26.2%	5135	55.4%A	2220	73.6%AB

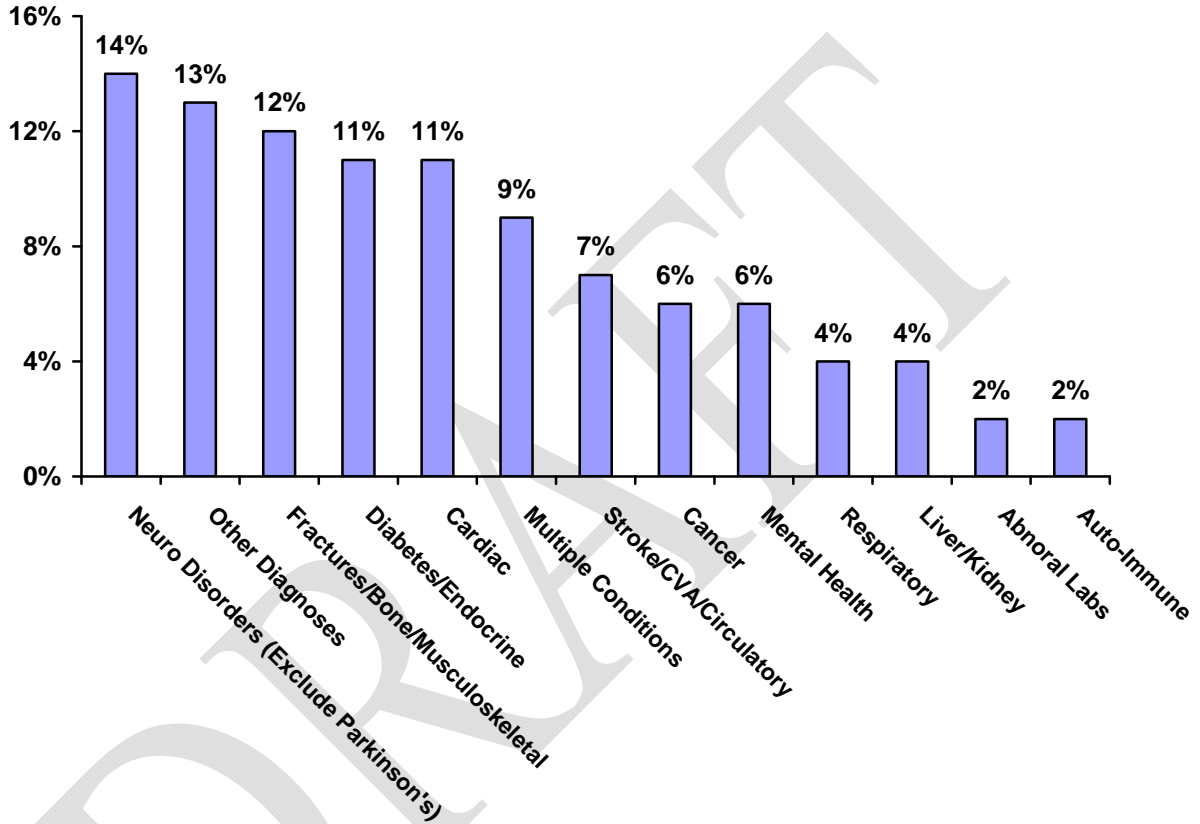
Note: Numbers in specific cells that have letters next to them indicate that there is a statistically significant difference between that result and similar cells under other age categories. Thus, for example, within the age 60 group, 74% of the declines were employed and this is significantly higher than the corresponding percentages for the age 60-69 and over age 70 groups.

C. Profile of Declines by Medical Diagnoses

In explaining to applicants why they may have been declined from insurance, almost all companies point to the presence of specific medical diagnoses. This is the case even when such diagnoses may not have yet manifested themselves into functional or cognitive decline. It is enough for an underwriter to know that such diagnoses will likely lead to dependency in ADLs to screen the individual out of the risk pool. The analysis of diagnostic information highlights the fact that the diagnoses that are recorded in the case files of applicants are many and varied. In order to assure that a profile could be

developed, clinical underwriters reviewed the diagnostic information provided by companies and developed a common basis for coding diagnoses into any one of thirteen primary categories. Figure 5 shows the distribution of the declined applicants by these primary categories.

Figure: 5: Distribution of Underwriting Declines by Medical Diagnosis



Note: “Other” is comprised of Dementia, Parkinson’s disease, current use of Durable Medical Equipment, ADL or IADL impairments, use of specific excluded drugs, soft-tissue issues.

As shown, there is a wide distribution of diagnoses that can lead to an underwriting decline. No single diagnostic category accounts for more than 15% of declines. The most prevalent categories include neurological issues, fractures, bones and musculoskeletal issues, cardiac problems and individuals presenting with multiple conditions. Roughly 6% of declines are comprised of individuals with mental health issues, the most common being depression.

Table 4 highlights the relationship between medical diagnoses and age. Key findings from this table include:

- Individuals age 70 and over are most likely to be declined because of neurological problems other than Parkinson's and the presence of multiple conditions.
- Diabetes, Endocrine, Cancer and Cardiac problems are the most prevalent reasons for declines for individuals in the age 60-69 age group.
- Fractures, bone issues and other musculoskeletal problems, as well as mental health, auto-immune and other diagnoses not captured by these other major categories are most prevalent in the under age 60 declines.

Table 4: Distribution of Declines by Medical Diagnosis by Age and Gender

		Age category					
		Less than age 60 (A)		age 60-69 (B)		age 70 or above (C)	
		Count	Column N %	Count	Column N %	Count	Column N %
Primary	Diabetes/Endocrine	1751	11.9% ^C	3348	13.0% ^{AC}	933	7.2%
	Cancer	901	6.1% ^C	1810	7.1% ^{AC}	616	4.7%
	Stroke/CVA/Circulatory	779	5.3%	2056	8.0% ^A	959	7.4% ^A
	Fractures/Bone Problems/Musculoskeletal	2156	14.6% ^{BC}	3199	12.5% ^C	1053	8.1%
	Neurological issues (Excluding Parkinson's)	1182	8.0%	2593	10.1% ^A	3717	28.5% ^{AB}
	Cardiac Problems	1376	9.3%	3156	12.3% ^{AC}	1158	8.9%
	Respiratory	512	3.5% ^C	970	3.8% ^C	359	2.8%
	Mental Health	1445	9.8% ^{BC}	1337	5.2% ^C	254	1.9%
	Abnormal Labs/Unstable condition	424	2.9%	592	2.3%	242	1.9%
	Other	2692	18.3% ^{BC}	3271	12.7% ^C	898	6.9%
	Auto-Immune	533	3.6% ^{BC}	594	2.3% ^C	135	1.0%
	Liver/Kidney	557	3.8% ^C	921	3.6% ^C	399	3.1%
	Multiple conditions	417	2.8%	1819	7.1% ^A	2322	17.8% ^{AB}

Note: The letters in specific cells designate that the proportion is significantly different than that found in the identified columns. Thus, for example, the proportion of individuals under age 60 declined due to Diabetes/Endocrine issues is higher than the corresponding percentage of declines for the over age 70 group.

D. Profile of Declines by Employment Status

While the CLASS Program is structured in a manner that maximizes participation -- even among those who already may have functional dependencies -- the one requirement that does afford some level of control regarding enrollment is the work requirement. To enroll in the program, an individual must be employed. Therefore, if one wants to obtain a profile of likely early enrollees to the program, a focus on the sub-set of *employed individuals* declined for private LTC insurance is clearly warranted. This group is already educated about the risk and need for coverage, has expressed its preferences through a willingness to pay for private insurance, and is likely to be highly motivated to participate in a public program, even if benefits levels are less than what they might have desired in the private market. In the analyses that follow, we segment data in terms of employment status. We have definitive employment status on roughly 18,500 declines.

As mentioned, many companies do not track in their system whether or not an applicant is employed. We do know from previous studies of buyers and non-buyers of LTC insurance that roughly 70% of all applicants for LTC insurance are employed. Tables 2 and 4 highlighted the fact that the rate of employment among individuals declined for insurance is much lower than for the population of applicants as a whole, at least with respect to those ages 60 and over.

Table 5 shows the relationship between key demographic characteristics of the sample by employment status. As shown, employed declines are more likely to be younger, male, and married, but less likely to have functional or cognitive issues than their non-employed counterparts.

Table 5: Relationship between Socio-Demographic Characteristics and Employment Status

	Employed	Not Employed
Age		
age 60	48%**	18%
age 60-69	43%	57%**
age 70 or above	9%	25%**
Average age	60	65**
Gender		
Male	54%**	45%
Female	46%	55%**
Marital Status		
Married	72%**	67%
Single	27%	33%**
Widow	1%	0%
ADL Loss	0.1%	.2%**
IADL Loss	0.4%	1.2%**
Cognitively Impaired	3%	6%**

Not shown in the table is the fact that employed applicants who were declined due to health status are slightly older (age 60) than are all employed applicants (age 58). Moreover, they tend to be somewhat more male (54%) than the total pool of all employed applicants (45%).

Table 6 summarizes the relationship between employment status and primary diagnosis among declines. The only statistically significant differences in the medical diagnosis profile between the two groups are that mental health issues and stroke/CVA/Circulatory problems are more prevalent among those not working. Among those employed, there is a somewhat higher proportion of individuals with a myriad of other diagnoses which are reflected in the “Other” category.

Table 6: Declines by Medical Diagnosis by Employment Status

	Employed	Not-Employed
Primary Diabetes/Endocrine	12.3%	11.4
Cancer	8.3%	8.5
Stroke/CVA/Circulatory	7.7%	9.1 ^{***}
Fractures/Bone Problems/Musculoskeletal	13.4%	13.2
Neurological issues (Excluding Parkinson's)	9.2%	9.5
Cardiac Problems	13.2%	12.9
Respiratory	3.3%	3.2
Mental Health	7.1%	8.5 ^{***}
Abnormal Labs/Unstable condition	2.2%	2.0
Other	15.5% ^{***}	14.1
Auto-Immune	3.2%	3.1
Liver/Kidney	3.9%	3.8
Multiple conditions	.6%	.6

Clearly, one's medical status is closely related to age. To gain a better understanding of the relationship between primary diagnoses and age, Table 7 arrays the data by age, employment status and diagnosis.

Table 7: Declines by Medical Diagnosis and Employment Status by Age

		Employed			Not-Employed		
		< age 60 (A)	age 60-69 (B)	age 70+ (C)	< age 60 (D)	age 60-69 (E)	age 70+ (F)
Primary	Diabetes/Endocrine	11.5%	13.6%AC	10.3%	7.8%	12.1%D	12.6%D
	Cancer	7.6%	9.0%	8.6%	6.1%	9.1%D	8.8%D
	Stroke/CVA/Circulatory	5.5%	9.4%A	11.0%A	5.7%	9.0%D	11.8%DE
	Fractures/Bone Problems/ Musculoskeletal	15.3%BC	11.8%	10.8%	14.7%	13.1%	12.5%
	Neurological issues (Excluding Parkinson's)	8.1%	8.9%	17.0%AB	10.0%	8.5%	11.4%E
	Cardiac Problems	10.0%	15.8%A	18.4%A	7.1%	12.1%D	18.8%DE
	Respiratory	2.9%	3.6%	4.4%	2.0%	3.5%D	3.5%D
	Mental Health	9.4%BC	5.6%C	2.0%	15.7%EF	8.1%F	4.3%
	Abnormal Labs/Unstable condition	2.4%C	2.3%C	.9%	2.2%	2.1%	1.8%
	Other	18.6%BC	13.1%	10.5%	18.8%EF	15.0%F	8.6%
	Auto-Immune	3.9%BC	2.6%	1.6%	5.1%EF	3.1%F	1.8%
	Liver/Kidney	4.1%	3.8%	3.8%	4.0%	3.7%	3.8%
	Multiple conditions	.7%	.3%	.7%	.9%	.5%	.5%

The key observations from this table are that:

- Among declines under age 60, mental health is more prevalent than for other age groups and it is also highly correlated with employment status: those who are not-working are roughly twice as likely to have mental health issues cited as a primary reason for a decline and this is true across all age segments.
- Fractures/Bone Problems/Musculoskeletal issues as well as Auto-immune issues are more prevalent among the under age 60 employed declines than among other age groups.

- Diabetes and Endocrine problems are most prevalent among employed individuals age 60-69. Also, individuals age 60-69 who are employed are more likely to have cardiac issues than are those who are not-employed.
- Among individuals age 70 and over, Stroke, CVA/ Circulatory issues, along with Neurological and Cardiac problems comprise the major reasons for decline. Neurological problems are more prevalent among the employed.

Table 8 below further segments the data by focusing on age and gender differences in the profile of medical diagnoses for individuals who are employed and were declined coverage.

Table 8: Employed Declines by Medical Diagnosis by Age and Gender

	EMPLOYED Individuals by AGE Group					
	Less than age 60		age 60-69		age 70 or above	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
	(A)	(B)	(A)	(B)	(A)	(B)
Primary Diabetes/Endocrine	15.6%B	7.9%	16.1%B	9.6%	11.5%	7.8%
Cancer	7.8%	7.5%	9.7%B	7.8%	11.0%B	4.1%
Stroke/CVA/Circulatory	6.6%B	4.5%	10.6%B	7.7%	11.9%	9.3%
Fractures/Bone Problems/Musculoskeletal	14.3%	16.2%	9.1%	16.0%A	7.4%	17.5%A
Neurological issues (Excluding Parkinson's)	7.4%	8.6%	8.7%	9.4%	16.8%	17.5%
Cardiac Problems	14.6%B	6.0%	19.2%B	10.6%	21.9%B	11.5%
Respiratory	2.9%	2.8%	3.2%	4.4%A	3.8%	5.6%
Mental Health	6.7%	11.8%A	4.6%	7.2%A	.9%	4.1%A
Abnormal Labs/Unstable condition	2.7%	2.2%	2.9%B	1.4%	1.3%	0.0%
Other	14.4%	22.3%A	10.0%	17.8%A	7.6%	16.4%A
Auto-Immune	1.8%	5.8%A	1.4%	4.6%A	.2%	4.5%A
Liver/Kidney	4.6%	3.7%	4.1%	3.3%	4.7%B	1.9%
Multiple conditions	.6%	.8%	.5%	.4%	.9%	0.0%

Key observations from Table 8 include:

- Under age 70, among employed applicants, males tend to have higher rates of Diabetes/Endocrine, Stroke/CVA/Circulatory, and Cardiac problems than do females.
- Across all ages, mental health and auto-immune issues as primary decline reasons among employed individuals are higher for females than for males.

Conclusions

Information from this analysis has clearly demonstrated that individuals who are unable to purchase private LTC insurance due to the medical underwriting process tend to be somewhat older, male and less likely to be employed than the total applicant pool. While few exhibit outward signs of functional impairment or dementia, this is likely the result of agents pre-screening activities. Thus, the pool of applicant declinations is more representative of individuals who are at risk for **near term need** rather than **immediate need**. For that reason, the roughly 8% of individuals who are declined for not passing a cognitive screen are likely at the early stages of cognitive decline and for the most part do not have dementia at the time of application.

The distribution of the sample by medical diagnosis suggests that there are a variety of reasons why someone may not be accepted into the risk pool. No single diagnostic category accounts for more than 15% of the declinations and there are clear patterns across age, gender and employment status. Estimating the prevalence of these diagnoses in the general target population for the CLASS Program is an important next step, as it will enable policymakers to begin to characterize with more precision the risk profile of enrollees. As such, this will enable more accurate pricing so that the premiums adequately reflect underlying risk and support ongoing program financial solvency.

APPENDIX Jb:

**CLASS PROGRAM BENEFIT TRIGGERS
AND COGNITIVE IMPAIRMENT**

CLASS PROGRAM BENEFIT TRIGGERS AND COGNITIVE IMPAIRMENT

Prepared Under Contract by Katie Maslow

For the Office of the Assistant Secretary for Planning and Evaluation,

U.S Department of Health and Human Services

Draft

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The mandated benefit triggers for the Community Living Assistance Services and Support (CLASS) Program legislation are clearly intended to include people with cognitive impairment. One of the two specified benefit triggers explicitly identifies as eligible an individual who “requires substantial supervision to protect the individual from threats to health and safety due to substantial cognitive impairment.” In addition, some people with cognitive impairment will be eligible based on the other specified benefit trigger, inability to perform at least 2 or 3 activities of daily living (ADLs) without substantial assistance from another person. Over time, for example, virtually all people who have progressive neurological diseases and conditions that cause cognitive impairment, e.g., people with Alzheimer’s disease, Huntington’s disease, and Amyotrophic Lateral Sclerosis (ALS), will need assistance from another person with all 6 ADLs listed in the legislation, unless they die first from another cause.

The CLASS Program benefit trigger that identifies individuals as eligible based on need for supervision to protect them from threats to their health and safety was probably intended by Congress to target people with cognitive impairment due to Alzheimer’s disease and other dementias that mainly affect older people. Certainly, however, some adults of all ages who have cognitive impairment due to other diseases and conditions, e.g., people with mental retardation, other intellectual disabilities, severe mental illness, traumatic brain injury and acquired immunodeficiency syndrome, could also be eligible based on this trigger. Likewise, some adults with cognitive impairment due to any of these diseases and conditions could be eligible based on inability to perform ADLs. Adults with cognitive impairment due to diseases and conditions that preclude them from working throughout their adult lives may not be able to enroll in the CLASS Program because of the work and earned income requirements for enrollment. Nevertheless, in developing regulations to operationalize and implement the CLASS Program benefit triggers, it is important to consider the relevance and impact of proposed regulations for adults with cognitive impairment due to diseases and conditions beyond the targeted group of older people with Alzheimer’s and other dementias.

There is currently a very large and growing body of research on cognitive impairment, measurement of cognitive impairment, and the need for and use of long-term services and supports by people with cognitive impairment. This research, as well as clinical and practice-based experience in determining eligibility for long-term services and supports, suggests various approaches for operationalizing and implementing the mandated CLASS Program benefit triggers as they pertain to people with cognitive impairment. To focus the discussion of findings from these sources, this paper begins by identifying the concepts and wording in the CLASS Program benefit triggers that are particularly important for people with cognitive impairment. The paper then compares the wording and concepts in the CLASS Program benefit triggers with the wording and concepts in the required benefit triggers for qualified long term care insurance policies under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Federal Long-Term Care Insurance Program and summarizes the limited amount of published information about individuals with cognitive impairment who receive long-term services and supports funded at least in part through these policies. Later sections of the paper discuss the relationship of cognitive impairment and need for and use of long-term services and supports and approaches for operationalizing and measuring the relevant concepts in the CLASS Program benefit triggers based on need for supervision to protect an individual from threats to health and safety and inability to perform ADLs. The CLASS Program legislation includes a third, unspecified benefit trigger, and the last section of the paper suggests options the Secretary might consider for this benefit trigger. Throughout the paper, recommendations for the Secretary are noted in text boxes.

PART 1: BENEFIT TRIGGERS IN THE CLASS PROGRAM AND OTHER LONG-TERM CARE INSURANCE PROGRAMS

As noted above, the CLASS Program legislation includes two specified benefit triggers and one unspecified benefit trigger to be determined by the Secretary. Box 1 shows the language from the CLASS Program legislation that describes the benefit triggers. Four concepts (underlined in the box) are particularly important in considering the implications of the benefit triggers for people with cognitive impairment:

1. substantial assistance (as defined by the Secretary) from another individual;
2. substantial supervision;
3. threats to health and safety; and
4. substantial cognitive impairment.

Box 1: CLASS Program Benefit Triggers

“A benefit trigger for provision of benefits that requires a determination that an individual has a functional limitation, as certified by a licensed health care practitioner, described in any of the following clauses that is expected to last for a continuous period of more than 90 days:

- (i) The individual is determined to be unable to perform at least the minimum number (which may be 2 or 3) of activities of daily living as are required under the plan for the provision of benefits without substantial assistance (as defined by the Secretary) from another individual.
- (ii) The individual requires substantial supervision to protect the individual from threats to health and safety due to substantial cognitive impairment
- (iii) The individual has a level of functional limitation similar (as determined under regulations prescribed by the Secretary) to the level of functional limitation described in clause (i) or (ii).”

“The term ‘activities of daily living’ means each of the following activities...

- (A) Eating.
- (B) Toileting.
- (C) Transferring.
- (D) Bathing.
- (E) Dressing.
- (F) Continence

Source: Public Law 111-148, Title VIII, Sections 3202 and 3203, March 2010.

The required benefit triggers for tax qualified long term care insurance policies under HIPAA (1996)^a are similar but not exactly the same as the mandated benefit triggers for the CLASS Program. In specific, the HIPAA benefit trigger based on need for supervision to protect the individual from threats to health and safety states that the threats are due to severe cognitive impairment,” as opposed to “substantial cognitive impairment” in the CLASS Program benefit trigger. In addition, in the HIPAA requirements, the 90-day period applies only to the benefit trigger based on inability to perform ADLs. Also, the words, “due to a loss of functional capacity” are added to the benefit trigger based on ADLs, so that the individual must be “unable to perform (without substantial assistance from another individual) at least 2 activities of daily living, due to a loss of functional capacity.”

The required benefit triggers for the Federal Long-Term Care Insurance Program are similar but not exactly the same as either the mandated benefit triggers for the CLASS Program or the HIPAA benefit triggers. Like the HIPAA benefit trigger based on need for supervision to protect the individual from threats to health and safety, the Federal Long-Term Care Insurance Program benefit trigger based on need for supervision requires that the threats are due to severe cognitive impairment,” as opposed to “substantial cognitive impairment” in the CLASS Program benefit trigger. Also like the HIPAA benefit triggers, the Federal Long-Term Care Insurance Program applies the 90-day period only to the benefit trigger based on inability to perform ADLs, and adds the words, “due to a loss of functional capacity,” to that benefit trigger. Unlike the CLASS Program and HIPAA benefit triggers based on need for supervision, the Federal Long-Term Care Insurance Program benefit trigger on need for supervision does not include the phrase, “to protect the individual from threats to health and safety.”

All three sets of benefit triggers list exactly the same ADLs: eating, toileting, transferring, bathing, dressing and continence. They differ only in that the HIPAA and Federal Long-Term Care Insurance Program benefit triggers specify that the person must need assistance with 2 of the 6 ADLs, while the CLASS Program triggers allow the Secretary to decide whether the person must need assistance with 2 or 3 ADLs.

^a The Health Insurance Portability and Accountability Act of 1996 (HIPAA) created a new federal income tax deduction for premiums for long-term care insurance policies that met requirements defined in the Act, including required benefit triggers.

This contractor has not found any published information about the number of individuals with cognitive impairment that has received long-term services and supports through the Federal Long-Term Care Insurance Program or the proportion of all individuals who have received such services that are individuals with cognitive impairment. One study funded by ASPE found, however, that 41 percent of a random sample of 1,474 individuals who had long-term care insurance and had just begun or were about to begin using paid long-term services and supports were individuals with cognitive impairment (Miller et al., 2008). The proportions of individuals that had cognitive impairment differed across care settings. Among those who had begun receiving paid care at home, 28 percent had cognitive impairment, compared with 63 percent of those who were receiving paid care in an assisted living facility and 64 percent of those who were receiving paid services in a nursing home (Cohen et al., 2006). Among those who had not yet begun receiving paid care, 29% had cognitive impairment.

The ASPE-funded study found that the great majority of individuals in the sample would have been eligible based on the HIPAA benefit triggers (Miller et al., 2008), but the study finding about the proportion of individuals that had cognitive impairment was based on the results of a brief mental status test, the Short Portable Mental Status Questionnaire (SPMSQ) (Pfeiffer et al., 1975), which was administered by research nurses for the study. Thus, it is not clear from the reported findings whether these individuals met the HIPAA benefit trigger based on need for supervision to protect the individual from threats to health and safety, the HIPAA benefit trigger based on ADLs, or both.

Another study funded by the MetLife Mature Market Institute found that 42 percent of a sample of 423 individuals who had long-term care insurance and were receiving paid care in the community were individuals with Alzheimer's disease or another dementia (MetLife, 2006). Again, it is not clear from the study finding whether these individuals met the HIPAA benefit trigger based on need for supervision, the HIPAA benefit trigger based on ADLs, both triggers, or another benefit trigger used by their long-term care insurance company. Nevertheless, both studies show that substantial proportions of people who are found to be eligible for long-term

services and supports through their long-term care insurance policy are people with cognitive impairment.

As of Oct. 5, 2010, Marc A. Cohen, PhD, was completing a report for SCAN Foundation on questions about how the HIPAA benefit trigger based on need for supervision to protect the individual from threats to health and safety is implemented in existing long-term care insurance plans.^b This report should provide valuable ideas about how the CLASS Program benefit trigger based on need for supervision could be operationalized and implemented.

Recommendation. Because of the similarities among the CLASS Program, HIPAA and Federal Long-Term Care Insurance Program benefit triggers and because the CLASS Program benefit triggers are intended for use in long-term care insurance plans, any available information about how the HIPAA and Federal Long-Term Care Insurance Program benefit triggers have been implemented will be useful to the Secretary in operationalizing the CLASS Program benefit triggers. Such information, which could include research findings and/or clinical and practice-based experience in determining eligibility for long-term services and supports, should be obtained in a timely manner.

PART 2: COGNITIVE IMPAIRMENT AND NEED FOR AND USE OF LONG-TERM SERVICES AND SUPPORTS

The term, *cognitive impairment*, refers to reduced or impaired cognitive or mental abilities, including memory, thinking, learning, awareness, orientation, understanding, recognition, concentration, reasoning, planning, organizing, solving problems and making judgments and decisions. A wide array of genetic and acquired diseases and conditions can cause cognitive impairment.

Cognitive impairment can result in inability to perform activities that are essential for normal, independent functioning, including self-care activities, usually referred to as ADLs and

^b Dr. Cohen indicated that ASPE is aware of the report. This contractor has not seen the report as of Oct. 11, 2010.

IADLs (instrumental activities of daily living) in older people, as well as activities that are required for school and work in younger people and activities that are part of normal social interaction for people of all ages. Even if an individual with cognitive impairment is physically able to perform these activities, he or she may be unable to learn or remember how to perform them, know when or where to perform them, or be unable to plan, initiate, or sequence the steps needed to perform them successfully. Depending on the types of activities the individual is unable to perform independently, he or she may need long-term services and supports.

The relationship between cognitive impairment and inability to perform essential self-care and other activities is obvious in a sense, but it is not always fully understood. Two examples pertaining to inability to perform ADLs illustrate the relationship. First, with respect to the ADL, dressing, an individual of any age could be physically unable to dress independently because of weakness or an injury, disease, or condition that makes it impossible for the individual to get out, put on, and fasten clothing. In contrast, an individual could be cognitively unable to dress independently because of inability to learn or remember how to put on clothing; inability to plan, initiate, and sequence the steps in dressing, or inability to understand or remember when to get dressed. Similarly, with respect to the ADL, toileting, which means getting to and using the toilet, an individual could be physically unable to get to or use the toilet independently because of weakness or an injury, disease or condition that makes it impossible walk or otherwise get to the toilet, use it and get back to his or her prior location. In contrast, an individual could be cognitively unable to learn or remember how to use a toilet, unable to recognize a toilet or know what it is for, or unaware of his or her need to use the toilet at a particular time. Although the specific reasons that individuals with cognitive versus physical impairments are unable to perform an ADL differ, and the kinds of help they need to perform the ADL may also differ, the end result with respect to the need for substantial assistance from another person to perform the ADL is often the same.

In addition to inability or reduced ability to perform self-care and other activities that are essential for normal, independent functioning, cognitive impairment can result in behaviors that create threats to the individual's health and safety. Examples of these behaviors include leaving home alone and getting lost; ingesting spoiled food or toxic substances; using household

appliances and sharp objects in an unsafe manner; and failing to follow instructions for needed medical care, e.g. instructions about the amounts of and schedule for taking prescribed medications. Such behaviors can lead to serious injury and death. To avoid these negative outcomes, long-term services and supports, including services often referred to as “supervision” or “monitoring,” may be needed.

The impact of cognitive impairment on an individual’s need for long-term services and supports varies greatly depending on many factors. These factors include how many and which particular cognitive abilities are affected and how severely they are affected; whether the cognitive impairment was present at birth or occurred in childhood or later in life; whether it occurred suddenly or gradually; and whether it is stable, worsening, or improving over time. For a few diseases and conditions that cause cognitive impairment, there is little or no variation among individuals who have the disease or condition with respect to a few of these factors. For example, all people with cognitive impairment due to Down’s syndrome have had the condition since birth. Likewise, almost all people with cognitive impairment due to an accident or a stroke have experienced a sudden onset of cognitive impairment, whereas almost all people with cognitive impairment due to degenerative dementias, such as Alzheimer’s disease, have experienced a gradual onset. As a rule, however, there is considerable variation among individuals with cognitive impairment due to any particular disease or condition in terms of these and other factors that affect the individual’s need for long-term services and supports.

Many individuals with cognitive impairment also have physical impairments. Their cognitive impairment is likely to limit their capacity to compensate for their physical impairments and, therefore, further reduce their ability to perform self-care and other activities that are essential for normal, independent functioning. For these individuals, need for long-term services and supports is affected by both their cognitive and physical impairments and the often complex interactions between the impairments.

Lastly, of course, an individual’s need for long-term services and supports depends on many characteristics of the individual’s family and social environment that are not determined by the disease or condition that is causing his or her cognitive impairment.

The following discussion focuses on the need for and use of long-term services and supports by older people with cognitive impairment and dementia. This focus addresses an important segment of the population of Americans with cognitive impairment, and the segment for which there is the most available information to evaluate the implications of the CLASS Program benefit triggers. Comparable information is needed to evaluate the implications of the triggers for nonelderly adults and people with cognitive impairment due to other diseases and conditions.

A. Need for Substantial Assistance from Another Person To Perform ADLs in Older People with Cognitive Impairment and Dementia

In older people, cognitive impairment of sufficient severity to result in inability to perform ADLs and other self-care activities is most often caused by dementia. The term, *dementia*, refers to a syndrome of decline in memory and at least one other cognitive ability that is severe enough to interfere with social or occupational functioning (APA, 2000). The requirement for decline distinguishes dementia from life-long mental retardation, although a person with mental retardation can develop dementia if his or her cognitive abilities decline from a previous level. The requirement for decline also means that a person with high previous intelligence can have dementia if his or her cognitive abilities decline to average levels, and this decline interferes with social or occupational functioning.

Many different diseases and conditions can cause dementia. Box 2 lists causes of irreversible dementia, followed by causes of potentially reversible dementia. Alzheimer's disease is said to be the most common cause of irreversible dementia in older people, but recent research shows that many older people who have the brain pathology that defines Alzheimer's disease also have brain pathology that defines other diseases and conditions that cause irreversible dementia, including brain pathology that defines vascular dementia and Lewy body disease (Olde Rikkert et al., 2006; Schneider et al., 2007). Thus, "mixed dementia" may be more common than dementia caused by any single disease or conditions.

Box 2: Causes of Nonreversible and Potentially Reversible Dementia

Causes of nonreversible dementia

Degenerative diseases

Alzheimer's disease
Frontotemporal lobar degeneration (including Pick's disease)
Huntington's disease
Progressive supranuclear palsy
Parkinson's disease
Lewy body disease
Olivopontocerebellar atrophy
Amyotrophic lateral sclerosis (ALS)
ALS-Parkinson-dementia complex
Hallewörden-Spatz disease
Kuf's disease
Wilson's disease (if not treated early enough)
Metachromatic leukodystrophy
Adrenoleukodystrophy

Vascular dementias

Binswanger's disease
Occlusive cerebrovascular disease
Cerebral embolism
Arteritis
Anoxia secondary to cardiac arrest, cardiac failure of carbon monoxide intoxication

Traumatic dementia

Craniocerebral injury
Dementia pugilistica

Infections

Acquired immunodeficiency syndrome
Primary AIDs encephalopathy
Opportunistic infections
Creutzfeldt-Jacob disease
Progressive multifocal leukoencephalopathy
Postencephalitic dementia

Causes of potentially reversible dementia

Neoplasms

Gliomas
Meningiomas
Metastatic tumors; carcinoma, lymphoma, leukemia
Remote effects of carcinoma

Metabolic disorders

Thyroid disease - hyperthyroidism and hypothyroidism
Hypoglycemia
Hypernatremia and hyponatremia
Hypercalcemia
Renal failure

Causes of potentially reversible dementia (cont.)

Hepatic failure
Cushing's disease
Addison's disease
Hypopituitarism
Wilson's disease

Trauma

Craniocerebral trauma
Heavy metals (lead, manganese, mercury, arsenic)
Organic poisons, including solvents and insecticides

Infections

Bacterial meningitis and encephalitis
Parasitic meningitis and encephalitis
Fungal meningitis and encephalitis, cryptococcal meningitis
Viral meningitis and encephalitis
Brain abscess
Neurosyphilis: meningovascular, tabes dorsalis, general paresis

Autoimmune disorders

Central nervous system vasculitis, temporal arteritis
Disseminated lupus erythematosus
Multiple sclerosis

Drugs

Antidepressants
Antianxiety agents
Hypnotics
Sedatives
Antiarrhythmics
Antihypertensives
Anticonvulsants
Cardiac medications, digitalis and derivatives
Drugs with anticholinergic effects

Nutritional disorders

Thiamine deficiency (Wernicke's encephalopathy and Wernicke-Korsakoff syndrome)
Vitamin B12 deficiency (pernicious anemia)
Folate deficiency
Vitamin B6 deficiency (pellagra)

Psychiatric disorders

Depression
Schizophrenia
Other Psychoses

Other disorders

Normal-pressure hydrocephalus
Whipple's disease
Sarcoidosis

Source for Box 2: Costa et al., AHCPR, 1996.

[Note: if a list like this were going to be used publicly, it should be updated with newer terms for some conditions. It could also be shortened.]

Impact of Cognitive Impairment and Dementia on Ability to Perform ADLs. Studies published over the past 20 years show that cognitive impairment in older people is associated with reduced ability to perform ADLs at any point in time (Fultz et al., 2003; Gill et al., 1995; Li and Conwell 2009; Mulrow et al., 1994; Reed et al., 1989; Smith et al., 2010). More important than this finding, however, are findings from longitudinal studies showing that cognitive impairment in older people at one point in time is associated with reduced ability to perform ADLs at a later time (Gill et al., 1996; Gill et al., 2007; Jagger et al., 2007; McGuire et al., 2006; Moody-Ayers et al., 2005; Moritz et al., 1995; Spiers et al., 2005; Wang et al., 2002). Specific findings from two of these studies are as follows:

- A study of 1,103 people age 72 and older who were able to perform all ADLs independently at baseline found that those who had cognitive impairment were 2.4 times as likely as those with no cognitive impairment to become unable to perform at least one ADL over the next year and 2.3 times as likely to become unable to perform at least one ADL over the next 3 years (Gill et al., 1996).
- A study of 5,671 people age 70 and older found that blacks age 70-79 were 2 times as likely as whites in that age group to decline in their ability to perform ADLs over a 2-year period, but the difference was entirely accounted for by differences between the two groups in baseline cognitive impairment (Moody-Ayers et al., 2005). Blacks age 80 and older were not more likely than whites in that age group to decline in their ability to perform ADLs in the two years after baseline assessment, but when cognitive impairment was accounted for, blacks age 80 and older were significantly less likely than whites in that age group to decline in their ability to perform ADLs over the 2-year period.

At least four studies have found that older people with cognitive impairment are also less likely than older people with no cognitive impairment to recover their ability to perform ADLs independently after an illness or hospitalization (Gill et al., 1997; Gill et al., 2009; Givens et al., 2008; Sands et al. 2003). Sands et al. (2003) found that in a sample of 2,557 people age 70 and

older who were hospitalized, those with cognitive impairment before the hospitalization were much less likely than those with no cognitive impairment to recover their preadmission ability to perform ADLs. Among those who were able to perform all ADLs independently before their hospitalization, 57 percent of those with moderate to severe cognitive impairment recovered their preadmission ability to perform ADLs by 90 days after discharge, compared with 72 percent of those with mild cognitive impairment and 86 percent of those with no cognitive impairment. Likewise, among those who were unable to perform at least one ADL independently before the hospitalization, only 35 percent of those with moderate to severe cognitive impairment recovered their preadmission ability to perform ADLs by 90 days after discharge, compared with 62 percent of those with mild cognitive impairment and 73 percent of those with no cognitive impairment.

Still other studies show that older people whose cognitive abilities decline faster are, on average, more likely than those whose cognitive abilities decline more slowly to develop new inability to perform ADLs (Schmidler et al, 1998; Yaffe et al., 2010).

As one would expect, people with diagnosed dementia are more likely than people without dementia to have reduced ability to perform ADLs at any point in time, to decline in their ability to perform ADLs over time, and to be unable to recover their ability to perform ADLs after an illness or hospitalization (Aguero-Torres et al., 1998; Mulrow et al. 2004; Penrod et al. 2008; Wolff et al. 2005). In a sample of 4,968 people age 65 and older, Wolff et al (2005) found that those with newly diagnosed dementia were 14 times as likely as those without diagnosed dementia to have new inability to perform ADLs independently after one year, even after controlling for age, gender, education, and other chronic and newly diagnosed conditions. Those with diagnosed dementia were 6 times and 7 times as likely to have new inability to perform ADLs after 2 years and 3 years, respectively. Likewise, in a sample of 1,745 people age 65 and older, Aguero-Torres et al. (1998) found that after 3 years, those with diagnosed dementia were 25 times as likely as those without diagnosed dementia to have new inability to perform ADLs. Lastly, in a sample of 240 people with diagnosed Alzheimer's disease, Freels et al (1992) found those who also had behavioral symptoms, such as unsafe wandering and aggressiveness,

were 8 times as likely as those who did not have behavioral symptoms to have difficulty performing ADLs.

Relationship of Ability to Perform ADLs and IADLs. Many studies of ability to perform ADLs in older people and people with dementia also address ability to perform IADLs. Some researchers have suggested that IADLs and ADLs constitute a hierarchy of functional abilities and that they can be ordered from abilities that are likely to be lost first to abilities that are likely to be lost last, as an individual's functioning worsens (see, e.g., Kempen and Suurmeijer, 1990; Spector 1987). In proposed hierarchies based on this concept, IADLs, such as using the telephone, shopping, food preparation, housekeeping, managing medications and managing money, are usually listed first and are expected to be lost first. The IADLs are followed by ADLs, which are expected to be lost last. The most commonly listed ADLs are those described by Katz et al. (1963), and they are usually listed in the following order, from the ADL likely to be lost first to the ADL likely to be lost last: continence, dressing, bathing, transferring, toileting, and feeding (or eating).

Some researchers who have studied ability to perform ADLs and IADLs in older people have shown that ability to perform two IADLs, using the telephone and managing money, and one ADL, eating, is strongly associated with cognitive ability (Fitzgerald et al., 1993; Wolinsky and Johnson, 1991.) The researchers refer to these functions as “advanced ADLs,” and others sometimes refer to the two IADLs as “cognitive IADLs.”

One study of 5,874 people age 65 and older found that the pattern of loss of ability to perform ADLs and IADLs in people with cognitive impairment did not match the usually cited hierarchies in which IADLs are lost before ADLs (Njegovan et al., 2001). The study found that inability to perform the ADL, bathing, occurred much earlier (that is, in people with less severe cognitive impairment) than would be expected on the basis of the usually cited hierarchies and before inability to perform IADLs such as using the telephone, managing money, and managing medications. Inability to perform the ADL, toileting, also occurred earlier than inability to

perform the same three IADLs.^c These findings suggest that inability to perform certain IADLs indicates more severe cognitive impairment than inability to perform certain ADLs, including two of the ADLs listed in the CLASS Program benefit trigger.

Inability to Perform ADLs in Cognitive and Dementia Rating Scales. At least three widely cited dementia rating scales identify stages of cognitive decline or dementia and include both cognitive and noncognitive abilities. These three scales are described very briefly below, and for each scale, the placement by stage of inability to perform the ADLs listed in the CLASS Program benefit trigger is noted:

- The Clinical Dementia Rating (CDR) scale (Morris et al., 1993) identifies five stages of dementia: 1) none; 2) questionable dementia; 3) mild dementia; 4) moderate dementia; and 5) severe dementia. The CDR places need for assistance with the ADL, dressing, in stage 2, “moderate dementia,” and the ADL, incontinence, in stage 3, “severe dementia.” The CDR scale does not name the other four ADLs in the CLASS Program benefit trigger but states that the need for “much help with personal care” occurs in stage 3, “severe dementia.”
- The Functional Assessment Staging (FAST) scale (Reisberg et al., 1985) identifies seven stages of dementia of the Alzheimer’s type by diagnostic levels: 1) normal adult; 2) normal aged adult; 3) compatible with incipient dementia; 4) mild dementia; 5) moderate dementia; 6) moderately severe dementia; and 7) severe dementia.^d The FAST places the need for assistance with the ADLs, dressing, bathing, toileting, and incontinence, in stage 6, “moderately severe dementia.” The FAST scale does not mention the ADLs, transferring and eating.
- The Global Deterioration Scale (GDS) (Reisberg et al., 1982) identifies seven stages of cognitive decline: 1) no cognitive decline; 2) very mild cognitive decline; 3) mild

^c The ADLs and IADLs listed in the order in which they were lost in the study by Njegovan et al. (2001) are as follows, from those lost first (i.e., in people with less cognitive impairment) to those lost last (i.e., in people with more cognitive impairment): doing housework, shopping, bathing, walking, transportation, meal preparation, toileting, using the telephone, managing money, transferring, managing medications, dressing, grooming, and eating.

^d The FAST scale also includes substages in stages 6 and 7. At least one of these substages is used for determining eligibility for services, in this case, eligibility for Medicare-covered hospice care.

cognitive decline; 4) moderate cognitive decline; 5) moderately severe cognitive decline; 6) severe cognitive decline; and 7) very severe cognitive decline. The GDS places “difficulty choosing the proper clothing to wear” in stage 5, “moderately severe cognitive decline.” It places “need for some assistance with ADLs, e.g., may become incontinent” in stage 6, “severe cognitive decline.” The scale places the ADLs, incontinence and need for assistance with toileting and feeding, in stage 7, “very severe cognitive impairment.” The GDS does not mention the ADLs, bathing and transferring.

Staging instruments like the CDR, the FAST, and the GDS, provide a general picture of the pattern of loss of cognitive and other abilities in progressive dementias. Some, and perhaps many, individuals do not fit neatly into the identified stages, however, and may become unable to perform ADLs at the level of cognitive impairment or dementia indicated in the scale. In fact, research shows that there is not a one-to-one correspondence between level of cognitive impairment and loss of ability to perform any particular ADL (Brinkman et al., 2002; Cohen-Mansfield et al., 1995; Galasko et al., 1991; Reed et al., 1989; Weintraub et al., 1992). Cognitive impairment and inability to perform ADLs are certainly related, as shown in the studies discussed earlier in this section, but they are not the same, and studies conducted in various settings shows that individuals who have essentially the same level of cognitive impairment vary considerably in their ability to perform particular ADLs. On the other hand, it is also clear that all individuals with progressive, nonreversible dementias will eventually be unable to perform any ADLs and will need total assistance from another person to survive.

Defining “substantial assistance from another person.” For purposes of determining which long-term services and supports can be deducted as medical expenses in federal income tax calculations, the term, “substantial assistance,” has been broadly defined to include two concepts: “hands-on assistance,” described as physical help without which the person would not be able to perform an ADL, and “standby assistance,” described as the presence of another person within arm’s reach to prevent injury, for example, when the person is bathing and might fall.

Some of the kinds of assistance that are most often needed by a person with cognitive impairment who is unable to perform ADLs are not encompassed by the concepts, “hands-on assistance” and “standby assistance.” As noted earlier, a person with cognitive impairment may be unable to perform ADLs because he or she is unable to learn or remember how to perform them, know when or where to perform them, or plan, initiate, and sequence the steps needed to perform them successfully. Although the term, “standby assistance,” could be construed to encompass the kinds of assistance needed by a person with these deficits, it is not usually described in that way.

A person with cognitive impairment who is unable to perform an ADL independently needs assistance to initiate the ADL at the appropriate time and in the appropriate place and to perform each of the steps required to complete the ADL successfully. The assistance needed by the person is “substantial” in the sense that the helper must be physically present and must remain involved in the activity until it is completed. Some ADLs can be effectively scheduled for certain times in the day (e.g., dressing) or even some days of the week (e.g., bathing). Others, especially toileting, cannot be scheduled in periods as long as a day, or even as long as 5 or 6 hours. Assistance with toileting can be needed at any time of the day or night, and failure to complete the ADL, toileting, is likely to result in failure with respect to another ADL, incontinence. Adult diapers can be used, but they must be changed on a timely basis to avoid the development of skin problems and decubitus ulcers. In this context, it is also important to note that the study by Njegovan et al. (2001) showed that inability to perform the ADL, toileting, can occur before (i.e. in people with less cognitive impairment) than the ADL, dressing.

Without substantial assistance, the person with cognitive impairment who cannot perform an ADL independently is no more able to perform the ADL than another person who is physically unable to perform it. The belief that the amount of assistance with ADLs that is needed by people with cognitive impairment is much smaller than the amount of assistance with ADLs that is needed by people with physical impairment is pervasive and difficult to dispel. It is possible that some individuals who hold this belief are not aware of the cognitive abilities that are needed to perform activities that are generally regarded as simple and routine once the abilities are acquired in childhood. It is also possible that some individuals are not aware that

accidents, injuries, progressive dementias and other diseases and conditions can result in cognitive impairment sufficient to leave an individual unable to remember how to perform these basic activities, unable to know when or where to initiate the activities and unable to sequence the steps needed to perform the activities successfully. Frequent use of the terms “cueing” and “reminding” to describe the kinds of help needed by some people with cognitive impairment to perform ADLs may contribute to this lack of awareness, by suggesting, for example, that all the person needs is “a reminder” to bath, dress, use the toilet or eat.

Whatever the reason for the belief that the amount of assistance with ADLs needed by people with cognitive impairment is much smaller than the amount of assistance with ADLs needed by people with physical impairment, it is important to clarify that individuals who are unable to perform ADLs because of physical or cognitive impairments or both need substantial assistance to perform the ADLs, even though the precise types of assistance they need may differ.

Recommendations. The term “substantial assistance” should be defined to include not only hands-on and standby assistance but also the assistance needed by a person with cognitive impairment who cannot perform the ADL independently, that is, assistance to initiate the ADL at the right time and in the right place and to complete the steps required to perform the ADL successfully.

Information about the kinds of difficulties that are frequently associated with inability to perform ADLs in people with cognitive impairment (that is, difficulty in knowing or remembering when or where to initiate the ADL and inability to plan and sequence the steps required to complete the ADL successfully) and the kinds of assistance that is needed to address these difficulties should be conveyed to anyone who is responsible for implementing the CLASS Program benefit trigger.

Information about both the strong relationship between cognitive impairment and inability to perform ADLs and, at the same time, the lack of one-to-one correspondence in some individuals between level of cognitive impairment and inability to perform a specific ADL should be conveyed to anyone who is responsible for implementing the CLASS program benefit triggers.

B. Need for Substantial Supervision To Protect the Individual from Threats to Health and Safety in Older People and People with Dementia

Far more research has been conducted on the relationship of cognitive impairment and inability to perform ADLs than on the relationship of cognitive impairment and the need for supervision to protect an individual from threats to health and safety, at least as these relationships exist in older people and people with dementia. To operationalize and implement the CLASS Program benefit trigger on need for supervision, it will be necessary to define the concepts, “threats to health and safety,” “substantial supervision” and “substantial cognitive impairment” and clarify their interrelationships and the implications of those interrelationships with respect to need for long-term services and supports. This section reviews available research findings to support these objectives.

It is obvious, at least upon reflection, that cognitive impairment can result in threats to health and safety. Cognitive impairment can reduce an individual’s ability to recognize such threats. Some, and perhaps many, people with cognitive impairment and people with dementia are not aware or only partially aware of their cognitive impairment and therefore may not know that they can no longer recognize threats as well as they once could. Moreover, once they are in a dangerous situation, they often lack specific cognitive abilities, such as reasoning, judgment and ability to plan, initiate and sequence behaviors, that would allow them to reduce their risk and get needed help.

As noted earlier, many people with cognitive impairment also have physical impairments, and their physical impairments often exacerbate threats to their health and safety. Such physical impairments can result from the same disease or condition that causes the person’s cognitive impairment, for example, in the case of individuals with neurological conditions that cause cognitive impairment and also cause impairments in gait and balance that increase the individual’s risk of falls. Alternatively, the physical impairments can result from a disease or condition that is unrelated to the disease or condition that causes the individual’s cognitive impairment, for example, in the case of individuals with cognitive impairment who also have

another disease and condition that causes serious vision impairment and therefore, increases their risk for accidents. Even vision and other impairments associated with normal aging can increase threats to health and safety for older people with cognitive impairment and dementia.

Threats to health and safety. Older people with cognitive impairment and people with dementia are at high risk for a wide array of threats to their health and safety as a result of wandering and other unsafe behaviors inside and outside the home. The following information about specific threats is intended to support the definition and clarification of the concept, “threats to health and safety,” as part of the overall operationalization and implementation of the CLASS Program benefit triggers.

Wandering. Probably the most frequently discussed threat to the health and safety of older people with cognitive impairment and people with dementia is wandering, getting lost and, as a result, becoming seriously injured or dying. No population-based data are available about the number or proportion of older people with cognitive impairment and dementia that wanders. Studies that were conducted in a sample of 193 older people with diagnosed Alzheimer’s disease and another sample of more than 15,000 veterans with moderate or severe cognitive impairment used medical and nursing home records to identify wandering incidents. The studies found that 20 to 25 percent of sample members had wandered at least once, and smaller proportions had wandered many times in the multi-year periods covered by the studies (Logsdon et al., 1998; Schonfeld et al., 2007). Findings from these and other studies show that wandering occurs in people at all levels of cognitive impairment but is more likely to occur in people with more versus less severe cognitive impairment; people who have had cognitive impairment and/or dementia for a longer time; people who also have depression, delusions, hallucinations, sleep disorders, and behavioral symptoms; and people who are taking antipsychotic medications (Kiely et al., 2000; Klein et al., 1999; Logsdon et al., 1998; Schonfeld et al., 2007)

It is sometimes said that most people with Alzheimer’s disease and other progressive dementias will wander and become lost at least once during the course of their disease (Rowe and Glover 2001). The studies described above may have missed wandering incidents, either because of the limited duration of the studies or because they relied on medical and nursing

home records that probably did not include all wandering incidents. Thus, it is possible that wandering is more common than the study findings indicate. If many wandering incidents were missed, it is also possible that the study findings about the characteristics of older people with cognitive impairment and people with dementia who wander could differ in unknown but important ways from the true characteristics of all such people who wander.

An older person with cognitive impairment or dementia who wanders may have a purpose or destination in mind (Algase et al., 1996; Schonfeld et al., 2007), but when the person is found to be missing, others may not be able to guess what that purpose or destination was and therefore, may not know where to look for the person. Once the person is lost, cognitive impairment, including reduced memory, judgment and ability to plan, initiate, and sequence behaviors, mean that the person may be unable to find his or her way home or get help.

Wandering and getting lost are risks for older people with cognitive impairment and people with dementia who are living in the community or in an assisted living facility or nursing home. One research team analyzed data from the Alzheimer's Association Safe Return program on 531 individuals with cognitive impairment who wandered and got lost in a 13-month period beginning in 1997 (Rowe and Glover, 2001). The study found that two-thirds of the individuals were living with a relative, and the remaining individuals were living in the community, either alone (15%) or with a paid caregiver (2%), or in an assisted living facility or nursing home (17%). Some of the individuals were found in a neighbor's yard, but others were found in the middle of intersections, walking along busy streets or highways, or in stores where their unusual behavior was noticed by store employees. Four of the individuals died, including three who died from prolonged exposure and one who was hit by a train. An additional 30 individuals experienced injuries, dehydration and the late effects of exposure to cold.

A retrospective review of newspaper accounts about 98 older people with dementia who died as a result of wandering and getting lost between 1998 and 2002, provides more information about the circumstances of their deaths (Rowe and Bennett, 2003). The most common cause of death in the 98 individuals was exposure (68%), followed by drowning (23%), falling (4%), being hit by a vehicle (3%), and asphyxiating in mud (1%). One-quarter of the individuals were

found dead within 24 hours of leaving their home or residential care facility, but one third were not found for more than a week. Most were found in a secluded place in the woods. Those who died in urban areas were also found in secluded places, such as a junkyard, a vacant lot, or the top of a building. Many of the newspaper reports indicated that the person had gotten to a secluded spot and stayed there until he or she died. Some seemed to have further concealed themselves under brush or other materials.

The risk of wandering ends when the person is no longer able to walk or otherwise ambulate independently, for example with a wheel chair. Interestingly, one study of wandering in nursing homes operated by the Department of Veterans Affairs (VA) found that 25 percent of wanderers were wheel chair users (Schonfeld et al., 2007).

One of the most important aspects of wandering in the context of the CLASS Program benefits triggers is its unpredictability. Even in people who have wandered numerous times, it is not clear when they will wander again, thus creating a possible need for supervision over long periods of time to reduce threats to the person's health and safety.

Accidents and injuries in the home. In addition to wandering, other threats to the health and safety of older people with cognitive impairment and people with dementia are caused by accidents, injuries, and illnesses that occur at home as a result of handling sharp objects, leaving the stove on, using water that is too hot, smoking or ingesting non-food, spoiled food or poisonous substances (Hurley et al. 2004; Oleske et al., 1995; Reed et al., 1990; Tierney et al., 2004). No data are available to determine how many older people with cognitive impairment and people with dementia experience accidents, injuries or illnesses as a result of these behaviors.

Falls. Most, but not all, studies of falls in older people and people with dementia have found that cognitive impairment is associated with increased risk (American Geriatrics Society, 2001; Ganz et al., 2007). More importantly, a study of fall-related injuries in a sample of 1,103 people age 72 and older found that cognitive impairment doubled the risk of serious injury associated with a fall (Tinetti et al., 1995). Another study of fall-related injuries in a sample of

157 individuals age 60 and older with diagnosed Alzheimer's disease found that wandering was associated with a greater likelihood that individuals who fell would sustain a fracture (Buchner and Larson, 1987).

Fall-related injuries account for a substantial proportion of all injuries in older people with cognitive impairment and people with dementia. One study of injuries incurred by 281 individuals age 44 to 92 with diagnosed Alzheimer's disease found, for example, that 44 percent of the injuries were caused by falls (Oleske et al., 1995).

Access to guns. Substantial proportions of older people with cognitive impairment and people with dementia have guns in their homes. One study of 106 individuals with symptoms of dementia who were seen at an outpatient memory disorders clinic in South Carolina found that 60 percent of the individuals had one or more guns in their homes, and the guns were loaded in 45 percent of these homes (Spangenberg et al, 1999). Likewise, a study conducted in 2002 by the Department of Veterans Affairs (VA) in a sample of 307 veterans with cognitive impairment found that 40 percent of the veterans had at least one gun at home, and 21 percent of these veterans had loaded guns (Veterans Health Administration, 2004). Most of the veterans with guns in their home had mild cognitive impairment, but 25 percent had moderate or severe cognitive impairment. No data are available to determine whether or how often the guns were used by the person with cognitive impairment or dementia or how many or what kinds of injuries may have resulted from this use. The presence of loaded guns in the homes of people with cognitive impairment and dementia would seem, however, to create a clear threat to their health and safety and the health and safety of others around them.

Driving. Many older people with cognitive impairment and people with dementia continue to drive. The 2002 VA study found that 44 percent of the 307 veterans with cognitive impairment were still driving (Veterans Health Administration, 2004). Most of those who were still driving had mild cognitive impairment, but 16 percent had moderate or severe cognitive impairment.

Most, but not all, studies of older drivers show that drivers with cognitive impairment and dementia are more likely than other older drivers to have vehicle crashes. A study of 3,238 drivers age 65 and older who agreed to a test of cognitive impairment at the time they were applying for renewal of their driver's license found that those with cognitive impairment were significantly more likely than those without cognitive impairment to have a crash documented in their state driving record (Stutts et al., 1998). A review of 23 studies of older drivers found that those with diagnosed dementia performed more poorly on road tests and in driving simulations, and caregivers reports indicated that the drivers with diagnosed dementia were 2.2 to 8 times more likely to have had a crash, but only one of the three studies that used state driving records to document crashes found that drivers with diagnosed dementia had more crashes than other older drivers (Mon-Son-Hing et al., 2007).

Most older people with cognitive impairment and people with dementia stop driving as their cognitive impairment increases, but some do not (Carr et al., 2005; Foley et al. 2000; Perkinson et al., 2005). A study of 201 people with diagnosed Alzheimer's disease found that 183 individuals (71%) had stopped driving, and 58 individuals (29%) had not (Carr et al., 2005). There were no significant differences in the cognitive test scores between the two groups. Most of the individuals in both groups had very mild cognitive impairment, as indicated by their score on the Clinical Dementia Rating (CDR) Scale, but almost one third (31%) of those who were still driving had a CDR score of 1.0 or higher. A CDR score of 1.0 indicates moderate dementia that is more marked for recent events and interferes with daily activity; possible geographic disorientation; and moderate difficulty with problem solving (Hughes et al., 1982; Morris, 1997). Higher CDR scores indicate higher levels of impairment. Another study of 643 men who were evaluated using the CDR as part of a larger study of heart disease found that 22 percent of the 98 men with a CDR score of 1.0 and one of the 23 men with a CDR score higher than 1.0 were still driving (Foley et al. 2000).

Serious medication errors. Many people of all ages fail to take their prescribed medications exactly as directed. Taking prescribed medications as directed means planning, initiating and sequencing the steps needed to take them at the right time, in the right amount and manner, e.g., with or without food, and remembering whether the medication was taken (Insel et

al., 2006). Understandably, older people with cognitive impairment and people with dementia are less likely than other people to take their prescribed medications as directed (Hurley et al., 2004; Insel et al., 2006; Ownby 2006). Anecdotal evidence indicates that such people sometimes take their medications erratically, not at all, or too much at one time, and later may not remember what they have taken. One study of 95 people age 67 and older who were managing their own medications tracked the extent to which they adhered to the directions for one of their medications (Insel et al., 2006). The study found that 62 percent of the sample adhered to the medication directions at least 85 percent of the time, and the remaining 38 percent adhered to the medication directions anywhere from zero to 84 percent of the time. Those with cognitive impairment were significantly more likely than those without cognitive impairment to adhere to their medication directions.

No data are available on the number or proportion of older people with cognitive impairment or people with dementia who have serious negative health outcomes as a result of failure to take their medications as directed. One study of 139 people age 65 and older who were living alone in the community and experienced harm due to cognitive impairment, identified 3 individuals who required emergency medical care because of delirium and cardiac complications of failing to take prescribed medications as directed (Tierney et al. 2004).

Self-neglect. Cognitive impairment is the most widely recognized cause of self-neglect, which has been defined as failure to attend adequately to one's own health, hygiene, nutrition or social needs (Abrams et al., 2002; Paveza et al., 2008). One study of 2,812 community dwelling people age 65 and older found that self-neglect was four times as likely in those with cognitive impairment as those without cognitive impairment (Abrams et al., 2002).

Self-neglect is the most common problem of adults referred to Adult Protective Services (APS) agencies in the U.S. (Heath et al., 2005; Lachs et al., 1997; Pavlik et al., 2001), and many studies of self-neglect in older people use samples of APS clients. Findings from these studies show that APS clients who are referred for self-neglect are much more likely than other APS clients to have cognitive impairment (Dyer et al., 2000; Heath et al., 2005). One study of 538

older APS clients who were referred for self-neglect found that 50 percent had cognitive impairment (Dyer et al., 2007)

Unawareness of deficit. Some, and perhaps many, older people with cognitive impairment and people with dementia are not aware of their cognitive impairment or related inability to perform activities that are essential for normal, independent functioning. Many researchers and clinicians say that this problem, generally referred to as “unawareness of deficit,” is much more common in people with cognitive impairment caused by certain diseases and conditions, e.g., Alzheimer’s disease and frontotemporal lobar degeneration, than by other diseases and conditions, e.g., vascular dementia (DeBettignies et al., 1990; Pia and Conway 2008; Wagner et al., 1997), but other researchers and clinicians are doubtful about some of these distinctions (see e.g., Aalten et al. 2005). No data are available to determine the number or proportion of older people with cognitive impairment, people with dementia, or people with any particular disease or condition that has unawareness of deficit.

Unawareness of deficit adds to the vulnerability of older people with cognitive impairment and people with dementia (Aalten et al. 2005; Lehmann et al., 2010; Wagner et al., 1997). Even if these people are able to recognize a threat to their health or safety, they may not be aware that they lack the cognitive abilities needed to respond effectively. As a result of unawareness of deficit, they may be unwilling to modify behaviors, such as driving, even when they recognize the risks created by the behaviors (Aalten et al., 2005; Cotrell and Wild, 1999; Wagner et al., 1999). For the same reason, they may unwilling to accept needed help.

Researchers and clinicians have noted that there is wide variability in the extent of unawareness of deficit in older people with cognitive impairment and people with dementia (Aalten et al. 2005; Feher et al., 1991; Wagner et al., 1999). Individuals with unawareness of deficit also vary in the extent to which they are aware of deficits in particular cognitive and related abilities (DeBettignies et al., 1990; Seltzer et al., 1997; Vesterling et al., 1997; Zanetti et al., 1999). Thus, for example, some people are unaware of deficits in their thinking and memory but unaware of deficits in other cognitive abilities that are important for independent living. In contrast, other people are unaware of deficits in their thinking and memory but aware of deficits

in other cognitive abilities that are important for independent living.

Unawareness of deficit is a complex condition that is not well understood. Some researchers and clinicians believe that it results entirely or almost entirely from neurological or other changes in the brain that are caused by the same disease or condition that is causing the person's cognitive impairment (Clare et al., 2002). Other researchers and clinicians believe that unawareness of deficit is often due to a psychological defense mechanism, usually referred to as "denial," through which the person protects himself or herself from thinking about and being upset by the reduction or loss of cognitive abilities. Most studies show that unawareness of deficit increases over time as a person's cognitive impairment worsens (McDaniel et al., 1995; Vesterling et al., 1997; Wagner et al., 1997; Zanetti et al., 1999), thus suggesting that it may be caused primarily by the disease or condition that is causing the person's cognitive impairment. Certainly, however, some older people with cognitive impairment and people with dementia also exhibit the psychological defense mechanism, denial.

Because unawareness of deficit increases vulnerability to threats to health and safety, it is a relevant factor in determining a person's need for supervision. Increased understanding about which people with cognitive impairment are likely to have unawareness of deficit, when it is likely to occur and how it can be recognized would be useful for anyone who is trying to implement the CLASS Program benefit trigger on need for substantial supervision to protect an individual from threats to health and safety.

Defining "substantial cognitive impairment." Taken out of the context of the CLASS Program benefit trigger, the term "substantial cognitive impairment," could be defined in many different ways. Since the CLASS Program trigger based on need for supervision uses the term "substantial cognitive impairment," instead of the term "severe cognitive impairment" that is used in the HIPAA and Federal Long-Term Care Insurance Program benefit triggers, one could assume that the legislative intent was to expand the definition to include people with moderate as well as severe cognitive impairment.

Considered within the context of the CLASS Program benefit trigger, the term, “substantial cognitive impairment,” seems to mean cognitive impairment at a level that results in threats to health and safety to which the individual is not able to respond effectively. Data are not available about the level of cognitive impairment at which many of the threats to health and safety described earlier in this report are likely to occur. The data on access to guns and driving indicate that these threats to health and safety are less likely to occur as the person’s cognitive impairment worsens. In contrast, the data on wandering indicate it is more likely to occur as the person’s cognitive impairment worsens. Unawareness of deficit, which makes the person less able to respond effectively to any threat to health and safety, is also more likely to occur as cognitive impairment worsens.

As described earlier, at least three widely cited dementia rating scales identify stages of cognitive decline or dementia and include both cognitive and noncognitive abilities. For each scale, the placement by stage of threats to health and safety and impairments in cognitive abilities that would allow individuals to respond effectively to any threat to health and safety is noted:

- The Clinical Dementia Rating (CDR) scale (Morris et al., 1993) places “moderate memory loss” and “moderate difficulty in handling problems” in stage 1, labelled “mild dementia.” The CDR places “severe memory loss, new material rapidly lost,” “usually disoriented to time, often to place,” and “severely impaired in solving problems,” in stage 2, labelled “moderate dementia.” It places “severe memory loss; only fragments remain,” “oriented only to person,” and “unable to make judgments or solve problems” in stage 3, labelled “severe dementia.”
- The Functional Assessment Staging (FAST) scale (Reisberg et al., 1985) places “difficulty in traveling to new locations” in stage 3, labeled “compatible with incipient dementia.” The FAST scale does not explicitly address other threats or related cognitive impairments.
- The Global Deterioration Scale (GDS) (Reisberg et al., 1982) places “patient may have gotten lost when traveling to an unfamiliar location” and “denial begins to become manifest” in stage 3, labeled as “mild cognitive decline.” The GDS places deficits in

memory and concentration and decreased ability to travel to new locations in stage 4, labeled “moderate cognitive decline,” and states that, “denial is a common defense mechanism in this stage.” It places “some disorientation to time and place” in stage 5, labeled “moderately severe cognitive decline. The GDS places “generally unaware of their surroundings,” “will require travel assistance but occasionally will display ability to travel to familiar locations” and loss of ability to “carry a thought long enough to determine a purposeful course of action,” in the next-to-last stage, stage 6, labeled “severe cognitive decline.”

In these dementia rating scales, most of threats to health and safety and most of the impairments in cognitive abilities that would allow individuals to respond effectively to threats are placed in the moderate or severe stage, but some are placed in earlier stages. The FAST scale and the GDS place difficulty traveling in new or unfamiliar locations in the mild or very mild stages of dementia and cognitive decline, and the CDR scale places moderate memory loss and moderate ability to handle problems in the mild stage of dementia. The GDS also places the first signs of denial in the mild stage.

As noted earlier, staging instruments like the CDR, the FAST, and the GDS, provide a general picture of the pattern of loss of cognitive and other abilities in progressive dementias, but some, and perhaps many, individuals do not fit neatly into the identified stages. Thus, the stage-specific placement of threats to health and safety and related cognitive abilities is informative, but one cannot assume a one-to-one correspondence for any particular individual between stage of cognitive decline or dementia and threats to health and safety to which the individual is not able to respond effectively.

Defining “substantial supervision.” Like “substantial cognitive impairment,” the concept, “substantial supervision,” could be defined in many different ways when considered generally. When considered in the context of the CLASS Program benefit trigger, “substantial supervision” seems to mean an amount of supervision that is sufficient to protect an individual with cognitive impairment or dementia from threats to his or her health and safety. Operationalizing and implementing the benefit trigger will require understanding about the level or amount of

supervision that is needed to protect such an individual from threats to health and safety and ideas about how to measure it.

The “Supervision Rating Scale,” a 13-step scale that was developed to measure the amount of supervision received by individuals with traumatic brain injury (TBI) provides ideas that may be helpful in thinking about levels of supervision. The scale identifies the following broad levels of supervision, ranging from no supervision to the highest amount of supervision that may be needed: 1) independent; 2) overnight supervision; 3) part-time supervision; 4) full-time indirect supervision; and 5) full-time direct supervision (Boake, 1996). The 13 steps are defined in terms of many factors, including whether the supervision occurs in particular time periods (e.g., at night, during waking hours); whether the person goes out of the home alone; how long the person is left alone (e.g., always, in the day, for the amount of time the caregiver needs to work full-time, for less than that amount of time, for less than an hour); how often the caregiver checks on the person if they are not in the same room (e.g., once every 30 minutes or less often); whether the person’s door locked from the outside at night; and, at the highest level of supervision, whether the person is in the caregiver’s direct line of sight. The scale is designed to be completed by a clinician based on interviews with the person and an informant, usually the caregiver.

[Note: This contractor has not found any other supervision staging instruments that see useful in thinking about level of supervision for the CLASS program benefit trigger.]

With respect to amount of supervision, one study of 35 family members and other unpaid caregivers of individuals with diagnosed Alzheimer’s disease identified the amount of supervision actually received by the individual and the relationship of amount of supervision actually received and the caregivers’ perceptions about the individuals’ need for supervision, the severity of the individuals’ dementia, and the occurrence of hazardous behaviors (Reed et al., 1990). For the study, “supervision” was defined as having a family member or responsible person in close proximity to the individual, even if they are not in the same room, and it was measured by caregiver reports about the number of hours the individual was left alone. Caregivers’ perceptions about individuals’ need for supervision were measured by their

responses to a question about whether the individual needed “watching to be safe,” and “hazardous behavior” was defined as an action by the person that the caregiver believed could lead to an accident if allowed to continue.

The study found that the amount of supervision actually received by the individuals (defined in terms of the number of hours they were left alone) was not significantly related to the severity of their dementia as measured by their CDR stage.

- Individuals in CDR stage 0.5 (questionable dementia) were left alone an average of 5.1 hours a day (range: 0-12 hours).
- Individuals in CDR stage 1.0 (mild dementia) were left alone an average of 2.9 hours a day (range: 0-8 hours).
- Individuals in CDR stage 2.0 (moderate dementia) were left alone an average of 3.4 hours a day (range: 0-12 hours).
- Individuals in CDR stage 3.0 (severe dementia) were left alone an average of 2 hours a day (range: 0-4 hours)

Although these findings suggest a trend toward more hours of supervision received (fewer hours left alone) for individuals with more severe dementia, the researchers note that at least one individual with moderate dementia was left alone for 12 hours a day, and at least one person with severe dementia was left alone for 4 hours a day (Reed et al., 1990).

In contrast to the lack of a statistically significant relationship between the amount of supervision received (number of hours left alone) and severity of dementia, there was a strong, significant relationship between caregivers’ perceptions about the individuals’ need for supervision and the severity of their dementia (Reed et al., 1990). Caregivers of most (87%) of the individuals in CDR stages 0.5 and 1.0 (questionable and mild dementia) said the individuals did not need watching to be safe; whereas caregivers of most (91%) of individuals in CDR stages 2.0 and 3.0 (moderate or severe dementia) said the individuals did need watching to be safe.

Interestingly, caregivers’ perceptions of the individuals’ need for supervision were not significantly related to the occurrence of hazardous behavior in the previous year (Reed et al.,

1990). On the other hand, the amount of supervision the individuals actually received was significantly related to the occurrence of hazardous behaviors: among individuals with one or more incidents of hazardous behavior in the previous year, 57% were receiving constant supervision, compared with only 5% of those with no incidents of hazardous behavior.

The relationships among these factors are complex. The researchers note the wide array of hazardous behaviors among the individuals, the heterogeneity of the life situations of the individuals and their caregivers and, as a result, the large number of potentially confounding variables in the study (Reed et al., 1990). Nevertheless, they comment that the study findings fit with their clinical experiences. They note that people with dementia often get to the moderate stage before their families acknowledge that there is a significant problem, and cite the study finding that caregivers generally did not perceive individuals with mild dementia as needing “watching to be safe.” Likewise, the researchers note that, “Supervision is a natural response to perceived hazardous behaviors” and cite the study finding that most (57%) of the individuals with hazardous behaviors in the preceding year were receiving constant supervision, compared with only 5 percent of individuals with no hazardous behaviors in the preceding year.

Another study analyzed data on need for supervision and related factors from the Medicare Alzheimer’s Disease Demonstration (MADD), a federally funded demonstration project implemented in 8 states from 1989-1994 (Fox et al., 1999). The study sample included more than 8,000 older people with dementia and their family and other unpaid caregivers. The MADD findings are based on data about factors that are defined and measured somewhat differently than the factors analyzed in the study described above. In MADD, caregivers’ perceptions about individuals’ need for supervision were measured by their responses to a question about whether the individual needed “minimal supervision,” “daytime supervision,” or “round-the-clock supervision.” Also, caregivers were asked about the number of hours of unpaid care provided for the individual by the primary caregiver and any other unpaid caregivers, and that number is used in the analysis, instead of number of hours the individual was left alone, that was used as to measure the amount of supervision provided in the study described above. Lastly, MADD used an individual’s score on a brief mental status test, the Mini-Mental State

Examination (MMSE), to measure severity of dementia, instead of the CDR score used in the study described above.

Using these somewhat different factors and ways of measuring them, the analysis of the MADD data found that caregivers' perceptions about individuals' need for supervision were significantly related to the number of hours of unpaid care provided for them (Fox et al., 1999). The data show that 25 percent of the caregivers said the individual needed "minimal supervision;" 19 percent said the individual needed "daytime supervision," and 56 percent said the individual needed "round-the-clock supervision." Individuals who were said to need "minimal supervision" received an average of 97 hours per week of unpaid care (including hours provided by the primary caregiver and any other unpaid caregivers); those who were said to need "daytime supervision" received an average of 129 hours of unpaid care per week; and those who were said to need "round-the-clock supervision" received an average of 176 hours of unpaid care.

The MADD data also show that caregivers' perceptions about individuals' need for supervision were strongly related to the severity of the individual's cognitive impairment. Individuals with very mild cognitive impairment (MMSE scores above 23) were generally said to need "minimal supervision;" those with moderate to severe cognitive impairment (MMSE scores 13 to 23) were generally said to need "daytime supervision;" and those with very severe cognitive impairment (MMSE scores below 13) were said to need "round-the-clock supervision." Average hours of unpaid care provided were also related to severity of cognitive impairment. Individuals with very mild cognitive impairment (MMSE scores above 23) were provided an average of 75 hours of unpaid care per week, compared with 94 hours of unpaid care for those with moderate to severe cognitive impairment (MMSE scores 13 to 23), and 120 hours per week for those with very severe cognitive impairment (MMSE scores below 13).

The concepts, terms and particularly the different ways of measuring them in the Supervision Rating Scale and the two studies described above are useful in thinking about how to operationalize and implement the concept "substantial supervision" in the CLASS Program benefit trigger. With respect to measuring need for supervision, Reed et al (1990) comment that

using the number of hours the individual is left alone as a measure of the amount of supervision the individual receives is not ideal because time spent with the caregiver may occur for other reasons than for supervision. The same caveat might apply to an even greater extent to using the number of hours of unpaid care provided for the individual as an indicator of need for supervision, as was done in the study by Fox et al. (1999).

In the Supervision Rating Scale and the studies by Reed et al. (1990) and Fox et al., (1999), it is assumed that “supervision” is provided in person; that is, the caregiver is physically present, at least, for example, in the same dwelling place, as the individual who needs supervision. Recently, there is increasing interest in and use of home monitoring technologies to observe older people with cognitive impairment and people with dementia in their homes and monitor their safety from a distance. Certainly the CLASS Program cash benefit will allow individuals and families to pay for home monitoring technologies. The question with respect to defining “substantial supervision” for the CLASS Program benefit trigger is whether use of such technologies should be considered an indicator that the individual either needs or is receiving supervision. In the context of the benefit trigger, “substantial supervision” is intended to protect the individual from threats to his or her health and safety. One might argue that home monitoring technologies do not protect the individual from such threats because no one can be present with the individual fast enough to avert the threat created, for example, by wandering and getting lost, leaving the stove on, using water that is too hot, or taking too little or too much of prescribed medications. Yet a recent report prepared for the Administration on Aging by O’Keeffe et al. (2010) provides numerous examples of technologies that monitor each of these behaviors and alert a caregiver or other emergency responder immediately, meaning that someone could be present with the individual very quickly, assuming that the monitoring technology is working and someone is paying attention to it. As such technologies are used more widely, and particularly as they become more reliable, it will be important to determine whether their use is evidence that an individual needs and/or is receiving “substantial supervision.”

Recommendations. The terms “substantial cognitive impairment” and “substantial supervision” should be defined in the context of the CLASS Program benefit trigger as opposed more generally. Defining the terms in this way will narrow the range of possible definitions and better reflect the intent of the legislative language.

Information about the kinds of threats to health and safety that are likely to affect older people with cognitive impairment and people with dementia should be conveyed to anyone who is responsible for implementing the CLASS Program benefit trigger. It should be emphasized that the risk to these individuals can come from their inability to recognize the threat, their inability to respond to the threat, or both, and that unawareness of deficit, that is, being unaware that they cannot recognize a threat, cannot respond to it, or both, is likely to increase their risk.

Information about the strong relationship between cognitive impairment and need for supervision and, at the same time, the lack of one-to-one correspondence between level of cognitive impairment or dementia and need for supervision in any particular individual should also be conveyed to anyone who is responsible for implementing the CLASS program benefit triggers.

Consideration should be given to the question about whether use of home monitoring technologies should be considered evidence that an individual either needs or is receiving supervision in the context of the CLASS Program benefit trigger.

C. Use of Long-Term Services and Supports by Older People with Cognitive Impairment and People with Dementia

Older people with cognitive impairment and people with dementia are high users of residential long-term care services. In 2009, 47 percent of all nursing home residents had a diagnosis of dementia in their nursing home record (American Health Care Association, 2009), and 68 percent had some degree of cognitive impairment (USDHHS, 2010). Virtually all studies of risk factors for nursing home placement that have been conducted in the United States over the past 30 years and have measured either cognitive impairment or dementia have found that

they are strong predictors of placement (see, e.g., Banaszak-Holl et al., 2004; Bauer et al., 1996; Bharucha et al., 2004; Black et al., 1999; Branch et al. 1982; Freedman et al., 1996; Greener et al., 1995; Jette et al., 1995; Salive et al., 1993; Shapiro et al., 1988; Temkin-Bauer 1995; Weissert et al., 1990; Wolinsky et al., 1993).

Older people with cognitive impairment and people with dementia also constitute about half of all residents of assisted living facilities (45%-67% according to a recent report) (Hyde et al., 2007). Moreover, the proportion seems to be growing as assisted living facilities increase their capacity to serve and their marketing to such people and their families.

These findings are consistent with the findings from the ASPE-funded study, described earlier, of a sample of 1,474 individuals who had long-term care insurance and had just begun or were about to begin using paid long-term services and supports. In that sample, 64 percent of the individuals who were receiving paid care in a nursing home and 63 percent of those who were receiving paid care in an assisted living facility were people with cognitive impairment (Cohen et al., 2006).

Despite the large proportions of nursing home and assisted living residents that are people with cognitive impairment and dementia, the majority of people with these conditions are living in the community at any point in time. Most of them receive substantial amounts of help from family members and other unpaid caregivers, but they are also high users of home and community-based long-term care services and supports. One study of community-living older people who needed help to perform ADLs and IADLs found that those who had cognitive impairment were more than twice as likely as those who did not have cognitive impairment to receive paid home care Johnson and Weiner (2006). In addition, those who had cognitive impairment and received paid home care used almost twice as many hours of care monthly as those who did not have cognitive impairment.

It is sometimes said that older people with cognitive impairment and people with dementia generally do not receive Medicare- and Medicaid-funded home health care, but available data show that is not true. In 2004 and 2005, 36 percent of Medicare beneficiaries age

65 and older who received home health care services paid for by either Medicare or Medicaid were people with cognitive impairment (Murtaugh et al., 2009)

Older people with cognitive impairment and people with dementia are also high users of adult day services. One study of older people in adult day centers found that more than half had cognitive impairment or dementia (O’Keeffe and Siebenaler, 2006).

Lastly, available data from three states indicate that more than one-third of older people who receive Medicaid home and community-based waiver services are people with cognitive impairment and dementia (Fortinsky et al., 2004; Hirdes et al., 2004; Mitchell et al., 2006).

This high use of residential and home and community-based long-term services and supports reflects the high need among older people with cognitive impairment and people with dementia for help to perform daily activities and their need for supervision to avoid threats to health and safety. It is important in this context to note the finding of the ASPE-funded study of long-term care insurance policyholders that only 28 percent of policyholders who were receiving paid care at home were people with cognitive impairment, compared with the much higher proportions of people with cognitive impairment among policyholders who were receiving paid care in an assisted living facility or nursing home (63% and 64% respectively) (Cohen et al. (2006). Doty et al. (2010) point out that having long-term care insurance coverage reduces the importance of cost in decisions about where to receive paid care, thus allowing individuals and their families to choose the service setting that meets their needs. Thus, the higher proportions of policyholders with cognitive impairment among all policyholders receiving paid care in nursing homes and assisted living facilities speaks again to their high need for help to perform daily activities and their need for supervision to avoid threats to their health and safety.

From the perspective of families, the care needs of older people with cognitive impairment and people with dementia, and especially the need for supervision to avoid threats to health and safety, often result in high stress and burden. In several studies, more than half of the family caregivers of people with dementia have said they feel they have to be “on duty” 24 hours a day in order to anticipate and prevent problems and ensure the person’s safety (Mahoney et al.,

2003; Schulz et al., 2003). This perceived need for 24-hour vigilance has been found in caregivers of people in all stages, including caregivers of people who are in the mild and moderate stages of dementia and may be at risk of wandering and getting lost or other unsafe activities (Adams et al., 2006).

D. Cognitive Impairment and Need for and Use of Long-Term Services and Supports by Adults with Cognitive Impairment Caused by Other Diseases and Conditions

The discussion in this report has focused on the need for and use of long-term services and supports by older people with cognitive impairment and people with dementia. As noted at the beginning of the report, some, and perhaps many, adults of all ages who have cognitive impairment due to diseases and conditions, such as mental retardation, other intellectual disabilities, severe mental illness, traumatic brain injury (TBI) and acquired immunodeficiency syndrome (AIDS), will also be eligible for long-term services and supports based on the two specified CLASS Program benefit triggers. Adults with cognitive impairment due to diseases and conditions that preclude them from working throughout their adult lives may not be able to enroll in the CLASS Program because of the work and earned income requirements for enrollment. Nevertheless, in thinking about how to operationalize and implement the CLASS Program benefit triggers, it is essential to consider the implications of any proposed approaches for adults with cognitive impairment due to these other diseases and conditions.

By definition, people with mental retardation and many people with other intellectual disabilities have cognitive impairment. Most people with mental illness do not have cognitive impairment, but some individuals with severe depression, schizophrenia, bipolar disorder, and other severe mental illnesses do (Aleman et al., 1999; Butters et al., 2004; Friedman et al., 2001; Mojtabai and Olfson, 2004; Moore et al., 2004; VanGorp et al., 1998). Likewise, some people with TBI and AIDS have cognitive impairment, and others do not.

Individuals with cognitive impairment caused by mental retardation, other intellectual disabilities, severe mental illness, or other diseases and conditions can develop dementia, especially as they get older. Older people with intellectual disabilities caused by Down's syndrome, for example, are very likely to develop Alzheimer's disease (Janicki et al., 1996).

Similarly, some people with severe depression, lifelong schizophrenia, and other severe mental illnesses develop dementia as they age (Knopman et al., 2006; Kales et al., 1999).

In the United States, older people with cognitive impairment and dementia, people with mental retardation and other intellectual disabilities, people with mental illness, and people with TBI and AIDS generally receive long-term services and supports in separate service systems. These service systems comprise different agencies, different professionals and service providers, different funding sources and different eligibility criteria for long-term services and supports. The extent to which each service system focuses on cognitive impairment differs, and the way cognitive impairment is defined and measured also differs across service systems.

Adults with cognitive impairment who are receiving or could receive long-term services and supports in any one of these service systems often have care needs that are not the main focus of the system. One example is people with mental illness who also have other serious physical health conditions and care needs related to those conditions that may not be met within the mental health service system. Another example is older people with dementia who have psychiatric and behavioral health conditions and care needs related to those conditions that may not be met within the service system for older people.

Policy analysts and researchers often note that the care needs of many individuals who need long-term services and supports cross the boundaries between the existing service systems. Professionals and care providers within each service system decry the lack of services within their system to meet all the care needs of the people they serve and frequently try to expand their services to meet all these needs. An alternative would be a more broadly based system of long-term services and supports that would provide services for people of all ages who need the services care, regardless of the disease or condition that causes that need. When such a system is proposed, however, many professionals, service providers, individuals, families, and advocacy organizations worry that important clinical expertise and other features of the age-based and condition-based service systems would be lost.

The problem of separate service systems and people whose needs for care cross the boundaries between those systems will certainly not be solved through the definition and operationalization of terms and concepts in the CLASS Program benefit triggers. On the other hand, one can hope that the benefit triggers can be defined and operationalized in ways that do not exclude adults with cognitive impairment caused by any disease or condition. In the short term, that objective can probably be best achieved through consultation and review of proposed approaches for operationalizing the benefit triggers by clinical experts and policy analysts who are knowledgeable about how cognitive impairment is defined and measured in each service system. In the longer term, it will be important to collect and analyze data on people with cognitive impairment who are enrolled in the CLASS Program and are later either allowed or denied long-term services and supports.

Recommendations. The CLASS Program benefit triggers should be operationalized and implemented to include not only potentially eligible older people with cognitive impairment and dementia but also potentially eligible adults of any age with cognitive impairment caused by any disease or condition.

Proposed definitions of terms and concepts in the benefit triggers and any proposed assessments of cognitive impairment for the CLASS Program should be reviewed by clinical experts and policy analysts who are knowledgeable about how cognitive impairment is defined and measured in the separate systems that provide long-term services and supports for adults with cognitive impairment and adjusted to the extent possible to address their concerns.

Once the CLASS Program is implemented and the 5-year waiting period for benefits has passed, data should be collected on people with cognitive impairment who determined to be eligible or ineligible for services based on the existing benefit triggers, and adjustments should be made in the benefit triggers to reduce any noted disparities in eligibility for people with the same or similar levels of cognitive impairment, regardless of the disease or condition that causes the impairment.

PART 3: OPTIONS FOR MEASURING CONCEPTS IN THE CLASS PROGRAM BENEFIT TRIGGERS THAT ARE IMPORTANT FOR PEOPLE WITH COGNITIVE IMPAIRMENT

Many different assessment instruments could be used to measure the concepts in the CLASS Program benefit triggers that are most important for people with cognitive impairment. The CLASS Program legislation says that the eligibility determinations based on the benefit triggers will be made by “a licensed health care practitioner.” Procedures for determining eligibility for CLASS Program services and supports have not yet been developed, and it is unclear whether there will eventually be a single organization that conducts eligibility determinations or, more likely, many organizations and individuals that determine eligibility, as is the case with most existing long-term care insurance plans. In this context, this contractor believes that no specific assessment instruments or procedures should be required to determine eligibility for CLASS Program services and supports. On the other hand, it is important to provide information about such instruments and their use to anyone who is responsible for implementing the CLASS Program benefit trigger. Some organizations and individuals may choose to use certain instruments. Equally important, awareness of the content of the instruments could help such organizations and individuals better understand and implement the intent and meaning of the concepts in the benefit triggers.

This section lists assessment instruments that measure concepts in CLASS Program benefit triggers that are most important for people with cognitive impairment. Further analysis of these instruments will be needed, but the objective of the analysis will differ depending on the decision that is made about whether specific assessment instruments and procedures will be required to determine eligibility for CLASS Program services and supports.

A. Measuring “Substantial Assistance”

The CLASS Program benefit trigger requires that an individual must be unable to perform at least the minimum number (which may be 2 or 3) of activities of daily living as are required under the plan for the provision of benefits without substantial assistance (as defined by the Secretary) from another individual. As noted earlier, this contractor recommends that

“substantial assistance” should be defined to include not only hands-on and standby assistance but also the assistance needed by a person with cognitive impairment who cannot perform the ADL independently, that is, assistance to initiate the ADL at the right time and in the right place and to complete the steps required to perform the ADL successfully.

Need for assistance to perform ADLs is usually determined with generic assessment instruments developed by Katz et al. (1963), Lawton and Brody (1969) and others. Some researchers and clinicians have developed assessment instruments intended specifically for people with cognitive impairment and dementia. Many of these instruments measure IADLs as well as ADLs, and many provide potentially useful wording to identify the kinds of difficulties people with cognitive impairment often experience in performing ADLs, and therefore the kinds of assistance they need to perform the ADLs successfully.

Assessment Instruments To Measure ADLs and IADLs
in People with Cognitive Impairment and Dementia

- *AD Situational Test* (Skurla et al. 1988)
- *Dependence Scale* (Rating based on informant responses to 13 questions about functional activities) (Stern et al., 1994)
- *Direct Assessment of Functional Status (DAFS)* (Observation and rating on tasks in 7 functional areas) (Lowenstein et al., 1989)
- *Dressing Performance Scale* (Observation and rating on 34 steps in dressing) (Beck 1988)
- *Functional Activities Questionnaire* (Informant report on 10 functional activities (Pfeffer et al. 1982)
- *Refined ADL Assessment Scale* (Observation and rating on 14 tasks) (Tappen 1994)
- *Self-Care Performance Tool* (Observation and rating on 4 self-care activities (Thralow and Rueter 1993)

B. Measuring “Substantial Cognitive Impairment”

The CLASS Program benefit trigger requires that the individual must need substantial supervision to protect him or her from threats to health and safety due to substantial cognitive impairment. As noted earlier, this contractor recommends that “substantial cognitive impairment” be defined in the context of the CLASS Program benefit trigger specifically, as the level of cognitive impairment that results in threats to health and safety to which the individual is not able to respond effectively.

Many assessment instruments have been developed to measure cognitive impairment, and some of these instruments may be particularly useful for organizations and individuals that are implementing the CLASS Program benefit triggers. The lists of assessment instruments below include brief mental status tests, performance tests, and instruments for informant interviews.

Brief Mental Status Tests

- *Alzheimer’s Disease Assessment Scale: Cognitive Behavior (ADAS-Cog)* (11 items) (Rosen et al., 1984)^c
- *Blessed Information-Memory-Concentration Test (BIMC)* (26 items) (Blessed et al., 1968)
- *Blessed Information-Memory-Concentration Test (BIMC)* (26 items) (revised by Katzman et al., 1983).
- *Blessed Orientation-Memory-Concentration Test (BOMC)* (Also called the Short Blessed Test (SBT)) (6 items) (Katzman et al., 1983)
- *Clock Drawing Tests* (many sources for scoring clock drawing tests)
- *CLOX* (an executive clock drawing test (Royall et al., 1998b))
- *Cognitive Abilities Screening Instrument (CASI)* (25 items) (Teng et al., 1994)
- *Cognitive Abilities Screening Instrument-Short form (CASI-Short)* (4 items) (Teng et al., 2001)

^c The Alzheimer’s Disease Assessment Scale has 11 items to measure “noncognitive behavior,” but these items seem to be rarely used.)

- *Community Screening Interview for Dementia (CSI 'D')* (28 items for the person and other items for an informant (Hall et al., 1993)
- *EXIT (The Executive Interview)* (Royall et al., 1992) This is a 25-item bedside measure
- *General Practitioner Assessment of Cognition (GPCOG)* (6 items for the person and other items for an informant (Brodaty et al., 2002).
- *Isaacs Set Test (IST)* (4 category verbal fluency test) (Isaacs et al., 1973)
- *Memory Impairment Screen (MIS)* (4 items)(Buschke et al., 1999)
- *Mental Status Questionnaire (MSQ)* (10 items) (Kahn et al., 1960)
- *Mini-Cog* (3 items) (Borson et al., 2000)
- *Mini-Mental State Examination (MMSE)* (~12 items) (Folstein et al., 1975)
- *Montreal Cognitive Assessment (MoCA)* (30 points) (Nasreddine et al., 2005)
- *Modified Mini-Mental State Examination (3MS)* (~ 16 items)(Teng and Chui 1987)
- *Ottawa 3D and Ottawa 3DY* (3 items and 4 items, respectively) (Molnar et al. 2008)
- *Saint Louis University Mental Status Examination (SLUMS)* (11 items) (Banks and Morley 2003)
- *Seven-Minute Screen* (includes 4 tests: cued recall: naming animals for 1 minute; the Benton Temporal Orientation Test, and Clock Drawing) (Solomon and Pendlebury, 1998)
- *Short Portable Mental Status Questionnaire (SPMSQ)* (10 items (Pfeiffer 1975)

Performance Tests

- *Drug Regimen Unassisted Grading Scale (DRUGS)* (Edelberg et al., 1999)
- *Everyday Problems Test for Cognitively Challenged Elderly (EPCCE)* (Willis et al., 1996)
- *Face-Hand Test (FHT)* (Fink et al., 1952)
- *The Home Visit* (Kapust and Weintraub, 1988)
- *The Medication Management (MM) Test* (Gurland et al., 1994)
- *The Time and Change Test* (Inouye et al., 1998)

Instruments for Informant Interviews

- *AD8* (8 items) (Galvin et al., 2005)
- *Blessed Dementia Scale* (22 items) (Blessed et al., 1968)
- *Dementia Severity Rating Scale* (11 domains) (Clark and Ewbank 1996)
- *Everyday Cognition Scale (E-Cog)* (39 items) (Farias et al., 2008)
- *General Practitioner Assessment of Cognition (GPCOG)* (6 items for the informant and other items for the person) (Brodaty et al., 2002).
- *Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)* (26 items) (Jorm and Jacomb 1989)
- *The Community Screening Interview for Dementia (CSI'D')* (30 items for the informant and other items for the person) (Hall et al., 1993)

C. Measuring “Substantial Supervision”

The CLASS Program benefit trigger requires that the individual must need substantial supervision to protect him or her from threats to health and safety due to substantial cognitive impairment. This contractor recommended earlier that “substantial supervision” should be defined specifically as the amount of supervision needed to protect an individual from threats to health and safety. The concepts and wording in the Supervision Rating Scale, described earlier, and in the two studies of amount of supervision provided and perceived need for supervision for older people with cognitive impairment and people with dementia may be useful for organizations and individuals that are implementing the CLASS Program benefit triggers

PART 4: OPTIONS FOR THE UNSPECIFIED BENEFIT TRIGGER

The preceding analysis suggests options the Secretary might consider for the unspecified benefit trigger.

- A trigger that addresses cognitive impairment in people with mental illness, including people with severe depression, who need long-term services and supports but would not be eligible based on the two specified benefit triggers; such a trigger might focus specifically on executive dysfunction.
- A trigger that addresses cognitive impairment in people with multiple diseases and conditions who need long-term services and supports but would not be eligible based on the specified benefit triggers.

In addition to benefit triggers, this contractor believes it will be important to consider the types of help people with cognitive impairment need to manage the cash benefit they receive through the CLASS Program.

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APPENDIX Jc:

**STRATEGIC ANALYSIS OF HHS ENTRY INTO THE
LONG-TERM CARE INSURANCE MARKET**

STRATEGIC ANALYSIS OF HHS ENTRY INTO THE LONG TERM CARE INSURANCE MARKET

David Dranove^a
Cory Capps^b
Leemore Dafny^a

^a Kellogg School of Management, Northwestern University, Evanston, IL

^b Bates White Economic Consulting, Washington, DC

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I. Introduction

Despite the potentially catastrophic costs of long term care, fewer than 3% of Americans have long term care insurance (LTCI). In order to increase LTCI coverage, the CLASS Act authorizes the Department of Health and Human Services HHS to offer a government-sponsored long term care insurance product (henceforth, CLTCI) alongside the offerings of private insurers. A key requirement of the CLASS Act is that projected revenues from CLTCI must equal or exceed expenses; that is, the product should be designed to at least break even. A second key requirement is that CLTCI cannot medically underwrite its basic policies; instead, initial premiums can vary only according to age at enrollment. HHS may be able to offer additional plans not described by the CLASS Act; it is not clear if HHS can medically underwrite these offerings. A third key feature is that employers that participate in the CLASS plan must automatically enroll their employees, who in turn can opt out of the program.¹ HHS has asked us to assess whether CLTCI is likely to be financially viable and to provide recommendations that would increase the appeal and viability of CLTCI.

In short, we have been asked to determine whether CLTCI can profitably enter the LTCI market. Although it is tempting to perform such an analysis by projecting revenues and expenses, such projections often prove to be highly speculative. Instead, we perform a *strategic analysis* of the LTCI market in general and possible CLTCI designs in particular. Strategic analysis, as exemplified by Michael Porter's *Competitive Strategy* and Besanko, Dranove, et al's *Economics of Strategy*, considers whether the underlying economic conditions of a market enable the participants to prosper and, at the same time, assesses whether there are profitable opportunities for entry.

We employ three classic tools of strategic analysis:

- *Industry Mapping* provides a basic set of facts about the industry that are required to understand the nature of competition and the potential for entry.
- *Industry analysis* assesses the competitiveness of a market, whether market conditions are likely to support profitability, and how incumbent firms are likely to respond to entry.

¹ Summaries are available at www.classactprovisions.com/PDF/CRS_Class%20Act_May_2010.pdf, www.cahealthadvocates.org/advocacy/2010/class.html and www.ncoa.org/independence-dignity/class-act-summary.html.

- *Positioning analysis* of a specific firm assesses the relative strengths and weaknesses of that firm and whether it can prosper by outperforming its rivals.

II. Industry Mapping

Despite the potential value of LTCI for many Americans, the LTCI market is very small.² Approximately 8 million Americans currently have LTCI; this corresponds to about 2.5% of the total population and 3.5% of the working-age population.³ There have been many theories advanced for the relatively small size of the market, including the high cost of coverage, uncertainty about the need for LTCI, the availability of Medicaid to pay for long term care expenses, and the notion that individuals may be reluctant to forego consumption today in order to protect their estates.⁴ We will not speculate as to the merits of these theories but will identify ways that existing LTCI products may fail to meet the needs of potential customers.

Table 1 reports total premiums collected (in \$millions) for all LTCI policies.⁵

Table 1: Size of the Long Term Care Insurance Market (in \$millions)

	All markets	Group (2008)	Individual (2009)
All policies*	\$7,065	\$1,043	\$6,022
New policies	\$924	\$187	\$737

* Includes renewals

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- ² Much of the information about the industry is taken from *Brokers World* magazine's 2009 survey of the individual market and 2008 survey of the group market. (These are the most recent surveys available.) Most surveyed sellers are life or health insurance companies selling LTCI as riders to health insurance or as stand-alone products. The group survey covers 6 carriers who account for approximately 80 percent of annual sales in the group market. The individual survey covers 19 carriers that account for 90 percent of sales. We account for the incompleteness of the surveys when reporting on market size and structure; our analysis of concentration assumes that firms excluded from the survey are of negligible size. We acknowledge that market share data derived from such surveys can be inaccurate. We therefore rely on these data for qualitative inferences only.
- ³ Anne Tergesen and Leslie Scism, "Long-Term-Care Premiums Soar," *Wall Street Journal*, October 16, 2010; U.S. Census Bureau 2009 population estimates, <http://quickfacts.census.gov/qfd/states/00000.html>. See also, Paula Span, "A New Long-Term Care Insurance Program," *New York Times*, March 24, 2010.
- ⁴ Jeffrey Brown and Amy Finkelstein, "Why is the market for long-term care insurance so small?" *Journal of Public Economics* 91 (2007): 1967–1991.
- ⁵ It is not clear if these figures include life insurance policies that permit the beneficiary to convert some of the insurance benefit to cash to pay for long term care. At death, the beneficiaries receive the balance of the insured amount less the long term care payout. Such policies seem to have been widely publicized about ten years ago.

Annual premium revenues from new and existing products exceed \$7 billion, which represents less than 3% of overall expenditures on nursing and home health in 2008.⁶ In contrast, premiums for traditional private health insurance represent approximately 37% of healthcare expenditures (excluding nursing and home health).⁷ The individual market for LTCI is approximately five times larger than the group market, although the group market has gained on the individual market in terms of new sales. (Prior to the recession, the group growth rate has averaged 18 percent versus 12 percent for the individual market.) This reverses the predominant pattern in private health insurance where, due to tax subsidies and pooling to reduce adverse selection, the group market is far larger than the individual market.

a. Channels

LTCI is typically sold by life insurance companies. This reflects the idea that individuals who purchase LTCI are trying to protect the value of their estates. As seen in Table 1, the vast majority of LTCI is sold in the individual insurance market. These policies are sold by agents for life insurance companies or by independent insurance brokers. These agents and brokers invest considerable effort identifying customers who are interested in protecting their estates and offer LTCI as a natural adjunct to life insurance. LTCI in the group market is usually sold in conjunction with group life insurance.

By all accounts, insurance agents receive substantial commissions. Although we do not have specific information about LTCI, we can gain insight by considering commissions for life insurance.⁸ While commissions vary somewhat by firm, the typical first year commission for life insurance products is 30–50% (whole life) and 90% (term life). Commissions run 5% per year thereafter.⁹ Commissions may be higher for independent agents and lower for company

⁶ In 2008, nursing home expenditures were \$138.4 billion and home health care expenditures were \$64.7 billion. CMS, 2008 National Health Expenditures, Table 2.

<http://www.cms.gov/NationalHealthExpendData/downloads/tables.pdf>.

⁷ In 2008, healthcare expenditures excluding nursing and home health care amounted to \$2.136 trillion. Total premiums for private health insurance were \$783.2 billion. CMS, 2008 National Health Expenditures, Tables 2 and 12.

⁸ We obtained this information through a combination of Internet search and interviews with a life insurance salesperson. See <http://www.lifeinsuranceadvisorsinc.com/articles/individuals/HowToReduceCommissions.pdf>; http://www.ehow.com/about_6509638_kind-do-insurance-agents-get_.html; <http://www.insure.com/articles/generalinsurance/agent-commissions-2.html>; <http://insurance.hirby.com/what-is-the-average-life-insurance-commission/>; Interview with Barry Finkelstein, 11/4/2010.

⁹ <http://personalinsure.about.com/od/life/f/lifefaq3.htm>. These figures do not include “expense allowances,” which companies grant to larger sellers (called “general agents” and can add 10% or more to the total commissions paid).

agents. Overall, the average commission over the lifetime of an LTCI policy appears to be in the neighborhood of 10 percent.

We are uncertain whether group LTCI commissions are different from individual LTCI commissions. Because the high cost of commissions has a crucial role to play in assessing CLASS insurance viability, and because the group market is growing relative to the individual market, it will be helpful to resolve this uncertainty.

Brokers are uncertain as to how the CLASS Act will affect their business. As might be expected from incumbent firms concerned about a potential entrant, some LTCI companies are encouraging brokers to give negative information about the act.¹⁰

b. Characteristics of Policies Sold

Agents and brokers play another important role in the LTCI market; they inform consumers about a myriad of potentially confusing features. Some of these features help protect insurers against adverse selection. These include:

- ***Pricing Structure.*** Premiums for LTCI are intended to be fixed for the duration of the policy. The amount depends largely on the enrollee's age when they first purchase coverage. Most enrollees are currently in their 50s and 60s. If coverage lapses, an individual may reenroll, but the premium is based on their age at reenrollment. Although it can be very costly for individuals to let coverage lapse, the drop-out rate is considerable and drop-outs are an important source of profits for LTCI carriers.

Notwithstanding the "fixed premium" policy design, all stock companies issuing LTCI have requested and received approval for rate increases for existing policyholders in order to cover "unexpected" increases in projected spending. Increases have ranged up to 40%. (Mutual companies have not done so.)¹¹

- ***Maximum Daily Benefit.*** Nearly all LTCI policies reimburse caregivers up to a maximum pre-specified amount, known as the maximum daily benefit. Most private carriers offer a wide range of maximum daily benefits up to \$400 or higher. The CLASS Act requires that HHS offer an LTCI product with a minimum average daily benefit of \$50. The minimum benefit is very small relative to private sector LTCI, where the median maximum daily benefit is about \$150. Indeed, only 12% of new individual policies and 18% of new group policies have daily benefits of \$99 or less.¹² Approximately half of all

¹⁰ <http://blog.empowerltci.com/2010/08/17/7-facts-benefit-brokers-need-to-know-about-selling-ltci/>

¹¹ Source: Interview with Barry Finkelstein, 11/4/2010

¹² *Broker World* does not separately report the percentage of policies with \$50 daily benefits.

new policies offer at least \$150 in daily benefits. 70 percent of individual policies and 90 percent of group policies have some sort of inflation adjustment for benefits.

- *Elimination Period.* The number of days that the policy holder must be eligible for long term care before insurance coverage begins. Although most carriers offer a number of options for the elimination period, the typical period for nursing homes is usually 90-100 days. Some policies have a much shorter elimination period for home care. The CLASS Act does not specify any particular elimination period for CLASS insurance.
- *Benefit Period.* Benefit periods range in length; many policies will pay benefits for no more than 5 years after the initial claim. Unlike private plan, the CLASS Act does not limit the benefit period for CLASS Act insurance.

There are additional features including inflation adjustments, pricing of spouses' policies, handling of premiums upon the death of the enrollee, and future purchase options. Customers often ask brokers and agents to price out a very generous policy and then ratchet down the features until the premium fits their budget. The complexity of this process helps explain the important role of the broker/agent.

c. Market Structure

Nearly all of the leading sellers of LTCI are also very active in the life insurance market.

Table 2a lists the leading carriers in the group market measured by share of premiums for new policies written in 2007. Table 2b lists the leading carriers in the individual market for 2009. The tables also indicate the year in which each company (or its corporate predecessor) was founded. We do not know when each firm entered the LTCI market.

Table 2a: National Market Shares and Year of Founding—Group Market, 2007

Carrier	Share	Year Company Founded
John Hancock	.327	1862
UNUM ¹³	.195	1874
MetLife	.112	1863
CNA	.083	1897
Prudential	.071	1875
Genworth	.012	1871
"Fringe" carriers not surveyed	.200	n/a

Table 2b: National Market Shares and Year of Founding—Individual Market, 2009

Carrier	Share	Year Company Founded
John Hancock	.240	1862
Genworth	.222	1871
Northwestern	.076	1857
MetLife	.075	1863
Bankers Life	.055	1879
New York Life	.044	1841
Prudential	.037	1875
MassMutual	.027	1851
Mutual of Omaha	.026	1909
Berkshire ¹⁴	.026	1860
State Farm	.023	1922
All other carriers combined	.149	n/a

A useful way to assess the competitiveness of a market is by computing a measure of market concentration, such as the *Herfindahl-Hirschman Index* (HHI), which is commonly used by the Department of Justice and Federal Trade Commission for antitrust enforcement.¹⁵ The HHI in the group market is approximately 1700, which under current antitrust guidelines is considered “moderately concentrated”; the HHI in the individual market is approximately 1260, which represents an “unconcentrated” market.¹⁶ In other words, both markets appear to

¹³ UNUM is the result of the 1990s consolidation of Union Mutual (founded in 1874), Colonial Life, Paul Revere, and Provident Life.

¹⁴ Berkshire merged with Guardian Life in 2001. Guardian was founded in 1860.

¹⁵ The HHI equals 10,000 times the sum of the squared market shares of each firm. For example, if the market consists of three firms with market shares of 0.5, 0.3, and 0.2, then $HHI = 10,000 \times (.25 + .09 + .04) = 3800$.

¹⁶ FTC and DOJ, *Horizontal Merger Guidelines*, issued August 19, 2010, § 5.3. <http://www.ftc.gov/os/2010/08/100819hmg.pdf>. Under the guidelines in effect prior to August of 2010, both the

have enough competitors to expect reasonably vigorous competition.¹⁷ There are other factors besides market structure that contribute to the competitiveness of the market, and we will consider these in the Industry Analysis.

There has been considerably more market share volatility in the group market than in the individual market. In the last few years, John Hancock has remained the leader in the group market but UNUM has supplanted MetLife as the number two seller while CNA and Prudential have both enjoyed substantial market share growth. In the wake of high benefit claims, John Hancock recently decided to exit the group market.¹⁸ These “share shifts” may be indicative of a competitive marketplace, or perhaps of adverse selection problems. In the individual market, John Hancock and Genworth have jockeyed for the position of market leader and Northwestern is the only carrier to enjoy a significant uptick in market share. CNA is no longer writing individual policies.

There appears to be considerable entry and exit among fringe competitors. An analysis performed in 2005 found the following:

“In the past 5 years, 18 major companies have sold out their long term care insurance business, may sell out or are gone from the market . . . Probably no one has kept track of the number of smaller companies . . . that have pulled out of the market as well. When the dust settles, if it ever does, 6 companies may represent over 80% of the market”¹⁹

Most churn occurs among fringe competitors; no firm with less than 10 years of experience in the LTCI market has more than a trivial share in the individual market.

d. Pricing

Some LTCI policies have built-in inflation protection; others do not. Policies without inflation protection must be underwritten to anticipate future utilization. Policies with inflation protection must also anticipate future price increases.

group market and the individual market would have been deemed moderately concentrated.

¹⁷ National market shares will accurately describe the competitive conditions in local markets under either of the following conditions. The first is that the market for the sale of LTCI is national, which would mean that most consumers are able to purchase policies from most LTCI insurers. The second is that, even if most of these firms do not compete in most markets, they could readily do so.

¹⁸ MetLife recently announced that it would stop selling new LTCI policies, though it will continue servicing existing enrollees. Erik Holm and Anne Tergesen, “MetLife Discontinues Sales Of Long-Term Care Coverage,” *Wall Street Journal*, November 11, 2010.

¹⁹ <http://www.longtermcarelink.net/a9insurance.htm#overview>.

Historically, LTCI insurers were required by state regulators (through the National Association of Insurance Commissioners, or NAIC) to have at least a 60% lifetime loss ratio (based on a comparison of the net present value of premiums and claims). This has led to pricing volatility, as expected claims costs have been volatile. In particular, differing expectations with respect to future LTC cost growth can drive differences in premiums offered today. For example, if an insurer expects LTC costs to grow at 5 percent per year, then in order to provide benefits valued at \$100 today the insurer will require \$551 in 35 years. If an insurer instead expects LTC costs to grow at 5.5 percent, providing those same benefits will require \$650 in 35 years. This 1/2 point difference in expectations of cost growth results in an 18% difference in the perceived actuarially fair premium. The observed pricing variation likely reflects variation in cost growth projections both across firms and within firms over time.

III. Industry Analysis

Industry analysis proceeds by considering a series of economic factors that may affect the intensity of competition and thereby affect profitability. When assessing profitability, no single factor is definitive. Nor is there a formula that translates the totality of the analysis into a particular level of profits. The analysis instead provides a qualitative assessment of profitability. Industry analysis also examines trends in these factors, to facilitate a forecast of future profit trends. If several key factors trend in the same direction, then forecasts about trends in profitability are more reliable.

Industry analysis is often associated with the work of Harvard economist Michael Porter, who identified five major forces that affect profitability—Internal Rivalry, Entry, Substitutes, Buyer Power and Supplier Power. In order to organize our analysis, we follow the Template for Doing a Five Forces Analysis that appears in Besanko, Dranove, et al., *Economics of Strategy*, which slightly modifies and updates the Porter framework. This template consists of a series of factors to be considered in conjunction with each force.

a. Internal Rivalry

Degree of Seller Concentration. As reported above, the LTCI market is relatively unconcentrated. This tends to increase price competition. There has been no pronounced trend in seller concentration. Some smaller players, such as State Farm, may be seeking to gain share.

Despite the relatively large number of competitors, there is substantial heterogeneity in pricing. *Broker World* conducted an experiment in which it solicited pricing quotes on behalf

of a fictitious employer. Plan design was held constant and prices were quoted by age of enrollee and for plans with and without inflation adjustment. Five of the six survey targets responded. For plans without inflation adjustment, the ratio of maximum to minimum price quotes ranged from 116–151% ,with no discernable correlation between price dispersion and enrollee age. For plans with inflation adjustment, the ratio of maximum to minimum price quotes ranged from 121–191%, and dispersion was negatively correlated with enrollee age.²⁰

Rate of Industry Growth. The LTCI market is currently stagnant, perhaps because of the economic downturn. This can intensify pressure on firms to lower prices in order to boost business. As the economy improves, sales of LTCI should improve as well, easing pricing pressure.

Other factors may affect industry growth. The baby boom bubble is entering the prime years for purchasing LTCI, thereby boosting demand. Strains on Medicaid budgets might limit federal and state funding for long term care, thereby increasing the demand for LTCI. Likewise, cutbacks to the Medicare Part C program (i.e., Medicare Advantage) might increase demand for LTCI. On the other hand, the movement of business to health insurance exchanges might reduce employer involvement in providing health benefits, thereby reducing demand for LTCI.

Cost Differences Among Firms. All major players have similar administrative and marketing cost structures. However, plans may have markedly different underwriting policies and selection strategies leading to different cost structures. This is reflected by the evidence on price dispersion reported in *Broker World*.

Excess Capacity. Capacity, as normally construed, is a nonissue in LTCI. However, firms may be constrained from growth if they lack financial capital. Economic recovery may provide life insurance firms with the cash required to support growth.

Product Differentiation. In one sense, the products are highly homogeneous—the value of a \$150 daily benefit is essentially the same regardless of the source of those funds. Homogeneity in certain benefit features is driven by HIPPA regulations, which specify requirements that plans must satisfy in order for premiums to be (partly) tax-deductible and benefits tax-exempt.

²⁰ As we note above, differences in the expected growth rate of LTC costs will drive differences in the premiums firms quote today. Sellers of LTCI are likely to have more consistent projections over a shorter time horizon than a longer time horizon, which could explain why dispersion is lower for older enrollees.

LTCI requires a fairly substantial outlay and consumers likely spend considerable time evaluating the product. Thus, one might expect to see strong price sensitivity. Due to the role of the sales agent, however, consumers may be loyal to one product or another. About half of all sales occur through company agents who may already have a relationship with the client through the sale of life insurance. There has recently been a shift of sales to independent agents who may represent several LTCI sellers. If this shift continues, consumers may display less loyalty and pricing pressures may intensify.

Switching costs. Consumers who have already purchased LTCI have enormous switching costs, as the premium is based on the age of initial purchase. Thus, virtually all price competition is largely restricted to new customers.

Observability of prices. Sellers can more easily tacitly collude if they can observe and quickly react to competitor price changes. (The reason is that any effort by one firm to gain market share through a price reduction is easily and quickly mimicked by its rivals.) Pricing in the individual market is customer specific, making “copycat” price matching difficult. Pricing in the group market is also not easily observed. Observability may increase substantially if the LTCI market switches to a Geico/Progressive sales model, as we discuss below.

Use of Facilitating Practices. NAIC regulations may serve to put a floor on insurance rates, anchoring premiums and acting as a “facilitating practice” (In this context, facilitating practices are practices that, by increasing price transparency or creating focal pricing points, may make tacit coordination on pricing more likely or sustainable). NAIC regulations that act as a floor on pricing would limit each LTC insurer’s ability to gain market share by setting an aggressive premium.

Size of sales orders. Sellers price more aggressively when each sale represents a large portion of their business. With the exception of very large employer groups, most sales are a miniscule portion of total business. CLASS may shift more attention to employer-based sales, which could intensify price competition.

Exit Barriers. Price competition is reduced when firms can easily exit markets, as they are more prone to exit than endure bitter price wars. LTCI carriers could face considerable harm to their reputations in the much larger life insurance market if they exited LTCI. They would be more likely to sell their existing policies to another carrier.²¹ Overall, we would expect LTCI carriers to defend their positions if their survival is threatened.

²¹ While it is discontinuing sales of new LTCI policies, MetLife is apparently planning to continue servicing

Industry Elasticity of Demand. The industry elasticity of demand is estimated to be around 0.75 which is not particularly high. Price increases, if they can be sustained, will not drive away so many customers as to drastically affect industry profits.

Overall Assessment of Internal Rivalry. Despite the relatively unconcentrated market, we believe that internal rivalry has been relatively muted, due to the importance of personalized sales contact. If the product were simplified to the point where consumers feel comfortable purchasing LTCI without a sales agent, then the remaining factors tend to weigh towards intense competition.

b. Entry and Exit

All of the major LTCI carriers have considerable experience. This section identifies barriers to entry and growth by newcomers and pays particular attention to potential lowering of entry barriers should LTCI become commoditized.

Economies of Scale and Scope. Traditional production economies associated with the spreading of facilities costs are absent. There are economies of scale and scope in marketing and selling of LTCI, as life insurance companies can efficiently identify potential LTCI customers. If LTCI is commoditized, these selling economies will become much weaker.

Importance of Reputation. As noted in Tables 1a and 1b, all of the major LTCI sellers are established life insurance companies. Ostensibly, consumers purchase from sellers with proven track records, as sellers who exit the market may be unable to fulfill their LTCI contracts. Even if the product is commoditized, consumers will still place a high value on the seller's financial stability.

Access to Distribution Channels. LTCI is currently sold through life insurance company agents and independent brokers. Distribution through the Internet will be possible if the product is commoditized.

Access to Key Inputs (Technology/Raw Materials/Know-how/Favorable Locations). These are not important entry barriers.

Experience Curve. Incumbents have the benefit of client lists that allow them to more efficiently deploy their sales forces. The actuarial models required for pricing LTCI are available from independent consultants. Still, LTCI companies have varied in the extent to

existing enrollees. Erik Holm and Anne Tergesen, "MetLife Discontinues Sales Of Long-Term Care Coverage," *Wall Street Journal*, November 11, 2010.

which they are able to successfully model key profit drivers, such as cost growth and drop-out rates, so new entrants may be placed at a disadvantage while they accumulate LTC underwriting expertise.

Strategic Behavior of Incumbents in Response to Entry. Because there has been no major entrant in recent years, there is no evidence one way or the other as to how incumbents would respond to entry. Moreover, a government plan may be viewed as a more committed entrant (e.g., unlikely to be driven out of the market via aggressive pricing) and so would likely generate a different strategic response than a private entrant.

Exit Barriers There are substantial exit barriers. Regulators will protect covered lives, and major carriers will be reluctant to harm their reputations in the much larger life insurance market by withdrawing from the LTCI market in a way that undermines commitments made to their installed base of enrollees.

Overall Assessment of Entry and Exit. Incumbents are protected by their longstanding reputations and access to selling channels. The latter may break down if LTCI is commoditized, but the former may remain important. Consumers may be willing to purchase annual auto insurance from GEICO or Progressive, but will they be willing to purchase LTCI from upstart firms, given payout periods that may be years or decades in the future?

c. Substitutes and Complements

Availability of Close Substitutes. LTCI protects future wealth. Consumers who are worried about the cost of lengthy nursing home stays are likely to have estates worth several hundred thousand dollars and are apt to purchase life insurance, which in this context can be viewed as a substitute for LTCI. This explains why the same channel is used for both insurance products. Consumers who are worried about the costs of short term nursing home stays and home care due to an acute condition are likely to have somewhat smaller estates. There are currently no good substitutes for LTCI for these individuals—we return to this point below.

Medicaid has been an important substitute for individuals of lesser means.

Price-Value Characteristics of Substitutes. Whole life insurance can replenish an estate drained by costly nursing home bills; term life may no longer be active by the time a nursing home is needed. But whole life is an imperfect substitute because the funds are not available until the patient is deceased.²² Medicaid is an imperfect substitute because many long term

²² Viatical settlements can allow individuals with life insurance to access funds prior to death. However, the value of life insurance policies do not affect Medicaid eligibility whereas the income from a viatical settlement could.

care providers will not accept it and individuals must meet income thresholds to qualify. Additionally, many individuals may fear that Medicaid will be underfunded in the future, further hampering access to care for beneficiaries.

State Medicaid Partnerships. These programs, which are active in most states, are intended to encourage the middle class to purchase LTCI.²³ “In the Partnership model, states offer the guarantee that if benefits under a Partnership policy do not sufficiently cover the cost of care, the consumer will qualify for Medicaid under special eligibility rules that allow a pre-specified amount of assets to be disregarded . . . [t]his is generally referred to as ‘asset protection’.”²⁴ CLASS should obtain similar asset protection for its products.

Availability of Complements. The continued growth in the demand for home health care and assisted living arrangements will place greater financial strains on the elderly and increase the value of LTCI.

Overall Assessment of Substitutes and Complements. As fears about Medicaid’s viability intensify and alternative long term care arrangements multiply, demand for LTCI is likely to grow substantially. This trend is unlikely to be meaningfully offset by growth of the limited set of substitutes or to be hampered by a lack of complements.

d. Buyer and Supplier Power

Supplier power is not an issue for LTCI, as there are no essential raw materials or technology required for sales. Buyer power stems largely from the power of insurance brokers. Brokers in the individual LTCI market have power if LTCI customers have a relationship with their broker and not with the LTCI company. In this case, the broker can command a large commission or threaten to sell competitors’ products. However, about half of sales in the individual market are currently done by company agents, rather than independent brokers.

LTCI group sales rely on a different brokerage channel, but the same considerations apply. Other considerations, such as the size of brokers or their ability to integrate into LTCI sales, are nonissues.

See, e.g., <http://www.kantrowitz.com/cancerpoints/ftcviatical.html>.

²³ The initial Partnership states are California, Connecticut, Indiana, and New York. Provisions in Deficit Reduction Act of 2005 allow any state to implement LTC Partnership programs and more than 30 states now offer such a program.

²⁴ Mark Meiners, “Medicaid Eligibility Issues for Long-Term Care Insurance Partnership Programs,” Center for Health Care Strategies, Inc., *Issue Brief*, March 2008.

Overall Assessment of Buyer and Supplier Power. Broker power is limited by several factors. First, they are not concentrated, so LTCI firms can switch brokers at will. Second, partial integration allows LTCI companies to credibly threaten to move to a fully integrated sales model should independent brokers seek too much power. In the future, commoditization of LTCI could break the power of brokers even as it fundamentally changes competition among LTCI firms.

e. Summary of Five Forces Assessment

The profitability of the LTCI market depends on the extent to which several factors apply:

- Consumers find it difficult to evaluate the product and rely on the advice of brokers and the reputations of established sellers (+)
- Perceived product complexity limits commoditization and entry by aggressive price cutting firms (+)
- Competition and partial integration by LTCI firms limit broker power (+)
- The viability of Medicaid as a LTCI insurer for those of limited means (-)

IV. Positioning Analysis

Beyond certain requirements described at the outset of this analysis, the ultimate form of the CLASS plan will be determined by the Secretary of the Department of Health and Human Services. Success of the CLTCI plan will likely ultimately be judged on two dimensions. First, does the plan meet the statutory requirement that its premiums cover its costs over a 75-year horizon? Second, does the plan meaningfully expand the size of the population with long term care insurance? Success on these two dimensions will require that the government plan capitalize on the unique strengths of a federal LTCI plan while counteracting the statutory and bureaucratic weaknesses of a federal plan. The performance of LTCI will depend both on its relative strength vis-à-vis private-sector competitors, and on its choices regarding product positioning. For example, should the CLTCI plan attempt to compete directly with private LTC insurers by offering either lower costs or lower benefits? Or should the CLTCI plan avoid direct competition and instead offer a set of features that private LTC insurers are unlikely to match?

a. Strengths

The key strengths of the CLTCI plan are in part inherent to the federal government and in part derive from various provisions of the CLASS Act.

- *Long-term solvency.* Table 2a and Table 2b show that all of the substantial private sellers of LTCI are more than 70 years old, which indicates that when it comes to purchasing insurance against risks decades hence, consumers place a premium on the perceived stability of the insurer. The federal government should have an advantage over private insurers on this account.
- *Strategic commitment.* Once enacted, it would literally require an act of Congress to eliminate the CLTCI plan. Recognizing this, efforts by incumbents to deter entry or engage in practices to drive the government out are fairly unlikely.²⁵ This ability to commit gives the CLTCI plan a strategic advantage over other potential entrants.
- *Automatic enrollment, opt-out, and payroll deductions.* For employers that choose to participate in the CLTCI plan, employees will be automatically enrolled and premiums will be deducted from paychecks. Employees who desire to opt-out are allowed to do so. Inertia may result in fewer opt-out decisions and the opt-out structure is certain to result in higher initial enrollment than would an opt-in structure.²⁶ As we discuss in the Industry Mapping section, the group segment, while smaller in magnitude, is growing more rapidly than the individual segment (18% vs. 12%), which will increase the value of the opt-out structure over time if the trend persists.
- *Low overhead and disintermediation.* The CLASS Act restricts administrative costs of the plan to 3% of premiums in each year of the program. The interpretation of administrative costs is broad and includes advice and counseling. This will force the CLTCI program to aggressively manage expenses. If the CLASS plan can meet this mandate while still offering a product that consumers are aware of and interested in purchasing, it will have a significant cost advantage over private LTC insurers, which are dependent upon commissioned brokers.
- *Simplicity and standardization.* The CLASS plan will have a simple and easily understood design that features a vesting period of at least 5 years, no elimination period, benefits that last for as long as the enrollee requires them, and inflation-adjusted benefits. This should complement the low overhead mandate by lessening the need for intermediaries to explain the various benefit options and configurations.

²⁵ This refers solely to actual competition. Private LTC insurers are likely to lobby Congress to change various aspects of the CLTCI plan.

²⁶ For example, consider that Medicare Part B uptake is nearly universal.

- *Access to the over-65 population.* Medicare is a popular entitlement program with frequent contact with its 45+ million beneficiaries. Were CMS to directly advertise the fact that Medicare does not cover most home health and nursing home costs, and include literature on CLASS in its annual *Medicare and You* booklet as well as information on Medicare.gov, the CLTCI program could realize a substantial boost in enrollment.²⁷ Of course, only seniors with earned incomes are permitted to purchase the product, so this strategy could generate confusion among retirees; targeting still-working seniors or those who are about to turn 65 could reduce this confusion.
- *State governments would benefit from greater CLASS enrollment.* For individuals with both CLTCI and Medicaid coverage, 95% of the CLTCI payments for institutional care and 50% of the CLTCI payments for in-home or community-based care will be directed to the state program, with the remainder retained by the CLTCI/Medicaid enrollee.²⁸ Accordingly, the states will have a direct financial incentive to promote CLTCI enrollment.²⁹

b. Weaknesses

- *The break-even requirement.* The CLASS Act requires the CLTCI plan to set premiums to cover costs over a 75-year period and the relevant language in the ACA prohibits the use of “taxpayer funds” for payment of benefits.³⁰ If consumers expect Congress to maintain this commitment and not subsidize CLTCI coverage then the early success of CLTCI is critical to its long-term success. If early failures lead consumers to believe CLTCI will fail, then the opt-out rate is likely to be higher. This reaction will in turn undermine the success of CLTCI. Thus, there is a strong element of path dependence in the success or failure of CLTCI that implies a very large premium on a successful initial launch of the program. If, however, consumers expect Congress to offset any shortfalls, then this factor may not be as important.

²⁷ In fact, 2011 *Medicare and You* booklet includes sections titled “Plan for Long-Term Care” and “Paying for Long-Term Care.” The former section directly warns seniors: “At least 70% of people over 65 will need long-term care services at some point. **Medicare and most health insurance plans, including Medigap (Medicare Supplement Insurance) policies don’t pay for this type of care. . .**” (Emphasis in original.) See <http://www.medicare.gov/publications/pubs/pdf/10050.pdf>. The section on paying for LTC includes a “Coming soon” section that describes the CLASS program. However, LTC information does not begin until page 110.

²⁸ Medicaid funded 49% of LTC costs in 2005; while the percentage varies by state, the federal government provides half or more of state Medicaid funding. Long-Term Care Financing Project, “National Spending for Long-Term Care,” February 2007, <http://ltc.georgetown.edu/pdfs/natspendfeb07.pdf>.

²⁹ Note that this incentive is not limited to current Medicaid enrollees. Many LTC recipients end up on the Medicaid rolls because of the costs of LTC, so slowing the arrival rate of such enrollees would generate savings to the states.

³⁰ Mulvey and Colello (2010), p. 12.

- *No medical underwriting.* Any CLTCI plan can set premiums that vary according to the age of the enrollee but cannot vary the premium by health status, as is commonly done by private LTC insurers. This creates the clear possibility that the CLTCI plan will become the LTCI plan of last resort, purchased only by those that have private information that they are likely to require LTC services. This would increase premiums further and could in the limit result in the collapse of the program—a result referred to as an “adverse selection death spiral.”

Adverse selection remains the greatest threat to the long-term viability of CLTCI. CLTCI’s solvency will be highly dependent upon effective use of the tools allowed by statute for combating adverse selection. These include the 5-year vesting period; the requirement of earned income in excess of the Social Security minimum wage during 3 of the 5 years immediately following purchase; and the steepness of the age-premium curve. All else equal, a steeper curve will benefit those who enroll earlier and act as a tax on those who enroll later.

- *Premium subsidies.* Premiums will be subsidized for employed full-time students and for those with incomes below the federal poverty level. The initial premium for both groups will be \$5, an amount that will grow over time with inflation.³¹ The subsidy expense must be covered out of the CLTCI’s premiums. This will worsen the actuarial value for higher income potential enrollees and improve the value for lower income potential enrollees. If this induces the former to opt-out and the latter to remain in, the size of the required subsidy will increase and the fracture will grow. In the limit, this could also cause the CLTCI plan to collapse. Several factors may mitigate this concern. A \$5.00 premium may be not be far from the actuarially fair premium for students; if this induces continued enrollment following graduation (or drop-out), then this subsidy may function as a loss-leader that brings in attractive customers. Similarly, to the extent that poverty is a transitory status, income-based subsidies may also act as a loss-leader that expands the pool of favorable risk enrollees.³²

³¹ Mulvey and Colello (2010), p. 5.

³² Iceland and Bauman (2004), “Income Poverty and Material Hardship: How Strong Is the Association?” *National Poverty Center Working Paper Series*, #04-17, at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=648341. Based on a review of the literature on poverty dynamics, the authors conclude that “longitudinal data show that a majority of poor individuals in the U.S. actually remain poor for only short periods of time and relatively high proportion of people have experienced poverty at one point or another.” However, cycling in and out of poverty status is also common. Whether this is a desired property or not, such cycling could improve the solvency of the CLTCI plan if it causes disenrollment and reenrollment in the plan.

- *Other features that may draw an adversely selected risk pool.* Unlike the typical private plan design, the CLTCI plan is structured to vary the benefit level in proportion to the degree of impairment of the enrollees. Enrollees who expect to have a high degree of impairment will receive a higher level of benefits, though they will not pay more than other enrollees of the same age. Additionally, unlike most private plans, which feature maximum benefit periods, the CLASS program does not limit the duration of the benefit. This will, all else equal, attract enrollment by those who expect to have LTC needs of greater duration and cost. We expect this to expose CLTCI to adverse selection. To the extent that some consumers are attracted by this design feature and willing to pay its actuarially fair cost, private firms will find this aspect easy to replicate and will not work to the advantage of CLTCI.
- *Inability to pair LTCI with life insurance.* The need for life insurance as part of wealth protection is readily understood; LTCI covers additional, related risks that whole and term life policies do not. There are likely economies of scope from joint production, particularly with respect to marketing costs.³³ It is no surprise that, to date, the largest sellers of LTCI are all significant sellers of life insurance. The CLTCI plan will have no comparable targeted access to the population most interested in LTC.
- *Mistaken perceptions that Medicare covers LTC costs.* A 2006 survey by the AARP found that only 25% of respondents over the age of 45 knew that Medicare would not pay for a long-term care stay in a nursing home.³⁴ Thus, 75% of the core target market segment is, apparently, unaware that they may need LTCI. This is a challenge that the CLTCI plan will share with private LTCI companies. Those private companies keep potential customers informed through the relationships they have from life insurance sales and on networks of affiliated and independent brokers. The CLTCI plan, which is restricted to 3% overhead (advocacy and counseling are considered administrative expenses), will not be able to match that network.
- *Minimal allowances for marketing and administrative expenses.* Misperceptions about LTCI are common and brokers have historically played a central role in distributing correct information. The administrative expenses restrictions on the CLASS plan leave little room for marketing to increase consumer awareness. While,

³³ JDPower.com reports that 60% of adult Americans have at least some life insurance. <http://www.jdpower.com/insurance/articles/Lack-of-Life-Insurance-Coverage/>.

³⁴ AARP, "The Costs of Long-Term Care: Public Perceptions Versus Reality in 2006," December 2006, http://assets.aarp.org/rgcenter/health/ltc_costs_2006.pdf, at 32.

as described above, CMS and the states may provide some degree of free marketing, this is not guaranteed.

- *Lower investment returns.* The CLASS plan is required to invest its premiums in government-issued securities and so will likely earn a lower return on the float between premiums and expenditures than private LTC insurers.

c. Implications

The greatest strengths of the CLTCI plan are the automatic enrollment of employees of firms that choose to participate in the CLASS program and the associated reduction in selling expenses. The greatest threat to the success of the CLASS program is the inability to medically underwrite premiums, which does raise the real possibility of an adverse selection death spiral and insolvency. Simply put, if the CLASS plan primarily attracts those for whom private LTC insurance is a bad value, it is likely to fail. This outcome is most likely if the CLASS plan is structured to simply mimic private plans but without underwriting and to appeal to the same set of consumers (primarily, those who purchase life insurance through a broker, a higher-income group).

The CLASS plan will better leverage its strengths by developing a plan structure that (1) appeals to a different set of consumers (lower and middle income) and (2) encourages enrollment by the relatively young and healthy members of that set of consumers. In section VI, we analyze a set of products that meet these criteria.

V. Competitor Responses to Entry: What Does the Literature Say?

CLASS insurance will represent a major new entrant into the LTCI market. It is therefore important to anticipate how incumbent sellers will respond. There is a large theoretical literature and substantially smaller empirical literature on incumbent responses to entry. Thomas (1999) reviews the literature and provides some evidence from the breakfast cereal

industry.³⁵ Simon (2005) also reviews the literature and adds evidence from magazine subscriptions.³⁶ We review both of these papers below.

a. Thomas

Thomas notes that early research focused on the use of price to deter entry. Incumbents could set a “limit price” below the short term profit maximizing level in order to make the market less attractive to entrants. Game theorists were skeptical of the limit pricing strategy because it assumes that the entrant is myopic and believes that the pre-entry price will prevail after entry. In fact, once entry occurs, the incumbent might accommodate the newcomer by, for example, tacitly colluding on price. Or incumbents might be better served by slashing prices after entry occurs, a strategy known as predatory pricing. This might drive out the entrant and deter future entry. But the strategy is costly in the short run and there is no guarantee that future entrants will be deterred.

Thomas identifies other entry deterring strategies, including product proliferation in differentiated goods markets to limit opportunities for entrants to fill product niches; increases in capacity, perhaps as a way to credibly threaten price reductions after entry; and advertising to build consumer loyalty to branded products.

The costs of advertising can dictate the structure of a market.³⁷ He observes that in many consumer products markets, there appear to be a small number of firms with recognizable brands, as well as several fringe “off-brand” competitors. The firms that advertise heavily attract customers who prefer to sample branded products while the fringe firms split the remainder of the market. The substantial sunk costs of creating a brand dictate the market structure. Entrants face the choice of duplicating the sunk advertising costs and splitting the branded market, or avoiding advertising costs and sharing the unbranded market. If sunk advertising costs are large relative to the market size, the number of branded firms will be limited, and entrants will be restricted to the unbranded segment.

Thomas also mentions the idea of “judo economics.” Small entrants may not attract the interest of incumbents. It may even be in the interest of entrants to try to commit to remaining small.

³⁵ Thomas, L. (1999) “Incumbent Firms’ Response to Entry: Price, Advertising, and New Product Introduction” *International Journal of Industrial Organization* 17: 527-55.

³⁶ Simon, D. (2005), “Incumbent Pricing Responses to Entry”, *Strategic Management Journal*, 26: 1229-48.

³⁷ This theory is attributed to Sutton (1991).

Thomas finds few empirical studies of entry deterrence. Entrants report in surveys that they rarely perceive responses by incumbents. There is some observational evidence that incumbents do occasionally add capacity or advertise more heavily after entry. Thomas' own empirical research focuses on breakfast cereals. He divides the data into different category segments (e.g., bran cereals.) He finds that incumbent firms in a segment tend to increase prices after entry into their segment by other incumbents, but reduce prices after entry by newcomers. Conversely, incumbents seem to increase advertising after entry by newcomers, but they do increase advertising when an established firm enters their segment.

b. Simon

Simon's discussion of the theoretical literature on entry deterrence largely covers the same ground as Thomas. Simon does make the critical observation that responses to entry may depend on the characteristics of the incumbent. This is the main theme of his empirical work. He posits that an incumbent's age, corporate scope, and market structure all predict the incumbent's response. Established firms are protected by reputations and their customers are less price sensitive. Thus, established firms are less likely to cut prices than younger incumbents. Firms that operate in multiple markets can extend a "reputation for toughness" across product lines and therefore benefit more from price cutting. Finally, firms in relatively unconcentrated markets may be reluctant to take the lead in price cutting.

Simon extends Thomas' review of the prior empirical literature. He finds fairly consistent evidence that incumbents reduce prices in the face of entry. Airlines cut prices in response to entry, especially entry by low cost carriers. Supermarkets cut prices in response to entry by warehouse clubs; tire retailers cut price in response to entry; some auto makers cut prices. Drug companies, in contrast, often do not cut prices in response to entry, preferring instead to increase prices and target a price insensitive niche. Overall, Simon's research does suggest a pattern of price cutting by incumbents. It is particularly noteworthy that we see price cutting in airlines and supermarkets, as airlines traditionally have low returns on investment and supermarkets traditionally have low returns on sales. Even so, incumbents are willing to sacrifice short term profits to combat entry.

Simon's studies responses to entry in magazines. He finds that older incumbents cut prices by 1-4 percent after entry while newer incumbents cut prices by 12 percent. Multimarket contact increases price cutting by 0.7 percent per "market"; The effect is present for new entrants but not for diversifying entrants. Finally, concentration does not, by itself, seem to matter.

Taken as a whole, the literature suggests that incumbents often cut prices after entry and may increase advertising after entry by new firms. However, incumbents in the LTCI market have

several characteristics that might temper price cutting in response to CLASS entry. First, they are old and have long established reputations. Second, they are not very diversified and do not face the threat of entry in their core market of life insurance. Incumbent LTCI firms may increase advertising after CLASS entry. There is already some mention of encouraging sales agents to make negative comments about CLASS insurance.

Despite the theory and evidence of price cutting, it is not clear that LTCI sellers would also reduce prices to combat CLASS entry, for five reasons.

1. The market is already fairly competitive; there may not be much room for further price reductions.
2. State underwriting requirements require prices be set to cover expected future costs.
3. Price cutting is not likely to drive HHS from the market.
4. There is no further deterrence effect from price cutting, since other entry barriers remain high.
5. CLTCI is likely to expand enrollment rather than draw business away from established sellers.

VI. Entry Opportunities for CLASS ACT Insurance

The CLASS Act authorizes the government to sell a traditional LTCI product with a set of rules governing product design, notably a \$50 per day minimum average benefit. Our strategic analysis suggests that entry by almost any newcomer would be difficult. The government has some advantages over other entrants, in particular it need not establish a reputation for long-term solvency and it can establish distribution channels through employers by fiat, rather than incurring the selling costs of commercial insurers. Even with access to employers, the government is unlikely to successfully compete without incurring substantial costs educating consumers about LTCI, the same kinds of costs currently incurred by commercial firms.

Rules in the CLASS Act governing enrollment put the government product at a competitive disadvantage. An actuarial forecast made on behalf of HHS suggests that the government would have to charge a premium for its \$50/day plan that is commensurate with that charged by commercial insurers for their plans offering \$150/day benefits.³⁸ (This comparison does

³⁸ Mulvey and Colello, pp. 5–7. The CBO and CMS have both estimated the average premiums necessary to provide a \$50/day average benefit level, with the CBO estimating premiums of \$123 per month and CMS estimating \$240. The difference is attributable to more pessimistic projections of adverse selection by CMS.

not appear to account for the fact that CLASS benefits do not terminate while private plans typically pay benefits only for 3–5 years.³⁹) Offering only this product puts CLTCI at a high risk for failure.

An important option for the government is to offer additional products that might prove to be profitable. We now consider several such products. When evaluating these alternatives, it is important to remember that CLASS has two related advantages over commercial carriers. It has the ability to introduce its products through the workplace and it does not have to pay substantial selling expenses to agents and brokers. But the value of these advantages would be greatly diminished if CLASS products were complex.

The first two options are motivated by the basic economics of insurance risk pools. In a nutshell, insurance works because low risk enrollees cross-subsidize high risk enrollees. This model is viable only if low risk enrollees are willing to participate; if the cross-subsidy is too large, low risks drop out and the pool falls apart. Commercial insurers are able to sign up low risk enrollees through medical underwriting (offering lower prices to low risk individuals), selling to employer groups where all or most employees are expected to agree to purchase coverage (more important for traditional health insurance), imposing waiting periods (so that individuals are less sure of their risks at the time they enroll) and other benefit restrictions that limit the cross-subsidy. The options we offer provide alternatives for CLASS to limit (but not eliminate) the extent of cross-subsidization, thereby encouraging low risk individuals to sign up for CLASS.

Both of the core options take advantage of CLASS' access to sales through employers. A key issue is whether CLASS should implement the "opt out" feature of selling through employers (if an employer chooses to offer the product, employees receive the product by default unless they opt out), use an "opt in" approach (employers make the product available but employees must opt in to receive it), or use an "active choice" model (employees must complete a form indicating whether they want to participate in the plan). Given that the individual market will be somewhat foreclosed to CLASS, it is essential that CLASS gets this decision right.

³⁹ In particular, the Congressional Research Service estimates that the "monthly premium for a \$50 per day policy in the private LTC insurance market for a five-year policy would be about \$94 a month." This is \$29 per month below the CBO-estimated CLASS premium. In exchange for the additional \$29 per month, the CLASS plan offers benefits of unlimited duration. Under the CMS estimates, the additional cost is much greater, \$146 per month. *Id.*

a. Core options to address adverse selection

1. Extended Vesting Period Long Term Care Insurance

Through plan design, CLTCI can reduce the effects of adverse selection. For example, CLTCI could offer a plan design that features a lower premium and an extended vesting period of more than five years. Individuals are less likely to have private information regarding their expected LTC needs in, say, 10 years. Nevertheless, the lower premium and the ability to lock in a premium schedule would provide an incentive for the young and healthy to purchase.

However, if “traditional CLTCI”, with a five-year vesting period and no underwriting, is also available then individuals would have little incentive to purchase the extended vesting period product. They can simply wait until the need is less distant and then purchase the traditional product. Therefore, for the “long vesting period” product to be successful, the age-premium curve must be steeper than actuarial tables so that those who enroll later in life would subsidize those who buy earlier, creating an incentive to join early. For example, the premium at age 50 for a person who enrolled in an extended vesting period plan at age 40 should be below the premium for a person at age 50 who enrolled in the standard 5-year vesting period plan at age 40. Alternatively, “traditional CLTCI” can be limited to a minimum benefits package of \$50 daily, while the “vested CLTCI” can be a more generous plan. Alternatively, CLASS could combat adverse selection by limiting enrollment in all CLASS products to individuals under age 50 (in year 1).

Advantages

- Minimizes adverse selection, thereby offsetting a major advantage of commercial LTCI firms.
- Commercial LTCI firms are unlikely to offer a similar product and will instead rely on their strengths in medical underwriting and sales to minimize selection.
- Simple benefit design keeps education costs low
- Large potential market.

Disadvantages

- Product offers greatest benefit to those individuals who also benefit from commercial LTCI. Commercial insurers have made significant inroads in selling LTCI through relationships in the individual life insurance market. Some commercial insurers can also be expected to encourage selling agents in the individual market to disparage the

CLASS product. CLASS will therefore be heavily dependent on reaching new customers through employers.

- Even with a simple plan design, CLASS would need to educate consumers about future long term care needs. This may require considerable sales and marketing effort.
- Because the product will necessarily have a simple design and sales process, success by CLASS has the potential to commodify LTCI. We discuss the implications of commodification in section VI.b.4.

Among the options discussed in this section, we are very optimistic about the potential success of this product. It has broad appeal, is well-protected against adverse selection, and can exploit CLASS' access to employers.

2. A “Tontine” Plan for Long Term Care Insurance

Two centuries ago, many individuals invested in Tontines. The money was pooled and invested in various assets, where the money remained until all but one investor had passed away. The last surviving investor received the entire investment. This idea of rewarding individuals for remaining healthy can be used to limit adverse selection against CLTCI. Consider a “Tontine” LTCI plan that gives “rebates” each year (possibly after a fixed or age-based number of years of payment of premiums) to individuals who do not use LTC services. The rebates are paid for through increased premiums. In this way, the Tontine reverses some of the cross-subsidy inherent in insurance and encourages low risks to participate in the plan.

The Tontine plan can succeed against commercial insurers if it threads the needle in terms of pricing. Remember that CLTCI has a substantial cost advantage due to minimal selling expenses. If these savings (which are realized for all enrollees) exceed the cross-subsidy on high risk enrollees (which has been reduced by virtue of the higher premium), then CLTCI can offer low risk individuals a net price (premium less rebate) that beats anything offered in the private sector.⁴⁰

While this structure may at first glance appear to be a variant on medical underwriting, there is an important distinction. With underwriting, net premiums vary only on *initial* health conditions. A Tontine structure, however, varies net premiums over the life of coverage in

⁴⁰ In a recent report, Milliman recommends a structure that would have a tontine-like element: “Individuals could be encouraged to preserve their benefits by offering them a faster benefit growth rate if they do not access their benefits until a certain age.” Bob Darnell et al., “Perspectives on the Community Living Assistance Services and Support (CLASS) Act,” *Milliman Research Report*, September 2010.

accordance with *realized* health conditions. Among other distinctions, this creates an incentive at the margin—an incentive not present with underwriting—for enrollees to take measures to reduce the likelihood that they will require LTC.

Advantages

- Tontine feature serves a similar role as medical underwriting: the effective premium decreases for low risks and increases for high risks.
- Tontine feature immediately communicates value to low risk enrollees.
- Commercial LTCI firms are unlikely to offer a similar product.
- Large potential market.
- Encourages positive health behaviors.

Disadvantages

- Commercial insurers can still rely on relationships between selling agents and consumers to enhance medical underwriting. Thus, CLASS can never fully equal underwriting capabilities of commercial plans.
- Commercial sellers may price plans to low risks more aggressively.
- CLASS will need considerable underwriting skills and demand modeling to determine the size of rebates and implications for profitability.
- Product is more complicated than the “extended vesting period” product.
- Success by CLASS has the potential to commodify LTCI.

The Tontine product shares many of the advantages and disadvantages of the “vesting period” product. It is also likely to rely on access to enrollees through employers. We believe the rebate has strong marketing potential and will draw in low risk individuals. However, this product seems more complex than the “vesting period” product. CLASS would need to limit plan features so as to minimize the sales effort and CLASS will require more sophisticated demand modeling. To the extent that the “vesting period” product is a “belt” and the Tontine is “suspenders”, we lean toward the belt or some combination of the two.

b. Additional Options

1. “Short-term” Long Term Care Insurance

There is currently a gap in the insurance market to provide insurance for short-term assisted living at old age. Currently, Medicare does not cover non-hospital institutional care or home nursing care unless it immediately follows hospitalization. Such care can last days or weeks, at a cost of tens of thousands of dollars. Individuals with substantial assets, who are purchasing both life insurance and LTCI, may not be interested in purchasing protection against such expenses. But consumers with modest retirement savings who are not eligible for Medicaid may also be fearful of becoming impoverished by long term care spending. (The average American retires with less than \$100,000 of non-housing wealth.) There are two reasons why traditional LTCI sellers may not be serving this market. First, LTCI sellers come from the life insurance market and they are skilled at identifying individuals who wish to protect estates worth hundreds of thousands of dollars. Second, a product that offers modest, short-term protection might be seen as a cheap substitute for other LTCI products that would cannibalize more profitable lines.

Such a product could cover assisted care of all forms for a short period (30–90 days). Premiums paid by someone who enrolls early in life would be very low. The product is a hedge against needing assistance for a short period of time, not insurance for someone who will live out their days in a nursing home. This product would be require some modest vesting period so that individuals do not purchase insurance immediately upon finding out that they require care

This product has several advantages and disadvantages.

Advantages

- Does not compete directly against existing LTCI products.
- Current LTCI sellers are unlikely to offer their own versions of this product inasmuch as it targets a different audience.

Disadvantages

- Limited market size. Medicare covers “short term” long term care needs if there is a hospitalization, so this product is restricted to patients who are not hospitalized.
- Amount of coverage is much smaller than for traditional LTCI, so that the risk premium and profits are commensurately smaller as well.
- Requires educating consumers about Medicare coverage limitations.

Overall, we believe that this product is promising but unlikely to generate significant financial returns to the CLASS program.

2. Linkages to the Private LTCI plans

HHS could seek to encourage the development of private sector plans that would supplement the CLASS program in a fashion similar to the way in which Medicare Supplemental plans fill in the gaps of Medicare Part A and Part B coverage. The availability of supplemental plans could increase the attractiveness of the CLASS plan. At the same time, encouraging the emergence of private supplemental products could lessen private insurers’ resistance to the CLASS plan. This could also open a channel to consumers that would impose minimal administrative costs on the CLASS plan.

However, the structure of such plans would need to be carefully considered in terms of both selection effects and marginal incentives. For example, supplemental coverage could increase the appeal of the CLASS plan to individuals with private information that their LTC needs are eventually likely to be substantial. At the margin, private supplemental coverage could make nursing homes a more attractive option relative to formal or informal home health care, with potential budgetary implications for programs such as Medicaid.

Advantages

- Could increase appeal of basic CLASS coverage.
- Could induce private plans to market CLASS coverage.

Disadvantages

- Adds further complexity to the market, working against strengths of the CLASS product.
- Not a short term solution to CLASS' budget problems.

3. A Note on Commoditization of LTCI

Because CLTCI will be offered through the workplace with a minimum of selling effort, it will necessarily have to have a simplified plan design. This stands in contrast with existing LTCI products that have many dimensions that a consumer only comes to understand through lengthy consultation with an agent. If CLTCI becomes successful, then the simplified design could become a template for standardized product offerings. In other words, we may see the commoditization of LTCI.

Ironically, the success of CLTCI could sow the seeds of its destruction. If LTCI is commoditized, selling agents will no longer be required and if they disappear, their commissions will disappear with them. LTCI could then be sold by companies like Progressive and Geico, which have miniscule selling expenses (other than advertising to establish brand credibility.) Such companies can continue to medically underwrite, giving them the best of both worlds so to speak: protection against selection and low costs. While this could greatly expand LTCI coverage, it might come at the expense of the viability of CLTCI.

VII. Summary and recommendations

The market for traditional LTCI succeeds because of a reliance on personal sales effort and sophisticated medical underwriting. Not only do these features allow commercial carriers to avoid adverse selection, they minimize internal rivalry and raise entry barriers. But these features come at a cost; selling expenses in LTCI are considerable. The creation of the

CLASS program provides a unique opportunity to break down entry barriers. But this alone will not guarantee the success of CLTCI.

CLASS must also devise ways to avoid adverse selection. If CLASS can minimize selection and exploit access to employers to minimize entry barriers, then its considerable cost advantage could allow it to more than effectively compete in the LTCI market. We have described two products—“vesting period” and “Tontine”—that we believe can compete successfully against commercial LTCI. Of the two, the former is simpler and therefore offers a greater chance of success. Ironically, the success of either product could break down entry barriers and allow other low cost insurers to successfully compete. Even so, this would be a win-win for consumers, and should not stand in the way of CLASS’ entry into the LTCI market.

APPENDIX Jd:

**MANAGING A CASH BENEFIT DESIGN IN
LONG-TERM CARE INSURANCE**

Managing a Cash Benefit Design in Long Term Care Insurance

7-27-10

INTRODUCTION

The use of cash benefits in long term care insurance has a long and varied history. Contrary to popular belief, cash benefits were more prevalent in the early days of the product's history – in the late 1980's and early 1990's – than they are today. With the emphasis of the CLASS Act on a pure cash benefit payment model, it is important to review the history of the use of cash benefits and address key issues in best practices when managing such a policy.

We begin with some basic terminology used to describe the basis on which long term care insurance pays benefits since the terminology is not always used consistently. We provide some level-setting definitions:

Cash (Disability) Benefit – the insurer pays a pre-defined cash benefit for each day the insured satisfies the “Chronically Ill” definition of needing help with 2 or more activities of daily living (ADLs) or having a severe cognitive impairment. The cash payment is made without regard to whether the claimant receives either paid services or informal care.

Reimbursement Benefit – the insurer reimburses (or pays directly with assignment to a provider) expenses incurred for covered services, up to the daily or monthly maximum amount selected by the insured for that service. Payments are made for each day the claimant is Chronically Ill and receives a covered service.

Indemnity Benefit – same as the above however, instead of paying expenses up to a set dollar amount, the insurer pays the set dollar amount without regard to the actual cost of services incurred. They may pay in excess of the cost of the care received. But it is required that the insured both be Chronically Ill and incur covered expenses.

HISTORY OF CASH BENEFITS

Cash benefits first emerged largely because of the flexibility they provided for both insurers and the insured and for the enhanced market appeal of a broadly flexible benefit. It is important to keep in mind that, at the time cash benefits emerged, most long term care policies did not include benefits beyond the basic home health care

(sometimes even limited to skilled home care) and nursing home care. In contrast, today's coverage includes a vast array of alternative care settings and providers (discussed in greater detail below).

The use of a pure cash benefit began in the late 1980's to early 1990's primarily with two insurers. Aetna – exclusively in the group market – initiated a pure disability benefit model which, at that time, paid for loss in 2 of 5 Activities of Daily Living, with bathing being the ADL not counted. The net impact of that, given the highly predictable order of ADL loss, with bathing and dressing most typically the first two losses, is that an insured would in effect need to have a deficit in 3 ADLs (bathing, dressing and toileting) in order to satisfy the benefit trigger and receive benefits. At the time that Aetna offered this product, it was not entirely uncommon for insurers to have a variety of benefit triggers with some using the same approach of excluding bathing as a countable ADL. Fortunately, this is no longer the case and all six of the basic ADLs are almost exclusively used today as the basis on which loss is determined.

At about the same time, UNUM began development of a retirement community-based insurance product with a cash benefit payment. One reason for this model for this specific market was that Continuing Care Retirement Communities (CCRCs) usually do not employ agency staff or have care facilities that would have satisfied prevailing policy definitions. Since CCRC services and facilities are often exclusively used by residents, they may not be traditionally licensed. The cash benefit was relatively small because it was meant to “gap fill” the differential in costs when residents in a CCRC move out of independent living to a higher (more costly) level of care; they would continue to pay their independent living fee but would use the insurance to pay the additional costs of assisted living or nursing home care. UNUM then expanded the cash benefit model to the individual and group markets. Nursing home care, with both Aetna and UNUM, was paid for on either an indemnity or a reimbursement basis.

Both companies subsequently moved to a hybrid approach. In about late 1990's, Aetna developed a service-based (reimbursement) policy in part for competitive reasons and also because they were not satisfied with the experience on their disability-based model. Interestingly, Aetna continued to use the 2/5 ADL loss requirement for its cash benefit but used the more generous and more prevailing 2/6 ADL loss requirement for the service reimbursement model. The choice of which benefit model to offer was typically made at the employer level. Similarly, UNUM began with just a disability model and shortly thereafter added what they call the professional services option (reimbursement payment).

Today, cash as a component of coverage is prevalent. There is also a great deal of diversity with respect to the number of carriers offering a cash benefit component as well as with the ways in which the benefit is fashioned.

CATEGORIES OF CASH BENEFITS

Today there are four approaches to offering cash benefits. Of these, what we call “All Cash” is the most akin to CLASS. The others offer various modifications with a cash benefit that is not as comprehensive as the “All Cash” approach. With these variations, it seems the industry is looking for ways to offer some of the additional flexibility of cash while also offering a more cost-competitive product. (Tables 1 and 2 show the prevalence of the various cash benefit types across both the individual and group markets.) The specific design variations offered within the family of “cash benefits” are summarized below.

All Cash

This type of product generally pays exclusively a cash benefit in specified amounts once eligibility triggers have been met. The cash benefit can be paid only when the insured is not confined in a care facility (with the facility-based benefit paid on a reimbursement or indemnity basis), or the policy can pay a cash benefit for any level of care need. At present, none of the “All Cash” products vary the benefit amount by degree of disability as CLASS is contemplating. Management of the “all cash” benefit varies (as discussed below), but generally insurers offering these types of products do not require proof of the receipt of either paid or unpaid long term care services. Sometimes, insurers that provide the “All Cash” model do not include other “ancillary” benefits like respite care, hospice care, informal caregiver training, equipment or home modification as the “cash” can be used for those types of services, and more.

Four companies have been associated with this type of benefit; Aetna, MedAmerica, Metropolitan Life and UNUM. Of these, only MedAmerica and UNUM are actively selling this product today. Aetna offered this product in the group market, as noted above, but no longer sells long term care insurance and has transferred some of its group cases to other carriers (most notably Prudential). MetLife recently stopped selling its “all cash” policy although they continue to administer the policies of this type which are in-force.

MedAmerica offers “All Cash” products that feature cash benefits paid on a monthly basis. Insureds who meet the benefit triggers must submit a form each month certifying that they continue to have the condition (or reside in the same care facility) as when they were initially assessed as benefit eligible. MedAmerica seems to be using this

monthly form as the plan of care required of tax-qualified long term care insurance products under HIPAA.

Unum offers both a cash product (called Total Home Care) and a service reimbursement product (Professional Home Care). In the group market, the choice of which to offer is generally made at the sponsoring employer level. Although they are no longer selling in the individual market, previously the insured could select at time of purchase the approach they preferred. Unum's target market includes numerous small businesses many of which include some amount of employer contribution. This serves in effect as a way of lowering the price of the "All Cash" product to the insured.

Cash Benefit as a Rider.

Some companies offer a cash benefit as a rider to a traditional expense reimbursement policy. The rider, obtained for an additional premium cost, allows insureds to receive the full amount of their home care benefit in cash assuming they meet all of the benefit triggers. The rider must have been selected at time of purchase. This option is offered as a part of a service reimbursement policy but changes how the home care benefits are paid. The prevailing approach is one where insureds decide on a month-to-month basis whether to elect benefits in the form of cash or as an expense reimbursement. Insureds using this benefit are more frequently assessed for benefit eligibility than those with the service reimbursement benefit. Some insurers have stopped offering this rider on policies with a lifetime duration and/or with high daily benefit amounts. And others have stopped using this approach entirely and instead use a "Built-in Cash Component" described below.

Built-in Cash Component.

Some carriers build in to the policy a provision for a cash benefit offered at less than the full home care benefit amount as an option at the time of claim. If the insured so chooses, they can elect to receive cash (typically on a month to month basis) in lieu of home health care benefits. The cash benefit may be paid at anywhere from 10% to 50% of the home care reimbursement amount. (Most carriers offer a home care benefit equal to the facility care benefit, and some even allow the home care benefit to be set at 150% of the facility care benefit amount.)

The idea behind this approach is to design the product to include a cash feature which is "premium neutral" thus mitigating some of the risk management issues associated with the "all cash" model. This model is also easier to sell since it offers the flexibility of cash without the "sticker shock" of the higher premium of the rider approach or "all cash" approach. In some cases, insurers put lifetime limits on the use of the cash benefit option and in other cases they do not.

Remainder or Ancillary Cash.

Two companies at present have a different approach. For both, the cash benefit is integral to the policy and not offered as an additional-cost rider. One company allows the insured to access cash if there are benefits remaining in their monthly home care reimbursement benefit at the end of the month. It is essentially an expense reimbursement policy with an added cash feature. Insureds who meet the benefit trigger and are receiving home care receive a traditional expense reimbursement benefit, however, if at the end of the month there are any funds remaining in their monthly home care benefit allowance (an amount chosen by them at time of purchase), they can elect to receive reimbursement for a wide array of long term care related expenses not covered in the policy, including family care, at up to 50% of that unused portion in the form of cash. The “cost” for family care is based on the number of hours of care that will be provided and prevailing rates for that type of care when provided by a home health aide or similar provider type in the area. They can also elect to leave the unused balance in their “pool of benefits” thereby conserving their lifetime maximum for future use.

Another insurer offers cash as a separate benefit that can be accessed by insureds who have met specific conditions. To be eligible for this benefit, the insured must: 1) meet the eligibility triggers; 2) satisfy the elimination period; 3) receive care at home; and 4) receive at least one day of home care during the month. Further, the insured must not have resided in a nursing home or assisted living facility during the calendar month. The cash benefit does not reduce the insured’s lifetime maximum benefit and can be continued as long the insured continues to meet these conditions. The cash amount is equal to 15% of the monthly service benefit to be used as the insured’s discretion; no proof of services or other verification of how the funds were used is required. The benefit is paid as a supplement to the regular service reimbursement benefit.

THE EXTENT OF CASH BENEFITS IN TODAY’S MARKETPLACE

There are no data on the percent of policies in-force with a cash benefit. Given the variability in the types of cash benefits offered, an overall percentage would not have much meaning; some carriers offer a pure cash model, while others have cash as a more modest component of the coverage. Since almost all the insurers offering a cash benefit also offer a reimbursement policy option, we can’t even derive a meaningful estimate of how much “cash” benefit is in-force based on carrier market share. For example, data from Broker World, 2009 indicate that in 2008, 38% of insureds had coverage with a company that offers a cash benefit option (either at point of sale or at time of claim) while about two-thirds of insureds have coverage with insurers not offering any cash component. Sales of cash benefits range from 1-3% of a company’s business to about

40%, based on anecdotal estimates provided by companies that sell both types of policies. So while we can say that less than one-third of today's insureds have a policy with a cash component, we cannot provide more specific market penetration estimates.

Data are available based on annual sales figures in the individual market only. As a percent of new lives in 2008, 3% of 2008 buyers in the individual market purchased a policy with a cash benefit as a base feature in the policy. Similarly, an additional 3% of new buyers bought a policy with a rider providing some type of cash benefit. These numbers, however, mask a significant amount of variation by company. Observe the following variation based on 2008 new lives in the individual market:

- Not surprisingly, MedAmerica and UNUM, both of which offer a cash benefit as an integral component of the policy, had the largest share of buyers with a cash benefit – over 80% of their new sales.
- Other companies that offer a cash benefit as a policy component had a smaller percent of their 2008 sales selecting a cash-based benefit plan (ranging from 2% for one insurers and as much as 39% for another, with sales levels in between those amounts for the other insurers).

CLOSER LOOK AT CASH BENEFITS

Table 3 shows the variation in the types of cash benefits offered. Of 13 policies with a cash component, nine have a cash benefit as a built-in feature of the product. Four offer a cash benefit only through a rider to the base policy. And three offer both a built-in cash benefit and an optional rider for an enhanced cash benefit. As noted previously, insurers tend to base the cash benefit on a percentage of either the monthly home care benefit or the monthly maximum for all levels of care if the policy has the same amount for all. Options range from 10% to 50%, but the most common percentage is 40%. Riders, however, tend to give insureds options for higher percentages, such as 50% and even 100%.

With built-in optional cash benefits, insureds inform the insurer at claim whether they wish to receive cash. Most policies let the insured change between cash and reimbursement from month to month. Cash benefit riders typically must be purchased at time of application and cannot be added later even with underwriting. The insured is typically not permitted to receive other home care or facility benefits while receiving a cash benefit.

Many policies with cash benefits, whether built-in or offered through riders, do not place restrictions on how insureds spend the cash, nor do they require that the insured prove receipt of care or services. Most policies with cash benefits reduce the overall pool of benefits “dollar for dollar,” though one insurer offers a cash benefit rider of 15% of the

home care benefit over and above the other benefits and does not apply the cash payouts towards the overall pool. Most policies pay either cash or expense reimbursement, but one or two provide an additional small cash pool on top of the expense reimbursement (although the total amount paid is limited to the monthly maximum).

ADVANTAGES OF THE CASH BENEFIT MODEL

The Cash Benefit model presents advantages for both the insurer and for the insured.

Advantages for the Insured

- **Flexibility.** The most obvious advantage for the insured is the flexibility in how funds can be used. This allows the insured to use the cash payment for non-traditional providers of care, informal caregivers, non-licensed providers, home modifications, help with instrumental activities of daily living (IADLs) like meal preparation, housekeeping, transportation and other services that are either not covered or are covered on a more limited basis under a traditional reimbursement product. Another advantage for the insured is the flexibility to “save up” the daily cash benefit payments and use them only on days when paid care is needed. For many people, paid care needs are “lumpy” in the sense that one might need full-time care during the weekday but no care at night or on weekends when family care is available. A fixed daily benefit reimbursement amount does not accommodate that type of expenditure pattern but a cash benefit which can be “banked” until needed can better match the uneven pattern of care needs. A cash benefit also can provide value to family members who may incur costs associated with caregiving. For example, a daughter who needs to hire child care or quit her job in order to provide personal care for her mother can use the cash benefit to offset those costs.
- **Product “Shelf Life.”** Another advantage to insureds is that cash benefits have more flexibility to remain useful and contemporary as new types of services and providers evolve. For someone buying a policy today which they likely won’t use for 20 to 30 years, this flexibility can be important. If the policy benefits and covered services are defined based on what is known about today’s service environment, without flexibility to upgrade, the policy can more quickly become obsolete.

Advantages for the Insurer.

- **Compliance.** A cash-based product is easier for the insurer to develop, file and maintain policy language since there is no need for provider or service definitions. Additionally, this means fewer state variations which also expedites

the state regulatory approval process. A cash benefit also has a longer “shelf life” which benefits the insurer as they do not need to design and file product updates as often in order to keep pace with a changing service system.

- Administration. A cash benefit policy can be easier to administer in the sense that the insurer does not need to verify provider or service eligibility – only that a qualifying disability and the need for long term care exists and that other policy provisions are met. One carrier mentioned that benefit payments are facilitated with a cash policy because they are typically transmitted via electronic funds transfer.
- Competitive Advantage. There is also a competitive advantage when a policy pays a cash benefit – all else being equal – because of the flexibility and appeal of cash. (While this is offset by the fact that a cash policy is more expensive, it is possible to design the cash benefit so that it is premium neutral with a competitor’s product.)

DISADVANTAGES OF THE CASH BENEFIT MODEL

Cost.

One of the primary disadvantages, both for consumers and insurers, is that this benefit approach is more expensive, with estimates ranging from about 20% to 35% to as much as 60% to 100% higher cost for a cash benefit. The range depends on the pricing assumptions and the type of cash benefit and other features of the policy and the age of the insured at time of purchase. (Table 4 shows premium differentials across insurers with and without a cash features for some sample policy designs.)

The greater level of expense is due in part simply to the fact that benefits are paid more often than they would be with a reimbursement policy; specifically they are paid whether or not the insured receives paid care and the benefit is available to be paid every day the insured is disabled, compared with a more intermittent payment schedule (e.g., 4-5 times a week) for someone with a reimbursement policy since that reflects the more typical pattern of paid service use. There are additional factors playing in to the higher costs of the cash model including greater administrative costs relative to functions around benefit determination, re-certification and fraud management. These are discussed in a later section.

Another concern with cash benefits is a higher claims denial rate which in turn generates greater administrative costs; this will become even more of an issue as a growing number of states require independent third party review of claim denials.

Another cost disadvantage for the insured is the fact that a cash benefit typically has little or no “salvage” value. Salvage refers to the pricing concept whereby the insurer assumes that neither the full benefit amount per day nor the lifetime maximum will be

fully utilized; this is especially true with high daily benefit amounts. With a cash benefit, the experience is that there is little or no “salvage.” Thus, insureds are not able to “conserve” their lifetime benefit maximum if they have coverage of less than “lifetime” duration because they will receive a cash payment on every day they are disabled even if they are not incurring expenses; these payments would “draw down” on their lifetime maximum. Of course, the individual can choose not to make a claim for benefits under the cash model as a way of conserving benefits but that is more difficult to do (logistically and practically) with a cash benefit. The appeal of receiving cash (perhaps to be used later if needed) is a strong incentive to make the claim rather than “holding off” just in case more care is needed later.

One carrier cited the “hassle factor” as a reason that a reimbursement benefit costs less than a cash benefit – meaning that the more documentation that is required to make a benefit claim (e.g., providing documentation of covered expense), the less likely the individual is to make the claim. The lack of a “hassle factor” with a cash benefit therefore can be another factor making it more expensive.

Managing the Benefits.

Another disadvantage for the insured is that they have to manage their cash benefit dollars and take sole responsibility for finding, arranging and verifying the appropriateness and “quality” of the care providers they elect to use. I don’t find this argument very compelling at all. In the Lifeplans LTCI admission cohort survey, it was clear that claimants very rarely relied on insurance company case managers to identify specific providers or “arrange” services for them. They picked their own providers (NF, ALF, home care) based on their own criteria. For NF, ALF it was reputation in the community, physician or other medical provider recommendations, and proximity. For home care, it is less clear what criteria claimants used to pick specific providers were chosen, but two thirds of claimants used agencies and one third hired individual providers. Let’s just imagine that an insurance company provides a “recommended” plan of care. The operative word here is “recommended.” Is a home care agency going to follow that plan to the letter? I doubt it because the schedule of service (e.g. how many days a week, hours, morning vs. evening) and tasks to be performed (baths on which days) will be worked out between the claimant and the agency (or individually hired aides). If the insured has given power of attorney to a caregiver or family member, there is no guarantee that the cash payments will be used as they should be to provide and pay for care. Some carriers provide a detailed plan of care that makes recommendations with regard to the nature and type of care insureds need to best meet their situation. Following this plan of care can help insureds make the most of their cash benefits.

Insureds may also use up total benefit dollars faster since benefits can be paid out even if they are not incurring expenses (e.g., if family or friend are providing care at no charge). Unless the insured “saves” those cash benefit payments for later use when

paid/formal care is the only alternative (e.g., nursing home care perhaps), the benefits available at that time might be greatly reduced.

Tax Implications.

While likely, there may be negative tax consequences for the insured with a high pay out cash policy. HIPAA imposes a limit on the amount of cash benefit relative to the amount of long term care expenses that can be received tax-free with a tax-qualified policy. In contrast, there is no limit on the amount of reimbursement for expenses that can be received tax-free. Some cash benefit options today can have a rather high daily benefit amount so it is not entirely unlikely that someone could receive, say, a \$500/day cash benefit and incur no long term care costs – in which case they could face a tax liability based on the amount in excess of the IRS cap (today set at \$290). This would mean that \$210/day (or over \$76,000/year) could be considered taxable income for the insured. This concern is less critical for CLASS given the significantly lower benefit amounts being considered.

Higher Administrative Costs.

One of the most important disadvantages for the insurer is the fact that a cash benefit is more costly for the insurer to administer (which translates into higher premium costs) because of the need for more in-person assessments and more frequent reassessments. Without the service records or provider input the insurer would receive under a reimbursement model, the insurer cannot assess continued benefit eligibility without doing costly in-person assessments more frequently than they would otherwise do. There is also considerable potential for fraud and abuse given the incentive for someone to “stay on claim” even when they are no longer chronically ill – an incentive that is much greater when they are receiving a cash payment, without a requirement to receive services. Surprisingly, there is a fairly significant “recovery” rate in long term care – one estimate cited by a large third party administrator finds that 30 to 40% of those who meet the benefit triggers and receive benefits eventually recover. So the ability to continually re-assess eligibility status is critical to the accurate payment of benefits. Additionally, without service records or provider input, the insurer cannot assess continued benefit eligibility without doing costly in-person assessments more frequently than they would otherwise do so.

CONSUMER RESPONSE TO CASH

Most carriers offering a cash benefit indicated that insureds articulate a preference for a cash benefit because of the flexibility of the offer. However, whether they elect such an option or not depends upon how competitively it is priced. In one insurer’s experience, initial “take up” of their cash rider (month-to-month option to elect 100% cash) was high – about 40%. But when the product was re-rated at about 28% higher premium,

take up dropped significantly to about 3%. That was the motivation for this insurer to move to a “built-in” premium neutral approach to cash.

Aside from this anecdotal information, data on the extent to which insureds elect a cash benefit – either as an optional rider – or to use on a month-by-month basis is not known. Similarly, information is not available on how insureds typically use cash. Aside from a few company-specific studies over the year, most insurers do not track how the cash benefit is used.

ALTERNATIVES TO A CASH BENEFIT: FLEXIBILITY OF TODAY’S LONG TERM CARE INSURANCE PRODUCTS WITH A REIMBURSEMENT MODEL.

The biggest advantage of the cash disability model, when first introduced, was the flexibility for the insured to use non-traditional providers or less costly providers for non-institutional care and to cover services not typically covered at that time (e.g., assisted living facility care, caregiver training, devices, respite or hospice care). However, reimbursement type policies have significantly diversified to accommodate a vast array of new types of providers, services and benefits. One of the most important – coverage for care in an assisted living facility – while virtually unknown as a benefit in the 1990s is universally covered in today’s policies, usually at the same benefit level as nursing home care.

Other benefit provisions which offer much of the same flexibility of a cash benefit are discussed below. The prevalence of these features in policies being sold today (based on data from 2008 sales) is strong. These data, exclusively for the individual market, are summarized in Figure 1 and discussed below.

Caregiver training typically provides a total benefit amount (sometimes expressed as a multiple of the nursing home DBA – e.g., 5 x DBA) to teach an informal caregiver how to safely provide personal care and supervision. The vast majority of plans offer this as a base feature in the policy, but one company does offer it as a rider. As a result, 99% of buyers in 2008 had this feature as part of their coverage.

Informal Caregiver Benefits allow payment to an informal (non-licensed) caregiver. Definitions of who qualifies as an informal caregiver may vary; some policies include family under any circumstances and some may limit the use of the benefit to family not living with the claimant on a regular basis. Nine of the 23 companies surveyed in 2008 include an informal caregiver benefit – most as a feature in the base policy. Overall, just under over 70% of all buyers had a policy with this feature.

Monthly Home Care: Since most people do not receive the same amount of care on a daily basis, having a monthly home care maximum instead of a daily limit gives the flexibility to “stack services” on days when people need more care and to preserve

benefits on days when they do not need paid care. While once fairly unique, most policies today do offer a monthly home care. Only four companies selling in 2008 do not have a monthly home care benefit. As a result, over 50% of all buyers in 2008 obtained a policy and/or rider that provides the flexibility of a monthly home care benefit.

An Indemnity Benefit pays a flat dollar amount when covered expenses are incurred, even if the benefit payment exceeds the amount of expenses. The insured can then use the difference essentially as a cash benefit to pay for some items not otherwise covered under the policy (e.g., private duty nurse in a nursing home stay). About half the companies selling in the individual market offer an indemnity benefit payment either as integral to the policy or through the offer of a rider. Of 2008 buyers, 7% obtained this provision as a base feature of the policy while 4% purchased it as a rider.

Respite care provides time off for informal caregivers, generally by providing benefits (home care, ALF or other services) without requiring that the elimination period be satisfied. This provision is included as an integral policy feature in nearly all policies; only one company selling in 2008 did not include respite care (although that carrier may have other policy features that serve a similar purpose – e.g, a 0 day elimination period for home care);

An Alternative Plan of Care provides flexibility for the insured to request the insurer to approve coverage for providers, treatments, services and care settings not otherwise covered under the policy. While most carriers do not authorize a cash payment under this provision, it is used to provide flexibility to pay for home modification, equipment, transportation, informal caregivers, family care and many other things. Overall, 80% of 2008 buyers obtained a policy with an APC as a base feature of their coverage.

Home Modification and Equipment benefits are designed to enhance independence when someone has ADL impairments and typically include things like wheelchair ramps, tub rails, and other adaptive devices. Access to this benefit is also widespread. Over 84% of buyers in 2008 had a policy with this feature either as an integral component of the coverage, or (2%) as a rider.

International Care. Many policies now pay for care abroad, either as a routine policy feature or on a limited/defined basis. Over 80% of buyers in 2008 had a policy with this feature as an integral component of their coverage.

[INSERT FIGURE 1 HERE]

Data on the extent of these flexible benefits in the group market is less readily available. However, Broker World 2009 indicates that six carriers in the group market include coverage for informal care and/or family care. Sometimes the option is made at the

employer level when they select the package of benefit features to offer and sometimes it may be an integral policy component. The Federal Long Term Care Insurance Plan also includes a benefit for informal and family caregivers and CalPERS has a provision for coverage for independent providers who are not licensed or agency-affiliated.

BEST PRACTICES IN MANAGING A CASH BENEFIT

As discussed above, the major disadvantage of a cash benefit is the added cost due to a variety of factors. The most “manageable” of these pertain to the following: managing utilization, accurate and timely benefit determination and re-assessments and monitoring and addressing potential fraud and abuse. This section summarizes the “best practices” insurers use to maintain as competitive and cost-effective cash benefit as possible, as well as to ensure that benefits are provided equitably and appropriately.

Underwriting.

While the CLASS Act will be offered without underwriting, most of the insurers offering a cash product underwrite to varying degrees. All insurers in the individual market employ underwriting. If an insured is requesting a high daily/monthly benefit amount and/or a large lifetime maximum where a cash benefit component is included, the insurer will generally take in to account the risk posed by that applicant relative to the coverage they are seeking. Some insurers make a “counter offer” of reduced coverage than what was applied for rather than declining an applicant or issuing them coverage on a sub-standard (higher premium) basis.

On the group side, one carrier offering an all cash option does not offer guaranteed issue. However, they use both case-level and individual underwriting although a short-form may be used in this market. Another insurer with an “all cash” benefit offers coverage on a guaranteed issue basis but does case level underwriting, limits the benefit amounts and durations, and sets either minimum participation levels and/or requires an employer contribution which significantly enhances participation. In earlier policy forms with its cash benefit, this insurer offered coverage on a guaranteed issue basis but had a policy provision which indicated that benefits would be triggered by a loss of 2 additional ADLs to whatever the applicant had at time of enrollment; the result of this is that if someone was already impaired in 2 ADLs at the time of enrollment, benefits would not begin until they reached a 4 ADL level of loss. While we would not, for many reasons, consider this a “best practice,” it was being used at one point in time to manage the risk of not using underwriting with an “all cash” product.

Another carrier offers a cash benefit rider in the group market without underwriting however, as is typically the case with guaranteed issue, it is limited to a defined

enrollment period and a meaningful “actively at work” definition. Also, the maximum daily benefit offered on a guaranteed issue basis is under \$350/day. Anything over that (coverage goes up to \$500/day in this case) must be underwritten. While it is rare, one carrier that does offer a lifetime benefit in the group market with a cash rider would only do so with full underwriting.

Benefit Design.

While some insurers offer lifetime coverage, most do not allow a policy to be issued with both lifetime coverage and a cash benefit option. This is more true for those offering a cash benefit rider or an all cash benefit than for those carriers which have “ancillary cash” or a built-in cash provision. Those two approaches are another alternative strategy for using benefit design to manage the risk of the cash benefit. Insurers also impose limits on the amount of daily or monthly benefit available with a cash benefit. Some do so within a cash rider by allowing a benefit amount less than the full amount that can be sold on an indemnity or reimbursement basis (e.g., a \$350/day maximum on the cash rider but a \$500 maximum on the reimbursement benefit).

With respect to the “built-in” cash benefit, several insurers indicated that the “built-in” cash benefit was designed to be “premium neutral,” which is why it pays at a lower rate (10% to 50%) than when benefits are elected on an expense reimbursement basis.

Additionally, most insurers offering a monthly benefit – whether cash or reimbursement – do so on a pro-rated basis. The amount of monthly benefit available to the claimant is equal to the percentage of days of the month on which they satisfied the benefit eligibility criteria. For example, someone who becomes disabled on June 1st and remains disabled the entire month would receive their entire monthly benefit amount (whether cash or reimbursement) but someone becoming disabled on June 15th would receive only half of their monthly benefit allowance.

A few insurers impose an “inner limit” on the amount of benefits that can be paid with cash. So someone with a lifetime policy maximum of \$150,000 might only be allowed to receive 10 x the monthly maximum or \$60,000 in the case of a \$6,000/month benefit amount. When a smaller lifetime limit is imposed, it might be offered as an “ancillary” benefit and may or may not draw down on the lifetime maximum although it is unusual to have any benefit payment fall “outside” the lifetime policy maximum – whether it is a cash benefit or not.

Benefit Determination & Recertification.

Appropriate and timely benefit assessments and re-assessments were cited universally by those administering cash benefits as one of the most important risk management tools. The additional challenge of administering a cash benefit policy is that it is more

difficult to determine benefit eligibility (i.e., the nature and degree of functional or cognitive loss) without records of expenses incurred, services provided or other medical or care notes. Therefore, an in-person assessment is typically required either more frequently or all the time (it differs by carrier practice) in the case of a cash benefit where it is used less frequently in a reimbursement benefit when other information is available and adequate to substantiate the loss.

Similarly, given the not insignificant (30 to 40%) recovery rate in long term care, it is very important to do timely re-assessments. One study found that 70% of claimants had at least one “transition” in terms of nature and degree of disability over the course of their disability. At a minimum, some carriers mentioned conducting re-assessments every 90 days. Receipt of a cash benefit is a powerful incentive for an insured or their family to maintain the receipt of benefits when the insured may no longer be benefit eligible; this is especially true if the cash benefit is being used for basic living expenses and not for the provision of paid care which of course would no longer be needed upon recovery. One carrier said that the need to do more frequent on-site assessments with a cash policy likely results in assessments costs which are two or four times as much as they would be under a reimbursement policy.

Some of the tools carriers use to assist in gathering needed information for benefit reassessment include structures questionnaires to physicians about the claimant’s need for supervision and support, ADL questionnaires for providers and informal caregivers, medical management tools, and the like. Telephone-based assessments can be helpful but only when there is other corroborating information like care notes or provider records.

Plan of Care.

A tax-qualified LTC policy must provide benefits in accordance with an approved Plan of Care developed by a Licensed Health Care Practitioner. While all TQ policies do this, the interpretation of what constitutes a Plan of Care and how it can be used varies widely. Some insurers see the Plan of Care merely as an articulation and description of the nature and degree of loss such that the insured is benefit eligible and do not go further to specify recommended or prescribed service types or frequencies. Other Plans of Care do go into further detail about care options and service settings, including both those covered under the plan as well as other community or free resources that might be available to the insured to help support their care needs. Some insurers monitor that benefits are provided in accordance with the Plan of Care by reviewing expenses submitted under a reimbursement policy. In a cash policy, the insurer interested in maintaining care consistent with the Plan of Care must rely upon care notes provided by either formal or informal caregivers. Some companies provide a format and guidelines by which families can document care notes while others do not. One unique approach

by a company that offers an “ancillary cash” benefit is to use the Plan of Care to define the type, amount and allowable expenses associated with the amount of the unused monthly benefit maximum which can be spent on long term care that isn’t covered in the policy – be it family care, equipment and devices or other items. They consider this a “cash and counseling” type model. It is also important to note that the Plan of Care is never a “hard and fast” document – it changes as insureds’ care needs and their options for receiving care change. If family care is initially available, a Plan of Care may reflect that in its recommendations; if that situation changes (e.g., a family helper becomes ill or moves), then the Plan of Care is modified to identify an alternative appropriate option for care.

In creating the Plan of Care, some insurers take care to assess the adequacy and competency of informal supports and unlicensed caregivers to provide care. This is an important factor whether those individuals provide care as a supplement to a reimbursement policy or as the primary source of care within a cash benefit plan. One carrier identified instances where the insured’s desired plan of care was to rely upon a spouse who was disabled to the point of being unable to provide the care needed.

Based on the claimant study mentioned above, for about one-third of all claimants, there is a recommendation for some type of change to the plan of care as indicated by the insured’s needs and personal situation. This figure remains fairly constant over time underscoring the need for on-going monitoring of care needs to help insureds get the most value of their coverage. And over 90% of claimants at all points in their disability cited that care management was helpful to them.

Fraud Investigation.

A focused and active fraud investigative unit is universally cited as an integral component critical to a cash benefit plan. While fraud investigation is also important for any policy, there is a significantly heightened potential/incentive for fraud with a cash benefit. Most insurers have a dedicated fraud unit, they might use a vendor for the service and it typically involves hiring private investigators. Insurers tend to focus on situations where an insured has an especially high daily benefit amount and where the initial assessment and subsequent reassessments suggest a high likelihood of recovery. One carrier indicated that they are successful in documenting fraud in about 50% of the suspected cases. One carrier mentioned that fraud investigations typically costs about \$2,000 to \$4,000 per case, sometimes higher.

Carriers indicated that fraud is also a more significant concern with a younger claimant population, which has obvious implications for CLASS. One insurer suggested that the fraud rates found in LTD might be a good proxy for estimating anticipated fraud in a cash-based benefit, in part because both are focusing on a younger, at work population. With older populations, the concern focuses more on fraud against the claimant and not

by the claimant. Some carriers said that in general there is more evidence of fraud perpetrated by the family of the claimant than by the claimant themselves.

Experience Monitoring.

As with all LTCL, experience monitoring against pricing assumptions is critical. Insurers say it is very important to know the actuarial assumptions with regard to utilization and recovery and to evaluate actual practice against that.

PREMIUM IMPACT

Table ___ compares premiums under varying types of cash benefit provisions. Some companies offer more than one option so the data provided represent multiple offerings of multiple insurers. Samples ages of 45, 55, 65, and 75 are used. The “base plan” chosen for analysis is one with a \$6,000/month benefit (\$200/day), a 90-100 day elimination period, built-in 5% compound inflation protection and a lifetime maximum roughly equal to 5 years. In most cases, these policies pay the same amount for home care as facility care. Obviously, there will be other minor benefit differences (e.g., one policy may have a more generous bed reservation benefit than another), but for the most part the important coverage elements are the same. We used only standard, non-discounted rates.

Obviously, for policies with a cash rider, the additional premium cost of that rider depends on whether it pays 20% of the home care reimbursement amount or 100%. For the smaller benefits (20% - 25%), the additional cost is roughly 13 to 30%. At the other extreme, the 100% cash benefit can add as much as 70% to the premium, although insurers vary considerable in how they price this rider.

The additional premium cost for the ancillary cash design is more modest – roughly 7% to 17% depending on company, cash amount and issue age.

For companies with a “built-in” cash benefit, we show actual annual premium amounts since those companies do not have a “no cash” option against which to compare the premium cost. There are few consistent patterns; for the most part the higher the built-in cash amount, the higher the premium, but in some cases, a more limited policy design has a higher premium cost. Other plan design and price assumption differs are likely to be a factor.

Finally, we compare two “all cash” policies with 4 “no cash” policies. The premiums and the premium differentials are both shown. Again, there are differences by carrier. The additional cost for an “all cash” vs “no cash” policy ranges from 20% at the oldest ages to 100% nearly across all ages for one company.

IMPLICATIONS FOR CLASS ACT

One of the primary concerns for CLASS is the premium cost impact of a cash benefit design and whether CLASS can be competitive with other private insurance offerings and thus attract a significant and healthy risk pool based on the premiums associated with the plan design. A cash benefit – all else equal – adds 20% to 100% to the premium cost of a “no-cash benefit” plan. Yet many of the competing plans in the private market without a cash benefit have significant benefit flexibility as shown in the summary of “ancillary” benefits included in today’s coverage.

While a cash benefit has strong consumer appeal because of its flexibility, the experience shows that, given a choice, most people prefer the more affordable non-cash or limited cash benefit plan. A concern for CLASS is whether the cash benefit will be more attractive to the population most at risk of being heavy users of benefit – those with current disabilities – and might not be price-competitive to attract a broad and healthy risk pool as well.

Unfortunately, the prevailing risk management techniques which are critical with a cash benefit design in order to maintain appropriate and cost-competitive coverage at the same time add to administrative costs. So it will be a challenge for CLASS to maintain the 3% of premium allowance for administrative costs while also having as robust and appropriate risk management infrastructure as will be needed. There are already concerns with the 3% premium allowance and the additional considerations needed to appropriately manage a cash benefit within that margin only make that more challenging.

It will be important for CLASS to anticipate the need for in-person assessments and appropriately scheduled re-assessments based on presenting condition of the claimant as part of its administrative cost structure. Establishing a strong benefit determination, review and appeal process and robust protocols for timely reassessments is the single most important challenge for CLASS in order to maintain the cost competitiveness and rate stability of the all-cash model. The infrastructure, risk management tools, training and staffing are all necessary to provide the required structure and process to support the cash benefit. There will be an additional administrative burden if the level of the cash benefit is varied with degree of disability; this will strengthen the incentives for insureds to maintain benefit eligibility and may encourage what is called “ADL-creep” where higher degrees of loss than are actually found are claimed. All this means additional risk management measures will be needed even beyond those that are already being brought to bear on LTCI in general and a cash benefit in particular; today, there are no products that pay a higher benefit level based on degree of loss alone.

Similarly, utilizing the plan of care to help guide claimants to appropriate services and providers and to help them manage care costs is also important. The language of CLASS seems to provide for an ability to monitor expenses and determine benefit payouts accordingly. One of the most promising best practices we observed would be the model where the plan of care takes in to account actual expenses and imputed expenses for unpaid/informal care and bases the approved cash allowance on those expenses.

There are few plan design strategies that CLASS can utilize to manage the costs of the all cash approach. The coverage is already defined as unlimited/lifetime. To some extent, the lower daily benefit amounts will help mitigate the costs of the cash approach. It is not clear whether there is any flexibility to include variations on “all cash” – e.g., a full benefit payout for expense reimbursement and then a portion of the balance up to the pro-rated monthly maximum paid in cash, rather than all of the balance paid in cash.

The industry has other “best practices” applicable to CLASS. Specifically, CLASS should consider some of the tools carriers use to assist in gathering needed information for benefit reassessment include structures questionnaires to physicians about the claimant’s need for supervision and support, ADL questionnaires for providers and informal caregivers, medical management tools, and the like. Telephone-based assessments can be helpful but only when there is other corroborating information like care notes or provider records.

Finally, with respect to marketing and education, if CLASS is more costly relative to the private market competition, it will need to focus specifically on the advantages of the cash benefit and how a smaller cash benefit provides more flexibility than a larger benefit amount paid on a reimbursement benefit. Helping consumers see the product advantages associated with a higher premium may help but this is still a challenge in such a highly price sensitive market. The concern, of course is that this message may work for those who have current or anticipated care needs but be less persuasive with a broader and healthier risk pool.

**Table 1: Types of Cash Benefits in Long Term Care Insurance – Individual Market and Multi-life Market
(companies are listed in order of market share in terms of in-force policies)**

Company	No Cash Component	All Cash	Cash Rider	Built-in Cash Component	Ancillary/ Remainder Cash
Genworth Financial	X				
John Hancock			X		
Bankers Life					
Transamerica	X			X	
MetLife		X			X
UNUM		X			
River Source (IDS)					
Thrivent					
Penn Treaty					
Allianz		X	X	X	
State Farm	X				
Fortis					
New York Life	X				
Northwestern LTC	X			X	
Mutual of Omaha				X	
MedAmerica		X		X	
Prudential			X	X	
Mass Mutual	X				
Ability Resources					
Physician's Mutual	X		X		
Equitable Life & Casualty	X				
Knights of Columbus					
CUNA Mutual	X				
Guarantee Trust	X				
Country Life	X				
State Life	X				
AIG Life				X	
Berkshire Life	X				
Standard Life & Accident					
Minnesota Life	X				
Assurity Life	X				

Other companies with cash benefits: LifeSecure (Ancillary); United of Omaha (Built-in). Does not include companies no longer selling in the individual market.

Table 2: Types of Cash Benefits in Long Term Care Insurance – Group and Association Market

(listed in order of market share in terms of in-force policies)

Company	No Cash Component	All Cash	Cash Rider	Built-in Cash Component	Ancillary/ Remainder Cash
UNUM		X			
Met Life	X				
John Hancock					
C.N.A.		X			
Federal LTC Insurance Program	X				
CalPERS	X				
Prudential				X	
Genworth Financial					
WEA	X				
(Aetna) – not selling		X			

Table 3. Summary of LTC Insurance Policies with Cash Benefit

Product	Policy Type	Classification	How Benefit is Implemented	Level of Cash Benefit Options	Is there a "Lifetime Limit" specific for the Cash Benefit	Limits on Receipt of Other Benefits	Limits on Use How Cash Can be Benefit
Allianz Generation Protector II	Individual	Cash Rider	Not clear if have to select % at purchase or at time of claim	Can elect 10%, 25% or 50% through monthly rider or 100% daily benefit in cash through full rider (up to \$250 per day). Assume the amount is based on the home and community benefit which is set at a pre-selected % of NH.	No	Only for 100% cash benefit	None
American General	Individual	Ancillary Cash		40% of pre-selected monthly maximum (and can switch between cash and reimbursement)	No	Yes, in lieu of HCC and Facility Care benefits	None
C.N.A.	Group						
John Hancock Custom Care II Enhanced	Individual	Rider	Automatic at time of claim	15% of HCC monthly benefit	No info	Assume can't use with NF or AL benefits	None

Product	Policy Type	Classification	How Benefit is Implemented	Level of Cash Benefit Options	Is there a "Lifetime Limit" specific for the Cash Benefit	Limits on Receipt of Other Benefits	Limits on Use How Cash Can be Benefit
LifeSecure	Individual	Ancillary	Automatic at time of claim	Up to 50% of unused portion of monthly benefit	No	No	Yes subject to plan of care specifics and documented expenses but family care allowed
MEDAmerica Simplicity	Individual	All Cash	Consumer must submit benefit request form each month	Selected by consumer at purchase	N/A (this is a cash-only policy)	No	None
MetLifePremier	Individual	Built into policy All Cash	No info	Selected by consumer at purchase	N/A (this is a cash-only policy)	No	None
MetLife LTC LifeStage Advantage	Individual	As rider (not available for \$1m total benefit)	At initial application	Full monthly benefit	No	No	None
Mutual of Omaha Mutual Care My Way	Individual	Built into policy	At time of claim (can stop and restart cash benefit)	35% of HC monthly included, but option to increase to 40% or 50% (not sure if requires rider)	No	Yes, no other benefits payable	None

Product	Policy Type	Classification	How Benefit is Implemented	Level of Cash Benefit Options	Is there a "Lifetime Limit" specific for the Cash Benefit	Limits on Receipt of Other Benefits	Limits on Use How Cash Can be Benefit
Mutual of Omaha Mutual Care 3 & 5	Individual	Built into policy	At time of claim (can stop and restart cash benefit)	35% of HC monthly	No	Yes, no other benefits payable	None
Physicians Mutual	Individual	As rider at time of purchase only	At initial application (must receive HHC at least 1 day during the month)	20% of home and community care benefit	No	Yes, does not apply to people living in NF or ALF or hospice	None
Prudential GLTC 3.5	Group			50% Cash Alternative			
Prudential LTC3 (Prudential Evolution offers a "starter" cash benefit of \$1,500 per month for a year)	Individual	Built into policy and available in two riders: one for 50% of benefit and one for 100% cash.	At time of claim and requested monthly	40% of HC Daily Benefit (see note in previous column on riders).	No	Yes, must receive HC benefit only	None
Prudential LTC3	Group	Built into policy and available as rider	No info	No info	No info	No info	No info
Transamerica Transcare	Individual	Built into policy	No info	10 times the daily benefit (30%)	No info	No info	No info

Product	Policy Type	Classification	How Benefit is Implemented	Level of Cash Benefit Options	Is there a "Lifetime Limit" specific for the Cash Benefit	Limits on Receipt of Other Benefits	Limits on Use How Cash Can be Benefit
United of Omaha – Assured Solutions & Assured Solutions Plus	Individual	Built into policy and option for larger cash benefit (50% of home care)	Option at time of claim	40% of the Basic Home Care Services ¹ Monthly Benefit Amount selected	No	Yes – in lieu of other services	None

¹ Basic Home Care Services include home health aide and homemaker services.

Table 4: Premium Impact of Cash Benefit Under Alternative Approaches*

CASH BENEFIT RIDERS – Cash Rider

Additional Premium Cost by Cash Amount and By Company

AGE	20% Cash	25% Cash	50% Cash	50% Cash	75% Cash	75% Cash	75% Cash	100% Cash	100% Cash	100% Cash
45	13%	30%	13%	41%	28%	50%	59%	39%	70%	70%
55	13%	30%	11%	41%	25%	50%	59%	36%	70%	70%
65	13%	30%	8%	50%	20%	49%	59%	33%	66%	70%
75	13%	30%	7%	50%	19%	49%	59%	30%	66%	70%

Notes: \$200/day, 5 year lifetime maximum, 5% compound inflation protection for life, 90-100 day elimination period. These riders all provide cash benefit in lieu of home care reimbursement and cash paid reduces the lifetime maximum. For 20% rider, insured must receive at least one day of paid home care in the month in order to receive the cash benefit and the cash benefit does not reduce the lifetime maximum.

CASH BENEFIT RIDERS – Ancillary/Additional Cash Model

Additional Premium Cost by Cash Amount and By Company

Age	15% Cash	25% Cash
45	10%	7%
55	10%	13%
65	10%	11%
75	8%	17%

Notes: Same coverage amounts as above however the 15% cash benefit is an “additional” amount to expense reimbursement and does not count against the lifetime maximum. For the 25% cash plan, cash benefit only paid if covered expenses also received and only if the maximum benefits paid (reimbursement plus cash) do not exceed the policy’s maximum monthly/daily benefit for home care.

Premium Comparisons under Alternative Built-in Cash

Benefit Payment Scenarios

AGE	10x DBA per month	10 x DBA per month	35% Built in	40% Built in	40% Built in	40% Built in	50% Built in
45	\$4,330	\$2,766	\$3,313	\$3,379	\$2,918	\$3,328	\$3,750
55	\$5,927	\$3,409	\$3,770	\$3,845	\$3,702	\$3,938	\$4,267
65	\$8,157	\$5,710	\$6,338	\$6,465	\$5,885	\$6,314	\$7,175
75	\$15,913	\$12,544	\$13,975	\$14,254	\$14,244	\$15,017	\$15,820

Note: Similar benefit design as above. Benefits paid reduce lifetime maximum.

Premium Comparison: All Cash vs. No Cash Component

Age	ALL CASH*	ALL CASH	NO CASH	NO CASH	NO CASH	NO CASH
45	\$4,273	\$3,888	\$3,180	\$5,688	\$2,052	\$2,160
55	\$5,745	\$5,440	\$3,840	\$6,972	\$3,024	\$3,300
65	\$8,599	\$10,152	\$5,880	\$9,696	\$4,692	\$5,640
75	\$16,031	\$19,008	\$13,380	\$16,932	\$7,800	\$10,560

Premium Comparison: All Cash vs. No Cash Component – by percentage difference in premium ALL CASH/NO CASH

Age	ALL CASH*	NO CASH	NO CASH	NO CASH	NO CASH
45	\$4,273/\$3,888	1.3/1.2	0.75/0.68	2.1/1.9	1.9/1.8
55	\$5,745/\$5,440	1.5/1.4	0.82/0.78	1.9/1.8	1.7/1.8
65	\$8,599/\$10,152	1.5/1.7	0.89/1.05	1.8/2.2	1.5/1.8
75	\$16,031/\$19,008	1.2/1.4	0.95/1.12	2.1/2.4	1.5/1.8

Note: Same as table above but percents rather than pure premiums.

*NOTE: All plans were run, when possible, with monthly benefit maximums of \$6000, 100% home care, 5 year benefit length, 5% automatic compound inflation, standard health rating, no discounts. Possible exceptions follow:

- One insurer offers a lifetime maximum of 5.5 years equivalent as closest option to the “standard plan” used.
- Another insurer offers only a daily, not a monthly maximum.
- The “ALL CASH” plan column one is for a lesser lifetime maximum - \$300,000 which equates to roughly 4.17 years; this was the closest approximation to a 5 year plan.
- The other “ALL CASH” plan is for a 5 year lifetime maximum.

A REPORT ON THE ACTUARIAL, MARKETING, AND LEGAL ANALYSES OF THE CLASS PROGRAM

For additional information, you may visit the DALTCP home page at http://aspe.hhs.gov/_/office_specific/daltcp.cfm or contact the office at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, SW, Washington, DC 20201. The e-mail address is: webmaster.DALTCP@hhs.gov.

Files Available for This Report

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	http://aspe.hhs.gov/daltcp/reports/2011/class/index.shtml http://aspe.hhs.gov/daltcp/reports/2011/class/index.pdf
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APPENDIX B: HHS Letters to Congress About Intent to Create Independent CLASS Office	[11 PDF pages]
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APPENDIX C: <u>Federal Register</u> Announcement Establishing CLASS Office	[2 PDF pages]
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Full Appendix	http://aspe.hhs.gov/daltcp/reports/2011/class/appG.htm http://aspe.hhs.gov/daltcp/reports/2011/class/appG.pdf
Ga: <u>Federal Register</u> Announcement for Personal Care Attendants Workforce Advisory Panel	http://aspe.hhs.gov/daltcp/reports/2011/class/appGa.pdf
Gb: Advisory Panel List of Members	http://aspe.hhs.gov/daltcp/reports/2011/class/appGb.pdf

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APPENDIX I: CLASS Administration Systems Analysis and RFI	[10 PDF pages]
	http://aspe.hhs.gov/daltcp/reports/2011/class/appI.htm
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APPENDIX J: Additional Analyses for Early Policy Analysis	[150 PDF pages]
Full Appendix	http://aspe.hhs.gov/daltcp/reports/2011/class/appJ.htm
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Ja: A Profile of Declined Long-Term Care Insurance Applicants	http://aspe.hhs.gov/daltcp/reports/2011/class/appJa.pdf
Jb: CLASS Program Benefit Triggers and Cognitive Impairment	http://aspe.hhs.gov/daltcp/reports/2011/class/appJb.pdf
Jc: Strategic Analysis of HHS Entry into the Long-Term Care Insurance Market	http://aspe.hhs.gov/daltcp/reports/2011/class/appJc.pdf
Jd: Managing a Cash Benefit Design in Long-Term Care Insurance	http://aspe.hhs.gov/daltcp/reports/2011/class/appJd.pdf
APPENDIX K: Early Meetings with Stakeholders	[4 PDF pages]
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Na: Agenda, List of Participants, and Speaker Bios	http://aspe.hhs.gov/daltcp/reports/2011/class/appNa.pdf
Nb: Presentation Entitled "Actuarial Research Corporation's Long Term Care Insurance Model"	http://aspe.hhs.gov/daltcp/reports/2011/class/appNb.pdf
Nc: Presentation Entitled "The Long-Term Care Policy Simulator Model"	http://aspe.hhs.gov/daltcp/reports/2011/class/appNc.pdf
Nd: Presentation Entitled "Comments on 'The Long-Term Care Policy Simulator Model'"	http://aspe.hhs.gov/daltcp/reports/2011/class/appNd.pdf
APPENDIX O: Actuarial Report on the Development of CLASS Benefit Plans	[47 PDF pages]
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	http://aspe.hhs.gov/daltcp/reports/2011/class/appO.pdf

APPENDIX P: June 22, 2011 Technical Experts Meeting
Full Appendix

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<http://aspe.hhs.gov/daltcp/reports/2011/class/appP.htm>

<http://aspe.hhs.gov/daltcp/reports/2011/class/appP.pdf>

Pa: Agenda and Discussion Issues and
Questions

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPa.pdf>

Pb: Presentation Entitled "Core Assumptions and
Model Outputs"

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPb.pdf>

Pc: Presentation Entitled "Actuarial Research
Corporation's Long Term Care Insurance
Model"

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPc.pdf>

Pd: Presentation Entitled "The Avalere Long-
Term Care Policy Simulator Model"

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPd.pdf>

Pe: Presentation Entitled "Alternative Approaches
to CLASS Benefit Design: The CLASS
Partnership"

<http://aspe.hhs.gov/daltcp/reports/2011/class/appPe.pdf>

APPENDIX Q: Table 2: Actuarial and Demographic Assumptions

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APPENDIX R: Figure 1: Daily Benefit Amount for Increased Benefit

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