

U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation Office of Disability, Aging and Long-Term Care Policy

# BROOKINGS/ICF LONG-TERM CARE FINANCING MODEL:

# USER'S GUIDE TO SPECIFYING SIMULATIONS

February 1992

## Office of the Assistant Secretary for Planning and Evaluation

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In particular, DALTCP addresses policies concerning: nursing home and communitybased services, informal caregiving, the integration of acute and long-term care, Medicare post-acute services and home care, managed care for people with disabilities, long-term rehabilitation services, children's disability, and linkages between employment and health policies. These activities are carried out through policy planning, policy and program analysis, regulatory reviews, formulation of legislative proposals, policy research, evaluation and data planning.

This report was prepared under contract #HHS-100-94-0016 between HHS's DALTCP and the Lewin Group. For additional information about this subject, you can visit the DALTCP home page at http://aspe.hhs.gov/\_/office\_specific/daltcp.cfm or contact the ASPE Project Officer, John Drabek, at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. His e-mail address is: John.Drabek@hhs.gov.

# BROOKINGS/ICF LONG-TERM CARE FINANCING MODEL: User's Guide to Specifying Simulations

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# OVERVIEW OF THE PROJECT

In September of 1988, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) contracted with Lewin-ICF and the Brookings Institution to develop a public use version of the Brookings/ICF Long Term Care Financing Model. Using microsimulation techniques, the model projects the utilization and sources of financing for nursing home and home care services among the elderly to the year 2020.

Under this contract, many of the assumptions used in the model were revised to reflect data and findings that had recently become available. As the need for alternative policy simulations arose, the capabilities of the model were expanded. Examples of the types of simulations modeled include: the purchase of new private long term care insurance products; the use of pension funds to purchase long term care insurance; and publicly sponsored programs, such as the long term care benefits proposed by the Pepper Commission.

One of the products of this project is a public use version of the model code and accompanying documentation. The documentation includes:

- **Model Assumptions**, which presents the assumptions used in developing the model.
- **Designing and Using Model Simulations**, which presents assumptions used in modeling alternative proposals and using the results of the model.
- A User's Guide to Specifying Simulations, which details how to specify simulations using the model's parameters.
- A Programmer's/Operator's Manual, which shows the code structure and operation of the model.

# PREFACE

This report is one of four related to the Brookings/ICF Long Term Care Financing Model. It outlines the function and use of parameters available to model users to specify simulations. The three other documents discuss: 1) the assumptions used in developing the model; 2) assumptions used in modeling alternative proposals and using the results of the model; and 3) the code structure and operation of the model.

This documentation was prepared by Lisa Maria B. Alecxih of Lewin-1CF, and Peter Robertshaw, a subcontractor to Lewin-ICF. John Drabek, serving as the project officer, and Paul Gayer of the Office of the Assistant Secretary for Planning and Evaluation provided invaluable comments.

This report was developed as part of the documentation of a public use version of the Brookings/ICF Long Term Care Financing Model for the Office of the Assistant Secretary for Planning and Evaluation. Other reports in this series include:

- Model Assumptions
- Designing and Using Model Simulations
- A Programmer's/Operator's Manual

Copies of the reports may be obtained by writing to:

Brenda Veazey Department of Health and Human Services Room 424E, Humphrey Building 200 Independence Avenue, S.W. Washington, D.C. 20201 This document describes how to specify a simulation using the Brookings/iCF Long Term Care Financing Model. The first section provides a brief overview of the model. For a more detailed description of model assumptions and uses, see the "Brookings/ICF Long-Term Care Financing Model: Model Assumptions."

The second section of this document provides instructions for specifying two example simulations using the model parameters and useful tables for checking the results. It also describes all the model parameters that can be used to simulate alternative financing scenarios for long term care services. For a discussion of the design of simulations, see the "Designing and Using Model Simulations" documentation. The final section provides brief descriptions of all the tables available in the model output. For a description of how to run the model and the model program code, see the "Programmers/Operators Manual."

## I. MODEL DESCRIPTION

The Brookings/ICF Long Term Care Financing Model (LTCFM) simulates the utilization and financing of both institutional and noninstitutional long-term care services for elderly individuals through the year 2020. Institutional services include nursing home care provided by skilled nursing facilities and intermediate care facilities. Noninstitutional services include home health, homemaker, personal care, and meal preparation services. The model simulates the number of individuals receiving these services and the costs of these services as financed by various public and private sources. The overall objective of the model is to simulate the effects of various financing and organizational reform options on future public and private expenditures for nursing home and home care services.

The model begins with a nationally representative sample of the adult U.S. population. Each member of this sample population is assigned a weight value which, when aggregated, will approximate the total U.S. population in terms of both number of persons and demographic (i.e. age, sex, etc.) characteristics. Each record in the sample database contains information on a person's age, sex, marital status, income, assets, and other characteristics. The model simulates changes for each individual in the sample population from 1986 to 2020, simulating changes in age, economic status, disability status, utilization of long term care, and method of paying for such care.

The model uses a Monte Carlo simulation methodology. The model simulates changes in an individual's status by drawing a random number between zero and one and comparing it to the fixed probability of that event occurring for an individual with a given set of socio-demographic characteristics. In order to produce consistent results between runs, the random numbers used are drawn from a permanent datafile so that each time the model is run the same random number is used for each decision made.

The model can be used to simulate long-term care financing assuming changes in private payment methods (such as increased purchase of private long-term care insurance), or new public financing programs. The simulations show the impact of the modeled changes on users of care and sources of financing. The model estimates cost impacts in the short-run and long-run for changes in public spending and changes in out-of-pocket spending. The model also indicates the role different sources of financing play for the elderly by age, sex, marital status, income, asset level, and duration of long term care use.

These simulations are greatly affected by the choice of assumptions about the economy (such as the rate of growth of the overall economy and nursing home prices) and individual behavior (such as rates of nursing home utilization and insurance purchase). The model can be used to make estimates using alternative assumptions to show how sensitive the results are to the assumptions chosen. Many of the possible assumptions and options are parameterized to allow for easy model operation.

## II. MODEL PARAMETERS

The parameters are divided into three major groups: 1) base case parameters; 2) public policy parameters; and 3) long term care insurance parameters.

In developing the model's "base case," we make our best attempt to model current law. The "Base Case Parameters" define the majority of our current law assumptions. We use the most recent data available to estimate probabilities of long term care utilization. The model code is written to reflect Medicare utilization and Medicaid eligibility criteria. The model is then run and compared to estimates from other sources such as income from the March Current Population Survey (CPS), nursing home use from the 1985 National Nursing Home Survey (NNHS) and 1982-84 National Long Term Care Survey (NLTCS), home care use from the NLTCS, and sources of financing for long term care services from administrative data and the Office of National Cost Estimates. For a detailed description of the base case assumptions and methodology, see the "Brookings/ICF Long Term Care Financing Model: Model Assumptions" and for a discussion of the process of benchmarking base case results to other data sources, see the "Base Case Memo" in Attachment 1 of the "Designing and Using Model Simulations" documentation.

The specific parameters of each model run determine the policy option simulated by the model. Parameters that can be varied include: eligibility criteria, length of coverage, deductible periods, coinsurance requirements, and reimbursement rates. Parameters likely to be varied by the user are divided into "Public Policy Parameters" and Long Term Care Insurance Parameters."<sup>1</sup>

Public policy parameters are used primarily to model proposals for universal nursing home and home care benefits, as well as Medicaid home care proposals. Public policy parameters may be used to model proposals to cover the first portion of a nursing home stay (front-end), nursing home care after a long deductible period (backend) or comprehensive policies. Home care proposals can be modeled in conjunction with nursing home care or independently.

Long term care insurance parameters are used primarily to simulate the purchase of and benefits of private long term care insurance. These parameters can be used in conjunction with the public policy parameters to model public proposals that contain incentives to purchase private insurance (i.e., a proposal to cover nursing home care after two years that would encourage persons to purchase private long term care insurance to cover the first two years of care). LTC insurance parameters take precedence over public policy parameters. A secondary set of long term care insurance parameters can be used to model a preferred LTC insurance policy (e.g., fairly comprehensive) and a secondary policy for persons who cannot meet the affordability criteria of the preferred policy. The LTC insurance policy parameters include: policy

<sup>&</sup>lt;sup>1</sup> Some of the base case parameters may be varied to simulate Medicaid eligibility reform options.

benefits, purchase criteria, lapse conditions, premiums, group coverage availability, and tax credit specifications.

## A. Example Simulations

There are two fundamental steps in specifying simulations. The first is to translate legislative language, proposals, or long term care insurance policies into their basic key components. The second is to relate the key components to the relevant model parameters. The first step is discussed in more detail in the "Designing and Using Model Simulations" documentation. Two example simulations are outlined below to demonstrate the second step of specifying key components as model parameters. The example simulations are a public program and long term care insurance purchase.

## 1. Public Program: Expanded Home Care and Short-Term Front End Nursing Home Coverage

This section demonstrates how the parameters would be used to specify a public program. The program considered has the following features:

- home care services for elderly persons with two or more impairments in activities of daily living after a 30 visit deductible that requires a 20 percent copayment; and
- coverage of nursing home care during the first six months of a stay for all elderly entrants that requires a 20 percent copayment.

Based on this information, the following presents how this public program would be specified in the parameters. Parameters that are more obvious (e.g., PROGRAM STARTS IN YEAR) are not discussed here, but the reader can refer to Section II.B beginning on page 8 for descriptions of all the parameters.

This first group of parameters sets up the program's initial structure.

AVAILABLE ? (1=YES, 0=NO)	1
ACCUMULATE WITH (1=MEDICARE, 2=LTC INS.)	j 2
PROGRAM STARTS IN YEAR	1992
BASE YEAR FOR DOLLARS	1992
PERCENT ELIGIBLE	100.0
START AGE	65
END AGE	999

The AVAILABLE parameter turns on and off the parameters related to public policy proposals. The ACCUMULATE WITH parameter can be used to specify where benefits paid under the various forms of federal public policy parameters are recorded in the output tables. Generally, LTC INS. (2) is used because the current base case does not use this variable to record any financing sources. The BASE YEAR FOR DOLLARS

parameter is used to specify the year in which payment rates for the program which are entered in parameters below in this case 1992.

The percent eligible parameter specifies the percent of persons who are eligible for the program. The default is "100.0" so that all eligible persons would receive benefits.<sup>2</sup> Since all elderly persons are covered under this proposal, the AGE ELIGIBLE TO RECEIVE BENEFITS parameter is set to "65" and the END AGE parameter is "999" or death.<sup>3</sup>

The next set of parameters defines the allowed benefits under public policy proposals for nursing home care and home care (NIS).

	NURSING HOME	NIS
DEDUCTIBLE DAYS/VISITS	0	30
DEDUCTIBLE \$	0	0
PUBLIC PAYMENT RATE	80.00	50.00
ESCALATION RATE FOR PAYMENT	5.5	5.5
COPAYMENT(%)	20.0	20.0
DAYS/VISITS OF COPAYMENT	183	999999
ADL REQUIRED	0	3
MAXIMUM DAYS/VISITS	183	999999
MAXIMUM \$	999999	999999

The DEDUCTIBLE DAYS/VISITS and DEDUCTIBLE \$ parameters are used to specify that no deductible is required for nursing home care and that 30 home care visits must be received before coverage begins. The PUBLIC PAYMENT RATE parameter specifies that the per diem rate for nursing home care is \$80.00 (in 1992 per the previous parameters) and the home care per visit rate is \$50.00. The escalation rate for benefits specifies the benefit payments will increase 5.5 percent annually. Specifying "5.5" means that benefit payments will keep pace with long term care inflation. The 20 percent copayment specified in the COPAYMENT (%) parameter is a percent of the PUBLIC PAYMENT RATE. Therefore, the public payment rate for nursing home care of \$80 per day in 1992 requires a \$16 copayment from persons receiving benefits while the program would pay \$64 per day. The DAYS/VISITS OF COPAYMENT parameter indicates that nursing home residents have a copayment requirement during their first 183 days of care and that home care recipients have a 20 percent copayment as long as they are receiving program services.

The ADL REQUIRED parameter applies to home care only. Nursing home care must be set to "0". The parameter for home care is set so that persons with two or

 $<sup>^{2}</sup>$  If for some reason one wishes to specify that only a portion of the eligible population should receive benefits then a number less than 100.0 may be entered (i.e., under a state option proposal, a subset of states representing 60 percent of the U.S. population choose to participate, then "60.0" could be entered).

<sup>&</sup>lt;sup>3</sup> If a proposal specifies that beneficiaries may not receive benefits until after a certain age this parameter can be changed. The model does not simulate benefits before age 65, therefore numbers less than 65 default to 65 in the simulation.

more ADI-s are eligible for care.<sup>4</sup> The MAXIMUM DAYS/VISIT parameter specifies that nursing home benefits are paid by the public program for 183 days and home care benefits are unlimited. The MAXIMUM \$ parameter is set at "999999" because the benefit period takes precedence.

Once the parameter file has been edited, the model may be run and the simulation results compared to the base case. For a discussion of running the model, see the "Programmer's/Operator's Guide." For a discussion of comparing simulation results to the base case, see the "Designing and Using Model Simulations" documentation.

## 2. Private Long Term Care Insurance Purchase

To demonstrate how private long term care insurance can be specified in the model parameters, we have chosen a typical long term care insurance policy offered on the market. The policy considered has the following features:

- four years of nursing home coverage after a 90 day deductible period at a payment rate of \$80 per day (indemnity benefit) that is indexed five percent simple;
- home care services reimbursed at one-half the nursing home benefit rate after a 30 visit deductible for purchaser with two or more ADLs; and
- premiums remain level after purchase.

Based on this information, the following presents how this private long term care insurance policy would be specified in the parameters.

The first set of parameters define basic policy details.

LTC INSURANCE PARAMETERS OPTION 1 (PREFERRED) <sup>5</sup>	
INSURANCE OPTION (0=OFF, 1=ON, 2=HCSA, 3=CRED.CON)	1
PERCENT DISABLED ALLOWED TO BUY INSURANCE	0.0
PERCENT OF PREMIUM PAID BY INSURED INSTITUTIONALIZED	2.0
BASE YEAR FOR DOLLARS	1990
AGE ELIGIBLE TO RECEIVE BENEFITS	65

The first parameter specifies that an insurance policy will be modeled. The PERCENT DISABLED ALLOWED TO BUY INSURANCE parameter allows the user to specify that disabled persons over age 65 are not permitted to purchase long term care insurance due to underwriting. The PERCENT OF PREMIUM PAID BY INSURED

0 = None

1 = IADL Only

- 2 = 1 + ADLs
- 3 = 2 + ADLs

<sup>&</sup>lt;sup>4</sup> The options for this parameter include:

<sup>&</sup>lt;sup>5</sup> There are two sets of long term care insurance parameters. Option 1 takes precedence. Option 2 can be used to model two alternative long term care insurance policies, purchase, lapse and other provisions simultaneously.

INSTITUTIONALIZED parameter specifies that premium payments are waived while a purchaser is in the nursing home. In the model, persons eligible to receive benefits are identified through premium payments. Therefore, to simulate a premium waiver the PERCENT OF PREMIUM PAID BY THE INSTITUTIONALIZED parameter is set at "2.0" rather than "0.0" because if no premium payments are recorded, a nursing home resident would no longer receive benefits. The BASE YEAR FOR DOLLARS and the AGE ELIGIBLE TO RECEIVE BENEFITS parameters are similar to those described above in the Public Policy parameters.

The next group of parameters define the benefits allowed under the long term care insurance policy to be simulated.

		NURSING HOME \$	ESCALATION	NIS \$	ESCALATION	CAP ESCALATION AT AGE YEARS	ESCALATION 1=% 2=\$
DAILY BENEFIT	I	80.00	5.0	-40.00	5.0	999	2

These parameters specify that the long term care insurance policy will pay \$80 per day for nursing home care and \$40 per visit for home care. Please note that insurance always pays the lesser of the daily/visit benefit amount specified and the applicable daily/visit charge. The purchaser is responsible for the difference from their income and assets. To limit the daily/visit charge to the policy provisions, a negative number is entered in the dollar amount parameter. The ESCALATION parameter indicates that benefits paid under the policy will increase five percent annually on an additive basis ("2") of the original benefit amount over time. For example, the additive escalation method would mean the \$80 per day benefit escalated at five percent would be \$84 in the second year, \$88 in the third year and \$116 by the tenth year after purchase (\$80 + ((80 \* .05) \* 9)).

	NURSING HOME	NIS	COMBINED	MAXIMUM PROPORTION TO ADD TO ASSET PROTECTION
DEDUCTIBLE DAYS/ VISITS	90	30	0	
MAXIMUM DAYS/VISITS	1460	1460	0	
MAXIMUM DOLLAR AMOUNT	99999	99999	0	0
COPAYMENT (%)	0.0	0.0		
ADL REQUIRED	i 0	3		

THE DEDUCTIBLE DAYS/VISITS parameter designates the 90 day nursing home deductible and the 30 visit home care deductible. The MAXIMUM DAYS/VISIT and the MAXIMUM DOLLAR AMOUNT show the four year benefit. The ADL REQUIRED parameter indicates the two or more ADL requirement for home care benefits. For an explanation of the COMBINED and MAXIMUM PROPORTION TO ADD TO ASSET PROTECTION parameters, see page 11 in Section II.B. The next group of parameters indicates specifics concerning premium prices, when purchase should begin, and who may purchase insurance. The parameters also allow group insurance to be modeled.

0
0

These parameters define the group coverage availability. The "0" in the AVAILABLE? parameter indicates that group coverage is not available.

	INIDIVIDUAL	GROUP
START YEAR	1986	0
END YEAR	2020	0
ESCALATION RATE (INSURED)	0.0	0
ESCALATION RATE (NEW PURCHASERS)	5.5	0
AGE START ELIGIBILITY	55	0
AGE END ELIGIBILITY (START YEAR)	79	0
AGE END ELIGIBILITY (OTHER YEARS)	79	0

In this simulation, we assume that purchase of the product begins in 1986 and continues until the end of the simulation in 2020. ESCALATION RATE (INSURED) of "0.0" defines the level premiums once a person has purchased insurance. The ESCALATION RATE (NEW PURCHASERS) parameter specifies the 5.5 percent increase in premiums for initial purchasers after the start year.

The AGE START and AGE END ELIGIBILITY parameters can be used to permit only certain age cohorts to purchase insurance initially and in years after the start year. For example, most long term care insurance policies are not available for initial purchase to elderly persons age 80 and over, therefore specifying the AGE END ELIGIBILITY (START YEAR) to be "79" would simulate this practice.

Other parameters are used to specify the premiums for the policy, the purchase assumptions, and the lapse assumptions. For a discussion of assumptions used previously for these parameters, see the "Designing and Using Model Simulations" documentation. For details on these parameters, see page 16 in Section II.B.

## **B.** Descriptions of Model Parameters

This portion of the documentation provides commentary on the use of the model parameters. Brief introductions to groups of parameters, as well as specifics on using particular parameters are presented. In general, parameters include a variable name or description, a delimiter (i.e., |), and an example entry for the parameter. All parameters

must have a value. Parameters that require a year should be entered in full (i.e., "1989" not "89") and ages must be in whole numbers. Decimals are optional.

Caution is advised in specifying simulations. It is important to always check the parameters specified in a run and to examine results critically. A fortran utility program called CHEKFL allows the user to compare their parameter specification to the base case parameters or the parameters of another simulation to note differences. See the "Programmers/Operators Manual" for how to use this program.

## 1. LTC Insurance Parameters

There are two sets of long term care insurance parameters. Option 1 takes precedence. Option 2 can be used to model two alternative long term care insurance policies, purchase, lapse and other provisions simultaneously.

## a. Policy Specifics

These parameters define basic policy details.

LTC INSURANCE PARAMETERS OPTION 1 (PREFERRED)	
INSURANCE OPTION (0=OFF, 1=ON, 2=HCSA, 3=CRED.CON)	3

This parameter specifies whether insurance, a medical IRA type program (HCSA), or the Credited contribution Program is available. When "1" is entered the insurance provisions specified in the parameters apply and when "0" is entered none of the LTC Insurance Parameters apply. Options 2 and 3 were unique proposals that could not be specified within the general parameters.

PERCENT DISABLED ALLOWED TO BUY INSURANCE	100.0
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This parameter allows the user to specify whether or not the disabled persons over age 65 are permitted to purchase long term care insurance. Entering "0.0" means that no disabled persons (those with any IADL or ADL impairment) may buy and entering "100.0" means that all disabled persons are eligible to buy insurance. The value is read as a percentage.

PERCENT OF PREMIUM PAID BY INSURED INSTITUTIONALIZED	2.0
--	-----

This parameter specifies whether or not premium payments are waived while a purchaser is in the nursing home. In the model, persons eligible to receive benefits are identified through premium payments. Therefore, to simulate a premium waiver the PERCENT OF PREMIUM PAID BY THE INSTITUTIONALIZED parameter should be set at "2.0" rather than "0.0" because if no premium payments are recorded, a nursing home resident would no longer receive benefits. If there is no premium waiver the parameter should be set at "100.00". The value is read as a percentage.

BASE YEAR FOR DOLLARS	1989
	1000

This parameter specifies the base year for the payments and premiums specified in the parameters for long term care insurance.

AGE ELIGIBLE TO RECEIVE BENEFITS	65

This parameter is similar to the AGE ELIGIBLE TO RECEIVE BENEFITS parameter in the Public Policy parameters.

## b. Policy Benefits

These parameters define the benefits allowed under the long term care insurance policy to be simulated.

	NURSING HOME \$	ESCALATION	NIS \$	ESCALATION	CAP ESCALATION AT AGE YEARS	ESCALATION 1=% 2=\$
DAILY BENEFIT	90	5.0	60	5.0	999	1
NOTE: INSURANCE CHARGE. TO LIMIT ABOVE.	E ALWAYS PAYS DAILY CHARGE	S MINIMUM OF DO TO DOLLAR AM	OLLAR AMO OUNT USE	OUNT (FROM ABO NEGATIVE NUM	OVE) AND APPLI BER IN DOLLAR	CABLE DAILY AMOUNT

These parameters specify how much the long term care insurance policy will pay per day for nursing home care and per visit for home care. Please note that insurance always pays the lesser of the daily/visit benefit amount specified and the applicable daily/visit charge (see Table 32: Average Daily Rates for Nursing Home Care on page 32). The purchaser is responsible for the difference from their income and assets. To limit the daily/visit charge to the policy provisions, enter a negative number in the dollar amount parameter (e.g., -90). Entering a negative number means that if the private pay daily rate were \$1 00, the beneficiary would not have to pay the \$1 0 difference between the daily rate and the policy's reimbursement amount.

The ESCALATION parameter allows the user to specify how benefits paid under the policy should increase over time. The annual percentage increase is read as a percentage. Escalation can be capped at a specified age (CAP ESCALATION AT AGE YEARS). The escalation of benefits may be compounded annually ("1") or on an additive basis ("2") of the original benefit amount. For example, selecting "1" would mean a \$100 per day benefit escalated at five percent would be \$105 in the second year, \$110.25 in the third year, and \$155 by the tenth year after purchase (\$100 +  $(1.05)^9$ ). Selecting "2" for the escalation method would mean a \$100 per day benefit escalated at five percent would be \$105 in the third year and \$145 by the tenth year after purchase (\$100 + ((100 \* .05) \* 9)).

	NURSING			MAXIMUM PROPORTION TO ADD TO ASSET
	HOME	NIS	COMBINED	PROTECTION
DEDUCTIBLE DAYS/VISITS	30	30	0	
MAXIMUM DAYS/VISITS	99999	99999	0	
MAXIMUM DOLLAR AMOUNT	99999	99999	0	0
COPAYMENT (%)	20.0	20.0		
ADL REQUIRED	0	1		
<ol> <li>TO USE COMBINED MAXIMUM AND APPROPRIATE NUMBER</li> <li>COMBINED DEDUCTIBLE DAY</li> <li>TO MAKE MAXIMUM DAYS/VIS HOME, ENTER -1 UNDER NIS.</li> <li>ADLS ARE FUNCTIONAL FOR 0 = NONE         <ol> <li>I = IALD ONLY</li> <li>I = IALD ONLY</li> <li>I = 3+ ADLS</li> <li>I = 3+ ADLS (85% OF 2+ A)</li> </ol> </li> <li>TO ADD THE DOLLAR AMOUN MAXIMUM PROPORTION TO E OTHERWISE ENTER 0.</li> </ol>	M DAYS/VISITS, ENT UNDER COMBINEE (S/VISITS NOT AVAI SITS FOR NIS DEPE NIS ONLY. NURISN ADLS) NT SPENT TO THE P BE ADDED (MAXIMU	ER 0 UNDEF ). LABLE. NDENT ON M G HOME MU ROTECTED M DOLLAR /	R NURSING HOM NUMBER OF DAY IST BE 0. ASSET AMOUNT AMOUNT ROW O	E AND NIS, 'S IN NURSING ENTER THE NLY),

THE DEDUCTIBLE DAYS/VISITS, COPAYMENT (%), and ADL REQUIRED parameters are similar to the ones in the Public Policy parameters and the COMBINED and MAXIMUM PROPORTION TO ADD TO ASSET PROTECTION do not apply to these parameters.

The MAXIMUM DAYS/VISIT and the MAXIMUM DOLLAR AMOUNT are also similar to those in the Public Policy Parameters, except they have some additional features. Under the long term care insurance parameters is it possible to specify a maximum for both nursing home and home care combined. This is accomplished be entering "0" under the NURSING HOME and NIS and specifying the total services allowed for both nursing home and home care combined under the COMBINED column. When not in use COMBINED should be set to "0". It is also possible to make the number of home care visits allowed dependent upon how many days nursing home benefits have been paid by specifying a "1" under the NIS column. The combined feature must be used for the MAXIMUM DOLLAR AMOUNT parameter. The last column applies only to the MAXIMUM DOLLAR AMOUNT parameter.

The MAXIMUM PROPORTION TO ADD TO ASSET PROTECTION allows the user to specify a percentage of the maximum dollar amount that is permitted to be added to the Medicaid asset test based on the amount of benefits paid. For example, if a state instituted a program similar to some of the Robert Wood Johnson proposals that allows the amount of insurance paid to be added to the Medicaid assets this parameter would be used. The value is read as the proportion to be added to the Medicaid eligibility asset test.

#### c. Claims Adjusting

This group of parameters is an attempt to model the enforcement of policy restrictions. It is generally not used.

CLAIMS ADJUSTING	
AVAILABLE ? (0=NO, 1=YES)	0

This parameter turns the claims adjusting on and off. The default is "0" to disable these parameters.

	PERCENT ALLOWED BENEFITS		
DISABILITY LEVEL	NURSING HOME	NIS	
IADL	50	50	
1 ADL	75	75	
2 ADLS	100	100	

These parameters allow the user to specify the percentage of persons who are covered by long term care insurance and who would be allowed benefits based on their disability level. They are read as a percentage.

#### d. Premiums

The next group of parameters indicates specifics concerning premium prices, when purchase should begin, and who may purchase insurance. The parameters also allow group insurance to be modeled.

GROUP COVERAGE PARAMETERS:	
AVAILABLE ? (0=NOSEE NOTES)	0
LAPSES WHEN GROUP ELIGIBILITY ENDS? (1=YES, 0=NO)	0
NOTE:	
1. FOR GROUP COVERAGE:	
0 = NO GROUP COVERAGE AVAILABLE	
1 = REQUIRES PENSION COVERAGE	
2. GROUP COVERAGE TAKES PRECEDENCE OVER INDIVIDUAL	

These parameters define the group coverage availability. "0" in the AVAILABLE? parameter indicates that group coverage is not available. A "1" indicates that group coverage is available. The group coverage requires a purchaser to have pension coverage. Group coverage takes precedence over individual policies. If group insurance is not available, the parameters described below for group should be set to "0" or "0.0".

		INDIVIDUAL	GROUP
START YEAR		1989	1989
END YEAR	Ì	2025	2025
ESCALATION RATE (INSURED)		4.2	4.2
ESCALATION RATE (NEW PURCHASERS)		4.2	4.2

These parameters specify the rate of increase in premiums. ESCALATION RATE (INSURED) defines the increase once a person has purchased insurance. A flat premium would be specified with "0.0". The ESCALATION RATE (NEW PURCHASERS) parameter specifies the increase in premiums for initial purchasers after the start year. Both these parameters are read as a percentages.

PERCENT ELIGIBLE TO USE	100.0	100

This parameter defines the percent of people eligible for benefits similar to the Public Policy parameters.

AGE START ELIGIBLITY	65	45
AGE END ELIGIBILITY (START YEAR)	999	64
AGE END ELIGIBILITY (OTHER YEARS)	999	45

These parameters can be used to permit only certain age cohorts to purchase insurance initially and in years after the start year. For example, most long term care insurance policies are not available for initial purchase to elderly persons age 80 and over, therefore specifying the AGE END ELIGIBILITY (START YEAR) to be "79" would simulate this practice. The AGE END ELIGIBILITY (OTHER YEARS) parameter is primarily used to restrict purchase in future years to a smaller age band than in the initial year. It is usually used when the user wishes to specify "one-time" purchase probability rather than annual purchase probability. For example, if the user wishes 25 percent of all working-aged persons for which premiums as a percent of income are less than one percent to purchase long term care insurance the AGE START ELIGIBILITY parameter would be set to "45", the AGE END ELIGIBILITY (START YEAR) would be set to "64", and the AGE END ELIGIBILITY (OTHER YEARS) would be set to "45". This would have the effect of allowing 25 percent of eligible workers meeting the purchase criteria to purchase group long term care insurance in the start year and 25 percent of all persons turning age 45 in subsequent years who meet the purchase criteria to purchase. Alternatively, annual purchase probabilities could be developed such that an increasing number of elderly of all ages purchase over time by setting lower purchase probabilities (e.g., 5 percent) and setting AGE END ELIGIBILITY (OTHER YEARS) to "999" so that all elderly meeting the purchase criteria and a random number less than the purchase probability may purchase in any given year.

PERCENT WITH REDUCED PREMIUMS	0	0.0
REDUCED PREMIUM PERCENT	0	0.0

These parameters are generally used under the group insurance. They permit a specified percentage of those purchasing insurance to receive reduced premiums (i.e., under an employer-sponsored plan where the employer subsidizes premiums). Both parameters are read as a percentages.

PERCENT ELIGIBLE TO BUY	100	100
INCREASE PER YEAR (%)	0	0
MAX PERCENT	100	100

This group of parameters allow the user to begin at a specified level of persons eligible (PERCENT ELIGIBLE TO BUY), and have a gradual buy in over time (INCREASE PER YEAR (%)) that peaks at a specified percentage of the persons eligible to buy that are exposed to the purchase probabilities (MAX PERCENT). These parameters are read as percentages.

SOURCE OF PREMIUMS:	SOURCE	OPTION
PREMIUMS FOR SELF EMPLOYED	0	0
PREMIUMS FOR EMPLOYED	0	0
PREMIUMS FOR RETIRED	0	0
PREMIUMS FOR UNEMPLOYED	0	0

This parameter defines from where the model should derive premiums for different categories of persons. Premiums do not change with a change in status (e.g., going from employed to retired). Premiums can be directly entered into the parameter list using source "0" or can be read from predetermined external files. The sources of external file premiums are as follows:

NOTES: SOURCES ARE AS FOLLOWS:	
0 = TABLE BELOW (SET OPTION TO 0)	
1 = LOOK-UP TABLE 1	
2 = LOOK-UP TABLE 2	
3 = LOOK-UP TABLE 3	
4 = LOOK-UP TABLE 4	

Look up tables are tables specified from an external source and are discussed in more detail in the "Programmer's/Operator's Manual."

The table below is where monthly premiums are entered directly into the parameters (SOURCE and OPTION set to "0". The first column if for individual policies and the second column is for group policies.

AGE MONTHLY AMOUNT		
25	36.71	27.02
26	36.71	27.02
27	36.71	27.01
28	36.71	27.02
29	36.71	27.02
30	42.32	36.81
31	42.32	36.01
32	42.32	36.01
33	42.32	36.01
34	42.32	36.01
35	42.32	36.01
36	42.32	36.01
37	42.32	36.01
38	42.32	36.01
39	42.32	36.01
40	42.32	36.01
41	42.32	36.01

AGE	AGE MONTHLY AMOUNT	
42	42.32	36.01
43	42.32	36.01
44	42.32	36.01
45	60.30	53.33
46	60.30	53.33
47	60.30	53.33
48	60.30	53.33
49	60.30	53.33
50	88.22	79.02
51	88.22	79.02
52	88.22	79.02
53	88.22	79.22
54	88.22	79.22
55	107.94	97.22
56	107.94	97.23
57	107.94	97.23
58	107.94	97.23
59	107.94	97.23
60	132.59	116.96
61	132.59	116.96
62	132.59	116.96
63	132.59	116.96
64	132.59	116.96
65	164.57	148.96
66	164.57	148.96
67	164.57	148.96
68	164.57	148.96
69	164.57	148.96
70	204.97	184.59
71	204.97	184.59
72	204.97	184.59
73	204.97	184.59
74	204.97	184.59
75	257.82	229.35
76	257.82	229.35
77	257.82	229.35
78	257.82	229.35
79	321.33	280.97
80	0.00	0.00
81	0.00	0.00
82	0.00	0.00
83	0.00	0.00
84	0.00	0.00
85+	0.00	0.00

## e. Tax Credit Parameters

These parameters are used to model tax credits for the purchase of long term care insurance.

AGE	PERCENT	MAX \$	INCOM	E CAP
<=	CREDIT	AMOUNT	MARRIED	SINGLE
40	0	0	40000	25000
50	0	0	40000	25000
60	0	0	40000	25000
70	0	0	40000	25000
999	0	0	40000	25000

The parameters allow the user to specify up to five age groups with varying percentage of the premium to be credited (PERCENT CREDIT), maximum credit amounts (MAX \$ AMOUNT), and income limits for receiving the full percentage of the credit (INCOME CAP). Insurance premiums are reduced only for persons who pay taxes and the credit is non-refundable. When not in use the PERCENT CREDIT and MAX AMOUNT should be set to "0". The PERCENT CREDIT parameter is read as a percentage.

ESCALATION RATE FOR \$	5.5

This parameter defines the annual rate of increase for the maximum dollar amount allowed and the income restrictions for the tax credit parameters. The ESCALATION RATE FOR \$ parameter is read as a percentage.

% POINT REDUCTION PER \$1000	1.0
------------------------------	-----

This parameter decreases the percentage of the credit allowed for each \$1,000 increase above the INCOME CAP specified above. The value is read as a percentage.

MA	RRIED CAP	60000
SIN	GLE CAP	45000
NO	TE:	
1.	INSURANCE PREMIUMS WILL BE REDUCED ONLY FOR THOSE WHO	O PAY TAXES.
2.	THOSE WHO PAY LESS TAXES THAN THE MAXIMUM ALLOWABLE T	AX CREDIT
	WILL BE PERMITTED TO HAVE THEIR PREMIUMS REDUCED ONLY U	JP TO THE
	AMOUNT THAT IS PAID IN TAXES.	

These parameters specify the maximum income for receiving the tax credit. Persons with income higher than the values entered in these parameters would not receive a tax credit.

#### f. Probability of Purchase

These parameters specify the probability of purchasing long term care insurance. There are a number of alternative groups for which separate probabilities can be specified.

PURCHASE PROBABILITIES SOURCE:	1
(1 = SEE PROBABILITY BY PREMIUM AS % OF INCOME TABLE BELOW,	
2 = EXTERNAL FILE (DEVICE 17),	
3 = EXTERNAL FILE (DEVICE 18),	
4 = SEE PROBABILITY BY POVERTY LEVEL TABLE BELOW)	

This parameter specifies where the probabilities of purchase should be derived. Options "1" and "4" are standard table where probabilities can be entered into the parameter list. Option "1" has probabilities by premiums as a percent of income and option "4" has probabilities by income as a percent of the poverty level. Under these tables, probabilities can be specified for up to four user defined age groups, for workers and non-workers, and for persons with assets above and below specified levels. The asset levels can be either financial assets (non-housing only) or total assets (financial and housing) and the amount required can vary based on marital status. Financial assets are specified by entering a positive value in ASSET LEVEL GREATER THAN OR EQUAL TO and total assets are specified with a negative value.

The other two sources of premiums are external files, options "2" and "3". These options permit the user to assign a file of probabilities to one of the devices (Option "2" is Device 17 and Option "3" is Device 18). The use of external files for purchase probabilities is discussed in more detail in the "Programmer's/Operator's Manual."

#### PURCHASE PROBABILITIES BASED ON ASSET LEVEL AND INCOME

ASSET LEVEL GREATER THAN OR EQUAL TO (SINGLE)	25000.0
ASSET LEVEL GREATER THAN OR EQUAL TO (FAMILY)	25000.0
NOTE: POSITIVE ASSET LEVEL INDICATES FINANCIAL ASSETS ONLY, N	IEGATIVE
ASSET LEVEL INDICATES FINANCIAL AND HOUSING ASSETS.	

	1		2	3	4
AGE GROUPS <=		50	59	64	84

NON-WORKERS				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	0	0	0	5
1.5	0	0	0	5
2.0	0	0	0	5
2.5	0	0	0	4
3.0	0	0	0	4
3.5	0	0	0	3
4.0	0	0	0	3
4.5	0	0	0	2
5.0	0	0	0	0
5.5	0	0	0	0
6.0	0	0	0	0
6.5	0	0	0	0
7.0	0	0	0	0
7.5	0	0	0	0
8.0	0	0	0	0
8.5	0	0	0	0
9.0	0	0	0	0
9.5	0	0	0	0
10.0	0	0	0	0
10.5	0	0	0	0
11.0	0	0	0	0
11.5	0	0	0	0
12.0	0	0	0	0
12.5	0	0	0	0
13.0	0	0	0	0
13.5	0	0	0	0
14.0	0	0	0	0
14.5	0	0	0	0
15.0	0	0	0	0
PROBABILITY BY POVERT	Y LEVEL:			
<100%	0	0	0	0
100-150%	0	0	0	0
150-200%	0	0	0	0
200-300%	0	0	0	0
300% +	100	100	100	100

WORKERS				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	15	20	25	0
1.5	10	15	20	0
2.0	5	10	15	0
2.5	0	5	10	0
3.0	0	5	5	0
3.5	0	0	5	0
4.0	0	0	5	0
4.5	0	0	0	0
5.0	0	0	0	0
5.5	0	0	0	0
6.0	0	0	0	0
6.5	0	0	0	0
7.0	0	0	0	0
7.5	0	0	0	0
8.0	0	0	0	0
8.5	0	0	0	0
9.0	0	0	0	0
9.5	0	0	0	0
10.0	0	0	0	0
10.5	0	0	0	0
11.0	0	0	0	0
11.5	0	0	0	0
12.0	0	0	0	0
12.5	0	0	0	0
13.0	0	0	0	0
13.5	0	0	0	0
14.0	0	0	0	0
14.5	0	0	0	0
15.0	0	0	0	0

## ASSET LEVEL LESS THAN MAX:

NON-WORKERS				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	0	0	0	5
1.5	0	0	0	5
2.0	0	0	0	5
2.5	0	0	0	4
3.0	0	0	0	4
3.5	0	0	0	3
4.0	0	0	0	3
4.5	0	0	0	2
5.0	0	0	0	0
5.5	0	0	0	0
6.0	0	0	0	0
6.5	0	0	0	0
7.0	0	0	0	0
7.5	0	0	0	0
8.0	0	0	0	0
8.5	0	0	0	0
9.0	0	0	0	0
9.5	0	0	0	0
10.0	0	0	0	0
10.5	0	0	0	0
11.0	0	0	0	0
11.5	0	0	0	0
12.0	0	0	0	0
12.5	0	0	0	0
13.0	0	0	0	0
13.5	0	0	0	0
14.0	0	0	0	0
14.5	0	0	0	0
15.0	0	0	0	0
PROBABILITY BY POVERTY	Y LEVEL:			
<100%	0	0	0	0
100-150%	0	0	0	0
150-200%	0	0	0	0
200-300%	0	0	0	0
300% +	100	100	100	100

## g. Underwriting Function

These parameters allow the user to specify adjustment factors to reduce the purchase probabilities dependent on the number of years after purchase a person becomes disabled. It is an attempt to model underwriting in the long term care insurance industry and would be used in conjunction with the long term care insurance parameters. The rationale for this underwriting function is that insurance underwriters are more effective at "predicting" disability the closer person is to becoming disabled.

AVAILABLE? (0=NO, 1=YES) 0
----------------------------

This parameter turns on and off the underwriting function. Setting the parameter to "0" is the default for disabling the parameters.

	YEAR AFTER PURCHASE BECOMES DISABLED	ADJUSTMENT FACTOR FOR PURCHASE PROBABILITY	
1		0.65	
2		0.72	
3		0.79	
4		0.86	
5		0.93	

These parameters specify the adjustment factors. They are multiplied times the purchase probabilities. Adjustment factors should be expressed with decimal places because they are not read as percentages (i.e., 95 percent should be entered as "0.95").

## h. Coverage for Parents

AVAILABLE (0=NO, 1=YES)

These probabilities can be used to allow elderly persons who have lower income to have their likelihood of purchasing insurance increased, as if their children might be subsidizing their premium payments. The factors specified under these parameters increases the probability of purchase specified in the Purchase Probabilities by (1 + (specified factor/100)). The parameters are read as percentages.

0

PREMIUM AS %	05.00				
OF INCOME	65-69	/1-/4	/5-/9	80-84	85+
<1	0	0	0	0	0
<2	0	0	0	0	0
<3	0	0	0	0	0
<4	0	0	0	0	0
<5	0	0	0	0	0
<6	10	10	10	10	10
<7	10	10	10	10	10
<8	10	10	10	10	10
<9	10	10	10	10	10
<10	10	10	10	10	10
<11	10	10	10	10	10
<12	10	10	10	10	10
<13	10	10	10	10	10
<14	10	10	10	10	10
<15+	10	10	10	10	10

## i. Lapse Assumptions (in percent)

The lapse assumption parameters specify the conditions under which or the probability a person will lapse their premium payments for long term care insurance.

LAPSE CRITERIA:	
SELF-EMPLOYED	2
EMPLOYED	2
RETIRED	2
UNEMPLOYED	2

Separate lapse criteria can be specified for the above groups. The sources of lapse probabilities are as follows:

#### NOTES:

-	-
	1 = DELTA OR MAX PERCENT (SEE BELOW)
	2 = DELTA AND MAX PERCENT (SEE BELOW)
	3 = TERM LIFE PROBABILITY LOOK-UP
	4 = PENSION LIFE PROBABILITY LOOK-UP
	5 = HIGH EARLY-CASH VALUE PROBABILITY LOOK-UP

Options "1" and "2" are entered in the parameter list. The DELTA parameter indicates the annual percentage point increase in the premium as a percent of income that is permissible. The MAXIMUM parameter indicates a maximum premium as a percent of income that is allowed before lapsing. Option "1" has a purchaser lapse if he or she meets the delta or maximum change criteria. Option "2" has a purchase lapse if he or she meets both the delta and maximum change criteria. For example, if the DELTA was set to "2" and the MAXIMUM was set to "4", a person who's premium as a percent of income increased three percentage points in the second year of purchase would lapse the policy under Option "1" and not under Option "2". Under Options "1" and "2" lapses may be specified separately for workers and non-workers and by age. Specifying the use of look-up tables for lapse criteria (Option 3-5) is discussed in the "Programmer's/Operator's Manual."

	WORKER		NON-WORKER	
	DELTA	MAXIMUM	DELTA	MAXIMUM
25	9999.00	4.0	9999.00	4.0
26	9999.00	4.0	9999.00	4.0
27	9999.00	4.0	9999.00	4.0
28	9999.00	4.0	9999.00	4.0
29	9999.00	4.0	9999.00	4.0
30	9999.00	4.0	9999.00	4.0
31	9999.00	4.0	9999.00	4.0
32	9999.00	4.0	9999.00	4.0
33	9999.00	4.0	9999.00	4.0
34	9999.00	4.0	9999.00	4.0
35	9999.00	4.0	9999.00	4.0
36	9999.00	4.0	9999.00	4.0
37	9999.00	4.0	9999.00	4.0
38	9999.00	4.0	9999.00	4.0
39	9999.00	4.0	9999.00	4.0
40	9999.00	4.0	9999.00	4.0
41	9999.00	4.0	9999.00	4.0
42	9999.00	4.0	9999.00	4.0
43	9999.00	4.0	9999.00	4.0
44	9999.00	4.0	9999.00	4.0
45	9999.00	4.0	9999.00	4.0

	WORKER		NON-WORKER	
	DELTA	MAXIMUM	DELTA	MAXIMUM
46	9999.00	4.0	9999.00	4.0
47	9999.00	4.0	9999.00	4.0
48	9999.00	4.0	9999.00	4.0
49	9999.00	4.0	9999.00	4.0
50	9999.00	5.0	9999.00	5.0
51	9999.00	5.0	9999.00	5.0
52	9999.00	5.0	9999.00	5.0
53	9999.00	5.0	9999.00	5.0
54	9999.00	5.0	9999.00	5.0
55	9999.00	5.0	9999.00	5.0
56	9999.00	5.0	9999.00	5.0
57	9999.00	5.0	9999.00	5.0
58	9999.00	5.0	9999.00	5.0
59	9999.00	5.0	9999.00	5.0
60	9999.00	6.0	9999.00	6.0
61	9999.00	6.0	9999.00	6.0
62	9999.00	6.0	9999.00	6.0
63	9999.00	6.0	9999.00	6.0
64	9999.00	6.0	9999.00	6.0
65	9999.00	7.0	9999.00	7.0
66	9999.00	7.0	9999.00	7.0
67	9999.00	7.0	9999.00	7.0
68	9999.00	7.0	9999.00	7.0
69	9999.00	7.0	9999.00	7.0
70	9999.00	8.0	9999.00	8.0
71	9999.00	8.0	9999.00	8.0
72	9999.00	8.0	9999.00	8.0
73	9999.00	8.0	9999.00	8.0
74	9999.00	8.0	9999.00	8.0
75	9999.00	8.0	9999.00	8.0
76	9999.00	8.0	9999.00	8.0
77	9999.00	8.0	9999.00	8.0
78	9999.00	8.0	9999.00	8.0
79	9999.00	8.0	9999.00	8.0
80	9999.00	8.0	9999.00	8.0
81	9999.00	8.0	9999.00	8.0
82	9999.00	8.0	9999.00	8.0
83	9999.00	8.0	9999.00	8.0
84	9999.00	8.0	9999.00	8.0
85+	9999.00	8.0	9999.00	8.0

## j. Death Benefit Tables for Private Sector LTC Policies

The death benefit tables for specific long term care insurance policies have been incorporated into the model. A death benefit for married couples is available when this parameter is invoked. The dollar amount of the death benefit is based on the policy that is purchased and the age the deceased purchased the policy and the age he/she died. These tables are independent of the Credited Contribution Program and are for use with private long term care insurance simulations. There are twelve options under the death benefit payments to survivors. Each option calls an external file that contains the values for death benefits to survivors based on the age at death and the age of purchase for

the policies specified. These options are designed to match the premium structure of specific LTC policies, summarized as follows:

DEACH BENEFIT POLICY:		0
0=NONE	•	
1=EMPLOYEE POLICIES, 730-DAY LIFETIME MAXIMUM AND NO INDEXING		
2=INDIVIDUAL POLICIES, 365-DAY LIFETIME MAXIMUM AND NO INDEXING		
3=INDIVIDUAL POLICIES, 730-DAY LIFETIME MAXIMUM AND NO INDEXING		
4=INDIVIDUAL POLICIES, 1825-DAY LIFETIME MAXIMUM AND NO INDEXING		
5=INDIVIDUAL POLICIES, 365-DAY LIFETIME MAX AND 5%/YEAR INDEXING		
6=INDIVIDUAL POLICIES, 730-DAY LIFETIME MAX AND 5%/YEAR INDEXING		
7=INDIVIDUAL POLICIES, 1825-DAY LIFETIME MAX AND 5%/YEAR INDEXING		
8=EMPLOYEE POLICIES, 365-DAY LIFETIME MAX AND NO INDEXING		
9=EMPLOYEE POLICIES, 1825-DAY LIFETIME MAX AND NO INDEXING		
10=EMPLOYEE POLICIES, 365-DAY LIFETIME MAX AND 5%/YEAR INDEXING		
11=EMPLOYEE POLICIES, 730-DAY LIFETIME MAX AND 5%/YEAR INDEXING		
12=EMPLOYEE POLICIES, 1825-DAY LIFETIME MAX AND 5%/YEAR INDEXING		

## k. Reduced Paid-Up Benefit

Nonforfeiture reduced benefits under the LTC insurance Parameters permits vested policyholders (four years of paying premiums) to retain a percentage of their long term care benefits based their age at purchase and lapse. The percentage of reduced paid-up benefit is dependent on whether or not a policy benefits are indexed.

REDUCED PAID-UP OPTION:	0
(0=NONE, 1=NO INDEXING, 2=INDEXING)	

This parameter can be set to no reduced paid up ("0"), reduced paid up for policies with no indexing of benefits ("1"), and policies with indexing of benefits ("2").

## I. LTC Insurance Parameters - Option 2

Options set in this section establish the conditions to be applied for the second of two possible policy options to be offered to each respondent. All options are defined in the same way as they were in the discussion above.

|--|

## 2. Public Policy Parameters

The public policy parameters are used primarily to model federal proposals for universal nursing home and home care benefits and Medicaid home care proposals.

AVAILABLE ? (1=YES, 0=NO)	1
ACCUMULATE WITH (1=MEDICARE, 2=LTC INS.)	2

This parameter can be used to specify where benefits paid under the various forms of federal public policy parameters are recorded in the output tables. Generally, LTC INS. is used because the current base case does not use this variable to record any financing sources. If both the public policy parameters and the long term care

insurance parameters are invoked simultaneously (i.e., under a back-end nursing home proposal where people purchase private long term care insurance to cover the deductible period) the user may wish to use the MEDICARE option for recording public policy benefits. Specifying that benefits are recorded under Medicare allows the benefits paid under the public policy to be distinguished from benefits paid by long term care insurance because expenditures for the public policy program and long term care insurance will not be recorded in the same output column.

PROGRAM STARTS IN YEAR	1989
BASE YEAR FOR DOLLARS	1989
PERCENT ELIGIBLE	100.0

These parameters specify the first year of the program and the base year for the payment rates. The base year for the payment rate is the year in which the specified payment rate is based.

The percent eligible parameter specifies the percent of persons who are eligible for the program. The default is "I 00.0". If for some reason one wishes to specify that only a portion of the eligible population should receive benefits then a number less than 1 00.0 may be entered (i.e., under a state option proposal, a subset of states representing 6 0 percent of the U.S. population choose to participate, then "60.0" could be entered). The PERCENT ELIGIBLE parameter is read as a percentage.

START AGE	65
END AGE	999

Generally the default for the AGE ELIGIBLE TO RECEIVE BENEFITS parameter would be "65". If a proposal specifies that beneficiaries may not receive benefits until after a certain age this parameter can be changed. The model does not simulate benefits before age 65, therefore numbers less than 65 default to 65 in the simulation. Similarly, if benefits are to end at a specified age the END AGE parameter can be modified. The default for the END AGE parameter is "999" or death.

## a. Program Benefits

The next set of parameters defines the allowed benefits under public policy proposals for nursing home care and home care (NIS). Nursing home and home care or either type of service can be specified under a proposal. To specify one and not the other, the parameters for the service that is not included should be set to 0.

	NURSING HOME	NIS
DEDUCTIBLE DAYS/VISITS	0	0
DEDUCTIBLE \$	0	0

These parameters specify either: 1) the number of days someone must be in a nursing home or the number of home care visits that must be received before program benefits begin; or 2) a dollar amount of services required to be received before program benefits begin. Services paid under Medicare are counted toward the deductible period.

The dollar amount for a deductible escalates at the increase in the Consumer Price Index (CPI). DEDUCTIBLE DAYS/VISITS and DEDUCTIBLE \$ can not be used together. One or the other, or neither can be specified. If no deductible applies, specify "0" in each of the parameter options.

PUBLIC PAYMENT RATE	72.90	61.70
ESCALATION RATE FOR PAYMENT	5.5	5.5

These parameters specify the benefit payments and rate of increase for the proposed program. Benefits payments are per them for nursing home care and per visit for home care. Under the public policy parameters the public payment rate is payment in full for services. Therefore, it is possible to have the public program pay a rate that is lower than the private pay rate without requiring the beneficiary to contribute the difference. The escalation rate for benefits specifies how much the benefit payments should increase annually. Entering "0.0" will cause the benefit payments to remain flat over time and therefore erode in real terms. Specifying "5.5" means that benefit payments will keep pace with long term care inflation. The ESCALATION FOR PAYMENT parameter is read as a percentage.

COPAYMENTS (%)	20.0	20
DAYS/VISITS OF COPAYMENT	999999	999999

These parameters specify whether or not a copayment for services is required from beneficiaries and how long the copayment is required. The copayment is a percent of the PUBLIC PAYMENT RATE. For example, if the public payment rate for nursing home care is \$1 00 per day and the copayment is 20 percent, persons receiving benefits would be required to pay \$20 per day and the program would pay \$80 per day. If no copayment is required this parameter should be set to "0". Unless a copayment is only required for a limited period of time, the DAYS/VISITS OF COPAYMENT should be set to "999999". The COPAYMENT (%) parameter is read as a percentage.

|--|

This parameter applies to home care only. Nursing home care must be set to "0". The options for this parameter include:

0 = NONE		
1 = IADL Only		
2 = 1 + ADLs		
3 = 2 + ADLs		

IADLs and ADLs used in defining disability are detailed in the "Model Assumption." In order to specify a three or more ADL requirement, the 2+ ADL criteria is used in conjunction with the induced demand parameter. See the induced demand parameter on page 47 for a more detailed discussion.

MAXIMUM DAYS/VISITS	30	999999
MAXIMUM \$	999999	999999

These parameters specify how long benefits are to be paid. To specify a one year nursing home benefit "365" should be entered in the MAXIMUM DAYS/VISIT parameter. This is a lifetime maximum which means that days of benefit are accumulated across nursing home stays unless the EPISODES OF CARE ALLOWED parameter described below is used. For unlimited benefits enter "999999" in the MAXIMUM DAYS/VISIT and the maximum \$ parameters. The MAXIMUM \$ parameter should be set at "999999" if the benefit period takes precedence. If a proposal pays up to a specified dollar limit the MAXIMUM \$ parameter should be used and the MAXIMUM DAYS/VISIT parameter should be set to "999999". The amounts in the MAXIMUM \$ parameter escalate at the rate of increase in the CPI.

EPISODES OF CARE ALLOWED	0
DAYS BETWEEN EPISODES REQ'D	183

These parameters apply to nursing home care only. They allow the user to override the MAXIMUM DAYS/VISIT parameter to allow a per episode maximum rather than a lifetime maximum. Setting the EPISODES OF CARE ALLOWED parameter to "0" disables both these parameters. The DAYS BETWEEN EPISODES REQ'D parameter permits the user to specify the length of time necessary between nursing home stays to constitute an episode. For example, if the EPISODES OF CARE ALLOWED was set to "0" and the MAXIMUM DAYS/VISIT for nursing home care was 730 days (two years) with no deductible, a person who had two 18 month nursing home stays would receive benefits for their entire first stay and six months of their second stay. If, on the other hand, the EPISODES OF CARE ALLOWED was set to "3", under the same circumstances the example person would have both stays fully covered because each episode was less than two years.

## b. Low Income Protection

The low income protection parameters are used in conjunction with the COPAYMENT parameter and allow the user to specify a sliding scale for the copayment amount based on income. The portion of the copayment not paid by the beneficiary is then picked up by the program and recorded with the program payments.

LOW INCOME PROTECTION				
		% PAID BY MEDICAID		
INCOME LEVEL		NURSING HOME	NIS	
< SSI		100		100
SSI - POVERTY		100		100
100-150 % POV		75		75
150-200 %	Í	50		50
200-250 %		0		0
250-300 %	Í	0		0

The percent of the copayment subsidized by the program should be entered in these parameters. If there is no subsidy "0" (i.e., the consumer pays the entire

copayment) should be entered and "100" should be entered for a full subsidy (i.e., the government pays the entire copayment). These parameters are read as percentages.

## c. Medicaid NIS

The Medicaid NIS parameters allow the user to specify Medicaid home care reform proposals.

MEDICAID NIS	
OVER-RIDE DEFAULTS	0

This parameter specifies whether or not the specifications of the current law Medicaid should be retained. When the parameter is set to "0" none of the parameters applying to Medicaid NIS apply to the simulation and current law prevails. When the parameter is set to "1" the eligibility criteria of the Medicaid NIS parameters take precedence but the current Medicaid program continues to exist with persons not eligible under the criteria on the Medicaid NIS parameters but eligible under the current program still receiving Medicaid benefits (e.g., if 2 or more ADL impairments are required under the Medicaid reform proposal, persons currently eligible for Medicaid home care financing with less than 2 ADLs would still receive Medicaid payments.).

START YEAR	1989
This parameter specifies the year the program starts.	
INCOME LIMIT (SINGLE)	438
INCOME LIMIT (MARRIED)	572
ASSET LIMIT (SINGLE)	2000
ASSET LIMIT (MARRIED)	3000

These parameters specify the monthly income and financial asset limits to be eligible for the proposed Medicaid home care benefit. Income and asset limits escalate with the CPI.

ADL REQUIRED	3
--------------	---

This parameter is similar to the ADL parameter described above.

PARTICIPATION RATES (IN %)	
CURRENT USERS	50.0
COGNITIVE	13.8
OTHER DISABLED	20.0
COGNITIVE	11.2

These parameters allow the user to specify the percent of eligible current home care users and other eligible disabled persons not currently receiving home care who would participate in a proposed program. It is an alternative to specifying induced demand. For example, it is conceivable that not everyone currently receiving home care who would be eligible for a program would choose to participate and 20 percent of eligible persons who do not receive home care under current law would participate. If

this is the case CURRENT USERS would be something less than 100.0 and OTHER DISABLED would be set at "20.0". These parameters also allow the user to incorporate cognitively impaired persons since the model's ADL definitions do not include the cognitively impaired. When using the Medicaid NIS parameters and the induced demand parameter for home care the CURRENT USERS should be set to "100.0" and the other participation rate parameters set to "0". The values are read as percentages.

COST SHARING (IN %)	
< SSI	5
SSI - POVERTY	5
100 - 200	10
200 - 300	0
NOTES:	
1. INCOME AND ASSET LIMITS ESCALATE AT CPI	

These parameters specify the copayment required of persons receiving Medicaid home care benefits under the Medicaid NIS parameters. If no copayments is required the parameter should be set to "0". For a 20 percent copayments the parameters should be set to "20". The values are read as percentages.

## 3. Base Case Parameters

Most of the parameters from this point on should not be changed by the user. These parameters define the long term care use under the base case. Altering these parameters will change the basic assumptions of the base case. Parameters that the user may want to alter are identified. Table numbers refer to tables presented in the model assumption documentation.

MODIFIED BASE CASE (1 =YES)	0

The modified base case simulates 30 percent of nursing home entrants with monthly income above 300 percent of the SSI limit, are not permitted to receive Medicaid financing. This is intended to approximate 401B states with restricted Medicaid eligibility.

ANNUAL START OF FORMAL HOME CARE USE PROBABILITIES FOR THE NON-INSTITUTIONALIZED DISABLED (%) TABLE 24			
DISABLITY LEVEL	MALES	FEMALES	
IADL ONLY	12.9	22.0	
1 ADL	15.9	26.6	
2+ ADLs	16.6	27.7	

THE NON-INSTITUTIONALIZED NON-DISABLED TABLE 25					
105		. <u>ES</u>		LES	
AGE	SINGLE	MARRIED	SINGLE	MARRIED	
65	1.56	0.92	2.14	1.26	
66	1.69	0.99	2.31	1.37	
67	1.82	1.07	2.50	1.48	
68	1.97	1.16	2.70	1.59	
69	2.12	1.25	2.91	1.72	
70	2.29	1.35	3.14	1.86	
	2.48	1.46	3.39	2.01	
12	2.67	1.58	3.66	2.17	
73	2.89	1.71	13.95	2.34	
74	3.12	1.85	4.26	2.53	
75	3.36	1.99	4.59	2.73	
76	3.63	2.15	4.95	2.95	
77	3.91	2.32	5.33	3.18	
78	4.22	2.51	5.75	3.43	
79	4.55	2.71	6.19	3.71	
80	4.91	2.92	6.67	4.00	
81	5.29	3.16	7.18	4.31	
82	5.70	3.41	7.73	4.65	
83	6.14	3.68	8.31	5.01	
84	6.61	3.96	8.94	5.40	
85	7.12	4.28	9.61	5.82	
86	7.66	4.61	10.33	6.27	
87	8.25	4.97	11.09	6.75	
88	8.87	5.36	11.91	7.27	
89	9.53	5.77	12.78	7.82	
90	10.25	6.22	13.70	8.42	
91	11.01	16.70	14.68	9.05	
92	11.81	7.21	15.72	9.73	
93	12.68	7.76	16.83	10.46	
94	13.59	8.36	18.00	11.23	
95	14.57	8.98	19.23	12.05	
96	15.61	9.65	20.54	12.93	
97	16.70	10.37	21.91	13.86	
98	17.86	11.14	23.35	14.86	
99	19.09	11.96	24.87	15.91	
100	20.39	12.83	26.46	17.02	

#### ANNUAL PROBABILITY OF STARTING TO USE FORMAL CHRONIC HOME CARE FOR THE NON-INSTITUTIONALIZED NON-DISABLED TABLE 25

PAID HOME CARE DISABILITY LEVEL PREVALENCE RATES (%) TABLE 26					
	TOTAL		IADL	1 ADL	2+ ADLS
MARRIED					
65-74	100.0		25.2	18.5	56.3
75-84	100.0	1 I	23.9	20.9	55.2
85+	100.0	Ì	16.7	16.7	66.6
UNMARRIED					
65-74	100.0		34.1	24.3	41.6
75-84	100.0	Ì	32.3	25.6	42.1
85+	100.0	Ì	33.9	37.8	28.3
TABLE 27: DISTRIBUTION OF MEDICARE LENGTH OF USE OF CHRONICALLY         DISABLED MEDICARE HOME HEALTH USERS (%)					
---	----------------------------	--	--	--	
DURATION (MONTHS)	PERCENTAGE DISTRIBUTION	ASSIGNED NUMBER OF MONTHS OF USE			
<3	59.0	2.0			
3-6	14.2	4.5			
6-12	9.6	9.0			
12-30	7.1	24.0			
30-60	7.0	48.0			
60+	3.1	72.0			

TABLE 28: MONTHLY NUMBER OF FORMAL VISITS BY FORMAL HOME CARE DISABILITY LEVEL					
VISITS	IADL	1 ADL	2+ ADLS	VISITS	
1-10	69.9	59.1	38.7	7	
11-20	8.4	8.0	11.8	15	
21+	21.7	32.9	49.5	32	

TABLE 29: PERCENTAGE DISTRIBUTION OF MEDICARE UNITS AMONG CHRONICALLY DISABLED PERSONS RECEIVING MEDICARE VISITS			
REIMBURSED VISI	rs	PROBABILITY	
1-9	6	39.9	
10-20	16	23.3	
21-30	27	12.1	
31-40	38	7.1	
41-50	49	4.6	
51-99	82	8.5	
100+	165	4.5	

TABLE 30: PERCENTAGE OF NON-INSTITUTIONALIZED NON-DISABLED PERSONSRECEIVING MEDICARE HOME HEALTH VISITS					
AGE MALES FEMALES					
65-74	3.	10 3.30			
75-84	4.8	30 4.80			
85+	9.4	16.40			

TABLE 31: INFORMAL HOME CARE PREVALENCE RATES FOR THE DISABLED					
AGE IADL 1 ADL 2+ ADLS					
65-74	83.5	84.0	95.8		
75-84	85.5	85.3	92.2		
85+	88.0	91.4	95.3		

TABLE HHA1: PERCENT OF CHRONICALLY DISABLED ELDERLY RECEIVING PAID	
HOME CARE WHO RECEIVE MEDICARE REIMBURSEMENT	
41.1	1

TABLE HHA2: RESPITE CARE	
ADL LEVEL	3
PERCENT	0
NUMBER OF HOURS	0
COST/HOUR (\$1984)	13
PERCENT COINSURANCE	20

The respite care parameters were used in modeling repealed provisions of the 1988 Medicare Catastrophic Coverage Act.

TABLE 32: AVERAGE DAILY RATES FOR NURSING HOME CARE BY SOURCE OF PAYMENT			
	CHARGE PER DAY ASSUMED IN	ANNUAL RATE OF INCREASE AFTER 1988	
PAYOR	CALENDAR YEAR 1988	(%)	
MEDICAID	55.30	5.5	
PRIVATE PAYOR	75.90	5.5	
MEDICARE	127.50	5.5	
LTC INSURANCE	66.40	5.5	

These rates can be modified under alternative simulations (e.g., Medicaid reimbursement reform proposals). The LTC INSURANCE daily rate can be used in conjunction with the LTC insurance parameters to model the capability of insurance companies to demand reduced rates. For example, the LTC INSURANCE parameter can be set at an amount less than the private pay rate. If this is done the amount that must be paid out-of-pocket (the difference between the indemnity benefit of the insurance policy and the payment rate) would be reduced for purchasers.

TABLE 33: PHASE-IN OF MEDICARE CATASTROPHIC COVERAGE ACT PREMIUM ANDSURTAX PROVISIONS							
		1989	1990	1991	1992	1993	INC.
MONTHLY PROJECTED CURRENT LAW PART B PREMIUM		27.10	29.00	30.60	32.28	34.05	5.5
MONTHLY CATASTROPHIC PREMIUM		4.00	0	0	0	0	5.5
ANNUAL SURTAX RATES (%)	i	0.0	0	0	0	0	0.0
MAXIMUM ANNUAL LIABILITY	i	800	850	900	950	1050	5.5
MONTHLY MEDIGAP PREMIUM	i	60.00	70.00	73.85	77.91	82.20	5.5

These parameters were used to model repealed taxation provisions of the 1988 Medicare Catastrophic Coverage Act. The Part B and Medigap premiums are used in the current model.

TABLE 38: FINANCING OF NON-MEDICARE, NON-MEDICAID HOME CARE SERVICES FOR THE ELDERLY (% OF TOTAL RECEIVING SERVICES FROM EACH PAYMENT SOURCE)					
PAID HOME CARE SERVICES					
SOURCE OF FUNDS POOR NON-POOR					
OUT-OF-POCKET	69.7	86.1			
OTHER PAYORS	30.3	13.9			

TABLE 39: AVERAGE PRICES PER VISI IN 1986	T FOR HOME CARE BY SO	URCE OF PAYMENT
PAYOR	CHARGE PER VISIT	PERCENT INCREASE
MEDICAID	48.70	5.5
MEDICARE	51.10	5.5
OUT-OF-POCKET	12.50	5.5
OTHER	25.20	5.5
CAP OF OUT-OF-POCKET INCOME EXPENSE (%)	30.0	0.0

TABLE 37: MEDICAID NIS SOURCE OF PAYMENT STRUCTURE					
	SING	LE	MAR	RIED	
-	INCOME	PROB	INCOME	PROB	
SSI LEVEL	360	18.7	530	18.7	
SSI TO 100% POVERTY	454	32.7	572	32.7	
100 - 200% POVERTY	908	43.5	1144	43.5	
200 - 300% POVERTY	1362	16.1	1716	16.1	
	SINGLE	MARRIED			
ASSET MEDICAID CAP	2000	3000			
YEAR FOR DOLLARS	1987	1987			
POVERTY LEVEL:	0070				
MARRIED COUPLE	6872				
	5447				
BASE YEAR	1987				
			1	01	
				91	
		11V111) LINALT)		0.0	
	-			0.0	
PERCENT WHO CONVERT (A	- SSETS > MCD			25.0	
PERCENT WHO CONVERT (A	SSETS - MCD L	I IMIT)		5.0	
I ENGTH OF STAY IN DAYS -	-			730	
PERCENT WHO CONVERT (A	- SSETS > MCD	IMIT)	1	50.0	
PERCENT WHO CONVERT (A	SSETS <= MCD	I IMIT)	i i	10.0	
I ENGTH OF STAY IN DAYS <	=	,	ł	99999	
PERCENT WHO CONVERT (A	SSETS > MCD LI	IMIT)	ł	50.0	
PERCENT WHO CONVERT (A	ASSETS <= MCD LIMIT)			10.0	
MCD RECIPIENT EXEMPT DA	YS	,	İ	183	
MCD RECIPIENT PERCENT S	ELLS			0	

The home equity conversion parameters indicate the percent of nursing home entrants with different lengths of stay and Medicaid/Non-Medicaid status who sell their homes when they enter a nursing home. The proceeds from the sale are added to financial assets.

The MCD RECIPIENT EXEMPT DAYS and MDC RECIPIENT PERCENT SELLS are used together to specify a Medicaid policy requiring Medicaid nursing home residents to sell their homes after a specified period of time. Setting the MCD RECIPIENT PERCENT SELLS to a value greater than 0 will override the home equity conversion parameters for those with assets below the Medicaid limit.

ASSET TRANSFER TO FAM	NILIES			
		PROBABILITY OF TRANSFER (PERCENT)		R (PERCENT)
		LOS < 6	6 - 24	LOS > = 24
ASSET LEVE	Ľ	MONTH	MONTHS	MONTHS
<	5000	90	90	90
<	10000	20	50	50
<	9999999	10	25	25

The asset transfer parameters simulate the spenddown/transfer of assets in the community prior to entry into the nursing home.

MEDICARE CATASTROPHIC COVERAGE ACT (IN 1989 DOLLARS)						
		1989	1990	1991	1992+	
PERCENT OF POVERTY LEVEL FOR TRANSFER	l	122	133	133	150	
FEDERAL INCOME TAX SURTAX LEVEL \$		150				
ANNUAL INCREASE IN SURTAX LEVEL AFTER 89	Ì	0.0				
SINGLE INDIVIDUAL RETAINED ASSETS (AFTER 6 MONTHS)	I	2000				
SINGLE INDIVIDUAL RETAINED ASSETS (1ST 6 MONTHS)	Ι	2000				
COMMUNITY SPOUSE RETAINED ASSETS (MIN)	Ι	12000				
COMMUNITY SPOUSE RETAINED ASETS (MAX)	Ι	60000				

Under the Medicare Catastrophic coverage Act parameters, the financial asset limits to qualify for Medicaid in a nursing home are specified. The base case parameters are shown above. The user may specify alternative limits in simulations that have Medicaid nursing home reform. For individuals, it is possible to specify alternative limits during the first six months of a nursing home stay and for after six months.

PERCENT OF NURSING HOME ENTRANTS RECEIVE MEDICARE:						
	BEFO	RE			1990 AND	
LENGTH OF STAY	198	8	1988	1989	AFTER	
< 3 MONTHS		43.0	50.0	60.0	60.0	
3-6 MONTHS	ĺ	27.0	40.0	50.0	45.0	
6 - 1 YEAR		18.0	30.0	35.0	35.0	
> 1 YEAR		13.0	25.0	30.0	30.0	
DAYS OF COVERAGE		30.0	35.0	50.0	40.0	
PERCENT OF CURRENT		0.0	0.0	10.0	0.0	
RESIDENTS COVERED						
COINSURANCE						
DAYS		8				
PERCENT		20.0				
NOTE: A POSITIVE NUMBER FOR DAYS INDICATES COINSURANCE DAYS FOR 1989						
ONLY, A NEGATIVE NUMBER INDICATES DAYS FOR 1989 AND AFTER.						

MEDICAID MONTHLY PERSONAL ALLOWANCE	30.0

This parameter may be changed if the user wants to specify a change in the Medicaid personal needs allowance for nursing home patients under a proposal. The default is \$30 per month.

FAMILY CONTRIBUTIONS TO SINGLE INDIVIDUALS IN NURSING HOMES ASSETS ABOVE MEDICAID LIMITS):	S (WITH
MONTHLY AMOUNT (1989\$)	200.0
PERCENT WHO RECEIVE	10.0

The family contribution parameter simulates payments toward the cost of nursing home care by family members of single individuals.

DEFAULT INFLATION RATE (%)	5.5
	0.0

This parameter sets the long term care inflation rate for the simulation. The default is "5.5". Other inflation rates may be used, but it is necessary to run a base case with an inflation rate that is the same as any policy simulation so that estimates of change are the result of the assumptions used in the simulation and not change in inflation assumptions. The DEFAULT INFLATION RATE parameter is read as a percentage.

|--|

This parameter specifies the real rate of growth in home equity values.

HOUSING ALLOWANCE	SINGLE	MARRIED
% OF MONTHLY INCOME	0.0	0.0
MAXIMUM DAYS	365	999999

This parameter can be used to specify a housing allowance for persons in a nursing home. It is generally used in conjunction with the public policy parameters or a Medicaid reform option. The percent of income specified is excluded from the resident's income applicable for Medicaid eligibility. The default in the base case is not to have a housing allowance. A maximum number of days for the housing allowance can also be specified. This parameter is disabled when "0.0" is entered n the % OF MONTHLY INCOME. The % OF MONTHLY INCOME parameter is read as a percentage.

#### 4. Induced Demand Specification

Under the base case these parameters should be left at "0.0". This implies no induced demand. Under simulations where the user wishes to specify increased use for persons eligible for a proposal the parameters may be set at any reasonable level. For example, if a home care proposal is expected to increase use to twice what it is under current policy, the NIS INDUCED DEMAND parameter should be set at "100.0". Induced demand is only applied to persons defined to be eligible through the public policy or long term care insurance parameters. This means that under long term care insurance. Values are read as percentages.

TABLE HHA3: INDUC	CED DEMAND			
INSURANCE	INSURANCE	PUBLIC POLICY	INSURANCE AND	
OPTION 1:	ONLY	ONLY	PUBLIC POLICY	
NIS	100.0	100.0	125.0	
NURSING HOME	10.0	10.0 20.0		
INSURANCE	INSURANCE	INSURANCE AND		
OPTION 2:	ONLY	PUBLIC POLICY		
NIS	80.0	100.0		
NURSING HOME	10.0	15.0		

Induced demand factors may be specified for alternative combinations of public policy programs and long term care insurance for both insurance policy options.

This is permitted to approximate different expected moral hazard related to varying extensiveness of coverage.

#### 5. Table Parameters

(0=OFF, 1 = ON)	
TABLE A1-A3	1
TABLE B1-B7	1
TABLE C	j 1
TABLE D	j 1
TABLE 0	j 1
TABLE 1	1
TABLE 2	j 1
TABLE 2A-2B	j 1
TABLE 3	1
TABLE 4	j 1
TABLE 5A	j 1

TABLE 5	1
TABLE 6	1
TALBE 7	j 1
TABLE 8	j 1
TABLE 9	i 1
TABLE 10	i 1
TABLE 11	i 1
TABLE 12	1
TABLE 13	1
TABLE 14	1
TABLE 15	,   1
TABLE 16A	I 1
TABLE 16	, 1 1
TABLE 17	1
TABLE 18	i i
TABLE 19	1
TABLE 20	1
TABLE 21	i i
TABLE 22	,   1
TABLE 23	1
TABLE 24	1
TABLE 24A	, 1 1
TABLE 24B	, 1 1
TABLE 24C	, 1 1
TABLE 25	, 1 1
TABLE 26	, 1 1
TABLE 27	, 1 1
TABLE 28	, I 1
TABLE 29	1
TABLE 29A	i 1
TABLE 29B	i 1
TABLE G1	i 1
TABLE G2	i 1
TABLE G3	i 1
TABLE G4	i 1
TABLE G5	i 1
TABLE 30	i 1
TABLE 30A	į 1
TABLE 30B	i 1
TABLE 31	1
TABLE 32	j 1
TABLE 33	1
TABLE 34	1
TABLE 35	j 1
TABLE 36	1
TABLE PJE1	1
TABLE PJE2	j 1
TABLE 37	1
TABLE 38	1
TABLE 39	1
TABLE 40	1
TABLE 41	1
TABLE 42	1
TABLE 43	1
TABLE 44	1
TABLE 45	1

TABLE 46	1
TABLE 47	1
TABLE 48	1
TABLE 49	1
TABLE 50	1
LAST YEAR FOR TABLES	2020

These parameters permit the user to disable the printing of selected tables. Entering "1" means a table will be printed and entering "0" means the table will not be printed. The LAST YEAR FOR TABLES parameters allows the user to specify that a simulation not be carried out the full simulation period to 2020. If this parameter is set to a value less than 2020, the results will be slightly different than if it were set at 2020. This is because the random number draw is altered by using the parameter. Therefore in comparing simulation runs, the LAST YEAR FOR TABLES entered should be the same.

BASE YEAR FOR DOLLARS (ENTER 0 FOR NOMINAL	) 1992

The BASE YEAR FOR DOLLARS parameter is used to specify the year for which values are reported in real dollars. Specifying a "0" will produce nominal values in the output tables.

#### 6. Health Care Savings Account Parameters

These parameters simulate a tax-advantaged savings plans. For more information on the application of these parameters, see a Lewin-ICF report for Merrill Lynch entitled, "Health Care Saving Accounts."

AVAILABLE ? (1=YES, 0=NO)	0						
INCOME GROUPS	13000	26000	39000	52000	65000	97500	9999999

INITIAL PARTICIPATION RATES (IN PERCENT):							
AGE	GROUP1	GROUP2	GROUP3	GROUP4	GROUP5	GROUP6	GROUP7
25	0	4	8	13	20	25	45
26	0	4	8	13	20	25	45
27	0	4	8	13	20	25	45
28	0	4	8	13	20	25	45
29	0	4	8	13	20	25	45
30	0	4	8	13	20	25	45
31	0	4	8	13	20	25	45
32	0	4	8	13	20	25	45
33	0	4	8	13	20	25	45
34	0	4	8	13	20	25	45
35	0	6	10	18	29	43	50
36	0	6	10	18	29	43	50
37	0	6	10	18	29	43	50
38	0	6	10	18	29	43	50
39	0	6	10	18	29	43	50
40	0	6	10	18	29	43	50

AGE	GROUP1	GROUP2	GROUP3	GROUP4	GROUP5	GROUP6	GROUP7
41	0	6	10	18	29	43	50
42	0	6	10	18	29	43	50
43	0	6	10	18	29	43	50
44	0	6	10	18	29	43	50
45	0	11	21	30	41	58	65
46	0	11	21	30	41	58	65
47	0	11	21	30	41	58	65
48	0	11	21	30	41	58	65
49	0	11	21	30	41	58	65
50	0	11	21	30	41	58	65
51	0	11	21	30	41	58	65
52	0	11	21	30	41	58	65
53	0	11	21	30	41	58	65
54	0	11	21	30	41	58	65
55	0	18	34	51	55	64	73
56	0	18	34	51	55	64	73
57	0	18	34	51	55	64	73
58	0	18	34	51	55	64	73
59	0	18	34	51	55	64	73
60	0	18	34	51	55	64	73
61	0	18	34	51	55	64	73
62	0	18	34	51	55	64	73
63	0	18	34	51	55	64	73
64	0	18	34	51	55	64	73

NON-CONTRIBUT	NON-CONTRIBUTOR PARTICIPATION RATES (IN PERCENT):						
AGE	GROUP1	GROUP2	GROUP3	GROUP4	GROUP5	GROUP6	GROUP7
25	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0
35	0	2	2	10	10	20	20
36	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0
45	0	10	10	15	15	30	30
46	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0

AGE	GROUP1	GROUP2	GROUP3	GROUP4	GROUP5	GROUP6	GROUP7
52	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0
54	j o	0	0	0	0	0	0
55	0	10	10	20	20	20	20
56	0	0	0	0	0	0	0
57	j o	0	0	0	0	0	0
58	0	0	0	0	0	0	0
59	0	0	0	0	0	0	0
60	j o	0	0	0	0	0	0
61	0	0	0	0	0	0	0
62	j o	0	0	0	0	0	0
63	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0

<b>CONTRIBUTIONS AS A PERCENT OF WAGE</b>	S AND SALARIES:
AGE	PERCENT OF EARNINGS
25	0.73
26	0.73
27	0.73
28	0.73
29	0.73
30	1.45
31	1.45
32	1.45
33	1.45
34	1.45
35	1.45
36	1.45
37	1.45
38	1.45
39	1.45
40	2.18
41	2.18
42	2.18
43	2.18
44	2.18
45	2.18
46	2.18
47	2.18
48	2.18
49	2.18
50	2.90
51	2.90
52	2.90
53	2.90
54	2.90
55	2.90
56	2.90
57	2.90
58	2.90
59	2.90
60	2.90
61	2.90

AGE	PERCENT OF EARNINGS
62	2.90
63	2.90
64	2.90

TAX CREDIT ACCOUNT (TCA):	
PERCENT OF CONTRIBUTIONS	60.0
REAL INTEREST RATE (%)	2.0

HEALTH CARE SAVINGS ACCOUNT (HCSA):	
PERCENT OF CONTRIBUTIONS	100.0
REAL INTEREST RATE	3.0

MEDIGAP POLICY:		
SLOPE		0.167
INTERCEPT	Ì	-64.1
(I.E. ANNUITIZED MEDIGAP = SLOPE*TCA+INTERCEPT)		

LTC INSURANCE COST (1989\$):	
COST	17784
REAL INTEREST RATE (%)	1.4

MAXIMUM ANNUAL CONTRIBUTION (1989\$):	
MAXIMUM (\$)	1392.0
ESCALATION RATE (%)	5.5

#### 7. Credited Contribution Policy Parameters

These parameters are used in conjunction with the long term care insurance parameters (Option 1) and specify the program specifics of a vested long term care insurance benefit. The public program offers long term care benefits that are financed by contributions during a person's lifetime. A person contributes to the program if his or her income exceeds a specified level in each year. There are provisions to allow the near-elderly and elderly to participate in the early years of the program. There are also provisions for establishing the benefit level a person receives when he or she requires long term care services. There is also a methodology establishing non-forfeiture benefit levels and death benefit levels.

PROGRAM START YEAR	1989
MORATORIUM YEARS	2
BASE YEAR FOR \$	1989

These parameters specify: 1) PROGRAM START YEAR -- when the program begins collecting contributions; 2) MORATORIUM YEARS -- how many years contributions are collected before participants may receive benefits ("0" implies benefits

would be paid beginning with the program start year); and 3) BASE YEAR FOR \$ -- specifies the base year for the income limits for contributions.

MINIMUM ANNUAL INCOME REQ'D FOR CREDITED CONTRIBUTIONS:		
INDIVIDUAL	6870	
MARRIED COUPLE	10305	

This parameters specifies the minimum level of annual income for individuals and married couples that is required in order to receive a credited contribution under the program. For each credited contribution, a person receives an additional unit of 0.1 up to the potential 1.0 units to be multiplied by the indexed benefit for long term care services (current benefit level). Credited contributions prior to the program start are recorded without actually being collected.

MINIMUM ANNUAL INCOME REQ'D FOR NON-CREDITED CONTRIBUTION:		
INDIVIDUAL	1040	
MARRIED COUPLE	2080	

This parameter specifies the minimum level of annual income for individuals and married couples that is required in order to receive a non-credited contribution under the program. Persons with income less than these limits receive no credits in that year. Persons with income between the minimum amount for a credit contribution and the minimum amount for a non-credit contribution receive a non-credited contribution. If a person has two consecutive non-credited contributions, the percent of the current benefit level the person would receive is decreased by 0.1 unit in the year of the second non-credited contribution and each consecutive non-credited contribution year. The non-forfeiture benefit is based on an accrual of .025 percent of each credited collected tax contribution. This means that the non-forfeiture accruals do not begin until after the specified start of the program, while the benefit accruals are based on income histories to 1981.

CONTRIBUTION AMOUNTS:	
ANNUAL INCOME	PERCENT OF
GREATER THAN:	INCOME CONTRIBUTED
0	0
1040	1
10305	1
999999	1
999999	1
999999	1
999999	1
999999	1
999999	1
999999	1

ANNUAL ESCALATION RATE FOR PERCENT OF INCOME (%)		4.2
YEAR TO START ESCALATION	Ì	1993
YEAR TO END ESCALATION		2020

This parameter allows the user to designate the percent of income that must be contributed based on annual income levels. Up to ten income breaks are permitted. If less than ten income breaks are used, the annual income level should be set at "999999" for those above the last income break and the percent of income contributed should be set at the level of the last specified income break. When the credited contributions are invoked, the PERCENT OF INCOME CONTRIBUTED overrides the premiums recorded in the LTC Insurance Parameters (Option 1). The PERCENT OF INCOME CONTRIBUTED parameter values are read as percentages.

#### **Death Benefit Provision**

There is an additional provision of the Universal Public Policy that does not require parameter specifications but is implemented when the Credited Contribution Policy Parameters are invoked. Under the program, spouses of decreased persons who have contributed to the program receive a death benefit based on a methodology for approximating the mean contributions for all participants. The death benefit is the sum of the mean contributions in years that a person has credited contributions less any benefit paid out for the individual.

# III. MODEL OUPUT TABLES

The model produces many standard output tables to be used in analyses. The model parameters discussed above can be used to select only particular tables to be generated in the table output file. Nearly all tables with monetary amounts are in the base year dollars specified by the user unless otherwise noted.<sup>6</sup> More detailed examples of frequently used tables are included in the "Designing and Using Model Simulations" documentation. The following provides a brief description of each of the output tables.

- **Table A1-3 "1986 Base Year Summary"** -- provides weighted persons counts for 1986 by age, sex, marital status, family income, and employment status.
- **Table B1-35 "Population Counts"** -- provides weighted persons counts by age, sex, and marital status for the years 1986 to 2020.
- Table C "Average Family Income, Persons 25 and Over" -- presents average family income for all persons age 25 and over during the course of the simulation.
- **Table D** "Lifetime Expenditures" -- presents lifetime long term care expenditures in 1986 dollars and utilization for persons turning age 65 in the years 1987 to 1991.
- Table D1 "Number of People by Expenditures and Family Income" -presents the distribution of persons using long term care by family income levels, out-of-pocket expenditure levels and total expenditure levels based on an average of the 1988 to 1992 period.
- **Table 0 "Number of Families"** -- provides a count of the number of couples, single males and single females for all persons age 65 and over.
- Table 1 "Total Nursing Home Charges By Source of Payment" -- summarizes the sources of nursing home financing (total Medicaid, State Medicaid, Federal Medicaid, Medicare, long term care insurance or proposed public programs, family cash, family assets) for the elderly population over the course of the simulation (1986 to 2020) in thousands of dollars.
- Table 2 "Total Number of Persons in Institutions By Source of Payment" -- summarizes the number of persons in a nursing home by sources of payment for

<sup>&</sup>lt;sup>6</sup> The base year for monetary values in the output tables can be changed through the parameters. An alternative base year may be specified or all output can be presented in nominal dollars. Categories used across years (e.g., income categories) are specified in 1989 dollars if the output is specified in nominal dollars.

the elderly population over the course of the simulation. Table 2A presents person with a length of stay less than two years and Table 2B presents persons with a length of stay of two or more years.

- Table 3 "Average Annual Nursing Home Payments By Source of Payment" -- summarizes the average amount paid per person for nursing home care by each source of payment for the elderly population over the course of the simulation.
- Table 4 "Population in Nursing Homes by Age and Year" -- provides counts of the total number of elderly persons and the number in nursing homes during the year by age for 1986 to 2020.
- Table 5 "Percentage of Payment for Nursing Homes By Source for the Entire Admission, For Year Entered Nursing Home" -- summarizes the sources of nursing home financing for entire lengths of stay for elderly cohorts admitted during the specified five year periods and 1986-2020 by demographic and economic characteristics of the nursing home entrants. Table 5A presents actual dollars spent, while Table 5 provides percentages.
- Table 6 "Number of Nursing Home Admissions By Length of Stay Category, For the Entire Admission for Year Entered Nursing Home" -- summarizes the number of persons in each elderly cohort admitted during the specified five year periods and 1986-2020 by their entire length of stay for alternative demographic and economic characteristics of the nursing home entrants.
- Table 7 "Nursing Home Admissions Between 1986 and 2020/Average Length Of Stay For Admissions Between 1986 and 2020" -- summarizes the number of elderly persons admitted to a nursing home during each year of the simulation and the average length of stay in days for those admitted in a year, overall and by age at admission.
- **Table 8 "Average Nursing Home Daily Census"** -- provides an estimate of the average daily census for elderly nursing home residents for 1986 to 2020 by summing all the days in a nursing home during a year and dividing by 365.
- Table 9 "Number of Families by Sources of Income" -- provides counts (in thousands) of the total number of elderly families and the number receiving pensions, social security, Supplemental Security Income (SSI), IRA income, earnings, asset income, and pay state and federal taxes for 1986 to 2020.
- Table 10 "Average Family Income of Families Age 65 and Over for Families with Income by Source" -- summarizes the average family income from different sources for persons with that source of income and average taxes paid by those paying taxes over the entire simulation (1986 to 2020) for all elderly

families and age groups based on the age of the head of the family (6575, 75-84, and 85+).

- Table 11 "Total Formal Non-institutionalized Services Charges By Source of Payment" -- summarizes the sources of home care financing (total Medicaid, State Medicaid, Federal Medicaid, Medicare, other public payers, long term care insurance or proposed public programs, family cash, family assets) for the elderly population over the course of the simulation (1986 to 2020) in thousands of dollars.
- Table 12 "Total Persons Using Formal Non-institutional Services By Source of Payment" -- summarizes the number of persons using paid home care by sources of payment for the elderly population over the course of the simulation.
- Table 13 "Average Formal Non-institutional Services Payments By Source of Payment" -- summarizes the average amount paid per person for paid home care by each source of payment for the elderly population over the course of the simulation.
- Table 14 "Population Receiving Formal Non-institutional Services by Age and Year" -- provides counts of the total number of elderly persons and the number using paid home care services during the year by age for 1986 to 2020.
- Table 15 "Population Receiving Informal Non-institutional Services by Age and Year" -- provides counts of the total number of elderly persons and the number receiving informal or unpaid home care services during the year by age for 1986 to 2020.
- Table 16 "Percentage of Payment for Formal NIS By Source for the Entire Length of NIS Use, For Year Entered NIS" -- summarizes the sources of nursing home financing for entire lengths of home care use for elderly cohorts admitted during the specified five year periods and 1986-2020 by demographic and economic characteristics of the home care users. Table 16A presents actual dollars spent, while Table 16 provides percentages.
- Table 17 "Number of Formal NIS Admissions By Length of Use Category, For the Entire Length of NIS Use for Year Entered Nursing Home" -summarizes the number of persons in each elderly cohort who began using formal home care during the specified five year periods and 1986-2020 by their entire length of use for alternative demographic and economic characteristics of the home care users.
- Table 18 "Formal NIS Admissions Between 1986 and 2020/Average Length Of Stay For Admissions Between 1986 and 2020/Average Number of Formal NIS Visits Between 1986 and 2020" -- summarizes the number of elderly persons who begin using paid home care during each year of the simulation; the

average length of use in days for those admitted in a year, overall and by age at admission; and the average number of paid home care visits in a year.

- **Table 19 "Average NIS Daily Census"** -- provides an estimate of the average daily census for elderly using formal and informal home care for 1986 to 2020.
- **Table 20 "Annual Insurance Premiums"** -- presents the number of elderly persons paying insurance premiums, the amount of premiums paid (in thousands), and the average annual premium paid for 1986 to 2020.
- Table 21 "Insured/Uninsured Only: Total Nursing Home Charges By Source of Payment" -- presents information similar to Table 1 for persons with long term care insurance, or receiving payments from a proposed public program and another table for those without for 1986 to 2020.
- Table 22 "Insured/Uninsured Only: Total Number of Persons in Institutions By Source of Payment" -- presents information similar to Table 2 for persons with long term care insurance, or receiving payments from a proposed public program and another table for those without for 1986 to 2020.
- Table 23 "Insured/Uninsured Only: Average Annual Nursing Home Payments By Source of Payment" -- presents information similar to Table 3 for persons with long term care insurance, or receiving payments from a proposed public program and another table for those without for 1986 to 2020.
- Table 24 "LTC Program Total Costs/LTC Program Total Persons/LTC Program Costs Per Person" -- summarizes by age group (65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95+): 1) expenditures by Medicaid, Medicare, Other Public Payers and those recorded in the LTC Insurance column for both nursing home and home care (basically from Tables 1 and 11); 2) total persons potentially eligible for benefits from the above sources of financing, as defined as the entire elderly population; and 3) average per capita expenditures (expenditures over number of persons) for the period 1986 to 2020.
- Table 24A "LTC Program Total Costs/LTC Program Costs Per Person (Nursing Home Only)" -- similar to Table 24, but expenditures summarized are for nursing home care only. (Note -- there is no total persons table for nursing home only, the base population is the same as that used in Table 24.)
- Table 24B "LTC Program Total Costs/LTC Program Costs Per Person (Formal NIS Only)" -- similar to Table 24, but expenditures summarized are for formal home care services (NIS) only. (Note -- there is no total persons table for formal NIS only, the base population is the same as that used in Table 24.)
- Table 24C "LTC Program Total Costs/LTC Program Costs Per Person (Total Expenditures Incl. Cash & Assets)" -- summarize all long term care

expenditures, both public and private, for nursing home and home care. (Note -- there is no total persons table for Table 24C, the base population is the same as that used in Table 24.)

- Table 25 "Average Employment Earnings Per Person" -- presents average earnings by age group for 1986 to 2020 for persons with earnings of \$12,500 or less, person with more than \$12,500, and all persons.
- Table 26 "Average Income Per Person" -- presents average total income by age group for 1986 to 2020 for persons with income of \$12,500 or less, person with more than \$12,500, and all persons.
- Table 27 "Number of Persons By Pension Amount" -- presents counts of persons age 65 and over by pension levels for the period 1986 to 2020.
- Table 28 "Distribution of Persons By Age and Sex" -- for the years 1986 to 2020 summarizes the percent of persons in a nursing home at some point during the year, the percent who have long term care insurance or receive payments from a proposed public program, the percent of nursing home residents with long term care insurance, and the total number of persons by age (65-74, 75-84, 85+) and sex.
- Table 29 "Summary of Nursing Home Usage for Population Aged 65" -- for the years 1986 to 1992, presents the lifetime nursing home utilization for cohorts turning age 65 by sex and also length of stay.
- Table 29A "Number of Persons By Lifetime LTC Expenditures" -- for users of long term care services during the period 1991 to 1995, presents the number of persons by expenditure level and amounts of financing from the alternative sources by level of total long term care expenditures in 1989 dollars.
- Table 29B "Number of Persons By Lifetime LTC Out-of-Pocket Expenditures as a Percent of Income" -- for users of long term care services during the period 1991 to 1995, presents the distribution of persons by annual out-of-pocket expenditures divided by annual income.
- Table G1 "Income Summary: Nursing Home Entrants/Non-Nursing Home Residents/All Elderly" -- for 1986 to 2020, summarizes the average total income, social security income, and earnings income for nursing home entrants, non-nursing home residents and all elderly by age sex and marital status.
- Table G2 "Nursing Home Entrants Age 75+: Income 10 Years Ago" -- for 1986 to 2020, summarizes the average total income, social security income, and earnings income ten years prior to entry for nursing home entrants age 75 and over.

- Table G3 "Persons With Payments Paid By Medicaid For Year Entered Nursing Home" -- presents the distribution of nursing home entrants by length of stay and the percent of their total charges paid by Medicaid for the following time periods: 1986-1988, 1989-1995, and five year intervals there after to 2020. Also includes tabulations for persons with income less than \$10,000 in 1989 and \$10,000 or more
- Table G4 "Number of Persons Admitted to Nursing Homes By Payment Status" -- presents the number of nursing home residents who are private pay, spend down, and Medicaid at admission for those with lengths of stay greater than one month, greater than three months, and greater than one year by economic and demographic characteristics for the following time periods: 1986-1988, 1989-1995, and five year intervals there after to 2020.
- Table GS "Elderly Persons In 2020 With and Without Long Term Care Insurance" -- distribution of persons by age, marital status, income in 1989 dollars, and alternative asset and home equity levels.
- Table G6 "Total Health Expenditure Limits" -- amount of total health expenditures (acute and long term care) in 1989 dollars above alternative limits (lifetime expenditures, three-year average expenditures, and annual expenditures, as well as some combinations), numbers of persons exceeding limits.
- Table 30 Series -- average for five year intervals by age, income level, income as a percent of the poverty level, and financial asset level for the following: number of families; number of people; nursing home expenditures by Medicare, Medicaid, and long term care insurance; nursing home expenditures by Medicare, Medicaid, and long term care insurance; all long term care expenditures (nursing home and home care) by Medicare, Medicaid, and long term care insurance; number of Medicare, Medicaid or other public payer recipients for both nursing home and home care; average "public" benefits per person receiving financing from Medicare, Medicaid, long term care insurance or other public payers for both nursing home and home care; number of people using nursing home or home care; number of admissions to nursing home or home care; long term care insurance payments for nursing home and home care; Medicare payments for nursing home and home care; total long term care expenditures for nursing home and home care; number of disabled persons: number of people in a nursing home; and the number of people not in a nursing home.
- **Table 30A Series** -- average for five year intervals for those in a nursing home and those not in a nursing home by income level, income as a percent of the poverty level, and financial asset level for the following: number of persons; "public" benefits from Medicare, Medicaid, other public payers and long term care

insurance; expenditures from Medicare, Medicaid and other public payers; and Medicaid expenditures.

- **Table 30B Series** -- average for five year intervals of the distribution of nursing home residents with Medicare, Medicaid or long term care insurance payments and home care users with Medicare, Medicaid, other public payers or long term care insurance payments by age, marital status, income level, and income as a percent of the poverty level.
- **Table 31.1 Series** -- summary tables of persons who purchase long term care insurance, survivors, those paying premiums, those ever in a nursing home, and those ever receiving Medicaid payments by income and asset level for the following time periods: 1989-1999; 1989-2009; 1989-2019.
- **Table 31.2 Series** -- summary information on characteristics of persons who spend down and those who don't by income and asset level for the following time periods: 1989-1999; 1989-2009; 1989-2019.
- **Table 31.3 Series** -- summary information by age, long term care use, as well as Medicaid and long term care financing for all persons, persons who purchase insurance and those who do not.
- **Table 32 "Persons Counts"** -- numbers of persons by age and sex for 1986 to 2020.
- **Table 33 "Asset Summary"** -- distribution of families, average financial assets, number with home equity, and average home equity level by age of family head, institutional status, and financial asset level for five year average intervals.
- **Table 34 "Disability Summary"** -- numbers of disabled persons by disability level, age, and institutional status for five year average intervals.
- Table 35 Series -- distribution of nursing home entrants by income and asset levels, as well as length of stay for five year average intervals for the following groups: all admissions; persons admitted with Medicaid financing; persons admitted without Medicaid financing; persons discharged alive; persons discharged alive with Medicaid at admission; persons discharged alive without Medicaid at admission; all discharges; all discharges admitted with Medicaid financing; all discharges admitted without Medicaid financing; all discharges admitted without Medicaid financing and with Medicaid at discharge; all discharges admitted without Medicaid financing; all discharges admitted without Medicaid financing and discharged without Medicaid financing.
- **Table 36 "Health Care Savings Accounts"** -- presents information that results from using the health care savings account parameters for 1986 to 2020.

- **Table PJE1 Series** -- counts of persons with and without long term care insurance by age and income level in 1989, 1991, 1996, 2001, 2006, 2011, 2016, and 2021.
- **Table PJE2 Series** -- counts of persons with long term care insurance by age and categories of percent of income required to buy insurance in 1989, 1991, 1996, 2001, 2006, 2011, 2016, and 2021.
- Table 37 "Distribution of Pension Plan Assets by Age and Family Income: 1990" -- distribution of amounts held in pension plans and numbers of persons in pay and not in pay status by age and family income level in 1990.
- Table 38A "Aggregate Nursing Home LTC Insurance Benefit Payments for 1986 Age Cohorts" -- total long term care insurance expenditures for nursing home care for each year from 1986 to 2020 for different age cohorts from 1986.
- Table 38B "Aggregate Home Care LTC Insurance Benefit Payments for 1986 Age Cohorts" -- total long term care insurance expenditures for home care for each year from 1986 to 2020 for different age cohorts from 1986.
- Table 38C "Aggregate Total LTC Insurance Benefit Payments for 1986 Age Cohorts" -- total long term care insurance payments for each year from 1986 to 2020 for different age cohorts from 1986.
- Table 38D "Aggregate Premium Payments for LTC Insurance for 1986 Age Cohorts" -- total long term care insurance premium payments for each year from 1986 to 2020 for different age cohorts from 1986.
- Table 38E "Number of Persons Paying LTC Insurance Premiums for 1986 Age Cohorts" -- number of persons paying long term care insurance premiums for each year from 1986 to 2020 for different age cohorts from 1986.
- Table 39A "Number of Persons Paying LTC Insurance Premiums By Age Group" -- number of persons paying long term care insurance premiums by age group for each year from 1986 to 2020.
- Table 39B "Total LTC Insurance Premiums Paid By Age Group" -- amount of premiums paid for long term care insurance by age group for each year from 1986 to 2020.
- Table 39C "Average LTC Insurance Premiums Paid By Age Group" -average premiums paid for long term care insurance by age group for each year from 1986 to 2020.
- Table 39D "LTC Insurance Premiums Times Marginal Tax Rate" -- amount of premiums paid for long term care insurance times the marginal tax rate for a

family by age group for each year from 1986 to 2020; used to calculate tax implications for tax deductions for the price of long term care insurance.

- **Table 40 "Tax Credit Discount Summary"** -- number of persons, amount of tax credits allowed, and average tax credit allowed for the purchase of long term care insurance under tax credit simulations by age group for each year from 1986 to 2020.
- Table 41 "Number of Persons by Age, Sex, Marital Status, and Income as a Percent of the Poverty Level" -- counts of persons by age, sex marital status and income as a percent of the poverty level for 1990, 2005, and 2020.
- **Table 42 Series** -- Distribution of elderly persons by age in a particular year and age cohorts for 1986-1990, 2001-2005, and 2016-2020 by: income level; financial assets levels; and financial and home equity levels.
- Table 43 "The Income Affordability of Nursing Home Care Among the Elderly" -- distribution of persons by age for all elderly and an admission cohort for the years 1986-1990, 2001-2005, and 2016-2020 for the following ratios: income as a percent of the cost of a year in a nursing home; income plus financial assets as a percent of the cost of a year in a nursing home; and income, financial assets and home equity as a percent of the cost of a year in a nursing home.
- Table 44 "Change in Nursing Home Patient Income Between Age 67 and Year of First Nursing Home Admission" -- distribution of persons admitted to a nursing home during the simulation by sex and the ratio of the following: income in the first year of admission to income at age 67; income and financial assets in the first year of admission to income and financial assets at age 67; income, financial assets, and home equity in the first year of admission to income, financial assets, and home equity at age 67.
- **Table 45 "Counts of the Aged"** -- numbers of families by age and marital status for 1988 and 2018 (five year averages).
- **Table 46 Series** -- the following tabulations by age and marital status for 1988 and 2018 (five year averages): number of families receiving sources of income (earnings, social security, pensions (public, private, defined benefit and private defined contribution), IRA income, asset income, and SSI); percent receiving sources of income; mean amount for those receiving in 1988 dollars; mean amount for all in 1988 dollars; and shares of aggregate income accounted for by sources of income.
- **Table 47 Series** -- the relative importance of the following income sources by age and marital status for 1988 and 2018 (five year averages): earnings; social

security; pensions (public, private, private DB and private DC); IRA income; asset income; and SSI.

- **Table 48 "Assets of the Aged"** -- distribution of families by financial and total asset levels by age and marital status for 1988 and 2018 (five year averages) in 1988 dollars.
- **Table 49 "Acute Care Summary"** -- distribution of elderly persons by total expenditure levels and public expenditure levels, total expenditures, and average expenditures for the following types of care: physician/DME (Part B); hospital (Part A); non-Medicare ambulatory services; prescription drugs; dental services; nursing home care; and home care. Tables are provided by age, sex, and decedent status for five year average around 1990, 2000, 2010, and 2015.
- **Table 50 "Pension Distribution"** -- Number of families and average family income from public pensions, private pensions, private DB pensions and private DC pensions by age.

# ATTACHMENT: LISTING OF PARAMETER FILE

#### LTC INSURANCE PARAMETERS -- OPTION 1 (PREFERRED)

INSURANCE OPTION (0=OFF, 1=ON, 2-HCSA, 3=CRED.CON)	0
PERCENT DISABLED ALLOWED TO BUY INSURANCE	0.0
PERCENT OF PREMIUM PAID BY INSURED INSTITUTIONALIZED	2.0
BASE YEAR FOR DOLLARS	1986
AGE ELIGIBLE TO RECEIVE BENEFITS	65

	NURSING HOME \$	ESCALATION	NIS \$	ESCALATION	CAP ESCALATION AT AGE YEARS	ESCALATION 1=% 2=\$
DAILY BENEFIT	60.00	5.5	-30.0	5.5	999	1
NOTE: INSURANCE ALV TO LIMIT DAILY CHARGI	VAYS PAYS MININ E TO DOLLAR AM	IUM OF DOLLAR OUNT USE NEGA	AMOUNT (FR ATIVE NUMBE	OM ABOVE) AND R IN DOLLAR AM	O APPLICABLE DA	AILY CHARGE.

	NURSING HOME	NIS	COMBINED	MAXIMUM PROPORTION TO ADD TO ASSET PROTECTION
DEDUCTIBLE DAYS/VISITS	60	30	0	
MAXIMUM DAYS/VISITS	1460	1460	0	
MAXIMUM DOLLAR AMOUNT	999999	999999	0	0
COPAYMENT (%)	0.0	0		
ADL REQUIRED	0	3		
NOTE:				
1. TO USE COMBINED MAXIMUM	DAYS/VISITS, ENT	ER 0 UNDER I	NURSING HOME AI	ND NIS, AND
APPROPRIATE NUMBER UNDER COMBINED.				
2 COMINED DEDUCTIBLE DAYS/	VISITS NOT AVAIL	ABLE		

3. TO MAKE MAXIMUM DAYS/VISITS FOR NIS DEPENDENT ON NUMBER OF DAYS IN NURSING HOME, ENTER -1 UNDER NIS.

- 4. ADLS ARE FUNCTIONAL FOR NIS ONLY. NURSING HOME MUST BE 0.
  - 0 = NONE
  - 1 = IADL ONLY
  - 2 = 1+ ADLS
  - 3 = 2+ ADLS
- 4 = 3+ ADLS (85% OF 2+ ADLS)
- 5. TO ADD THE DOLLAR AMOUNT SPENT TO THE PROTECTED ASSET AMOUNT, ENTER THE MAXIMUM PROPORTION TO BE ADDED (MAXIMUM DOLLAR AMOUNT ROW ONLY), OTHERWISE ENTER 0.

CLAIMS ADJUSTING:	
AVAILABLE ? (0=NO, 1=YES)	0

		PERCENT ALLOWED BENEFITS		
DISABILITY LEVEL		NURSING HOME	NIS	
IADL		100	100	
1 ADL	ĺ	75	75	
2 ADL'S		50	50	

#### PREMIUMS

GROUP COVERAGE PARAMETERS:	
AVAILABLE ? (0=NOSEE NOTES)	0
LAPSES WHEN GROUP ELIGIBILITY ENDS? (1=YES, 0=NO)	0
NOTE:	
1. FOR GROUP COVERAGE:	
0 = NO GROUP COVERAGE AVAILABLE	
1 = REQUIRES PENSION COVERAGE	
2. GROUP COVERAGE TAKES PRECEDENCE OVER INDIVIDUAL	

	INDIVIDUAL	GROUP
START YEAR	1986	0
END YEAR	1986	0
ESCALATION RATE (INSURED AGE <65)	0.0	0
ESCALATION RATE (INSURED AGE 65+)	0.0	0
ESCALATION RATE (NEW PURCHASERS)	5.5	0
PERCENT ELIGIBLE TO USE	100.0	0
AGE START ELIGIBILITY (BUY-IN)	40	0
AGE END ELIGIBILITY (START YEAR)	84	0
AGE END ELIGIBILITY (OTHER YEARS)	84	0
PERCENT WITH REDUCED PREMIUMS	0	0.0
REDUCED PREMIUM PERCENT	0	0.0
PERCENT ELIGIBLE TO BUY	100	0.0
INCREASE PER YEAR (%)	i 0	0.0
MAX PERCENT	100	0.0

SOURCE OF PREMIUMS:			
	SOURCE	OPTION	
PREMIUMS FOR SELF EMPLOYED	0	0	
PREMIUMS FOR EMPLOYED	0	0	
PREMIUMS FOR RETIRED	0	0	
PREMIUMS FOR UNEMPLOYED	0	0	
NOTES: SOURCES ARE AS FOLLOWS:			
0 = TABLE BELOW (SET OPTION TO 0)			
1 = LOOK-UP TABLE INDIVIDUAL POLICI	ES		
2 = LOOK-UP TABLE EMPLOYEE POLICI	ES		
3 = LOOK-UP TABLE RETIRED POLICIES			
4 = LOOK-UP TABLE GENERIC POLICIES	8		

AGE	E MONTHLY AMOUNT	
25	10.00	0
26	10.00	0
27	10.00	0
28	10.00	0
29	10.00	0
30	10.00	Ő
31	10.00	0
	10.00	0
32	10.00	0
24	10.00	0
25	10.00	0
30	10.00	0
30	10.00	0
37	10.00	0
38	10.00	0
39	10.00	0
40	10.00	0
41	10.00	0
42	10.00	0
43	10.00	0
44	10.00	0
45	10.00	0
46	10.00	0
47	10.00	0
48	10.00	0
49	10.00	0
50	10.00	0
51	10.00	Ő
52	10.00	Ő
53	10.00	0
55	10.00	0
54	10.00	0
55	10.00	0
50	10.00	0
57	10.00	0
58	10.00	0
59	10.00	0
60	10.00	0
61	10.00	0
62	10.00	0
63	10.00	0
64	10.00	0
65	10.00	0
66	10.00	0
67	10.00	0
68	10.00	0
69	10.00	0
70	10.00	0
71	10.00	0
72	10.00	0
73	10.00	Ō
74	10 00	õ
75	10.00	õ
76	10.00	0
77		0
78		0
70		0
נו	10.00	U

AGE	MONTHLY AMOUNT	AGE
80	10.00	0
81	10.00	0
82	10.00	0
83	10.00	0
84	10.00	0
85+	10.00	0

TAX CREDIT PARAMETERS:						
	AGE	PERCENT	MAX \$	INCOME CAP		
	<=	CREDIT	AMOUNT	MARRIED	SINGLE	
	40	0	0	40000	25000	
	50	0	0	40000	25000	
	60	0	0	40000	25000	
	70	0	0	40000	25000	
	999	0	0	40000	25000	

ESCALATION RATE FOR \$	5.5
% POINT REDUCTION PER \$1000	1.0
MARRIED CAP	60000
SINGLE CAP	45000
NOTE:	
1. INSURANCE PREMIUMS WILL BE REDUCED ONLY FOR THOSE WHO PAY	TAXES.
2. THOSE WHO PAY LESS TAXES THAN THE MAXIMUM ALLOWABLE TAX CF	REDIT WILL BE

PERMITTED TO HAVE THEIR PREMIUMS REDUCED ONLY UP TO THE AMOUNT THAT IS PAID IN TAXES.

## PROBABILITY OF PURCHASE

PURCHASE PROBABILITIES SOURCE:	1
(1=SEE PROBABILITY BY PREMIUM AS % OF INCOME TABLE BELOW,	
2=EXTERNAL FILE (DEVICE 17),	
3=EXTERNAL FILE (DEVICE 18),	
4=SEE PROBABILITY BY POVERTY LEVEL TABLE BELOW)	

UNDERWRITING FUNCTION:	
AVAILABLE? (0=NO, 1=YES)	0

YEAR AFTER PURCHASE BECOMES DISABLED	ADJUSTMENT FACTOR FOR PURCHASE PROBABILITY
1	0.65
2	0.72
3	0.79
4	0.86
5	0.93

# COVERAGE FOR PARENTS: AVAILABLE? (0=NO, 1=YES)

PREMIUM AS %					
OF INCOME	65-69	71-74	75-79	80-84	85+
<1	0	0	0	0	0
<2	0	0	0	0	0
<3	0	0	0	0	0
<4	0	0	0	0	0
<5	0	0	0	0	0
<6	10	10	10	10	10
<7	10	10	10	10	10
<8	10	10	10	10	10
<9	10	10	10	10	10
<10	10	10	10	10	10
<11	10	10	10	10	10
<12	10	10	10	10	10
<13	10	10	10	10	10
<14	10	10	10	10	10
<15+	10	10	10	10	10

0

ASSET LEVEL GREATER THAN OR EQUAL TO (SINGLE)	25000
ASSET LEVEL GREATER THAN OR EQUAL TO (FAMILY)	25000
NOTE: POSITIVE ASSET LEVEL INDICATES FINANCIAL ASSETS ONLY, NEGAT	IVE ASSET
LEVEL INDICATES FINANCIAL AND HOUSING ASSETS.	

	1	2	3	4
AGE GROUPS <=	50	59	64	84

#### PROBABILITY BY PREMIUM AS A PERCENT OF INCOME:

WORKERS:				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	100	100	100	100
1.5	100	100	100	100
2.0	100	100	100	100
2.5	100	100	100	100
3.0	100	100	100	100
3.5	100	100	100	100
4.0	100	100	100	100
4.5	100	100	100	100
5.0	100	100	100	100
5.5	100	100	100	100
6.0	100	100	100	100
6.5	100	100	100	100
7.0	100	100	100	100
7.5	100	100	100	100
8.0	100	100	100	100

PERCENT OF INDIVIDUAL INCOME	AGE GROUP 1	AGE GROUP 2	AGE GROUP 3	AGE GROUP 4
8.5	100	100	100	100
9.0	100	100	100	100
9.5	100	100	100	100
10.0	100	100	100	100
10.5	100	100	100	100
11.0	100	100	100	100
11.5	100	100	100	100
12.0	100	100	100	100
12.5	100	100	100	100
13.0	100	100	100	100
13.5	100	100	100	100
14.0	100	100	100	100
14.5	100	100	100	100
15.0	100	100	100	100

NON-WORKERS:				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	100	100	100	100
1.5	100	100	100	100
2.0	100	100	100	100
2.5	100	100	100	100
3.0	100	100	100	100
3.5	100	100	100	100
4.0	100	100	100	100
4.5	100	100	100	100
5.0	100	100	100	100
5.5	100	100	100	100
6.0	100	100	100	100
6.5	100	100	100	100
7.0	100	100	100	100
7.5	100	100	100	100
8.0	100	100	100	100
8.5	100	100	100	100
9.0	100	100	100	100
9.5	100	100	100	100
10.0	100	100	100	100
10.5	100	100	100	100
11.0	100	100	100	100
11.5	100	100	100	100
12.0	100	100	100	100
12.5	100	100	100	100
13.0	100	100	100	100
13.5	100	100	100	100
14.0	100	100	100	100
14.5	100	100	100	100
15.0	100	100	100	100

PROBABILITY BY POVERTY LEVEL:					
<100%		0	0	0	0
100-150%	ĺ	0	0	0	0
150-200%	ĺ	0	0	0	0
200-300%	ĺ	0	0	0	0
300% +	ĺ	100	100	100	100

## ASSET LEVEL LESS THAN MAX:

WORKERS:				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	100	100	100	100
1.5	100	100	100	100
2.0	100	100	100	100
2.5	100	100	100	100
3.0	100	100	100	100
3.5	100	100	100	100
4.0	100	100	100	100
4.5	100	100	100	100
5.0	100	100	100	100
5.5	100	100	100	100
6.0	100	100	100	100
6.5	100	100	100	100
7.0	100	100	100	100
7.5	100	100	100	100
8.0	100	100	100	100
8.5	100	100	100	100
9.0	100	100	100	100
9.5	100	100	100	100
10.0	100	100	100	100
10.5	100	100	100	100
11.0	100	100	100	100
11.5	100	100	100	100
12.0	100	100	100	100
12.5	100	100	100	100
13.0	100	100	100	100
13.5	100	100	100	100
14.0	100	100	100	100
14.5	100	100	100	100
15.0	100	100	100	100

NON-WORKERS:					
PERCENT OF		AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME		1	2	3	4
<1.0		100	100	100	100
1.5		100	100	100	100
2.0	Ì	100	100	100	100
2.5		100	100	100	100
3.0	Ì	100	100	100	100
3.5	Ì	100	100	100	100

PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
4.0	100	100	100	100
4.5	100	100	100	100
5.0	100	100	100	100
5.5	100	100	100	100
6.0	100	100	100	100
6.5	100	100	100	100
7.0	100	100	100	100
7.5	100	100	100	100
8.0	100	100	100	100
8.5	100	100	100	100
9.0	100	100	100	100
9.5	100	100	100	100
10.0	100	100	100	100
10.5	100	100	100	100
11.0	100	100	100	100
11.5	100	100	100	100
12.0	100	100	100	100
12.5	100	100	100	100
13.0	100	100	100	100
13.5	100	100	100	100
14.0	100	100	100	100
14.5	100	100	100	100
15.0	100	100	100	100

PROBABILITY BY POVERTY LEVEL:					
<100%		0	0	0	0
100-150%		0	0	0	0
150-200%		0	0	0	0
200-300%		0	0	0	0
300% +		100	100	100	100

# LAPSE ASSUMPTIONS (IN PERCENT):

LAPSE CRITERIA:	
SELF-EMPLOYED	2
EMPLOYED	2
RETIRED	2
EMPLOYED	2
NOTES:	
1 = DELTA OR MAX PERCENT (SEE BELOW)	
2 = DELTA AND MAX PERCENT (SEE BELOW)	
3 = TERM LIFE PROBABILITY LOOK-UP	
4 = PENSION LIFE PROBABILITY LOOK-UP	
5 = HIGH EARLY-CASH VALUE PROBABILITY LOOK-UP	

	WORKER NON-WORKER		RKER	
	DELTA	MAXIMUM	DELTA	MAXIMUM
25	999.00	999.0	999.00	999.0
26	999.00	999.0	999.00	999.0
27	999.00	999.0	999.00	999.0
28	999.00	999.0	999.00	999.0
29	999.00	999.0	999.00	999.0
30	999.00	999.0	999.00	999.0
31	999.00	999.0	999.00	999.0
32	999.00	999.0	999.00	999.0
33	999.00	999.0	999.00	999.0
34	999.00	999.0	999.00	999.0
35	999.00	999.0	999.00	999.0
36	999.00	999.0	999.00	999.0
37	999.00	999.0	999.00	999.0
38	999.00	999.0	999.00	999.0
39	999.00	999.0	999.00	999.0
40	999.00	999.0	999.00	999.0
41	999.00	999.0	999.00	999.0
42	999.00	999.0	999.00	999.0
43	999.00	999.0	999.00	999.0
44	999.00	999.0	999.00	999.0
45	999.00	999.0	999.00	999.0
46	999.00	999.0	999.00	999.0
47	999.00	999.0	999.00	999.0
48	999.00	999.0	999.00	999.0
49	999.00	999.0	999.00	999.0
50	999.00	999.0	999.00	999.0
51	999.00	999.0	999.00	999.0
52	999.00	999.0	999.00	999.0
53	999.00	999.0	999.00	999.0
54	999.00	999.0	999.00	999.0
55	999.00	999.0	999.00	999.0
56	999.00	999.0	999.00	999.0
57	999.00	999.0	999.00	999.0
58	999.00	999.0	999.00	999.0
59	999.00	999.0	999.00	999.0
60	999.00	999.0	999.00	999.0
61	999.00	999.0	999.00	999.0
62	999.00	999.0	999.00	999.0
63	999.00	999.0	999.00	999.0
64	999.00	999.0	999.00	999.0
65	999.00	999.0	999.00	999.0
66	999.00	999.0	999.00	999.0
67	999.00	999.0	999.00	999.0
	999.00	999.0	999.00	999.0
69	999.00	999.0	999.00	999.0
70	999.00	999.0	999.00	999.0
71	999.00	999.0	999.00	999.0
12	999.00	999.0	999.00	999.0
13	999.00	999.0	999.00	999.0
74	999.00	999.0	999.00	999.0
	999.00	999.0	999.00	999.0
01	999.00	999.0	999.00	999.0

	WORKER		NON-WC	RKER
	DELTA	MAXIMUM	DELTA	MAXIMUM
77	999.00	999.0	999.00	999.0
78	999.00	999.0	999.00	999.0
79	999.00	999.0	999.00	999.0
80	999.00	999.0	999.00	999.0
81	999.00	999.0	999.00	999.0
82	999.00	999.0	999.00	999.0
83	999.00	999.0	999.00	999.0
84	999.00	999.0	999.00	999.0
85+	999.00	999.0	999.00	999.0

DEATH BENEFIT POLICY:	0
0=NONE	
1=EMPLOYEE POLICIES, 730-DAY LIFETIME MAXIMUM AND NO INDEXING	
2=INDIVIDUAL POLICIES, 365-DAY LIFETIME MAXIMUM AND NO INDEXING	
3=INDIVIDUAL POLICIES, 730-DAY LIFETIME MAXIMUM AND NO INDEXING	
4=INDIVIDUAL POLICIES, 1825-DAY LIFETIME MAXIMUM AND NO INDEXING	
5=INDIVIDUAL POLICIES, 365-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
6=INDIVIDUAL POLICIES, 730-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
7=INDIVIDUAL POLICIES, 1825-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
8=EMPLOYEE POLICIES, 365-DAY LIFETIME MAX AND NO INDEXING	
9=EMPLOYEE POLICIES, 1835-DAY LIFETIME MAX AND NO INDEXING	
10=EMPLOYEE POLICIES, 365-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
11=EMPLOYEE POLICIES, 730-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
12=EMPLOYEE POLICIES, 1825-DAY LIFETIME MAX AND 5%/YEAR INDEXING	

REDUCED PAID-UP OPTION	0
	<b>v</b>
(0=NONE, 1=NO INDEXING, 2=INDEXING)	

## LTC INSURANCE PARAMETERS -- OPTION 2

INSURANCE OPTION (0=OFF, 1=ON)	0
PERCENT DISABLED ALLOWED TO BUY INSURANCE	100.0
PERCENT OF PREMIUM PAID BY INSURED INSTITUTIONALIZED	2.0
BASE YEAR FOR DOLLARS	1989
AGE ELIGIBLE TO RECEIVE BENEFITS	65

	NURSING HOME \$	ESCALATION	NIS \$	ESCALATION	CAP ESCALATION AT AGE YEARS	ESCALATION 1=% 2=\$
DAILY BENEFIT	100	5.0	-50	5.0	999	1
NOTE: INSURANCE ALV TO LIMIT DAILY CHARGE	VAYS PAYS MINII E TO DOLLAR AN	MUM OF DOLLAR 10UNT USE NEG/	AMOUNT (FF ATIVE NUMBE	ROM ABOVE) AND R IN DOLLAR AM	APPLICABLE DA	AILY CHARGE.

	NURSING			ADD TO ASSET	
	HOME	NIS	COMBINED	PROTECTION	
DEDUCTIBLE DAYS/VISITS	0	0	0		
MAXIMUM DAYS/VISITS	99999	99999	0		
MAXIMUM DOLLAR AMOUNG	0	0	40000	1	
COPAYMENT (%)	0.0	20.0			
ADL REQUIRED	0	3			
NOTE:					
1. TO USE COMBINED MAXIMU	JM DAYS/VISITS, ENT	ER 0 UNDER NUR	SING HOME AND	NIS, AND	
APPROPRIATE NUMBER UN	IDER COMBINED.				
2. COMINED DEDUCTIBLE DAY	YS/VISITS NOT AVAILA	ABLE.			
3. TO MAKE MAXIMUM DAYS/\	ISITS FOR NIS DEPEN	NDENT ON NUMBI	ER OF DAYS IN N	URSING HOME,	
ENTER -1 UNDER NIS.					
<ol><li>ADLS ARE FUNCTIONAL FO</li></ol>	R NIS ONLY. NURSING	G HOME MUST BE	0.		
0 = NONE					
1 = IADL ONLY					
2 = 1+ ADLS					
3 = 2+ ADLS					

- 4 = 3+ ADLS (85% OF 2+ ADLS)
  5. TO ADD THE DOLLAR AMOUNT SPENT TO THE PROTECTED ASSET AMOUNT, ENTER 1 (MAXIMUM DOLLAR AMOUNT ROW ONLY), OTHERWISE ENTER 0.

CLAIMS ADJUSTING:	
AVAILABLE ? (0=NO, 1=YES)	0

		PERCENT ALLOWED BENEFITS		
DISABILITY LEVEL		NURSING HOME	NIS	
IADL		100	100	
1 ADL	Í	75	75	
2 ADL'S		50	50	

# PREMIUMS

GROUP COVERAGE PARAMETERS:	
AVAILABLE ? (0=NOSEE NOTES)	0
LAPSES WHEN GROUP ELIGIBILITY ENDS? (1=YES, 0=NO)	0
NOTE:	
1. FOR GROUP COVERAGE:	
0 = NO GROUP COVERAGE AVAILABLE	
1 = REQUIRES PENSION COVERAGE	
2. GROUP COVERAGE TAKES PRECEDENCE OVER INDIVIDUAL	

	INDIVIDUAL	GROUP
START YEAR	1989	0
END YEAR	2025	0
ESCALATION RATE (INSURED AGE <65)	0.0	0
ESCALATION RATE (INSURED AGE 65+)	0.0	0
ESCALATION RATE (NEW PURCHASERS)	0.0	0
PERCENT ELIGIBILITY TO USE	100.0	0
AGE START ELIGIBLIITY	65	0
AGE END ELIGIBILITY (START YEAR)	999	0
AGE END ELIGIBILITY (OTHER YEARS)	999	0
PERCENT WITH REDUCED PREMIUMS	0	0.0
REDUCED PREMIUM PERCENT	0	0.0
PERCENT ELIGIBLE TO BUY	100	0.0
INCREASE PER YEAR (%)	0	0.0
MAX PERCENT	100	0.0

SOURCE OF PREMIUMS:						
	SOURCE	OPTION				
PREMIUMS FOR SELF EMPLOYED	0	0				
PREMIUMS FOR EMPLOYED	0	0				
PREMIUMS FOR RETIRED	0	0				
PREMIUMS FOR UNEMPLOYED	0	0				
NOTES: SOURCES ARE AS FOLLOWS:						
0 = TABLE BELOW (SET OPTION TO 1)						
1 = LOOK-UP TABLE INDIVIDUAL POLICI	1 = LOOK-UP TABLÈ INDIVIDUAL PÓLICIES					
2 = LOOK-UP TABLE EMPLOYEE POLICIES						
3 = LOOK-UP TABLE RETIRED POLICIES						
4 = LOOK-UP TABLE GENERIC POLICIES	5					

AGE	MONTHLY AMOUNT		
25	2.00	0	
26	2.00	0	
27	2.00	0	
28	2.00	0	
29	2.00	0	
30	2.00	0	
31	2.00	0	
32	2.00	0	
33	2.00	0	
34	2.00	0	
35	2.00	0	
36	2.00	0	
37	2.00	0	
38	2.00	0	
39	2.00	0	
40	2.00	0	
41	2.00	0	
42	2.00	0	
43	2.00	0	

AGE MONTHLY AMOUNT		
44	2.00	0
45	2.00	0
46	2.00	0
47	2.00	0
48	2.00	0
49	2.00	0
50	2.00	0
51	2.00	0
52	2.00	0
53	2.00	0
54	2.00	0
55	2.00	0
56	2.00	0
57	2.00	0
58	2.00	0
59	2.00	0
60	2.00	0
61	2.00	0
62	2.00	0
63	2.00	0
64	2.00	0
65	2.00	0
66	2.00	0
67	2.00	0
68	2.00	0
69	2.00	0
70	2.00	0
71	2.00	0
72	2.00	0
73	2.00	0
74	2.00	0
75	2.00	0
76	2.00	0
77	2.00	0
78	2.00	0
79	2.00	0
80	2.00	0
81	2.00	0
82	2.00	0
83	2.00	0
84	2.00	0
85+	0	0

TAX CREDIT PARAMETERS:						
	AGE	PERCENT	MAX \$	INCOME	CAP	
	<=	CREDIT	AMOUNT	MARRIED	SINGLE	
	40	0	0	40000	25000	
	50	0	0	40000	25000	
l í	60	0	0	40000	25000	
Í	70	0	0	40000	25000	
	999	0	0	40000	25000	
ESCALATION RATE FOR \$	5.5					
--	--------					
% POINT REDUCTION PER \$1000	1.0					
MARRIED CAP	60000					
SINGLE CAP	45000					
NOTE:						
1. INSURANCE PREMIUMS WILL BE REDUCED ONLY FOR THOSE WHO PAY	TAXES.					

2. THOSE WHO PAY LESS TAXES THAN THE MAXIMUM ALLOWABLE TAX CREDIT WILL BE PERMITTED TO HAVE THEIR PREMIUMS REDUCED ONLY UP TO THE AMOUNT THAT IS PAID IN TAXES.

# **PROBABILITY OF PURCHASE**

 PURCHASE PROBABILITIES SOURCE:
 1

 (1=SEE PROBABILITY BY PREMIUM AS % OF INCOME TABLE BELOW,

 2=EXTERNAL FILE (DEVICE 17),

 3=EXTERNAL FILE (DEVICE 18),

 4=SEE PROBABILITY BY POVERTY LEVEL TABLE BELOW)

UNDERWRITING FUNCTION:	
AVAILABLE? (0=NO, 1=YES)	0

YEAR AFTER PURCHASE BECOMES DISABLED	ADJUSTMENT FACTOR FOR PURCHASE PROBABILITY
1	0.65
2	0.72
3	0.79
4	0.86
5	0.93

COVERAGE FOR PARENTS:	
AVAILABLE? (0=NO, 1=YES)	0

PREMIUM AS %					
OF INCOME	65-69	71-74	75-79	80-84	85+
<1	0	0	0	0	0
<2	0	0	0	0	0
<3	0	0	0	0	0
<4	0	0	0	0	0
<5	0	0	0	0	0
<6	10	10	10	10	10
<7	10	10	10	10	10
<8	10	10	10	10	10
<9	10	10	10	10	10
<10	10	10	10	10	10
<11	10	10	10	10	10
<12	10	10	10	10	10
<13	10	10	10	10	10
<14	10	10	10	10	10
<15+	10	10	10	10	10

ASSET LEVEL GREATER THAN OR EQUAL TO (SINGLE)	25000.0
ASSET LEVEL GREATER THAN OR EQUAL TO (FAMILY)	25000.0

	1	2	3	4
AGE GROUPS <=	50	59	64	84

# PROBABILITY BY PREMIUM AS A PERCENT OF INCOME:

WORKERS:				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	100	100	100	100
1.5	1	2	2	3
2.0	0	1	2	3
2.5	0	1	1	3
3.0	0	0	1	2
3.5	0	0	0	2
4.0	0	0	0	2
4.5	0	0	0	1
5.0	0	0	0	0
5.5	0	0	0	0
6.0	0	0	0	0
6.5	0	0	0	0
999.0	0	0	0	0
7.5	0	0	0	0
8.0	0	0	0	0
8.5	0	0	0	0
9.0	0	0	0	0
9.5	0	0	0	0
10.0	0	0	0	0
10.5	0	0	0	0
11.0	0	0	0	0
11.5	0	0	0	0

PERCENT OF INDIVIDUAL INCOME	AGE GROUP 1	AGE GROUP 2	AGE GROUP 3	AGE GROUP 4
12.0	0	0	0	0
12.5	0	0	0	0
13.0	0	0	0	0
13.5	0	0	0	0
14.0	0	0	0	0
14.5	0	0	0	0
15.0	0	0	0	0

NON-WORKERS:				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	100	100	100	100
1.5	1	2	2	3
2.0	0	1	2	3
2.5	0	1	1	3
3.0	0	0	1	2
3.5	0	0	0	2
4.0	0	0	0	2
4.5	0	0	0	1
5.0	0	0	0	0
5.5	0	0	0	0
6.0	0	0	0	0
6.5	0	0	0	0
999.0	0	0	0	0
7.5	0	0	0	0
8.0	0	0	0	0
8.5	0	0	0	0
9.0	0	0	0	0
9.5	0	0	0	0
10.0	0	0	0	0
10.5	0	0	0	0
11.0	0	0	0	0
11.5	0	0	0	0
12.0	0	0	0	0
12.5	0	0	0	0
13.0	0	0	0	0
13.5	0	0	0	0
14.0	0	0	0	0
14.5	0	0	0	0
15.0	0	0	0	0

PROBABILITY BY POVERTY LEVEL:					
<100%		0	0	0	0
100-150%	ĺ	0	0	0	0
150-200%	ĺ	0	0	0	0
200-300%	ĺ	100	100	100	100
300% +	İ	100	100	100	100

# ASSET LEVEL LESS THAN MAX:

WORKERS:				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	100	100	100	100
1.5	1	2	0	0
2.0	0	1	0	0
2.5	0	1	0	0
3.0	0	0	0	0
3.5	0	0	0	0
4.0	0	0	0	0
4.5	0	0	0	0
5.0	0	0	0	0
5.5	0	0	0	0
6.0	0	0	0	0
6.5	0	0	0	0
7.0	0	0	0	0
7.5	0	0	0	0
8.0	0	0	0	0
8.5	0	0	0	0
9.0	0	0	0	0
9.5	0	0	0	0
10.0	0	0	0	0
10.5	0	0	0	0
11.0	0	0	0	0
11.5	0	0	0	0
12.0	0	0	0	0
12.5	0	0	0	0
13.0	0	0	0	0
13.5	0	0	0	0
14.0	0	0	0	0
14.5	0	0	0	0
15.0	0	0	0	0

NON-WORKERS:				
PERCENT OF	AGE GROUP	AGE GROUP	AGE GROUP	AGE GROUP
INDIVIDUAL INCOME	1	2	3	4
<1.0	100	100	100	100
1.5	1	2	0	0
2.0	0	1	0	0
2.5	0	1	0	0
3.0	0	0	0	0
3.5	0	0	0	0
4.0	0	0	0	0
4.5	0	0	0	0
5.0	0	0	0	0
5.5	0	0	0	0
6.0	0	0	0	0
6.5	0	0	0	0
7.0	0	0	0	0
7.5	0	0	0	0
8.0	0	0	0	0
8.5	0	0	0	0

PERCENT OF INDIVIDUAL INCOME	AGE GROUP 1	AGE GROUP 2	AGE GROUP 3	AGE GROUP 4
9.0	0	0	0	0
9.5	0	0	0	0
10.0	0	0	0	0
10.5	0	0	0	0
11.0	0	0	0	0
11.5	0	0	0	0
12.0	0	0	0	0
12.5	0	0	0	0
13.0	0	0	0	0
13.5	0	0	0	0
14.0	0	0	0	0
14.5	0	0	0	0
15.0	0	0	0	0

PROBABILITY BY P	OVERTY LEVEL:				
<100%		0	0	0	0
100-150%	ĺ	0	0	0	0
150-200%	ĺ	0	0	0	0
200-300%	İ	0	0	0	0
300% +	i	0	0	0	0

# LAPSE ASSUMPTIONS (IN PERCENT):

LAPSE CRITERIA:	
SELF-EMPLOYED	2
EMPLOYED	2
RETIRED	2
EMPLOYED	2
NOTES:	
1 = DELTA OR MAX PERCENT (SEE BELOW)	
2 = DELTA AND MAX PERCENT (SEE BELOW)	
3 = TERM LIFE PROBABILITY LOOK-UP	
4 = PENSION LIFE PROBABILITY LOOK-UP	
5 = HIGH EARLY-CASH VALUE PROBABILITY LOOK-UP	

	WOR	KER	NON-WC	ORKER
	DELTA	MAXIMUM	DELTA	MAXIMUM
25	9999.00	4.0	9999.00	4.0
26	9999.00	4.0	9999.00	4.0
27	9999.00	4.0	9999.00	4.0
28	9999.00	4.0	9999.00	4.0
29	9999.00	4.0	9999.00	4.0
30	9999.00	4.0	9999.00	4.0
31	9999.00	4.0	9999.00	4.0
32	9999.00	4.0	9999.00	4.0
33	9999.00	4.0	9999.00	4.0
34	9999.00	4.0	9999.00	4.0
35	9999.00	4.0	9999.00	4.0
36	9999.00	4.0	9999.00	4.0

	WORKER		NON-WORKER	
	DELTA	MAXIMUM	DELTA	MAXIMUM
37	99999.00	4.0	9999.00	4.0
38	9999.00	4.0	9999.00	4.0
39	9999.00	4.0	9999.00	4.0
40	9999.00	4.0	9999.00	4.0
41	9999.00	4.0	9999.00	4.0
42	9999.00	4.0	9999.00	4.0
43	9999.00	4.0	9999.00	4.0
44	9999.00	4.0	9999.00	4.0
45	9999.00	4.0	9999.00	4.0
46	9999.00	4.0	9999.00	4.0
47	9999.00	4.0	9999.00	4.0
48	9999.00	4.0	9999.00	4.0
49	9999.00	4 0	9999 00	4.0
50	9999.00	5.0	9999.00	5.0
51	9999.00	5.0	9999.00	5.0
52	9999 00	5.0	9999 00	5.0
53		5.0	9999 00	5.0
54		5.0	9999.00	5.0
55		5.0	9999.00	5.0
56		5.0	0000.00 0000 00	5.0
57		5.0	9999.00	5.0
58		5.0	0000 NN	5.0
50		5.0	0000 00	5.0
60		5.0	0000 00	5.0
61		0.0	0000 00	0.0
62		0.0	9999.00	0.0
62		0.0 6.0	9999.00	0.0
63		0.0 6.0	9999.00	0.0
64 65		0.0	9999.00	0.0
60	99999.00	999.0	9999.00	999.0
00	99999.00	999.0	9999.00	999.0
67	99999.00	999.0	9999.00	999.0
60	99999.00	999.0	9999.00	999.0
69	99999.00	999.0	9999.00	999.0
70	99999.00	8.0	9999.00	8.0
71	99999.00	8.0	9999.00	8.0
72	99999.00	8.0	9999.00	8.0
73	99999.00	8.0	9999.00	8.0
	99999.00	8.0	9999.00	8.0
75	9999.00	8.0	9999.00	8.0
76	9999.00	8.0	9999.00	8.0
//	9999.00	8.0	9999.00	8.0
/8	9999.00	8.0	9999.00	8.0
/9	9999.00	8.0	9999.00	8.0
80	9999.00	8.0	9999.00	8.0
81	9999.00	8.0	9999.00	8.0
82	9999.00	8.0	9999.00	8.0
83	9999.00	8.0	9999.00	8.0
84	9999.00	8.0	9999.00	8.0
85+	9999.00	8.0	9999.00	8.0

DEATH BENEFIT POLICY:	0
0=NONE	
1=EMPLOYEE POLICIES, 730-DAY LIFETIME MAXIMUM AND NO INDEXING	
2=INDIVIDUAL POLICIES, 365-DAY LIFETIME MAXIMUM AND NO INDEXING	
3=INDIVIDUAL POLICIES, 730-DAY LIFETIME MAXIMUM AND NO INDEXING	
4=INDIVIDUAL POLICIES, 1825-DAY LIFETIME MAXIMUM AND NO INDEXING	
5=INDIVIDUAL POLICIES, 365-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
6=INDIVIDUAL POLICIES, 730-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
7=INDIVIDUAL POLICIES, 1825-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
8=EMPLOYEE POLICIES, 365-DAY LIFETIME MAX AND NO INDEXING	
9=EMPLOYEE POLICIES, 1835-DAY LIFETIME MAX AND NO INDEXING	
10=EMPLOYEE POLICIES, 365-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
11=EMPLOYEE POLICIES, 730-DAY LIFETIME MAX AND 5%/YEAR INDEXING	
12=EMPLOYEE POLICIES, 1825-DAY LIFETIME MAX AND 5%/YEAR INDEXING	

REDUCED PAID-UP OPTION:	0
(0=NONE, 1=NO INDEXING, 2=INDEXING)	

# PUBLIC POLICY PARAMETERS

AVAILABLE ? (1=YES, 0=NO)	0
ACCUMULATE WITH (1=MEDICARE, 2=LTC INS.)	2
PROGRAM STARTS IN YEAR	1989
BASE YEAR FOR DOLLARS	1989
PERCENT ELIGIBLE	100.0
START AGE	35
END AGE	999

	NURSING HOME	NIS
DEDUCTIBLE DAYS/VISITS	0	0
DEDUCTIBLE \$	0	0
PUBLIC PAYMENT RATE	72.90	0
ESCALATION RATE FOR PAYMENT	5.5	0
COPAYMENT (%)	20.0	0
DAYS/VISITS OF COPAYMENT	999999	0
ADL REQUIRED	0	0
MAXIMUM DAYS/VISITS	183	0
MAXIMUM \$	999999	0
EPISODES OF CARE ALLOWED	1	
DAYS BETWEEN EPISODES REQ'D	183	
NOTES:		
1. INSURANCE TAKES PRECEDENCE OVE	R PUBLIC POLICY.	
2. ENTER EITHER DEDUCTIBEL DAYS/VISI	TS OR DEDUCTIBLE DOLLA	RS.
3. DEDUCTIBLE AND MAXIMUM DOLLARS	ESCALATE AT CPI.	
<ol><li>ADLS ARE FUNCTIONAL FOR NIS ONLY.</li></ol>	NURSING HOME MUST BE	0.
0 = NONE		
1 = IADL ONLY		
2 = 1+ ADLS		
3 = 2+ ADLS		
4 = 3+ ADLS (85% OF 2+ ADLS)		

- 5 = 3+ ADLS (72.6% CURRENT, 60.5% OTHER DISABLED) 5. EPISODES OF CARE APPLIES TO NURSING HOME DAYS ONLY. IF NOT REQUIRED, SET TO 0!

### LOW INCOME PROTECTION

	% PAID BY MEI	DICAID
INCOME LEVELS	NURISNG HOME	NIS
< SSI	0	0
SSI - POVERTY	0	0
100-150 % POV	0	0
150-200 %	0	0
200-250 %	0	0
250-300 %	j 0	0
NOTE: SEE TABLE 35A FOR SSI AND POVER	RTY LEVELS	

MEDICAID NIS	
OVER-RIDE DEFAULTS	0
START YEAR	1989
INCOME LIMIT (SINGLE)	438
INCOME LIMIT (MARRIED)	572
ASSET LIMIT (SINGLE)	2000
ASSET LIMIT (MARRIED)	3000
ADL REQUIRED	3

50.0
13.8
20.0
11.2

COST SHARING (IN %)		
< SSI		0
SSI - POVERTY		0
100 - 200		0
200 - 300		0
NOTES:		
1. INCOME AND ASSET LIMITS ESCALA	TE AT CPI	
2. SEE TABLE 35A FOR INCOME LEVELS	S	

### HEALTH CARE SAVINGS ACCOUNT PARAMETERS

AVAILABLE? (1=YES, 0=NO)	0

INITIAL PARTICIPATION RATES (IN PERCENT):							
AGE	GROUP1	GROUP2	GROUP3	GROUP4	GROUP5	GROUP6	GROUP7
25	0	4	8	13	20	25	45
26	0	4	8	13	20	25	45
27	j O	4	8	13	20	25	45
28	0	4	8	13	20	25	45
29	j 0	4	8	13	20	25	45
30	0	4	8	13	20	25	45
31	0	4	8	13	20	25	45
32	j 0	4	8	13	20	25	45
33	0	4	8	13	20	25	45
34	0	4	8	13	20	25	45
35	0	6	10	18	29	43	50
36	0	6	10	18	29	43	50
37	0	6	10	18	29	43	50
38	0	6	10	18	29	43	50
39	0	6	10	18	29	43	50
40	0	6	10	18	29	43	50
41	0	6	10	18	29	43	50
42	0	6	10	18	29	43	50
43	0	6	10	18	29	43	50
44	0	6	10	18	29	43	50
45	0	11	21	30	41	58	65
46	0	11	21	30	41	58	65
47	0	11	21	30	41	58	65
48	0	11	21	30	41	58	65
49	0	11	21	30	41	58	65
50	0	11	21	30	41	58	65
51	0	11	21	30	41	58	65
52	0	11	21	30	41	58	65
53	0	11	21	30	41	58	65

	AGE	GROUP1	GROUP2	GROUP3	GROUP4	GROUP5	GROUP6	GROUP7
54		0	11	21	30	41	58	65
55		0	18	34	51	55	64	73
56		0	18	34	51	55	64	73
57		0	18	34	51	55	64	73
58		0	18	34	51	55	64	73
59		0	18	34	51	55	64	73
60		0	18	34	51	55	64	73
61		0	18	34	51	55	64	73
62		0	18	34	51	55	64	73
63		0	18	34	51	55	64	73
64		0	18	34	51	55	64	73

NOM	NON-CONTRIBUTOR PARTICIPATION RATES (IN PERCENT):							
	AGE	GROUP1	GROUP2	GROUP3	GROUP4	GROUP5	GROUP6	GROUP7
25		0	0	0	0	0	0	0
26		0	0	0	0	0	0	0
27		0	0	0	0	0	0	0
28		0	0	0	0	0	0	0
29		0	0	0	0	0	0	0
30		0	0	0	0	0	0	0
31		0	0	0	0	0	0	0
32		0	0	0	0	0	0	0
33		0	0	0	0	0	0	0
34		0	0	0	0	0	0	0
35		0	2	2	10	10	20	20
36		0	0	0	0	0	0	0
37		0	0	0	0	0	0	0
38		0	0	0	0	0	0	0
39		0	0	0	0	0	0	0
40		0	0	0	0	0	0	0
41		0	0	0	0	0	0	0
42		0	0	0	0	0	0	0
43		0	0	0	0	0	0	0
44		0	0	0	0	0	0	0
45		0	10	10	15	15	30	30
46		0	0	0	0	0	0	0
47		0	0	0	0	0	0	0
48		0	0	0	0	0	0	0
49		0	0	0	0	0	0	0
50		0	0	0	0	0	0	0
51		0	0	0	0	0	0	0
52		0	0	0	0	0	0	0
53		0	0	0	0	0	0	0
54		0	0	0	0	0	0	0
55		0	10	10	20	20	20	20
56		0	0	0	0	0	0	0
57		0	0	0	0	0	0	0
58		0	0	0	0	0	0	0
59		0	0	0	0	0	0	0
60		0	0	0	0	0	0	0
61		0	0	0	0	0	0	0
62		0	0	0	0	0	0	0
63		0	0	0	0	0	0	0
64		0	0	0	0	0	0	0

CONTRIBUTIONS AS A PERCENT OF WAGES AN	ID SALARIES:
AGE	PERCENT OF EARNINGS
25	0.73
26	0.73
27	0.73
28	0.73
29	0.73
30	1.45
31	1.45
32	1.45
33	1.45
34	1.45
35	1.45
36	1.45
37	1.45
38	1.45
39	1.45
40	2.18
41	2.18
42	2.18
43	2.18
44	2.18
45	2.18
46	2.18
47	2.18
48	2.18
49	2.18
50	2.90
51	2.90
52	2.90
53	2.90
54	2.90
55	2.90
56	2.90
57	2.90
58	2.90
59	2.90
60	2.90
61	2.90
62	2.90
63	2.90
64	2.90

TAX CREDIT ACCOUNT (TCA):	
PERCENT OF CONTRIBUTIONS	60.0
REAL INTEREST RATE (%)	2.0

HEALTH CARE SAVINGS ACCOUNT (HCSA):	
PERCENT OF CONTRIBUTIONS	100.0
REAL INTEREST RATE	3.0

MEDIGAP POLICY:	
SLOPE	0.167
INTERCEPT	-64.1
(I.E. ANNUITIZED MEDIGAP = SLOPE*TCA+INTERCEPT)	

LTC INSURANCE COST (1989\$):	
COST	17784
REAL INTEREST RATE (%)	1.4

MAXIMUM ANNUAL CONTRIBUTION (1989\$):	
MAXIMUM (\$)	1392.0
ESCALATION RATE (%)	5.5

#### **CREDITED CONTRIBUTION POLICY PARAMETERS**

PROGRAM START YEAR	1991
MORATORIUM YEARS	0
BASE YEAR FOR \$	1989

MINIMUM ANNUAL INCOME REQ'D FOR CREDITED CONTIRBUTIONS:	
INDIVIDUAL	6870
MARRIED COUPLE	10305

MINIMUM ANNUAL INCOME REQ'D FOR NON-CREDITED CONTRIBUTION:		
INDIVIDUAL	1040	
MARRIED COUPLE	1040	

CONTRIBUTION AMOUNTS:				
ANNUAL INCOMEGREATER THAN:	PERCENT OF INCOME CONTRIBUTED			
0	0			
1040	0.5			
10305	1			
999999	1			
999999	1			
999999	1			
999999	1			
999999	1			
999999	1			
999999	1			

ANNUAL ESCALATION RATE FOR PERCENT OF INCOME	10.0
YEAR TO START ESCALATION	1991
YEAR TO END ESCALATION	2020

#### MODIFIED BASE CASE (1=YES)

ANNUAL START OF FORMAL HOME CARE USE PROBABILITIES FOR THE NON-INSTITUTIONALIZED DISABLED (%) TABLE 22			
DISABLITY LEVEL	MALES	FEMALES	
IADL ONLY	12.9	22.0	
1 ADL	15.9	26.6	
2+ ADLs	16.6	27.7	

0

ANNUAL PROBABILITY OF STARTING TO USE FORMAL HOME CARE FOR THE NON-INSTITUTIONALIZED NON-DISABLED TABLE 23				
	MALES		FEMALES	
AGE	SINGLE	MARRIED	SINGLE	MARRIED
65	1.56	0.92	2.14	1.26
66	1.69	0.99	2.31	1.37
67	1.82	1.07	2.50	1.48
68	1.97	1.16	2.70	1.59
69	2.12	1.25	2.91	1.72
70	2.29	1.35	3.14	1.86
71	2.48	1.46	3.39	2.01
72	2.67	1.58	3.66	2.17
73	2.89	1.71	3.95	2.34
74	3.12	1.85	4.26	2.53
75	3.36	1.99	4.59	2.73
76	3.63	2.15	4.95	2.95
77	3.91	2.32	5.33	3.18
78	4.22	2.51	5.75	3.43
79	4.55	2.71	6.19	3.71
80	4.91	2.92	6.67	4.00
81	5.29	3.16	7.18	4.31
82	5.70	3.41	7.73	4.65
83	6.14	3.68	8.31	5.01
84	6.61	3.96	8.94	5.40
85	7.12	4.28	9.61	5.82
86	7.66	4.61	10.33	6.27
87	8.25	4.97	11.09	6.75
88	8.87	5.36	11.91	7.27
89	9.53	5.77	12.78	7.82
90	10.25	6.22	13.70	8.42
91	11.01	6.70	14.68	9.05
92	11.81	7.21	15.72	9.73
93	12.68	7.76	16.83	10.46
94	13.59	8.36	18.00	11.23
95	14.57	8.98	19.23	12.05
96	15.61	9.65	20.54	12.93
97	16.70	10.37	21.91	13.86
98	17.86	11.14	23.35	14.86
99	19.09	11.96	24.87	15.91
100	20.39	12.83	26.46	17.02

PAID HOME CARE DISABILITY LEVEL PREVALENCE RATES (%) TABLE 24					
	TOTAL		IADL	1 ADL	2+ ADLS
MARRIED					
65-74	100.0		25.2	18.5	56.3
CHANGED 56.2 TO 56.3					
75-84	100.0		23.9	20.9	55.2
85+	100.0		16.7	16.7	66.6
CHANGED 66.5 TO 66.6		-			
UNMARRIED					
65-74	100.0		34.1	24.3	41.6
CHANGED 41.5 TO 41.6		•			
75-84	100.0		32.3	25.6	42.1
85+	100.0	i	33.9	37.8	28.3
CHANGED 28.4 TO 28.3		•			

TABLE 25: DISTRIBUTION OF MEDICARE LENGTH OF USE OF CHRONICALLY DISABLED MEDICARE HOME HEALTH USERS (%)			
		ASSIGNED NUMBER	
	DISTRIBUTION		
<3	59.0	2.0	
3-6	14.2	4.5	
6-12	9.6	9.0	
12-30	7.1	24.0	
30-60	7.0	48.0	
60+	3.1	72.0	

TABLE 26: PERCENTAGE DISTRIBUTION OF MEDICARE UNITS AMONG CHRONICALLY DISABLED PERSONS RECEIVING MEDICARE VISITS				
REIMBURSED VISITS PROBABILITY				
1-9		6	39.9	
10-20		16	23.3	
21-30	ĺ	27	12.1	
31-40		38	7.1	
41-50	ĺ	49	4.6	
51-99		82	8.5	
100+	ĺ	165	4.5	
CHANGED 4.1 TO 4.5	-			

TABLE 27: PERCENTAGE OF NON-INSTITUTIONALIZED NON-DISABLED PERSONS RECEIVING MEDICARE HOME HEALTH VISITS			
AGE	MALES	FEMALES	
65-74	3.10	) 3.30	
75-84	4.80	) 4.80	
85+	9.40	) 16.40	

TABLE 28: MEDICARE HOME HEALTH LENGTH OF USE DISTRIBUTION			
LENGTH OF USE	PERCENTAGE		
(MONTHS)	DISTRIBUTION		
1	58.6		
2	19.6		
3	9.2		
4	3.0		
5	3.0		
6	2.6		
7	0.6		
8	0.7		
9	0.7		
10	0.7		
11	0.7		
12	0.6		

TABLE 29: DISTRIBUTION OF LENGTH OF USE FOR NON-INSTITUTIONAL NON-MEDICARE SERVICE USERS			
DURATION			
(MONTHS)		PROBABILITY	
< 3	2.5	51.5	
3-6	4.5	14.7	
6-12	9.0	12.0	
12-60	36.0	17.4	
60+	72.0	4.4	

TABLE 30: MONTHLY NUMBER OF FORMAL VISITS BY FORMAL HOME CARE DISABILITY LEVEL					
VISITS	IADL	1 ADL	2+ ADLS	VISITS	
1-10	69.9	59.1	38.7	7	
11-20	8.4	8.0	11.8	15	
21+	21.7	32.9	49.5	32	

TABLE 31: INFORMAL HOME CARE PREVALENCE RATES FOR THE DISABLED					
AGE		IADL	1 ADL	2+ ADLS	
65-74		83.5	84.0	95.8	
75-84	Ì	85.5	85.3	92.2	
85+	Ì	88.0	91.4	95.3	

TABLE HHA1: PERCENT OF CHRONICALLY DISABLED ELDERLY RECEIVING PAID HOME	
CARE WHO RECEIVE MEDICARE REIMBURSEMENT	
41	.4

TABLE HHA2: RESPITE CARE	
ADL LEVEL	3
PERCENT	0
NUMBER OF HOURS	0
COST/HOUR (\$1984)	13
PERCENT COINSURANCE	20

TABLE HHA3: INDUCED DEMAND			
OPTION I.	UNLT	UNLT	FUBLIC FULIC
NIS	0.0	0.0	0.0
NURSING HOME	0.0	0.0	0.0
INSURANCE	INSURANCE	INSUR	ANCE +
OPTION 2:	ONLY	PUBLIC	POLICY
NIS	0.0	C	0.0
NURSING HOME	0.0	C	0.0

TABLE PHH32: AVERAGE DAILY RATES FOR NURSING HOME CARE BY SOURCE OF PAYMENT						
	CHARGE PER DAY					
	ASSUMED IN ANNUAL RATE OF					
PAYOR	CALENDAR YEAR 1988	INCREASE AFTER 1988 (%)				
MEDICAID	55.30	5.5				
PRIVATE PAYOR	75.90	5.5				
MEDICARE	127.50	5.5				
LTC INSURANCE	66.40	5.5				

TABLE 33: PHASE-IN OF MEDICARE CATASTROPHIC COVERAGE ACT PREMIUM AND SURTAX PROVISIONS							
		1989	1990	1991	1992	1993	% INC.
MONTHLY PROJECTED CURRENT		27.10	29.00	30.60	32.28	34.05	5.5
LAW PART B PREMIUM							
MONTHLY CATASTROPHIC PREMIUM		4.00	0	0	0	0	5.5
ANNUAL SURTAX RATES (%)	1	0.0	0	0	0	0	0.0
MAXIMUM ANNUAL LIABILITY	1	800	850	900	950	1050	5.5
MONTHLY MEDIGAP PREMIUM	ĺ	60.00	70.00	73.85	77.91	82.20	5.5

TABLE 34:       FINANCING OF NON-MEDICARE, NON-MEDICAID HOME CARE SERVICES FOR THE         ELDERLY (% OF TOTAL RECEIVING SERVICES FROM EACH PAYMENT SOURCE)				
PAID HOME CARE SERVICES				
SOURCE OF FUNDS	POOR	NON-POOR		
OUT-OF-POCKET	69.7	86.1		
OTHER PAYORS	30.3	13.9		

TABLE 35: AVERAGE PRICES PER VISIT FOR HOME CARE BY SOURCE OF PAYMENT IN 1986				
		CHARGE		
PAYOR		PER VISIT	PERCENT INCREASE	
MEDICAID		48.70	5.5	
MEDICARE	ĺ	51.10	5.5	
OUT-OF-POCKET	ĺ	12.50	5.5	
OTHER	ĺ	25.20	5.5	
CAP OF OUT-OF-POCKET INCOME	İ	30.0	0.0	
EXPENSE (%)				

TABLE 35A: MEDICAID NIS SOURCE OF PAYMENT STRUCTURE						
	SING	SINGLE MARRIED				
	INCOME	PROB	INCOME	PROB		
SSI LEVEL	360	18.7	530	18.7		
SSI TO 100% POVERTY	454	32.7	572	32.7		
100 - 200% POVERTY	908	43.5	1144	43.5		
200 - 300% POVERTY	1362	16.1	1716	16.1		
	SINGLE	MARRIED				
	2000	3000				
YEAR FOR DOLLARS	1987	1987				
	6972					
	0072   5447					
BASE VEAR	J447   1087					
DAGE TEAR	1907					
HOME EQUITY CONVERSION	:					
LENGTH OF STAY IN DAYS <	=		1	91		
PERCENT WHO CONVERT (A	SSETS > MCD LIMIT	)	i	0.0		
PERCENT WHO CONVERT (A	SSETS <= MCD LIMI	, T)	i	0.0		
LENGTH OF STAY IN DAYS <	=	/	İ	365		
PERCENT WHO CONVERT (A	SSETS > MCD LIMIT)	)	i	25.0		
PERCENT WHO CONVERT (A	SSETS <= MCD LIMI <sup>2</sup>	T)	i	5.0		
LENGTH OF STAY IN DAYS <	=		İ	730		
PERCENT WHO CONVERT (A	SSETS > MCD LIMIT)	)	İ	50.0		
PERCENT WHO CONVERT (ASSETS <= MCD LIMIT)						
LENGTH OF STAY IN DAYS < = 999						
PERCENT WHO CONVERT (A	SSETS > MCD LIMIT)	)		75.0		
PERCENT WHO CONVERT (A	SSETS <= MCD LIMI	Т)		15.0		
MCD RECIPIENT EXEMPT DA	YS			183		
MCD RECIPIENT PERCENT S	ELLS			0		

ASSET TRANSFER TO FAMILIES:	
ALLOW TRANSFER IF SELL HOME (0=NO, 1=YES)	0

		PROBABILIT	Y OF TRANSFE	R (PERCENT)
		LOS < 6	LOS 6 - 24	
ASSET LEVE	L	MONTH	MONTHS	LOS >= 24
<	5000	90	90	90
<	10000	20	50	50
<	9999999	10	25	25

# MEDICARE CATASTROPHIC COVERAGE ACT (IN 1989 DOLLARS)

		1989	1990	1991	1992+
PERCENT OF POVERTY LEVEL FOR TRANSFER		122	133	133	150
FEDERAL INCOME TAX SURTAX LEVEL \$	Т	150			
ANNUAL INCREASE IN SURTAX LEVEL AFTER 89	İ	0.0			
SINGLE INDIVIDUAL RETAINED ASSETS (AFTER 6 MONTHS)	I	2000			
SINGLE INDIVIDUAL RÉTAINED ASSETS (1ST 6 MONTHS)	I	2000			
COMMUNITY SPOUSE RETAINED ASSETS (MIN)	I	12000			
COMMUNITY SPOUSE RETAINED ASETS (MAX)		60000			

PERCENT WHO RECEIVE MEDICARE:					
		BEFORE			1990 AND
LENGTH OF STAY		1988	1988	1989	AFTER
< 3 MONTHS		43.0	50.0	60.0	60.0
3 - 6 MONTHS	Í	27.0	40.0	50.0	45.0
6 - 1 YEAR		18.0	30.0	35.0	35.0
> 1 YEAR	I	13.0	25.0	30.0	30.0
DAYS OF COVERAGE	Ι	30.0	35.0	50.0	40.0
PERCENT OF CURRENT RESIDENTS COVERED		0.0	0.0	10.0	0.0

COINSURANCE	
DAYS	8
PERCENT	20.0
NOTE: A POSITIVE NUMBER FOR DAYS INDICATES COINSURANCE DAYS FOR	R 1989 ONLY, A
NEGATIVE NUMBER INDICATES DAYS FOR 1989 AND AFTER	

MEDICAID MONTHLY PERSONAL ALLOWANCE	30.0

ABOVE MEDICAID LIMITS):	
MONTHLY AMOUNT (1989\$)	200.0
PERCENT WHO RECEIVE	10.0

DEFAULT INFLATION RATE	5.5

REAL HOME EQUITY GROWTH (%)	1.0

HOUSING ALLOWANCE	SINGLE	MARRIED
% OF MONTHLY INCOME	0.0	0.0
MAXIMUM DAYS	365	999999

TABLE PARAMETERS: (0=OFF, 1= ON)	
TABLE A1-A3	1
TABLE B1-B7	1
TABLE C	1
TABLE D	j 1
TABLE 0	1
TABLE 1	1
TABLE 2	1
TABLE 2A-2B	1
TABLE 3	1
TABLE 4	1
TABLE 5A	1
TABLE 5	1
TABLE 6	1
TALBE 7	1
TABLE 8	1
TABLE 9	1
TABLE 10	1
TABLE 11	1
	1
	1
	1
TABLE 19	1
TABLE 20	   1
TABLE 22	   1
TABLE 22	1
TABLE 24	, . I 1
TABLE 24A	1
TABLE 24B	, I 1
TABLE 24C	,   1
TABLE 25	1

TABLE 26	1
TABLE 27	1
TABLE 28	i 1
TABLE 29	1
TABLE 29A	1
TABLE 29B	i 1
TABLE G1	1
TABLE G2	1
TABLE G3	i 1
TABLE G4	1
TABLE G5	1
TABLE 30	1
TABLE 30A	1
TABLE 30B	1
TABLE 31	1
TABLE 32	1
TABLE 33	1
TABLE 34	1
TABLE 35	1
TABLE 36	1
TABLE PJE1	1
TABLE PJE2	1
TABLE 37	1
TABLE 38	1
TABLE 39	1
TABLE 40	1
TABLE 41	1
LAST YEAR FOR TABLES	2020
ENTER BASE YEAR FOR DOLLARS	1992
ENTER 0 FOR NOMINAL	

# LONG-TERM CARE MICROSIMULATION MODEL

# **Reports Available**

Brookings/ICF Long-Term Care Financing Model: Designing and Using Model Simulations

Executive Summary	http://aspe.hhs.gov/daltcp/reports/modsimes.htm
HTML	
PDF	

Brookings/ICF Long-Term Care Financing Model: Model Assumptions http://aspe.hhs.gov/daltcp/reports/modampes.htm HTML http://aspe.hhs.gov/daltcp/reports/modampes.pdf PDF

Brookings/ICF Long-Term Care Financing Model: Programmer's/Operator's Manual http://aspe.hhs.gov/daltcp/reports/prgopres.htm HTML PDF http://aspe.hhs.gov/daltcp/reports/prgopres.pdf

Brookings/ICF Long-Term Care Financing Model: User's Guide to Specifying Simulations HTML http://aspe.hhs.gov/daltcp/reports/1992/usergdes.htm PDF

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