Conversion of Life-Insurance Policies to Long-Term Care Benefit Plans in Florida

Prepared for:
Florida Health Care Association

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Executive Summary

The objective of the following research is to examine utilizing life-insurance policy assets as a means of private funding in order to pay for long-term health care needs. Life-insurance policies are an unqualified asset for Medicaid eligibility, and owners have limited options; to either surrender their policies or be subject to costly recovery actions by Medicaid. The option to convert life-insurance policies to a long-term health care benefit plan is considered a “qualified spend down” for Medicaid eligibility.

CEFA FSU researched the value for conversion of life-insurance policies in Florida, this for both the elderly and non-elderly adults with self-help limitations (i.e. being in need of some form of long-term health care) utilizing the opportunity for conversion of life-insurance policies in Florida. The research involved analyzing a small sample of data obtained from seniors having converted their life-insurance policies into long-term health care benefit plans. Several assumptions were made. Given the issue of not being eligible for Medicaid, this especially with assets e.g. life-insurance policies on the higher value end are involved two scenarios were analyzed. One scenario determining eligibility if life-insurance to a maximum value of $180,000 were owned (61.6th percentile of life-insurance policy distribution), and another scenario involving ownership to a maximum value of $200,000 (66.8th percentile).

CEFA FSU finds that about 2,520 to 2,530 seniors annually (averages per scenario 1 and 2 respectively) may upon becoming self-care limited, receive benefits payable to the average total amount from $78.9 to $90.1 million net (exclusive of final expenses), if they convert their life-insurance policies into long-term health care benefit plans (i.e. $31,308 to $35,622 net per senior on average). Additionally, from 1,752 to 1,956 adults annually may, upon becoming self-care limited, receive benefits payable to the average total amount of from $59.4 to $67.3 million net, if their life-insurance policies are converted into long-term health care benefit plans (i.e. about $33,924 to $34,399 net per adult on average). In total, about 4,272 to 4,486 residents annually may, upon becoming self-care limited, receive benefit payable to the average total amount from $138.3 to $157.4 million net, if their life-insurance policies are converted into long-term health care benefit plans.

Conversely, Medicaid expenses on long-term health care services for residents may be offset by similar amounts (as aforementioned) annually. This is about 5.07-5.78 percent of the Medicaid long-term care appropriations for Nursing Home Care or 2.99-3.40 percent of the total Medicaid Long Term Care budget of Fiscal Year 2011-2012.

<table>
<thead>
<tr>
<th>Percentile on Insurance Policy Distribution</th>
<th>Medicaid Eligibility at Insurance Policy Values Less than $180,000</th>
<th>Medicaid Eligibility at Insurance Policy Values Less than $200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>61.6</td>
<td>66.8</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>$ 138.3 Million</td>
<td>$ 157.4 Million</td>
</tr>
</tbody>
</table>
1. Introduction

For the 2012 Florida legislative session, House Bill 1055 is being introduced, and would require: a) use of an accelerated death benefit (ADB) rider, if present, to pay for nursing home care, b) required disclosure to the consumer of the National Conference of Insurance Legislators (NCOIL) Model Law, (which deals amongst others with unclaimed property policies), and c) would allow policy conversions as an extended spend down Medicaid eligibility requirement.

The objectives of the sponsors of the bill are twofold, namely:

- To protect consumers by giving policy owners as much information as possible about their legal rights on life-insurance policy ownership; and
- To save taxpayers money by utilizing the value of life-insurance policies and to delay the need for a citizen becoming dependent on Medicaid.

2. Long-term Care Benefit Plans and Life-insurance Conversion

The objective of this research project is to examine the impacts of the objective of House Bill 1055, specifically the opportunities for utilizing life-insurance policy assets as an available means whereby private funding may pay for long-term health care needs. In order to perform the research, a public records request was relayed to the Florida Department of Children & Families.1 To date however, the request is still in due process with the attorney by the General Counsel's office of the afore-mentioned department. Their preliminary response was that it may not be possible to query a specific type of asset, such as life-insurance. Nonetheless, a small data sample was obtained from Life Care Funding Group, LLC2 of seniors who had converted their life-insurance policies into long-term care benefit plans, and upon which the findings and conclusions of this research are based. The data from the sample, however, could not be verified.

Estimated Medicaid expenditures for Fiscal Year 2011-12 (July 2011 through June 2012) were approximately $20.3 billion, covering approximately 3.19 million people in Florida.3 Of the state's Medicaid "service and deliverable" expenditures, seniors consumed the larger part, namely 69 percent. According to the state Department of Elder Affairs, over 3.26 million Floridians (or about 17.3 percent of the state's population) are of age 65 and over, while about 40 percent of seniors

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1 Request was relayed Friday 16/12/2011.
2 Life Care Funding Group, LLC. See http://www.lifecarefunding.com/
have at least one disability, potentially needing some form of long-term care. Some estimated 42,375 adults will become self-help limited annually, of which 11.5 percent will become dependent on Medicaid (see below). However, few Floridians can afford long-term care insurance to cover or financially provide for long-term health care needs. On the other hand, 7.4 million residents, or about 40 percent of the state’s population, own life-insurance policies to the combined worth of $1.44 trillion. On applying for assistive care, home and community-based services through a Medicaid waiver or nursing home long-term care, individuals must meet both medical and financial criteria to qualify for public assistance programs that receive federal funding. The Department of Elder Affairs’s "Comprehensive Assessment and Review for Long-Term Care Services (CARES) Program" determines medical eligibility, and the Department of Children and Families “Economic Self-Sufficiency (ACCESS) Program” determines financial eligibility. On registering with ACCESS, applicants have to disclose assets and income. In particular, all Medicaid applicants are specifically asked if they own life-insurance policies, and if so, they have to disclose the full policy details. A failure to disclose and comply is fraud.

A life-insurance policy is legally recognized as an asset of the policy owner (with all rights of personal property ownership) and it counts against the owner when qualifying for Medicaid. If a policy has more than a minimal amount of cash value (usually in the range of $2,000) it must be liquidated and that money is to be spent towards cost of care before the owner will qualify for Medicaid.

According to the Florida Legislature’s Office of Program Policy Analyses and Government Accountability: “A life-insurance policy can be surrendered for its cash value to be spent down on care, or a policy can be converted for its fair market value and the full benefit of that conversion can be used to pay for long-term care as a qualified spend down. The owner of one or more policies has a variety of options to consider:

- A policy with more than a minimal amount of cash value must be surrendered back to the insurance company with the proceeds spent down on care.
- A policy with no cash value does not need to be liquidated but the death benefit will be subject to federally required Medicaid recovery efforts to return the amount of money spent on care.
- Many states will exempt a small “final expense” policy if the full death benefit value is assigned to a funeral home.

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5 The Department of Elder Affairs administers five Medicaid home and community-based services waiver programs for seniors: Adult Day Health Care (ADHC); Aged and Disabled Adult (ADA); Assisted Living for the Elderly (ALE); Channeling for the Frail Elder; and Nursing Home Diversion (NHD), also known as Long-Term Care Community Diversion Pilot Project. Each waiver has additional eligibility criteria. See amongst others http://elderaffairs.state.fl.us/english/GLR/sops2007/Files/Section%20E.pdf and http://www.oppaga.state.fl.us/profiles/5023/
• Third-Party Assignment or Transfer of a life-insurance policy for less than its fair market value is a violation of asset transfer rules if done within the so-called 60-month “look back” period.

• A policy owner has the legal right to convert a life-insurance policy into a long-term care benefit plan at its fair market value and extend their spend down period by covering cost of care as private pay while preserving a portion of the death benefit until exhausted.

The policy conversion option is considered a “qualified spend down” of a life-insurance policy asset for Medicaid eligibility. By converting an existing life-insurance policy to a long-term care benefit plan, the owner is spending down the asset towards their cost of care in a Medicaid compliant manner while still preserving a portion of the death benefit. If the insured passes away while spending down via their benefit enrollment, any remaining death benefit would be paid out to the designated beneficiary without being subject to Medicaid recovery.”

In addition to the benefit for the individual in terms of receiving needed long-term health care, upon conversion of his/hers’ life-insurance policy, the service provider will gain revenues subject to Florida tax at the corporate rate. These dollars would not exist if not for the policy conversion option. Next to the delayed entry onto Medicaid, this aspect needs mentioning, but would need further economic impact or consequence analyses, and is not part of this research.

3. Economic Analyses and Methodology

This research as to the value of potential life-insurances for conversion involves various consecutive steps or building blocks. First is an age distribution, which is taken from the US 2010 Census, to have proportional numbers per each age category, this given the “assets” to be attributed. Second, percentages of individuals on disability are taken from the Center for Personal Assistance Services: “Disability Data for Florida”, from the 2009 American Community Survey, Center for Personal Assistance Services. In particular, the data on “self-care limitation” is matched with the population per age distribution to get an age distribution on “self-care limitation” in Florida. However not all people with “self-care limitations” will end up in need of Medicaid assistance. Therefore, thirdly, a dependency rate is calculated based on the Lewin Group data on Medicaid dependency of Floridians from their Medical Expenditure Panel Survey (MEPS) data, and published in the “Medicaid’s Impact Helping People with Serious Health Care Needs”. In table 1, the relevant data of Floridians with serious health care issues, relying on Medicaid, are given.

6 http://www.oppaga.state.fl.us/profiles/5023/
7 U.S. Census Bureau, data retrieved from http://www.census.gov/popest/data/intercensal/state/ST-EST00INT-02.html
Table 1: Floridians with Serious Health Care Issues Who Rely on Medicaid.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total Number</th>
<th>Number who rely on Medicaid</th>
<th>percentage</th>
<th>percentage</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 19</td>
<td>3,080</td>
<td>1,120</td>
<td>36.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-64</td>
<td>221,400</td>
<td>24,160</td>
<td></td>
<td>10.9%</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>318,530</td>
<td>26,380</td>
<td></td>
<td>8.28%</td>
<td></td>
</tr>
<tr>
<td>&lt; 19</td>
<td>15,700</td>
<td>7,220</td>
<td>46.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-64</td>
<td>775,580</td>
<td>96,810</td>
<td></td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>745,380</td>
<td>96,810</td>
<td></td>
<td>12.99%</td>
<td></td>
</tr>
<tr>
<td>&lt; 19</td>
<td>433,380</td>
<td>148,940</td>
<td>34.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-64</td>
<td>972,620</td>
<td>126,090</td>
<td></td>
<td>13.0%</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>495,780</td>
<td>58,310</td>
<td></td>
<td>11.76%</td>
<td></td>
</tr>
<tr>
<td>&lt; 19</td>
<td>70,980</td>
<td>32,490</td>
<td>45.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-64</td>
<td>2,599,380</td>
<td>272,890</td>
<td></td>
<td>10.5%</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>2,362,840</td>
<td>235,900</td>
<td></td>
<td>9.98%</td>
<td></td>
</tr>
<tr>
<td>&lt; 19</td>
<td>523,140</td>
<td>189,770</td>
<td>36.77%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-64</td>
<td>4,568,980</td>
<td>519,950</td>
<td></td>
<td>11.48%</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>3,922,530</td>
<td>417,400</td>
<td></td>
<td>10.82%</td>
<td></td>
</tr>
</tbody>
</table>

Calculated from data taken from the table, the weighted average on seniors (age 65 and over) in Florida having “Cancer”, “Diabetes”, “Chronic Lung Disease” and/or “Heart Disease or Stroke”, depending on Medicaid relative to the total number of seniors with the same disability, not depending on Medicaid, is 10.82%. Similarly, for adults (between the ages of 19 and 64) the percentage is 11.48%. Because more than triple the percentage for juniors (<19 years of age) is interpreted as having no assets or income (in particular, no life-insurance), and therefore juniors are not further taken into account in this research. Given the very nature of the mentioned health care issues, it is assumed that the mentioned adults and seniors will need and/or do receive some form of long-term health care. Fourth, ownership of life-insurance policies is determined. In Florida, 7.4 million residents, or about 40 percent, own a life-insurance policy to the combined face-value of $1.44 trillion. Given that the younger age group (<19 years of age) probably will not own life-insurance policies (given also the mentioned high dependency rate of 36.77%), the life-insurance policy ownership rate is “redistributed” over the adults and seniors to 49.8 percent, and 61.6 percent, respectively. In total, given the age-group frequencies, this comes out at an overall percentage of 40 percent for Florida residents. Fifth, it is assumed for now that residents, within each five-year age group or category, are evenly distributed, thus allowing for now a division of the total by five to retrieve a number for each age. Next, it is also for now assumed that conversions of life-insurance policies to long-term care health benefit plans are evenly distributed per age group. Then, it is assumed that a distribution on values of life-insurance policies, which was based on a sample of 28 (n=28), holds for those who potentially will need or want to convert his/her policy into a long-term health care benefit plan (on this particular distribution, see below). It is assumed
that a multiple regression on conversion of life-insurance policies to long-term health care benefit plans, and which was based on the same sample mentioned, will hold for those who potentially will need or want to convert his/her policy (see below). Finally, it is assumed that the average of $2,272 for “final expenses” is to be reserved from any converted value (also taken from the sample), and that this value holds for those who potentially will need or want to convert his/her policy into a long-term health care benefit plan. Unknown (and no assumption is made) regarding the level of present usage of life-insurance policy assets to finance health care needs.

A small sample of data from 28 cases (n=28) is obtained, in which the owner of a life-insurance policy converted the policy into a long-term care (LTC) benefit plan. First, the sample is utilized to derive a distribution on values of potential life-insurance policies, this using the risk and decision analysis software @RISK. The best-fit distribution proofed to be a LogLogistic distribution. The cumulative relative frequency of the distribution is used to fit the 7.4 million Floridians owning life-insurance policies. Likewise, the sum of policy values times the frequencies is adjusted to fit the $1.44 trillion in total value of life-insurances in Florida aforementioned. Henceforth, it is assumed that the distribution as depicted in Figure 1 describes and is representative for Florida life-insurance policy ownership and value of policy benefits.

Figure 1: Cumulative Frequency and Frequency Distribution on Life-insurance Policy Values in Florida.

The distribution turns out a modal value of $83,637 and a median of $143,624 for 1,804,818 (63,819) and 3,718,663 (49,163), Floridians respectively (frequency in parentheses, on 510 classes).

The next step is to determine the benefit payable upon a potential conversion of a life-insurance policy into a long-term care benefit plan. The sample indicates that conversion of life-insurance policy on average will yield about 38 percent (37.6%) of the benefit or face value, this to be

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10 A sample of 20 cases was provided for by Life Care Funding Group LLC, and an additional 8 cases were taken from various issues of the Life Care Funding Bulletin, issues Oct 2011 and March 2011.
11 Palisade Corporation, maker of the world’s leading risk and decision analysis software, @RISK and the DecisionTools, http://www.palisade.com.
12 Within the sample, the minimum conversion takes place at 25.2% and the maximum at 60.0%.
utilized for long-term care benefits. In addition, the sample gives an average of $2,272 for final expenses\textsuperscript{13}. Consequently, an average of $2,704 is paid on a monthly basis for long-term health care services, which last on average for 15.4 months\textsuperscript{14}.

In table 2 the various building blocks and assumptions are provided on those Florida residents (adults and seniors) becoming self-care limited per year, Medicaid dependent, and who are in possession of a life-insurance policy. As outlined in the table, annually there are 6,429 “self help-limited” Floridians, 2,425 in the age category 20 to 64 and 4,003 of the age 65 and over, becoming dependent on Medicaid and are in possession of life-insurance policies. On conversion, these policies represent the value of $187.4 million at modal benefits and similarly $332.2 million at median.

\textsuperscript{13} Within the sample, the minimum on final expenses is $350 and the maximum $5,900.
\textsuperscript{14} Within the sample, the minimum duration of a benefit plan is 3 months and the maximum 36 months.
### Table 2: Value of Conversion of Life-Insurance Policies to LTC Health Benefits Plans (Median and Modal) of Floridians Dependent on Medicaid with Insurance per Annum.

<table>
<thead>
<tr>
<th>Age</th>
<th>Number Both sexes</th>
<th>Self help limitation percent</th>
<th>Self help limitation</th>
<th>Population Dependent on Medicaid* percent</th>
<th>Population Dependent on Medicaid *</th>
<th>Population with Insurance per 5 year age group</th>
<th>Population Dependent with Insurance per annum**</th>
<th>Population with Insurance x median value conversion***</th>
<th>Population with Insurance x modal value conversion***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>18,801,310</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 to 24 years</td>
<td>1,228,758</td>
<td>1.0%</td>
<td>12,288</td>
<td>11.5%</td>
<td>1,411</td>
<td>49.8%</td>
<td>703</td>
<td>$ 7,268,000</td>
<td>$ 4,099,000</td>
</tr>
<tr>
<td>25 to 29 years</td>
<td>1,179,227</td>
<td>1.0%</td>
<td>11,792</td>
<td>11.5%</td>
<td>1,354</td>
<td>49.8%</td>
<td>675</td>
<td>$ 6,975,000</td>
<td>$ 3,934,000</td>
</tr>
<tr>
<td>30 to 34 years</td>
<td>1,110,318</td>
<td>1.0%</td>
<td>11,103</td>
<td>11.5%</td>
<td>1,275</td>
<td>49.8%</td>
<td>635</td>
<td>$ 6,568,000</td>
<td>$ 3,704,000</td>
</tr>
<tr>
<td>35 to 39 years</td>
<td>1,178,467</td>
<td>1.0%</td>
<td>11,785</td>
<td>11.5%</td>
<td>1,353</td>
<td>49.8%</td>
<td>674</td>
<td>$ 6,971,000</td>
<td>$ 3,931,000</td>
</tr>
<tr>
<td>40 to 44 years</td>
<td>1,252,787</td>
<td>1.0%</td>
<td>12,528</td>
<td>11.5%</td>
<td>1,439</td>
<td>49.8%</td>
<td>717</td>
<td>$ 7,411,000</td>
<td>$ 4,179,000</td>
</tr>
<tr>
<td>45 to 49 years</td>
<td>1,401,202</td>
<td>3.0%</td>
<td>42,036</td>
<td>11.5%</td>
<td>4,828</td>
<td>49.8%</td>
<td>2,406</td>
<td>$ 24,865,000</td>
<td>$ 14,023,000</td>
</tr>
<tr>
<td>50 to 54 years</td>
<td>1,340,291</td>
<td>3.0%</td>
<td>40,209</td>
<td>11.5%</td>
<td>4,618</td>
<td>49.8%</td>
<td>2,301</td>
<td>$ 23,785,000</td>
<td>$ 13,414,000</td>
</tr>
<tr>
<td>55 to 59 years</td>
<td>1,202,418</td>
<td>3.0%</td>
<td>36,073</td>
<td>11.5%</td>
<td>4,143</td>
<td>49.8%</td>
<td>2,065</td>
<td>$ 21,338,000</td>
<td>$ 12,034,000</td>
</tr>
<tr>
<td>60 to 64 years</td>
<td>1,135,250</td>
<td>3.0%</td>
<td>34,058</td>
<td>11.5%</td>
<td>3,911</td>
<td>49.8%</td>
<td>1,949</td>
<td>$ 20,146,000</td>
<td>$ 11,362,000</td>
</tr>
<tr>
<td>65 to 69 years</td>
<td>959,233</td>
<td>5.3%</td>
<td>50,839</td>
<td>10.8%</td>
<td>5,501</td>
<td>61.6%</td>
<td>3,391</td>
<td>$ 35,047,000</td>
<td>$ 19,765,000</td>
</tr>
<tr>
<td>70 to 74 years</td>
<td>768,707</td>
<td>5.3%</td>
<td>40,741</td>
<td>10.8%</td>
<td>4,409</td>
<td>61.6%</td>
<td>2,717</td>
<td>$ 28,085,000</td>
<td>$ 15,839,000</td>
</tr>
<tr>
<td>75 to 79 years</td>
<td>615,514</td>
<td>5.3%</td>
<td>32,622</td>
<td>10.8%</td>
<td>3,530</td>
<td>61.6%</td>
<td>2,176</td>
<td>$ 22,488,000</td>
<td>$ 12,683,000</td>
</tr>
<tr>
<td>80 to 84 years</td>
<td>482,023</td>
<td>19.2%</td>
<td>92,548</td>
<td>10.8%</td>
<td>10,015</td>
<td>61.6%</td>
<td>6,173</td>
<td>$ 63,799,000</td>
<td>$ 35,981,000</td>
</tr>
<tr>
<td>85 to 89 years</td>
<td>290,882</td>
<td>19.2%</td>
<td>55,849</td>
<td>10.8%</td>
<td>6,044</td>
<td>61.6%</td>
<td>3,725</td>
<td>$ 38,500,000</td>
<td>$ 21,713,000</td>
</tr>
<tr>
<td>90 years and over</td>
<td>143,243</td>
<td>19.2%</td>
<td>27,503</td>
<td>10.8%</td>
<td>2,976</td>
<td>61.6%</td>
<td>1,834</td>
<td>$ 18,959,000</td>
<td>$ 10,692,000</td>
</tr>
<tr>
<td>Total 20 to 64 years</td>
<td>11,028,718</td>
<td>1.9%</td>
<td>211,870</td>
<td>11.5%</td>
<td>24,333</td>
<td>49.8%</td>
<td>12,126</td>
<td>$ 125,327,000</td>
<td>$ 70,680,000</td>
</tr>
<tr>
<td>Total 65 years and over</td>
<td>3,259,602</td>
<td>9.2%</td>
<td>300,103</td>
<td>10.8%</td>
<td>32,475</td>
<td>61.6%</td>
<td>20,017</td>
<td>$ 206,878,000</td>
<td>$ 116,673,000</td>
</tr>
<tr>
<td>Total</td>
<td>14,288,320</td>
<td>3.6%</td>
<td>511,974</td>
<td>11.1%</td>
<td>56,808</td>
<td>57.2%</td>
<td>32,143</td>
<td>$ 332,205,000</td>
<td>$ 187,353,000</td>
</tr>
</tbody>
</table>

* see footnote 11

** number based on simple division by 5, actual number may vary due to frequency distribution within each age class

*** uncorrected for potential eligibility on higher values of insurance policies
The aforementioned values however, are not yet adjusted for Medicaid eligibility, given potential higher end values of insurance policies. Given also that the calculation done is based on average (and median) values only, a similar framework was modeled utilizing the different distributions at stake. Most importantly the distribution on life-insurance policy values (from Figure 1) is used, but also the age category frequencies, and for the seniors in particular the age distribution on conversion (based on the sample), as per the following Figure\textsuperscript{15}.

**Figure 2: Age Distribution From the Sample on the Conversion of Life-Insurance Policies in Long-Term Care Benefit Plans.**

![Figure 2: Age Distribution From the Sample on the Conversion of Life-Insurance Policies in Long-Term Care Benefit Plans.](image)

The Figure depicts the age distribution at conversion of the sample, showing also the best fit distribution.\textsuperscript{16} As shown by the Figure the age on conversion is skewed to the right, indicating a marked age discrimination of 75 and over on the conversion of life-insurance policies. Given the lower demographic frequencies at older ages, this does influence the total conversion outcome value. Given that no age distribution on conversion for the adult population is available, this is assumed to be evenly spread.

Also, the conversion of life-insurance policies to long-term care benefit plans for seniors, instead of using the 37.6 percent aforementioned, is based on the following regression (also derived from the sample):

\[\text{Distribution: Weibull}(16.585, 80.651, \text{Shift}(-0.32895)), \text{using @Risk software.}\]

\textsuperscript{15} The sample gives an average age on which conversion takes place, namely the average age of 77.8\textsuperscript{15} (or 77 and 10 months).

\textsuperscript{16} Distribution: Weibull(16.585, 80.651, Shift(-0.32895)), using @Risk software.
and for the adults the same conversion is based on the function:

\[
ABP_{\text{Adult}} = 0.8768 \cdot \text{PDB}^{0.9227}
\]

in which:
ABP = Accelerated Benefits Payable (Long Term Care Benefits Payable (LTC))
PDB = Life-insurance Policy Death Benefit
A = Age

The last mentioned function, given that no data on conversion by adults is available, is derived from a Monte Carlo modeling using one hundred random draws on elder data (utilizing the respective distributions on life-insurance policy values, and age distribution as variables in the \(ABP_{\text{Elder}}\) regression). On each draw a regression between the life-insurance policy values and long-term health care benefits (ABP) is determined (i.e. regardless of age). The hundred regressions are averaged (both variable and exponent) on which the mentioned \(ABP_{\text{Adult}}\) function was obtained.

The following Figure depicts a example of a run, on conversion of life-insurance policies into long-term health care benefit plans from seniors, the regression calculated (“Power” Seniors), and the derived and determined regression \(ABP_{\text{Adult}}\) on adults converting their policies.

**Figure 3: Example Run and Comparison on Life-insurance Policy Value Conversion to LTC Health Benefit Plans, Seniors and Adults.**
As can be taken from the Figure the use of the \( \text{ABP}_{\text{Adult}} \) function is a good estimator for the conversion of life-insurance policy values in long-term health care benefit plans. In addition, the “final expenses” are deducted not at the average of $2,272 mentioned, but at a relative rate of about 5.8 percent (5.78%) off the long-term health care benefits, to have a better relative match between these expenses and the benefits.

Finally there remains the issue of not being eligible upon Medicaid application, this especially with assets (here life-insurance policies) to the higher value end. Therefore two scenarios’ are run, one scenario on eligibility owning life-insurance to a maximum value of $180,000 (61.6\text{th} percentile) labeled “Scenario 1”, and one scenario with a maximum value of $200,000 (66.8\text{th} percentile) labeled “Scenario 2”.

The distribution of the (modeled Monte Carlo run outcomes on) total net values on conversion of life-insurance policies in long-term health care benefits by seniors is depicted in Figure 4. 17

**Figure 4: Total Net Value on Converted Life-insurance Policies by Seniors in LTC Benefit Plans.**

As can be seen in the Figure, the distribution of the elder scenario 1 (max $180,000) is skewed to the left, with a total modal net conversion value or long term health care benefits payable at the $37.3-$42.3 million level. The average net total conversion value of the elder scenario 1 runs is $78.9 million involving 2,520 seniors (average benefit payable is $31,308 per senior). The modal net value for elder scenario 2 (max $200,000) is $38.1-$44.2 million. The average converted net total value of the elder scenario 2 is $90.1 million involving 2,530 seniors (average $35,622 per senior). Clearly, the higher eligibility values on life-insurance policies shift the total conversion values up.

17 The distributions are calculated using @Risk
Conclusion:

- About 2,520 to 2,530 seniors annually (numbers and values are averages per scenario) may, on becoming self-care limited, receive benefits payable to the average total amount of $78.9 to $90.1 million net, if they convert their life-insurance policies into long-term health care benefit plans (i.e. about $31,308 to $35,622 net per senior on average). Conversely, Medicaid expenses on long-term health care services to seniors may be offset by a similar amount, if converted.

For adults the distribution of the total net values on conversion of life-insurance policies in long-term health care benefits is shown in Figure 5.\(^{18}\)

**Figure 5: Total Net Value on Converted Life-insurance Policies by Adults in LTC Benefit Plans.**

As illustrated in the Figure, the net modal value in adult scenario 1 is at the $21.1-$25.3 million level. Adult scenario 2 comes in at the converted modal net value of $30.0-$35.0 million. The average total net value or long term-care benefits payable on conversion of life-insurance policies in the adult scenario 1 runs is $59.4 million with 1,752 adults (average benefit payable $33,924 net per adult), and adult scenario 2 at $67.3 million with 1,956 adults (average $34,399 net per adult).

Conclusion:

- From 1,752 to 1,956 adults (20 to 64 years of age) annually may, upon becoming self care limited, receive benefits payable to the average total amount from $59.4 to $67.3 million net, if their life-insurance policies are converted into long-term health care benefit plans (i.e. about $33,924 to $34,399 net per adult on average). Conversely, Medicaid expenses on long-term health care services to adults may be offset by a similar amount, if converted.

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18 The distributions are calculated using @Risk
The sum of the Monte Carlo run results on the two categories seniors and adults, two scenarios (max $180,000 and max $200,000 on Medicaid eligibility) respectively, is depicted in Figure 6.\textsuperscript{19}

Figure 6: Total Net Value on Converted Life-insurance Policies in LTC Benefit Plans by Adults and Seniors.

As can be taken from the Figure the two modal values of total scenario 1 on conversion, into long-term health care benefits plan or payable, by both adults and seniors, is $78.1-$86.9 million net. Scenario 2 comes in at a total modal net value of $105.1-$115.4 million long-term health care benefits payable. The average total value of the scenario 1 runs is $138.3 million net, with 4,272 residents, and scenario 2 at $157.4 million with 4,486 residents.

Conclusion:

- In total, approximately 4,272 to 4,486 residents annually may, on becoming self-care limited, receive net benefits payable to the average total amount from $138.3 to $157.4 million net, if their life-insurance policies are converted into long-term health care benefit plans. \textit{Conversely, Medicaid expenses on long-term health care services for residents may be offset by a similar amount, if converted.}

Finally, Figure 7 provides a perception on the relation Medicaid eligibility, at various life-insurance policy values (and percentiles, in parentheses, from the life-insurance policy distribution; Figure 1), and the total net value on conversion in long-term health care benefits payable.

\textsuperscript{19} The distributions are calculated using @Risk
Next to the Medicaid eligibility, at life-insurance policy values of less than $180,000 (61.6th percentile) and less than $200,000 (66.8th percentile) at total benefits payable of $138.3 and $157.4 million net respectively, Figure 7 provide a series of combinations between life-insurance policy values and the total values on conversion in net payable long term health care benefits. If Medicaid eligibility would be set at life-insurance policy values of less than $173,932 (60), then the total long-term health care benefits payable would be about $133.7 million net. Similarly, at less than $183,625 (62.5) the same would be about $148.3 million net, at $190,024 (65) the net benefits would be about $152.9 million; while eligibility at less than $215,614 (70) would turn a net total value of long term health care benefits payable of about $170.7 million. As can be take from Figure 7, higher Medicaid eligibility criteria will correspondingly lead to higher total values in health care benefits payable, but will increasingly be less likely. Overall, changes in eligibility criteria, from the mentioned $180,000 and $200,000, will only relatively change the total sum of long term health care benefits payable. As to the present knowledge, but not substantiated, the present practice on eligibility is at about 63.5 percent, i.e for Florida at about $186,500 in insurance policy benefits and at about $150.1 million in total net long term health care benefits payable. Table 3 provides the values aforementioned, on the two scenarios 1 and 2 respectively.
Table 3: Combinations on Medicaid Eligibility, Income Insurance Distribution and Total Net Value on Long Term Health Care Benefits Payable.

<table>
<thead>
<tr>
<th>Percentile on Insurance Policy Distribution (Figure 1)</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid Eligibility at Insurance Policy Values</td>
<td>61.6</td>
<td>66.8</td>
</tr>
<tr>
<td>Less than $180,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Net Long Term Health Care Benefits Payable</td>
<td>$ 138.3 Million</td>
<td>$ 157.4 Million</td>
</tr>
</tbody>
</table>

4. Conclusions

CEFA FSU finds that about 2,520 to 2,530 seniors (averages per scenario 1 and 2 respectively) who become self-care limited may receive the expected benefits from $31,308 to $35,622 net per senior on average per year. In total, these elders or seniors are projected to receive from $78.9 to $90.1 million net, on conversion of their life-insurance policies into long-term health care benefit plans per year. Additionally, from 1,752 to 1,956 adults who age from 20 to 64 years and become self-care limited may approximately receive expected benefit from $33,924 to $34,399 net per adult on average per year. In total, these adults are projected to receive from $59.4 to $67.3 million net, on conversion of their life-insurance policies into long-term health care benefit plans per year. The combination of both elders or seniors and adults, approximately 4,272 to 4,486 residents, who become self-care limited, may obtain the expected benefit of $138.3 to $157.4 million net, on conversion of their life-insurance policies into long-term health care benefit plans per year.

Conversely, Medicaid expenses on long-term health care services for residents may be offset by similar amounts (as aforementioned) annually. This is about 5.07-5.78 percent of the Medicaid long-term care appropriations for Nursing Home Care and 2.99-3.40 percent of the total Medicaid Long Term Care budget of Fiscal Year 2011-2012.
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