Retiring Poor in New Jersey: The Projected Expenditures on Government Programs for Older Adults

Karen A. Zurlo, Ph.D.*
Serah Shin, Ph.D. †
Hyungsoo Kim, Ph.D. †

*Rutgers, the State University of New Jersey, New Brunswick, New Jersey
†University of Kentucky, Lexington, Kentucky
SUMMARY

A growing number of near-retirees in New Jersey face the risk of retiring poor. Between 2013 and 2030, the portion of New Jersey residents aged 65 and older will increase from 14 to 20 percent. Due to a steady increase in life expectancy, at retirement older adults will require income and resources to last 15 to 20 years or more. Yet, many near-retirees in New Jersey are not financially prepared to fund their retirement for this extended period of time. Social Security, which provides a large portion of total income for most adults age 65 and older, will not provide sufficient income in retirement. Savings and retirement pension plans will become a more critical component of economic security.

As a result, older adults are at-risk of retiring poor and may increasingly rely on government programs for support. This report assesses projected government expenditures associated with five main programs that support new retirees in New Jersey. These programs include: Medicaid, Supplemental Security Income (SSI), Supplemental Nutrition and Assistance Program (SNAP), the Property Tax Reimbursement Program (Senior Freeze), and the Low-Income Home Energy Assistance Program (LIHEAP). In combination, the growing older adult population, their minimal levels of income, and reliance on these programs may yield a large financial burden on the state of New Jersey and other governmental entities.

Data and Methodology

To better understand the potential costs associated with the growing older adult population in New Jersey, we utilized the Survey of Income and Program Participation (SIPP, 2008; wave 10), a national dataset, which provides household level data describing the demographic and financial characteristics of the population. Following is the methodology used to estimate future costs of five major governmental programs. (Additional details are provided in Appendix I.)
Step 1. Estimations of the Population who will turn 65 years of Age in 2016-2030

1) Data estimations use growth projections and death rates of the population turning 65 in each year:
   a. The population turning 65 in each year ($Y_n = P_n - \{P_{(n-1)} \times (1-D_{65+})\}$
   b. The cumulated population turning 65 from 2016 ($C_{n}$): $C_{2016} = Y_{2016}$
      $C_{2017} = Y_{2017} + \{Y_{2016} \times (1-D_{65})\}$

Step 2. Assets & Income Distribution at the Household Level

1) Asset: Estimated net worth, resources, financial assets
2) Two Income Sources: Social Security and annuities from financial assets

Step 3. Eligibility Test for Each of the Five Programs

1) Program eligibility requirements were based on current requirements
   Marital status and total household income were used to calculate eligibility for each individual.
   b. Medicaid: includes ‘New Jersey Medicaid’ and ‘Specified Low Income Medicare Beneficiary (SLMB & QI-1)’
   d. Property Tax Reimbursement: [http://www.state.nj.us/treasury/taxation/ptr/eligibility.shtml](http://www.state.nj.us/treasury/taxation/ptr/eligibility.shtml)
   e. Low Income Home Energy Assistance Program (LIHEAP)

Step 4. Estimated Benefits for each Program

1) Benefits were estimated considering marital status and economic assumptions.
a. Supplemental Security Income (SSI): based on current benefits

b. Medicaid

- Current benefits: $19,554/each aged enrollee (in 2015 dollar)
  
  [link](http://kff.org/medicaid/state-indicator/medicaid-spending-per-enrollee/)

- Medicaid cost increase rate
  
  √ Basic assumption: 2.6%/year (based on 2000-2011 increase rates for NJ Aged)
  
  √ Additional scenarios: 5.0%/year (based on 2007-2013 increase rates for NJ total)

- Adjusted in 2015 dollar

c. Supplemental Nutrition Assistance Program (SNAP)

- Average: $127/individual/month
  
  [link](http://www.cbpp.org/research/a-quick-guide-to-snap-eligibility-and-benefits)

d. Property Tax Reimbursement (Senior Freeze)

- (Tax rate*Home market value in each year) minus (Tax rate*Home market value in the year of ‘aged 65’)

- Home market value increase rate
  
  √ Basic assumption: 2.6%/year (based on 2010-2015 Average NJ Residential Sales Price)
  
  √ Additional scenario: 4.6%/year (based on 1994-2015 Average NJ Residential Sales Price)
  
  [link](http://www.state.nj.us/treasury/taxation/lpt/class2avgsales.shtml)

- Property tax rates: 2.0%

  √ (Average tax bill / Average Residential Sales Price) for 2010-2014 in NJ
  
  [link](http://www.state.nj.us/treasury/taxation/lpt/aveg_res_tax.shtml)
  
  [link](http://www.state.nj.us/treasury/taxation/lpt/class2avgsales.shtml)

- Adjusted in 2015 dollar for the calculated tax value
Key Finding:

- Low Income Home Energy Assistance Program (LIHEAP)
  - Average: $1,027/person/year

**Step 5. Costs for each Program were calculated by Year**

- Cumulated 65+ Population * % of Eligibility in each year * Benefits/individual in each year

**Step 6. Final Calculation**

- Costs of each program by year using one basic assumption and three additional scenarios

**RESULTS**

*Demographic Projections*

As Figure 1 indicates, between 2016 and 2030 we project a steady growth with a significant cumulative effect in the number of retirees. We estimate that 101,000 to 137,000 individuals will turn 65 years of age in New Jersey each year. Between 2016 and 2023 the cumulated estimate of the number of adults who turn 65 will total 870,000. When we extend our estimates to 2030, the total nearly doubles to 1.6 million. This growing number of older New Jerseyans will be eligible for an increasing number of retirement benefits and support programs.
Asset and Income Distribution of the Older Adult Population

Figures 2 and 3 indicate the projected disparities in asset distribution and income levels, which differ widely between lower decile levels and upper decile levels. Household members in the upper income and asset deciles will have the resources to remain independent and rely less on government programs. In contrast, individuals in the lower income and wealth deciles will be less likely to have the sufficient resources to maintain an adequate quality of life and will be more dependent on governmental programs for health care, food assistance, housing, and general tax benefits.
Figure 2. Asset Distribution Levels by Income Decile

Figure 3. Projected Levels of Income Distribution by Income and Income Decile
Key Finding:

Income disparities are evident among older adults in New Jersey. Among adults age 65 and older current mean annual income is twice the level of median annual income. We anticipate a growing disparity in income among older adults in New Jersey because income is fixed for a large percent of retirees.

The Growth Effect on Government Programs

To support the cumulative number of individuals who turn 65 years of age in New Jersey between 2016 and 2030, five major government programs will be utilized more fully by these retirees. Table 1 illustrates our cost estimates, using a conservative set of assumptions, which consider program eligibility criteria and death rates, as detailed by the Centers for Disease Control and Prevention. For new retirees who qualify for any one of these five programs, we estimate the growth in the program costs between 2016 and 2030.

<table>
<thead>
<tr>
<th>Year</th>
<th>Supplemental Security Income (SSI)</th>
<th>Medicaid</th>
<th>SNAP</th>
<th>Property Tax Reimbursement Program</th>
<th>LIHEAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$31,862,276</td>
<td>$296,417,156</td>
<td>$44,687,143</td>
<td>-</td>
<td>$31,769,725</td>
</tr>
<tr>
<td>2020</td>
<td>$169,021,989</td>
<td>$1,590,950,446</td>
<td>$237,054,933</td>
<td>$58,782,007</td>
<td>$168,531,024</td>
</tr>
<tr>
<td>2025</td>
<td>$348,848,823</td>
<td>$3,325,876,717</td>
<td>$485,497,004</td>
<td>$256,272,274</td>
<td>$345,157,582</td>
</tr>
<tr>
<td>2030</td>
<td>$513,066,255</td>
<td>$4,924,341,356</td>
<td>$705,625,598</td>
<td>$555,685,673</td>
<td>$501,655,052</td>
</tr>
</tbody>
</table>
In Table 2, we estimate the total sum of program costs based on conservative cost measures (the basic assumption) and alternative cost measures (Scenarios 1, 2, and 3), which are more aggressive and include the following projections:

Basic Assumption: Medicaid increase rate 2.6%; Home market value increase rate 2.6%
Scenario1: Medicaid increase rate 2.6%; Home market value increase rate 4.6%
Scenario2: Medicaid increase rate 5.0%; Home market value increase rate 2.6%
Scenario1: Medicaid increase rate 5.0%; Home market value increase rate 4.6%
(Assumptions for SSI, SNAP, LIHEAP are the same)

Table 2. Cost Summary Using Basic Assumption and Alternative Scenarios

<table>
<thead>
<tr>
<th>Year</th>
<th>Basic Assumption</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$404,032,565</td>
<td>$404,032,565</td>
<td>$404,032,565</td>
<td>$404,032,565</td>
</tr>
<tr>
<td>2020</td>
<td>$2,220,607,249</td>
<td>$2,272,170,493</td>
<td>$2,588,655,276</td>
<td>$2,640,218,520</td>
</tr>
<tr>
<td>2025</td>
<td>$4,754,006,778</td>
<td>$5,013,059,704</td>
<td>$6,025,328,842</td>
<td>$6,284,381,768</td>
</tr>
<tr>
<td>2030</td>
<td>$7,189,261,720</td>
<td>$7,834,097,409</td>
<td>$9,905,828,498</td>
<td>$10,550,664,187</td>
</tr>
</tbody>
</table>

CONCLUSIONS

Key Findings
- Between 2016 and 2030, the costs of governmental programs are expected to top $7.2 billion and could reach a total of $10.5 billion in new spending.
- Medicaid, which provides health insurance to the poorest poor, is estimated to provide coverage to 241,000 new retirees in 2030 with average costs projected to equal more than $20,000 per person.
This study assessed the financial preparedness of New Jersey’s new retirees and the effects on direct benefit expenditures for select means-tested programs over the next 15 years. We anticipate that increased reliance on government programs among retirees would add significant burden to governmental expenditures. To reduce the projected governmental expenditures for these five public assistance programs, a KEY recommendation is to introduce programs that improve savings rates for young and mid-aged adults, and near-retirees. A modest increase in annual savings for these individuals could have a significant impact on economic security in old age. By increasing the savings rates, asset and income levels of older adults could increase in retirement. As a result of these economic improvements, government programs could remain more solvent and older individuals could exercise and experience greater independence.

Key Recommendations - Institute retirement programs that improve the saving rate

- This can be accomplished by state support of retirement pension plans for employers who cannot afford to offer such plans. Other states, such as Oregon and Illinois, have begun to institute such programs and may set an example for New Jersey.

- Additionally, the projected expenses of Medicaid are large and could be reduced by increasing participation in retirement programs for young and mid-aged workers, saving the state of New Jersey an estimated $1.6 billion over the next fifteen years.
Following is the detailed methodology used to estimate the future costs of five major governmental programs, which include: Supplemental Security Income (SSI), Medicaid, Supplemental Nutrition Assistance Program (SNAP), Property Tax Reimbursement (Senior Freeze), and Low Income Home Energy Assistance Program (LIHEAP).

**The Analysis Process**

Step 1. Estimate the population who will be turning 65 in 2016-2030

Step 2. Determine asset levels & income distributions of the target population

Step 3. Incorporate eligibility test for each program

Step 4. Estimate the benefits for each program

Step 5. Calculate the costs for each program

Step 6. Sum

**Step 1. The population who will be turning 65 in 2016-2030**

1) Data
   - Projections of the total population 65+ in New Jersey, 2012 to 2032: [http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfproj/sptab2.htm](http://lwd.dol.state.nj.us/labor/lpa/dmograph/lfproj/sptab2.htm)
   - Death rates: [http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_03.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_03.pdf)

2) Estimations
   a. The population turning 65 in each year \( Y_n \)
      
      \[ Y_n = P_n - \{P_{(n-1)} * (1-D_{65+})\} \]
      
      note: \( P_n \): 65+ population in the year of ‘n’
      \( D_k \): Death rate for the aged ‘k’ group
      
      \[
      D_{65+}: 0.0455  \\
      D_{65-69}: 0.015; D_{70-74}: 0.024; D_{75-79}: 0.037
      \]
      
      e.g. 1) the population turning 65 in 2016
1,404,691(65+ population in 2016) - 1,366,084(65+ population in 2015)*(1-0.0455) = 1,404,691 - 1,303,927 = 100,764

e.g. 2) the population turning 65 in 2017

1,443,300(65+ population in 2017) - 1,404,691(65+ population in 2016)*(1-0.0455) = 1,443,300 - 1,340,778 = 102,522

b. The cumulated population turning 65 from 2016 ($C_n$)

$C_{2016} = Y_{2016}$

$C_{2017} = Y_{2017} + \{Y_{2016} * (1-D_{65})\}$

$C_{2018} = Y_{2018} + \{Y_{2017} * (1-D_{65})\} + \{Y_{2016} * (1-D_{65})*(1-D_{66})\}$

..............

$C_{2030} = Y_{2030} + \{Y_{2029} * (1-D_{65})\} + \{Y_{2028} * (1-D_{65})*(1-D_{66})\} + \ldots + \{Y_{2016} * (1-D_{65})*(1-D_{66})*\ldots*(1-D_{79})\}$

Step 2. Asset & income distribution

1) Sample

- Survey of Income and Program Participation (SIPP 2008 wave 10)


- New Jersey has sufficient responses for state level estimates in the SIPP data set.

- Age 50~65 in New Jersey: 718 individuals

2) Asset: household level

- Estimate three types of asset values: net worth, resources, financial assets

a. Net worth: total assets - total debt

b. Resources: refer to the definition of resources in program eligibility requirements

- Accounts (saving, checking, retirement, etc.), properties (exclude principle residence), stocks, bonds, annuities, investments, etc.

- Not included: home equity, value of the first car
c. Financial assets: accounts (saving, checking, retirement, etc.), stocks, bonds, annuities

- used for the calculation of household annuity income from financial asset

3) Income: household level

- Two primary components: Social Security benefits (respondent + spouse), Annuity from financial assets

a. Social Security (SS) benefits

- If respondent or spouse had SS: applied the current SS

- If respondent or spouse didn’t have SS: estimate future SS benefit based on current earned income and age, using the ‘Social Security Quick Calculator’
  http://www.ssa.gov/OACT/quickcalc/index.html?__utmz=230172574.1965007110.1441738574.1442336264.1442425177.6&__utmz=230172574.1441738574.1442425177.6&__utmc=230172574&__utmx=-&__utmz=230172574.1441738574.1.1.utmc=bing|utmccn=(organic)|utmcmd=organic|utmctr=social%20security.gov&__utmz=-&__utmz=230172574.1441738574.1.1.utmc=bing|utmccn=(organic)|utmcmd=organic|utmctr=social%20security.gov&__utmz=-

- Assumed normal retirement age (66)

- Married couple: added 50% of the calculated benefit for their spouse’ unless the spouse has his/her own earning income or SS

- Single: Calculation based on respondent’s earned income

b. Annuity from financial assets: Annuity terms were for a fictitious 20-year 4.3% yield fixed annuity, and discounted inflation rate (2.3%).

Step 3. Eligibility test for each program

1) Eligibility requirements for each program: based on current program requirements


b. Medicaid: include ‘New Jersey Medicaid’ and ‘Specified Low Income Medicare Beneficiary (SLMB & QI-1)’:
  http://www.nj.gov/humanservices/dmahs/clients/medicaid/abd/index.html
  http://www.state.nj.us/humanservices/doas/services/slmb/

http://www.nj.gov/humanservices/dfd/programs/njsnap/

d. Property Tax Reimbursement:
http://www.state.nj.us/treasury/taxation/ptr/eligibility.shtml

e. Low Income Home Energy Assistance (LIHEAP)
http://www.nj.gov/dca/divisions/dhcr/offices/heausfincomefact.html

2) Eligibility test

- Eligibility was calculated for each individual considering marital status and total household income.

- For SSI, Medicaid, SNAP, LIHEAP, different income & resource limitations were applied for couples and single households.

- If individual is married, we compared the requirements for couples and household income (for married households, household income=respondent income + spouse income).

- If individual is single, we compared the requirements for individual and household income (for single households, household income=respondent income).

- For the programs which have a resources test, eligibility was re-calculated every 5 years due to the decline of household resources.

Step 4. Estimation of benefits for each program

1) Benefits estimation

- Benefits were estimated for each individual considering marital status.

- To avoid double counting household-level benefits for some programs (SSI, LIHEAP), the household benefits for couples were split equally between respondents and spouses.

- Other Economic Assumptions: The 2015 Long-Term Budget Outlook
http://www.cbo.gov/publication/50250

2) Benefits

a. Supplemental Security Income (SSI): based on current benefits

- Benefit: Maximum benefit (for the NJ, $764(S)/$1,125(C)) – household income
http://www.ssa.gov/ssi/text-income-ussi.htm
- Average: $462/person/month
- Assumption for the increased rate: same rate to the inflation rate
- Adjusted in 2015 dollars

b. Medicaid

- Current benefits: $19,554/each aged enrollee (in 2015 dollars)
  
  http://kff.org/medicaid/state-indicator/medicaid-spending-per-enrollee/
  
- Medicaid cost increase rate
  
  √ Basic assumption: 2.6%/year (based on 2000-2011 increase rates for NJ Aged)
  
  √ Additional scenario: 5.0%/year (based on 2007-2013 increase rates for NJ total)
  
  
  
- Adjusted in 2015 dollars

c. Supplemental Nutrition Assistance Program (SNAP)

- Average: $127/individual/month
  
  
- Assumption for the increase rate: same rate to the inflation rate
  
  - Adjusted in 2015 dollars

d. Property Tax Reimbursement (Senior Freeze)

- (Tax rate*Home market value in each year) minus (Tax rate*Home market value in the year of ‘aged 65’) 

- Home market value increase rate

  √ Basic assumption: 2.6%/year (based on 2010-2015 Average NJ Residential Sales Price)

  √ Additional scenario: 4.6%/year (based on 1994-2015 Average NJ Residential Sales Price)

  http://www.state.nj.us/treasury/taxation/lpt/class2avgsales.shtml
- Property tax rates: 2.0%

√ (Average tax bill / Average Residential Sales Price) for 2010-2014 in NJ

http://www.state.nj.us/treasury/taxation/lpt/averg_res_tax.shtml

http://www.state.nj.us/treasury/taxation/lpt/class2avgsales.shtml

- Adjusted in 2015 dollars for the calculated tax value

e. Low Income Home Energy Assistance Program (LIHEAP)

- Average: $1,027/person/year
- Weighted mean of current benefits considering household size

http://www.nj.gov/dca/divisions/dhcr/offices/docs/liheap_benefit_amt_tbl.pdf

- Assumption for the increase rate: same rate to the inflation rate
- Adjusted in 2015 dollars

**Step 5. Calculate the costs for each program**

- Calculated for each program by each year

- Cumulated 65+ Population * % of Eligibility in each year * Benefits/individual in each year

**Step 6. Sum**

- Sum the cost from each program by year

- One main result (basic assumption) and three additional scenarios (additional assumptions)

Figure 1. Basic Assumption and Three Scenarios of Cost Estimates
Basic Assumption: Medicaid increase rate 2.6%; Home market value increase rate 2.6%
Scenario 1: Medicaid increase rate 2.6%; Home market value increase rate 4.6%
Scenario 2: Medicaid increase rate 5.0%; Home market value increase rate 2.6%
Scenario 3: Medicaid increase rate 5.0%; Home market value increase rate 4.6%
(Assumptions for SSI, SNAP, and LIHEAP are the same.)