HEALTHY AGING DATA REPORT

Highlights from Rhode Island, 2016

RESEARCH AND ANALYSIS BY

JOHN W. McCORMACK GRADUATE SCHOOL OF POLICY AND GLOBAL STUDIES
UNIVERSITY OF MASSACHUSETTS BOSTON

FUNDED BY

TUFTS Health Plan FOUNDATION
A Message from the Governor

Rhode Island’s older population is growing dramatically. Today, more than 217,000 Rhode Island residents are age 60 or older—that’s 20% of the population. By 2040 that figure is expected to rise to 264,238, an increase of nearly 75% over 30 years. In addition, we have a higher proportion of adults age 85 and older than any other state in the nation.

The Rhode Island 2016 Healthy Aging Data Report offers a unique opportunity to address this demographic reality with state, regional, and local leaders. Coupled with Aging in Community, the report released by the Subcommittee of the Long Term Care Coordinating Council earlier this year, the Rhode Island 2016 Healthy Aging Data Report can help guide program and policy decisions to support healthy aging and build vibrant, healthier communities.

While we are fortunate to have some programs in place—the Department of Health’s Adult Immunization Program was recognized as a national model and Rhode Island was one of the first states in the nation to offer paid leave for family caregivers—there is still much work to be done.

The report includes comprehensive community profiles for every city and town, key comparisons from community to community, and useful recommendations to guide future efforts. I encourage everyone who cares about making Rhode Island a healthy place to grow old to use the report to inform your work.

My thanks to the community leaders who served on the Advisory Council for this report, Tufts Health Plan Foundation for their generous funding support, and the team at the Gerontology Institute of the John W. McCormack Graduate School of Policy and Global Studies at the University of Massachusetts Boston for delivering such a valuable tool.

Gina M. Raimondo
Governor
State of Rhode Island and Providence Plantations
A Message From the Funder and Principal Investigator

Building community health by improving healthy aging

We join the Governor in thanking the Advisory Council for their invaluable support and counsel during this process. We hope this report will serve as a catalyst to recognize the contributions and needs of older adults in Rhode Island and help communities seeking to address these needs. As our organizations have demonstrated in our work and engagement, we are committed to improving the lives of older adults in communities where we live and work.

The Rhode Island 2016 Healthy Aging Data Report is an easy-to-use compilation of community-specific health-related information supported by a grant from the Tufts Health Plan Foundation to researchers at the Gerontology Institute of the John W. McCormack Graduate School of Policy and Global Studies at the University of Massachusetts Boston. It is the first-ever comprehensive examination of healthy aging in the state.

This resource provides custom profiles that include more than 120 indicators of healthy aging for all 39 Rhode Island communities, plus 20 focused profiles at the zip code level for the core cities and high population areas of the state. These data provide a clearer picture of the health of Rhode Island older adults, and at a finer level of geographic detail, than has ever been compiled. Rhode Island is one of only two states in the nation to have such comprehensive data on healthy aging.

The Rhode Island 2016 Healthy Aging Data Report provides a solid foundation on which to build efforts to improve the health of individuals and communities in Rhode Island, and it echoes the conclusions of Aging in Community, the report released by the Rhode Island Subcommittee of the Long Term Care Coordinating Council earlier this year.

Key findings to spur action:

- In national rankings, Rhode Island generally looks pretty healthy. Compared to other New England states, however, older Rhode Island adults are in relatively poor health, with the highest regional rates of high cholesterol, hypertension, ischemic heart disease, diabetes, asthma, anemia, osteoarthritis/rheumatoid arthritis, cataracts, and those living with four or more chronic diseases.

- When it comes to the health of older adults, resources matter: 1) in wealthier communities, health indicators are generally better than the state average; and 2) in less resourced, mostly urban areas, health indicators are generally worse than the state average. Nonetheless, our data also show communities where normally dominant socioeconomic levels seem to be offset by other factors driving health in either better or worse directions.

1 The core cities: Providence, Pawtucket, Central Falls, and Woonsocket.
Those wanting to make change should be guided by the idea of winnable battles promoted by the Centers for Disease Control and Prevention (CDC). Focus on specific actions such as addressing improved nutrition, physical activity, or obesity, where significant progress can be made in improving health outcomes in a relatively short time frame—generally within one to four years. More deeply rooted challenges, such as reducing poverty rates or racial segregation, or addressing other social determinants of health are longer-term goals. To make progress in those long-term battles will require collaborative community, regional, and state efforts—engaging all community members, even those not typically involved in healthy aging endeavors such as departments of public health or departments of public works.

Importantly, improvements in health can be made. We saw it in Massachusetts where advocates, once armed with data from the Massachusetts Healthy Aging Data Report, were able to convince policymakers to invest in programs with clear, measurable goals to improve the health of older adults. This report sets the stage for similar improvements in healthy aging in Rhode Island. Use this Highlights Report and the full online database to inform your own work and join us in making Rhode Island an age-friendly state.

Thomas Croswell
Chief Executive Officer, Tufts Health Plan
Board of Directors, Tufts Health Plan Foundation

Elizabeth Dugan, PhD
Principal Investigator, Gerontology Institute
The University of Massachusetts Boston

You can access this comprehensive view of healthy aging in Rhode Island at www.HealthyAgingDataReports.org or on the Tufts Health Plan Foundation website.
HIGHLIGHTS FROM THE RHODE ISLAND 2016 HEALTHY AGING DATA REPORT
# Table of Contents

About the Report ................................................................. 6
The Needs of an Aging Population ........................................ 7
What Factors Drive Healthy Aging? ....................................... 8
Health Indicators Used in this Report .................................... 9
What is Happening in Rhode Island? ..................................... 11
How Healthy Are Older Adults in Rhode Island? ..................... 12
Rhode Island Communities Face Challenges ......................... 15
Gender Disparities in Healthy Aging ..................................... 17
Disparities in Healthy Aging in Core Cities ......................... 18
Conclusions and Recommendations .................................. 20
Acknowledgments .............................................................. 22
About the Report

The approximately 217,000 Rhode Island residents who are age 60 or older represent a valuable—and sometimes vulnerable—state asset. The data compiled in the full Rhode Island 2016 Healthy Aging Data Report (available online at www.healthyagingdatareports.org) present leaders and advocates working at all levels of the state with an opportunity to protect and improve this asset.

More than 120 separate indicators of health have been compiled and analyzed to help users get the “big picture” about the health of older citizens across the state and in each of the 39 Rhode Island communities. Further, we provide an in-depth look at 20 zip codes in core cities and high-density population areas. The data allow an exploration of issues such as the distribution of disease or disability, the impact of gender on health disparities, and how population health varies by zip code. This offers a new tool for assessing the health of Rhode Island communities and suggests possible action steps to improve health in areas currently below state averages.

The project presents a trove of data in a variety of formats:

- 41 comprehensive community profiles—one for every Rhode Island city and town and two Providence neighborhoods, plus 20 profiles of neighborhoods in the core cities
- 131 maps showing the statewide distribution of indicators
- 130 bar charts visually displaying indicator rates for each community in the state
- 18 interactive maps showing the distribution of chronic disease indicators
- A one-page infographic summarizing the key findings of the report
- 11 tables showing a range of comparisons on key health indicators (within-state and within-New England)

This Highlights Report summarizes the broad issues of healthy aging in Rhode Island and presents high-level findings of the data analysis.
The Needs of an Aging Population

Across the globe, populations are aging due to gains in longevity and declining fertility rates.

In the United States someone born in 1900 had a life expectancy of 47. Today it is nearly 80. That amazing gain in longevity means that by 2030 about one of every five Americans will be age 65 or older—that’s about 72 million people. This profound demographic transformation has implications for adults, families, employers, service providers, policy makers, and communities. The major causes of death have shifted from infectious diseases to non-communicable, chronic conditions (e.g., heart disease, stroke, Alzheimer’s disease, and diabetes). Finding ways to optimize the abilities and functioning of older adults and to minimize the constraints of health limitations is key. Put another way, adding health to those added years should be a top priority, because what matters for most people is the quality of their years, not just the length of their lifespan. We want to live long and well in age-friendly communities (see below).

AGING IN PLACE:
GLOBAL GOAL, LOCAL OPPORTUNITIES

Across cultures, older adults strongly prefer to stay at or near home as they grow older, in familiar surroundings for as long as possible. However, for most communities there is a gap between the community’s design and the needs of an aging population. Communities that work for the oldest and youngest residents tend to work well for people of all ages. In response, organizations and governments are mobilizing to create age-friendly communities with improved transportation options, social opportunities, flexible employment and volunteering options, appropriate and affordable housing, and services promoting physical and emotional health.

The World Health Organization has launched its Global Database of Age-Friendly Practices, a searchable resource for anyone interested in making their community more accessible and functional for older adults. Another source of information is the Livable Communities section of the AARP website, which offers a wide range of research, reports, and case studies of successful efforts. In Northern New England, the Tri-state Learning Collaborative on Aging offers free resources and shared learning online at agefriendly.community/afc. These sites and others can help point Rhode Island toward solutions that can be tailored for the unique needs of communities large and small across the state. Rhode Island has begun to seize these opportunities, specifically with the release of Aging in Community by the Rhode Island Subcommittee of the Long Term Care Coordinating Council in 2016. But more must be done. Delaying a response to the state’s demographic realities will only result in more difficult and more costly challenges later. Taking active steps now can positively enable economic growth, better family supports, and improved long-term care for Rhode Island’s older adults.
What Factors Drive Healthy Aging?

One’s health at any point in time is influenced by many factors, including genetics, lifestyle choices, health care, your education and income levels, where you live, and the randomness of accidents.

Which of these factors matters most at a population level? Data from the Rhode Island 2016 Healthy Aging Data Report are consistent with analyses from other states: demographic and socioeconomic factors contribute most to differences in older adult population health. This finding has some profound implications for health care-related decisions and for discussions about larger issues of social and economic justice in our society.

Factors associated with BETTER population health:

- Higher levels of income and education
- Having a more racially diverse and acculturated population, other things being equal
- Good health behaviors and use of preventive services

Factors associated with WORSE population health:

- A less-educated, poorer, and older population (suggesting that, to some extent, healthy aging is a social justice issue)
- Poorer social environments (e.g., higher crime rates, lower voter participation rates)
- Higher percentages of older women and veterans in the population.
Health Indicators Used in this Report

The 120 indicators of healthy aging used in the report cover the following areas:

**Population characteristics**
Estimates for the number and percentages of people age 60 years or older and age 65 or older were compiled because the federal Older Americans Act sets the eligibility requirements for local Councils on Aging and other groups at 60 and older. Estimates are provided for many other population characteristics, such as race, gender, marital status, education, the number of people who are non-native-English speakers, the number of veterans of military service, and the percentage of older adults in each community who have recently moved.

**Wellness and prevention**
A wide range of measures were examined including levels of physical activity, physical exams, participation in various types of health screenings, immunizations, falls, fractures, and oral health.

**Nutrition/diet**
This category included percentages of the population who eat five or more servings of fruit or vegetables daily, who are obese, who have high cholesterol, who smoke, and who drink alcohol excessively.

**Mental health**
This indicator looked at the percentages of people who experienced 15 or more days of poor mental health in the past month, the percentage age 60 and older who talked with family or friends almost daily, and the percentage who have ever been diagnosed with depression.

**Chronic disease**
The analysis included indicators of chronic diseases (Alzheimer’s disease and related dementias, diabetes, stroke, chronic obstructive pulmonary disease, asthma, hypertension, heart attack, high cholesterol, heart disease, congestive heart failure, atrial fibrillation, arthritis, osteoporosis, cancer [breast, colon, lung, prostate], benign prostatic hyperplasia, chronic kidney disease, hypothyroidism, anemia, cataracts, and glaucoma) and summary indicators (people with either four or more chronic conditions or people with no chronic conditions).

**Living with disability**
Estimates of the percentage of people living with six types of disability were examined—impairments of hearing, vision, thinking and memory (cognition), walking or moving (ambulation), self-care, and independent living.

**Access to care**
Since healthy aging is affected by the availability of service providers, information was gathered on the number of primary care providers, hospitals, nursing homes, and home health agencies within five miles of a geographic location. Also reported are the percentage of adults eligible for both Medicaid and Medicare, the percentage of adults enrolled in Medicare Advantage plans, the percentage who have a regular physician, and the percentage who did not see a doctor due to cost.
Service utilization

This indicator looked at the use of various types of health services such as visits to physicians, visits to emergency rooms, home health visits, monthly prescription fills, and inpatient hospital stays. The percentage getting Medicaid long-term services and supports, the number of nursing-home beds per 1,000 persons age 65 and older, and durable medical claims are also reported.

Community and civic engagement

One’s physical and social environment can affect health. Estimates of community characteristics are reported (e.g., air pollution, walkability, and vacant housing in neighborhood). Civic engagement indicators include social participation, voter registration, attitude toward service organizations, and the percentage age 60+ who are satisfied with their neighborhood.

Safety and transportation

Safety indicators include violent and property crime. Transportation indicators include fatal accident rates, municipal transportation services, alternative transportation programs, and volunteer driver programs.

Economics

Financial security can have a significant impact on healthy aging. Economic indicators include the percentage of those living below the poverty level, the percentage of adults 60+ receiving food stamps, the percentage employed, household income, home ownership rates, and a cost of living measure.

WHERE THE NUMBERS COME FROM

Great care was taken in choosing the data sources, analytical tools, and methodologies required for this project. Indicators were included only if they were based on reliable, existing data that could be mapped to our multidimensional conceptual model, that were reported at the required level of geographic specificity, and that were measured periodically (to allow for updating). Full details about these methodological and statistical issues are available in the Technical Report, which is available online at www.healthyagingdatareports.org.

The three primary data sources:

The Centers for Medicare & Medicaid Services (CMS) Medicare Master Beneficiary Summary File, which was used to generate estimates of community-level indicators of chronic disease prevalence, access to care, wellness and prevention health behaviors, and use of services.

The Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System (BRFSS), a telephone survey of health-related risk behaviors, health, and preventive service use. The Rhode Island Department of Health oversees this effort in Rhode Island and provided access to data and advice.

Population composition measures drawn from the 2010 Decennial Census and five-year American Community Survey produced by the U.S. Census Bureau.
What is Happening in Rhode Island?

The general trend of an aging population is particularly evident in Rhode Island, which has the highest proportion of adults age 85 and older in the nation.²

Rhode Island’s population of older adults is rising steadily: In 2010 there were 151,881 residents over the age of 65. By 2040 that figure is expected to rise to 264,238, an increase of nearly 75% over 30 years. (Figure 1).

In terms of raw numbers, more older adults are found in the bigger cities of Providence, Warwick, and Cranston. But as shown in Figure 2, when viewed in terms of the percentage of older adults in the community, striking differences are seen, with some small communities, such as New Shoreham, Little Compton, and North Smithfield, having much higher than average percentages of residents age 60 and older.

How Healthy Are Older Adults in Rhode Island?

Compared with the U.S. as a whole, many in Rhode Island are achieving a healthy older age. The state is ranked 11th healthiest for older adults according to some reports, with higher-than-average education, income, access to health insurance, and rates of health care use.

In a comparative report card on healthy aging published by the Centers for Disease Control and Prevention in 2013, Rhode Island was in the top quartile for:

- Flu vaccination in the past year
- Ever having pneumonia vaccination
- Mammogram in past two years
- Colorectal cancer screening
- Being up to date on selective preventative services

On a regional level, however, Rhode Island does not fare as well. The state had the lowest composite score for the health of its older adults among New England states in a 2016 ranking. The Rhode Island 2016 Healthy Aging Data Report corroborates this picture: for the great majority of health indicators studied, Rhode Island fares worse than most other New England states.

As seen in Table 1, prevalence rates among older Rhode Island residents are the highest among New England states for anemia, asthma, cataracts, diabetes, high cholesterol, hypertension, ischemic heart disease, osteoarthritis/rheumatoid arthritis, and multiple comorbidities (4+ chronic diseases). In addition, Rhode Island has the highest rate of Medicaid-paid long term services and supports. Most of these chronic diseases are associated with a higher mortality risk, high rates of medical service use, and an impaired quality of life. There are a few indicators where Rhode Island rates are better than other New England States: atrial fibrillation, glaucoma, and hypothyroidism are better than Connecticut; mortality, heart attack, and depression are better than Maine; and chronic kidney disease and atrial fibrillation are better than Massachusetts.

Looking just at Rhode Island, some significant variations in health can be seen, which suggest some clear opportunities for change:

- Most Rhode Island communities have some indicators that can be improved upon as well as some indicators suggestive of strengths in healthy aging.
- The city of Providence (other than zip code 02906, the area around Brown University) has the most population health indicators that are below the state average. Four other communities with many indicators suggestive of poorer health are North Providence, Johnston, Central Falls, and Pawtucket.
- Pronounced gender disparities exist. Women have much higher prevalence rates for some diseases and traits than men. Improving the health of older women should be a priority to improve the overall health of the aging population in Rhode Island.
- Men’s prevalence rates exceeded those of women by five or more percentage points on several...
### Table 1 Comparing Rates of Indicators Among New England States

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>RI</th>
<th>CT</th>
<th>ME</th>
<th>MA</th>
<th>NH</th>
<th>VT</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Year Mortality Rate</td>
<td>4.6%</td>
<td>4.3%</td>
<td>4.8%</td>
<td>4.4%</td>
<td>4.5%</td>
<td>4.7%</td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>78.0%</td>
<td>75.7%</td>
<td>71.6%</td>
<td>73.9%</td>
<td>71.9%</td>
<td>65.6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>35.7%</td>
<td>33.9%</td>
<td>29.2%</td>
<td>31.9%</td>
<td>28.5%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Stroke</td>
<td>12.5%</td>
<td>12.4%</td>
<td>11.5%</td>
<td>12.2%</td>
<td>11.0%</td>
<td>10.9%</td>
</tr>
<tr>
<td>COPD</td>
<td>24.1%</td>
<td>21.3%</td>
<td>24.3%</td>
<td>22.1%</td>
<td>21.2%</td>
<td>19.5%</td>
</tr>
<tr>
<td>Asthma</td>
<td>14.0%</td>
<td>12.9%</td>
<td>11.4%</td>
<td>12.3%</td>
<td>10.4%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>79.1%</td>
<td>77.1%</td>
<td>71.7%</td>
<td>76.3%</td>
<td>71.0%</td>
<td>68.2%</td>
</tr>
<tr>
<td>Heart Attack</td>
<td>5.4%</td>
<td>4.6%</td>
<td>6.1%</td>
<td>4.7%</td>
<td>4.5%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Ischemic Heart Disease</td>
<td>45.9%</td>
<td>43.8%</td>
<td>39.0%</td>
<td>41.9%</td>
<td>35.9%</td>
<td>35.2%</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>24.8%</td>
<td>24.4%</td>
<td>20.7%</td>
<td>23.4%</td>
<td>18.3%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Anemia</td>
<td>52.2%</td>
<td>51.5%</td>
<td>39.7%</td>
<td>47.5%</td>
<td>38.2%</td>
<td>38.5%</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>23.4%</td>
<td>22.7%</td>
<td>21.9%</td>
<td>24.6%</td>
<td>20.9%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Cancer - Breast</td>
<td>10.7%</td>
<td>10.8%</td>
<td>9.1%</td>
<td>10.6%</td>
<td>9.4%</td>
<td>9.3%</td>
</tr>
<tr>
<td>Cancer - Prostate</td>
<td>13.8%</td>
<td>13.3%</td>
<td>11.0%</td>
<td>14.1%</td>
<td>11.7%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Cancer - Colorectal</td>
<td>3.2%</td>
<td>3.1%</td>
<td>2.7%</td>
<td>3.1%</td>
<td>2.6%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Cancer - Lung</td>
<td>2.1%</td>
<td>1.8%</td>
<td>1.6%</td>
<td>2.0%</td>
<td>1.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Atrial Fibrillation</td>
<td>15.2%</td>
<td>16.2%</td>
<td>14.9%</td>
<td>15.9%</td>
<td>14.4%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Arthritis</td>
<td>52.1%</td>
<td>50.4%</td>
<td>47.9%</td>
<td>50.8%</td>
<td>47.2%</td>
<td>47.1%</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>21.0%</td>
<td>21.0%</td>
<td>18.0%</td>
<td>21.0%</td>
<td>18.2%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>26.5%</td>
<td>28.0%</td>
<td>24.4%</td>
<td>25.2%</td>
<td>22.8%</td>
<td>23.8%</td>
</tr>
<tr>
<td>Cataract(s)</td>
<td>67.9%</td>
<td>65.1%</td>
<td>64.6%</td>
<td>64.8%</td>
<td>60.9%</td>
<td>61.1%</td>
</tr>
<tr>
<td>Hypothyroidism</td>
<td>21.1%</td>
<td>23.6%</td>
<td>21.0%</td>
<td>20.5%</td>
<td>20.0%</td>
<td>18.0%</td>
</tr>
<tr>
<td>BPH</td>
<td>40.3%</td>
<td>40.8%</td>
<td>36.7%</td>
<td>40.3%</td>
<td>36.8%</td>
<td>36.8%</td>
</tr>
<tr>
<td>Hip Fracture</td>
<td>3.9%</td>
<td>3.9%</td>
<td>3.6%</td>
<td>3.8%</td>
<td>3.4%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Depression</td>
<td>30.0%</td>
<td>27.1%</td>
<td>31.9%</td>
<td>29.7%</td>
<td>27.6%</td>
<td>28.8%</td>
</tr>
<tr>
<td>Alzheimer’s Disease or Related Dementias</td>
<td>14.6%</td>
<td>14.9%</td>
<td>11.4%</td>
<td>13.9%</td>
<td>12.4%</td>
<td>10.5%</td>
</tr>
<tr>
<td>4+ Chronic Conditions</td>
<td>63.9%</td>
<td>61.1%</td>
<td>57.3%</td>
<td>60.3%</td>
<td>54.6%</td>
<td>51.3%</td>
</tr>
<tr>
<td>No Chronic Conditions</td>
<td>8.4%</td>
<td>8.6%</td>
<td>11.7%</td>
<td>8.4%</td>
<td>11.0%</td>
<td>11.6%</td>
</tr>
<tr>
<td>Medicare Advantage Enrollment</td>
<td>39.4%</td>
<td>25.2%</td>
<td>21.8%</td>
<td>22.0%</td>
<td>7.2%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Dually Eligible (Medicaid/Medicare)</td>
<td>14.6%</td>
<td>20.8%</td>
<td>24.4%</td>
<td>15.9%</td>
<td>7.6%</td>
<td>15.5%</td>
</tr>
<tr>
<td>% LTSS (Medicaid)</td>
<td>6.2%</td>
<td>5.9%</td>
<td>3.0%</td>
<td>4.9%</td>
<td>3.7%</td>
<td>4.1%</td>
</tr>
<tr>
<td>% Living in urbanized areas (all ages)</td>
<td>90.7%</td>
<td>88.0%</td>
<td>38.7%</td>
<td>92.0%</td>
<td>60.3%</td>
<td>36.9%</td>
</tr>
</tbody>
</table>

Table 1 shows where the Rhode Island estimate for some health indicators is statistically better or worse than other New England states (CT, ME, MA, NH and VT) based on nonoverlapping 95% margins of error.

- Red: Indicators for which RI performed the worst in the region
- Blue: Indicators for which other states in the region performed worse than RI
indicators. Disparities in prevalence rates of ischemic heart disease and chronic kidney disease have negative implications for men’s health. However, our analyses suggest that men are more likely to engage in physical activity than women and to meet preventive health screening goals.

Analysis of health indicators at the most detailed level (of zip codes) tells a consistent story: health is worse in less-resourced core urban areas, better in more affluent areas. The challenges, however, can also point to possible solutions:

- Rates of serious chronic diseases such as chronic kidney disease, diabetes, depression, and multiple comorbidities were higher than the state average for 14 out of 20 core city zip codes. Rhode Island has begun investing in some chronic disease self-management programs (e.g., for people with diabetes) along the lines of a program developed and validated by Stanford University. A greater, or more targeted, use of such self-management programs could help address these challenges.

- Half of core city zip codes had higher-than-state-average rates of depression and use of Medicaid-financed long-term support services. Effective treatments for depression exist but are underused, which offers an opportunity for improving health. Reducing depression improves quality of life, improves chronic disease management, and reduces health care costs. The National Institute of Mental Health provides information and resources on best practices for treating this common condition.

- Physician office visits were lower than the state average in 10 of 20 core city zip codes, suggesting a possible problem with access to, or use of, physician services.

- Some communities have impressive strengths in terms of healthy aging. These communities should be examined to determine if some of their programs, services, or other efforts could serve as models for the more vulnerable communities.
Rhode Island Communities Face Challenges

Table 2 highlights key indicators and the communities with the three best and worst rates. The results again demonstrate that more urbanized communities have the most challenges in terms of healthy aging.

| TABLE 2. BEST AND WORST RATES ON SELECT INDICATORS |
|---------------------------------|-------------------------------|
| **INDICATOR**                   | **BEST RATES**                | **WORST RATES**               |
| MORTALITY RATE                  | West Greenwich                | Charlestown                   |
|                                 | Woonsocket                    | Warren                        |
|                                 | Coventry                      | Bristol                       |
| ANY PHYSICAL ACTIVITY IN PAST MONTH | Providence NE               | Providence Other              |
|                                 | East Greenwich                | Woonsocket                    |
|                                 | North Kingstown               | Pawtucket                     |
| CDC PREVENTIVE SCREENINGS      | Providence NE                | Providence Other              |
|                                 | Cranston                      | Scituate                      |
|                                 | Charlestown                   | Gloucester                    |
| OBESITY                         | Providence NC                | Providence Other              |
|                                 | North Kingstown               | Central Falls                 |
|                                 | East Greenwich                | Pawtucket                     |
| DEPRESSION                      | Exeter                        | Central Falls                 |
|                                 | New Shoreham                  | Providence                    |
|                                 | Jamestown                     | Providence Other              |
| ALZHEIMER’S & RELATED DEMENTIAS | Exeter                        | Central Falls                 |
|                                 | Jamestown                     | Westerly                      |
|                                 | New Shoreham                  | Providence Other              |
| STROKE                          | New Shoreham                  | Central Falls                 |
|                                 | Jamestown                     | Westerly                      |
|                                 | Foster                        | Woonsocket                    |
| DIABETES                        | Jamestown                     | Central Falls                 |
|                                 | New Shoreham                  | Providence Other              |
|                                 | Providence NE                | Johnston                      |
| ASTHMA                          | Jamestown                     | Central Falls                 |
|                                 | New Shoreham                  | Woonsocket                    |
|                                 | Westerly                      | Pawtucket                     |
| MULTIPLE COMORBIDITIES (4+)     | Jamestown                     | Woonsocket                    |
|                                 | New Shoreham                  | Central Falls                 |
|                                 | Exeter                        | North Providence              |
| AMBULATORY DIFFICULTY          | New Shoreham                  | Central Falls                 |
|                                 | Jamestown                     | Exeter                        |
|                                 | Foster                        | Providence Other              |
Table 3 shows the eight Rhode Island communities with the most better-than-state-average health indicators and the communities with the most worse-than-state-average indicators. These data show that serious chronic disease contributes most to the community rankings.

While this is due in part to the greater number of serious chronic disease indicators reported, with two exceptions (Jamestown and the 02906 zip code of Providence) mild chronic disease and preventive service use indicators do not contribute significantly to the counts determining top- and bottom-ranked communities relative to the numbers of these indicators reported.

High counts of good mental health and community engagement indicators are found among the communities with the most indicators of better-than-average health, while lower rates of community engagement indicators are common among the communities with the most indicators worse than average. (Note that we did not determine whether good mental health is a cause or a result of higher levels of community engagement.)

### Table 3. Counts of Health Indicators with Rates Better/Worse than State Average for Cities and Towns

<table>
<thead>
<tr>
<th>TOWN</th>
<th>HEALTH INDICATORS BETTER THAN STATE AVERAGE</th>
<th>HEALTH INDICATORS WORSE THAN STATE AVERAGE</th>
<th>MEDICARE SERVICE USE INDICATORS LOWER THAN AVERAGE</th>
<th>MEDICARE SERVICE USE INDICATORS HIGHER THAN AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jamestown</td>
<td>34</td>
<td>1</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Newport</td>
<td>26</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>26</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Charlestown</td>
<td>25</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>North Kingstown</td>
<td>25</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Providence NE</td>
<td>25</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>New Shoreham</td>
<td>24</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Little Compton</td>
<td>24</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Providence other</td>
<td>9</td>
<td>29</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Woonsocket</td>
<td>2</td>
<td>23</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Central Falls</td>
<td>3</td>
<td>21</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>North Providence</td>
<td>2</td>
<td>20</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Johnston</td>
<td>2</td>
<td>20</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Pawtucket</td>
<td>6</td>
<td>18</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>
Gender Disparities in Healthy Aging

Our analyses of data from the American Community Survey (ACS) show that, on average, older women in Rhode Island were less educated, poorer, and more likely to live alone than were their older male counterparts.

Given the importance of social factors in the determination of health, these gender differences in socioeconomic status should be kept in mind when evaluating gender disparities in population health indicators.

Table 4 shows that in Rhode Island women often have higher prevalence rates for certain diseases or traits compared to men. Whether these disparities have favorable or unfavorable implications toward women depends on the indicators. The four indicators with the largest disparities (osteoporosis, hypothyroidism, osteoarthritis/rheumatoid arthritis, and depression) have negative health implications for women (although female gender is a well-established biological risk factor for these diseases as well). Three of the indicators with positive female disparities support good health: eating five or more daily servings of fruits and vegetables, talking daily with friends or family, and getting vaccinated for pneumonia.

Men were more likely than women to suffer from ischemic heart disease and chronic kidney disease, although they were also more likely than women to be physically active and to meet screening goals for various types of cancer.

Analysis of the gender disparities data suggests that for at least some indicators, the disparities are not uniform across regions within the state, which may reveal some useful information for targeting interventions (see the Community Profiles at www.healthyagingdatareports.org for details). For example, at the state level, no gender disparity was seen in whether local service organizations understand the needs of people in their communities, but in Region 3 (East Greenwich, North Kingstown) older women had a much higher rate of positive responses to this question than older men, which may suggest dissatisfaction with local agencies among the men. Local agencies might consider trying new or modified outreach efforts to male clients in these communities.

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>STATE %</th>
<th>FEMALE-MALE DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female Percentage Higher</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% with osteoporosis</td>
<td>4.1%</td>
<td>32.2%</td>
</tr>
<tr>
<td>% with hypothyroidism</td>
<td>10.7%</td>
<td>28.4%</td>
</tr>
<tr>
<td>% with osteoarthritis/rheumatoid arthritis</td>
<td>43.2%</td>
<td>57.6%</td>
</tr>
<tr>
<td>% ever diagnosed with depression</td>
<td>21.8%</td>
<td>35.6%</td>
</tr>
<tr>
<td>% with cataract(s)</td>
<td>61.1%</td>
<td>71.9%</td>
</tr>
<tr>
<td>% with 5+ servings of fruit or vegetables per day</td>
<td>17.3%</td>
<td>27.4%</td>
</tr>
<tr>
<td>% 60+ talked with family or friends daily</td>
<td>70.2%</td>
<td>78.9%</td>
</tr>
<tr>
<td>% dually eligible for Medicare and Medicaid</td>
<td>9.9%</td>
<td>18.1%</td>
</tr>
<tr>
<td>% 65+ with independent living difficulty*</td>
<td>9.8%</td>
<td>16.5%</td>
</tr>
<tr>
<td>% 65+ with ambulatory difficulty*</td>
<td>16.2%</td>
<td>22.6%</td>
</tr>
<tr>
<td>% with asthma</td>
<td>10.3%</td>
<td>16.7%</td>
</tr>
<tr>
<td>% with anemia</td>
<td>48.0%</td>
<td>53.9%</td>
</tr>
<tr>
<td>% with glaucoma</td>
<td>23.3%</td>
<td>28.4%</td>
</tr>
<tr>
<td>% received pneumonia vaccine</td>
<td>70.9%</td>
<td>76.1%</td>
</tr>
<tr>
<td><strong>Female Percentage Lower</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% met CDC preventive health screening goals</td>
<td>43.0%</td>
<td>37.7%</td>
</tr>
<tr>
<td>% with chronic kidney disease</td>
<td>26.1%</td>
<td>20.5%</td>
</tr>
<tr>
<td>% any physical activity within last month</td>
<td>73.9%</td>
<td>67.3%</td>
</tr>
<tr>
<td>% with ischemic heart disease</td>
<td>50.9%</td>
<td>40.8%</td>
</tr>
</tbody>
</table>

*All rate estimates were age-adjusted with weights so that men and women have the same age distribution in 5-year intervals except for indicators with *
Disparities in Healthy Aging in Core Cities

There is poorer population health among the lower socioeconomic-status population living in core city zip codes.

ACS and CMS data were used to examine health disparities in the larger, or core, cities where the older population tends to be poorer, less educated, and more racially diverse than in the state as a whole. The Rhode Island Department of Health has designated Providence, Pawtucket, Central Falls, and Woonsocket as "core cities." While Warwick, East Providence, and Cranston are not included on this list, for the purpose of this analysis, we use the terms "core cities" and "core city zip codes" to describe all seven cities and 20 zip codes of interest in this research.

The results of this analysis show that rates of serious chronic diseases such as diabetes, chronic kidney disease, depression, and having multiple comorbidities were higher than the state average for 12 out of 20 core city zip codes. Half of core city zip codes had a higher-than-state-average rate for the use of Medicaid-financed long-term support services. This was not the case for mild chronic disease indicators. Physician office visits were also lower than the state average in 10 of 20 core city zip codes, suggesting a possible problem with access to, or use of, physician services.

Figure 5 (following page) shows an example of these data, with the highest rates of residents with multiple chronic conditions being found in urban or core communities. Such data could allow for the more precise targeting of health improvement efforts, such as those being made in the Health Equity Zones identified by the Rhode Island Department of Health. Having the Health Equity Zones explicitly consider the needs of older residents could be one way to integrate and synthesize ongoing work to improve the health of all Rhode Islanders.
An analysis of health indicators by zip codes reveals notable variations within city limits. In each of the five cities with two or more zip codes, one zip code area differs substantially from others. For example:

- The population health of older persons in the Cranston zip code 02920 tends to be poorer than that of older persons living in 02910 and 02921 Cranston zip codes.

- In East Providence, the population health of older persons living in 02914 appears better than their counterparts living in 02916 and 02915 zip codes.

- The population health of older persons in the Pawtucket zip code 02860 is suggested to be worse than that of older persons living in zip code 02861.

- The count data for Warwick suggest that the population health of older persons living in zip code 02888 is better than that of their counterparts living in zip codes 02886 and 02889.

- Data suggest a rough gradient in the population health of older persons living in Providence. The health of older persons appears to be best in zip codes 02905 and 02906, and worst in zip codes 02903, 02908, and particularly in 02904.

Knowledge of such disparities can facilitate efforts to reduce them. An example is from New York’s Aging Improvement District in East Harlem, which has improved access for older adults to a wide range of needed services intended to improve health. In the Berkshires region of Massachusetts, 32 communities joined together to address disparities revealed in their community profiles. That’s the power of local, accurate data to motivate improvements.

![Diagram showing percentage of Medicare beneficiaries age 65 and older with 4 or more chronic conditions across Rhode Island cities.](source: CMS, 2012 & 2013)
Conclusions and Recommendations

The Rhode Island 2016 Healthy Aging Data Report allows for an unprecedented examination of the state’s older adults. The data provide federal, state, regional, and local community leaders with the evidence needed to plan short- and long-term interventions to promote healthy aging. We encourage you to use this report as a catalyst for change to:

1. **Understand.** Visit [www.healthyagingdatareports.org](http://www.healthyagingdatareports.org) to download your Community Profile and educate yourself and others in the community about the older adults who live in your city, town, or zip code—their ages, living arrangements, health status, strengths, and vulnerabilities. Further explore gender disparities and financial insecurity (e.g., economic disparities).

2. **Engage.** Bring stakeholders and community members together to start a conversation about what the data mean and what can be done to address challenges. Delve deeper into the data. Talk to older adults and their families, faith-based organizations, the business community, law enforcement, and public health departments.

3. **Plan.** Create a strategic plan and address what you can in the short term, but work toward sustainable long-term strategies.

4. **Act.** Use the data to prioritize needs, potential interventions, new partnerships, funding sources, and allocation of resources.

In addition, we make the following specific recommendations:

1. **Develop relevant statewide plans.**
   
   a. Address high rates of high cholesterol, hypertension, ischemic heart disease, diabetes, depression, asthma, anemia, osteoarthritis/rheumatoid arthritis, and cataracts.
   
   b. Address the issues related to oral health.
   
   c. Assist individuals and their care partners in managing multiple chronic conditions (for example through access to evidence-based chronic disease self-management programs).
   
   d. Recognize the heterogeneity of an aging population. The needs of Baby Boomers turning 70 differ markedly from those 85+.
   
   e. Raise awareness that healthy aging is a lifelong endeavor. Baby Boomers should recognize the importance of health promotion to later life outcomes.
   
   f. Recognize that the growth of the “oldest old” has implications for long term services and supports, family caregivers, housing, and economic development.
g. Recognize and support informal family caregivers as well as paid formal caregivers. It is no longer the “sandwich generation” of those caring for both parents and children, but now, for many, it is the “club sandwich generation”—caring for grandparents, parents, and children. The stresses on both groups can be immense. Rhode Island is already a leader in this area and is one of only a handful of states that provide paid leave to family caregivers. Expanding the family leave law should be explored.

2. **Prioritize.** Create a comprehensive sustained intervention addressing multiple indicators that are “worse” than state average for North Providence, Johnston, Central Falls, Pawtucket, Providence (other than zip code 02906), and Woonsocket; these communities have the greatest number of indicators suggesting poorer health.

3. **Collaborate.** Work with local leaders and interested parties to identify ways to become more age-friendly and healthier at the community level, for example by supporting the Building Age-Friendly Rhode Island Coalition that is being formed in response to *Aging in Community*, the report released by the Subcommittee of the Long Term Care Coordinating Council. In light of the statewide high rates of depression, increased support of the work of the Rhode Island Elder Mental Health and Addiction Coalition is warranted.

4. **Replicate.** Identify models that work in communities that are healthier than the state average; which of those could be translated into the communities with challenges in healthy aging?

5. **Engage.** Promote opportunities for community/civic engagement. Better health is associated with higher engagement.

As this report clearly shows, healthy aging is complex. It is influenced by genetics, lifestyle, behaviors, and health practices, which are in turn influenced by our community, our culture, and our access to care. From birth to death we are constantly adding to, or subtracting from, our capacity to age well. It is a dynamic, lifelong process. Although screening, healthy behaviors, and effective management of chronic diseases at the individual level are essential to maximizing both quality of life and longevity, changes in policies and systems that affect healthy aging are also needed, including the development of supportive social systems and physical environments. We are all in this together, and with the power of new knowledge, we can work together to build age-friendly communities and improve the health of Rhode Island's older adults.
Acknowledgments

Suggested citation:
Highlights from the Rhode Island 2016 Healthy Aging Data Report. Dugan E, Porell F, Silverstein NM.

Rhode Island 2016 Healthy Aging Data Report Advisory Council
Samara Viner Brown
Phillip G. Clark
Kathleen Connell
Francine Connolly
Tara Cooper
Joan Crawley
John DiTomaso
Rachel Filinson
Bill Flynn
Marie Ganim
Holly Garvey
State Senator Gayle Goldin
Rebecca Kislak
Joan Kwiatkowski
Jennifer Leigh
Maureen Maigret
Sam Marullo
Kathleen McKeon
Yvette Mendez
MaryLou Moran
State Representative Eileen Naughton
Paula Parker
Cecelia Pelky
Jenny Pereira
Marianne Raimondo
David J. Raposa
Kali S. Thomas
Lynn Urbani

Researchers from the Gerontology Institute of the John W. McCormack Graduate School of Policy and Global Studies, University of Massachusetts Boston
Elizabeth Dugan, PhD
Frank Porell, PhD
Nina M. Silverstein, PhD
Chae Man Lee, PhD(c), MS
Hyo Jung Lee, PhD
Bon Kim, MS
Krystal Kittle, MS, MA

Tufts Health Plan Foundation
Nora Moreno Cargie
President, Tufts Health Plan Foundation
Vice President, Corporate Citizenship, Tufts Health Plan
Nora_Moreno_Cargie@tufts-health.com

Anne Marie Boursiquot King
Managing Director
AnneMarie_Boursiquot@tufts-health.com

Alrie McNiff Daniels
Communications Officer
Alrie_Daniels@tufts-health.com

John Snow, Inc.
Elizabeth Costello
Andrea Goetschius
Michelle Samplin-Salgado
Josiah Altschuler
Courtney Winger

Highlights Report Writer
Stephen Braun
www.braunmedicalmedia.com
Tufts Health Plan Foundation
Board of Directors

Patty Blake  
*President, Senior Products*  
Tufts Health Plan

Nora Moreno Cargie  
*President, Tufts Health Plan Foundation and Vice President, Corporate Citizenship, Tufts Health Plan*

Thomas Croswell  
*Chief Executive Officer*  
Tufts Health Plan

David S. Green, M.D.  
*Critical Care Medicine, Pulmonary Medicine*  
Emerson Hospital

Jackie L. Jenkins-Scott  
*President*  
Wheelock College

Vincent Mor, Ph.D.  
*Professor of Medical Science*  
Florence Pirce Grant University Professor of Community Health  
Department of Health Services, Policy and Practice  
Brown University

Thomas P. O’Neill, III (Chairman)  
*Chief Executive Officer*  
O’Neill & Associates

Charlotte Golar Richie  
*Commissioner*  
Massachusetts Commission Against Discrimination

George A. Russell Jr.  
*Executive Vice President, Director of Corporate Citizenship and President of State Street Foundation, Inc. (Retired)*  
State Street Corporation

Steven A. Tolman  
*President*  
Massachusetts AFL-CIO

Rev. Liz Walker  
Roxbury Presbyterian Church  
*Executive Producer, Better Living with Liz Walker*  
WCVB-TV Channel 5

James Roosevelt, Jr.  
*Advisor to the Board and Senior Management*  
Tufts Health Plan

BOARD MEMBER EMERITUS

Rev. Liz Walker  
Roxbury Presbyterian Church  
*Executive Producer, Better Living with Liz Walker*  
WCVB-TV Channel 5

ADVISOR

James Roosevelt, Jr.  
*Advisor to the Board and Senior Management*  
Tufts Health Plan
“The first wealth is health.”

– RALPH WALDO EMERSON