Health Index

2014 REPORT

MaineHealth

Health Index

www.mainehealthindex.org

MaineHealth

is a not-for-profit family of leading, high-quality providers and other healthcare organizations, working together so our communities are the healthiest in America.

– MaineHealth's Vision

ABOUT THE REPORT

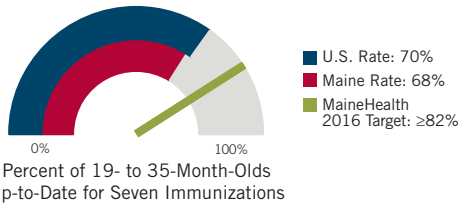
This report includes the following sections:

The Priorities At-a-Glance: How Are We Doing?

Increase childhood immunizations

page 8

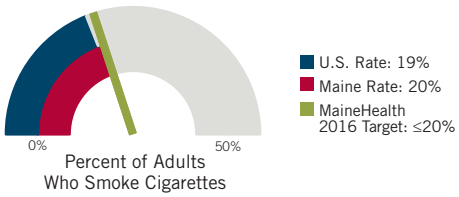
The rate of toddlers up-to-date for immunizations in 2013 was not statistically different from the rate in 2012 and remained below the 2016 target.



Decrease tobacco use

page 10

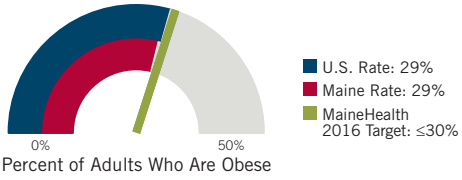
The rate of adults smoking in 2013 was unchanged from 2012 and met the 2016 target.



Decrease obesity

page 12

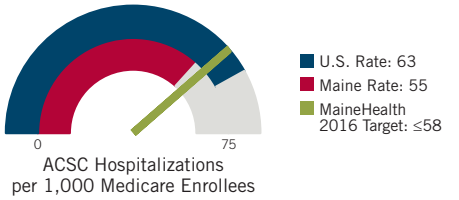
The rate of adults with obesity in 2013 was unchanged from 2012 and met the 2016 target.



Decrease preventable hospitalizations

page 14

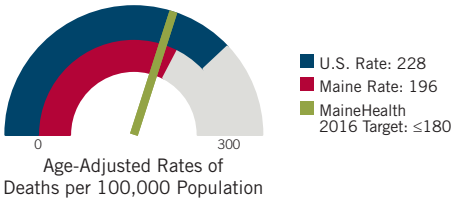
The rate of ACSC hospitalizations in 2012 decreased from 2011 and met the 2016 target.



Decrease cardiovascular deaths

page 16

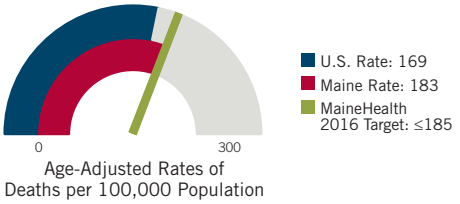
The rate of cardiovascular deaths continued to decrease in 2010-2012 but remained above the 2016 target.



Decrease cancer deaths

page 18

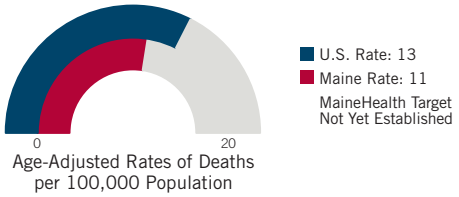
The rate of cancer deaths continued to decrease in 2010-2012 and met the 2016 target.



Decrease prescription drug abuse and addiction

page 20

The rate of deaths from drug overdose in 2010-2012 was unchanged from the 2009-2011 rate. The MaineHealth target has not yet been established.



2014 Health Index Report

Welcome to the 2014 Health Index Report!

The 2014 report marks the fifth edition of MaineHealth's Health Index Report. The Health Index initiative was launched in 2009 as a unique strategy to monitor progress on Maine's most pressing health priorities, spur collective action, and improve the health status of people and communities. While the 2014 report highlights activities in the MaineHealth region (11 counties in Maine and adjacent Carroll County, New Hampshire), data for all Maine counties is included. Data for Carroll County, N.H. is included where available. A special section on health disparities describes the impact of factors such as income and education on health status.

On pages 4-5 you will find the most recent results for two national population health assessments, the 2014 America's Health Rankings® (AHR) and the 2015 County Health Rankings© (CHR). These rankings enable easy comparisons, either state to state (AHR) or county to county (CHR). Both also provide benchmarks that are helpful for measuring Maine's progress (and challenges) in improving population health over time.

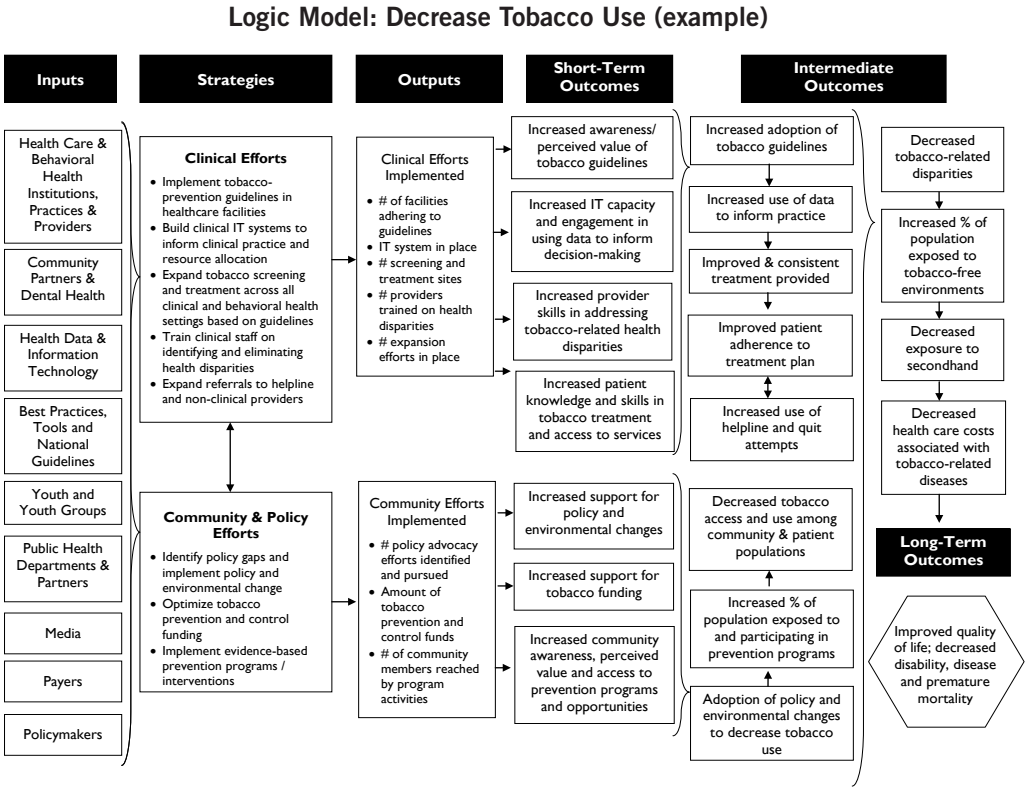
How the Report is Organized

The Report features an "At-a-Glance" page providing a summary of each priority's status, and comparing current Maine and national data to MaineHealth's targets. All MaineHealth targets have a goal of being met by 2016. Pages 8 to 21 contain two-page spreads for the seven priorities. Left-hand pages include a narrative overview of progress, a table that compares national, Maine and "best state" results, and maps or tables that show details of county-level data. Right-hand pages highlight actions on the priority during the previous year in three domains:

- **Clinical** – clinical settings include hospital, health centers, physician practices, school-based health centers, and rural clinics.
- **Community** – community settings include schools, child care centers, community organizations, and businesses.
- **Policy** – policy strategies include local, state, and federal legislation or organizational policies.

Health Index Logic Models Updated

Logic models are a widely accepted method of graphically depicting major relationships between desired health outcomes and the science- and evidence-based steps that are involved in achieving those outcomes. Typically, logic models link inputs to processes and outcomes and are useful guides to choosing strategies and allocating resources. During the summer and fall of 2014, Health Index staff convened seven work groups comprised of more than 100 researchers, clinicians, public health experts, and others to revise and update the logic models for each of the seven Health Index priorities. Brenda Joly MPH, Ph.D., professor of Public Health at the University of Southern Maine's Muskie School, led each of the groups through a process of assessment and consensus-building that resulted in new and improved logic models. They can be found on the Health Index website under "Strategies" within each priority section at www.mainehealthindex.org.

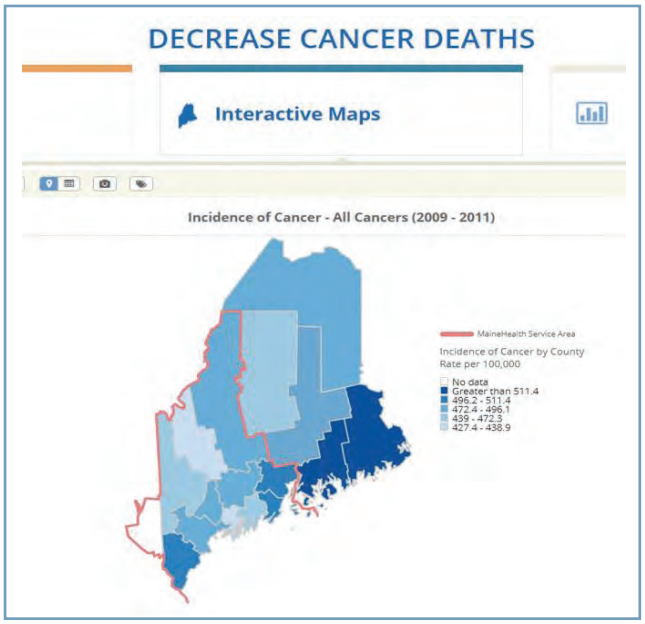


The Health Index Website

www.mainehealthindex.org

The Health Index is Online.

Due to space limitations, the annual Health Index Report provides a high-level summary of data, actions and outcomes. The website provides more detailed data and resources in an interactive format.



What Kind of Information Can Users Find?

Browse Data

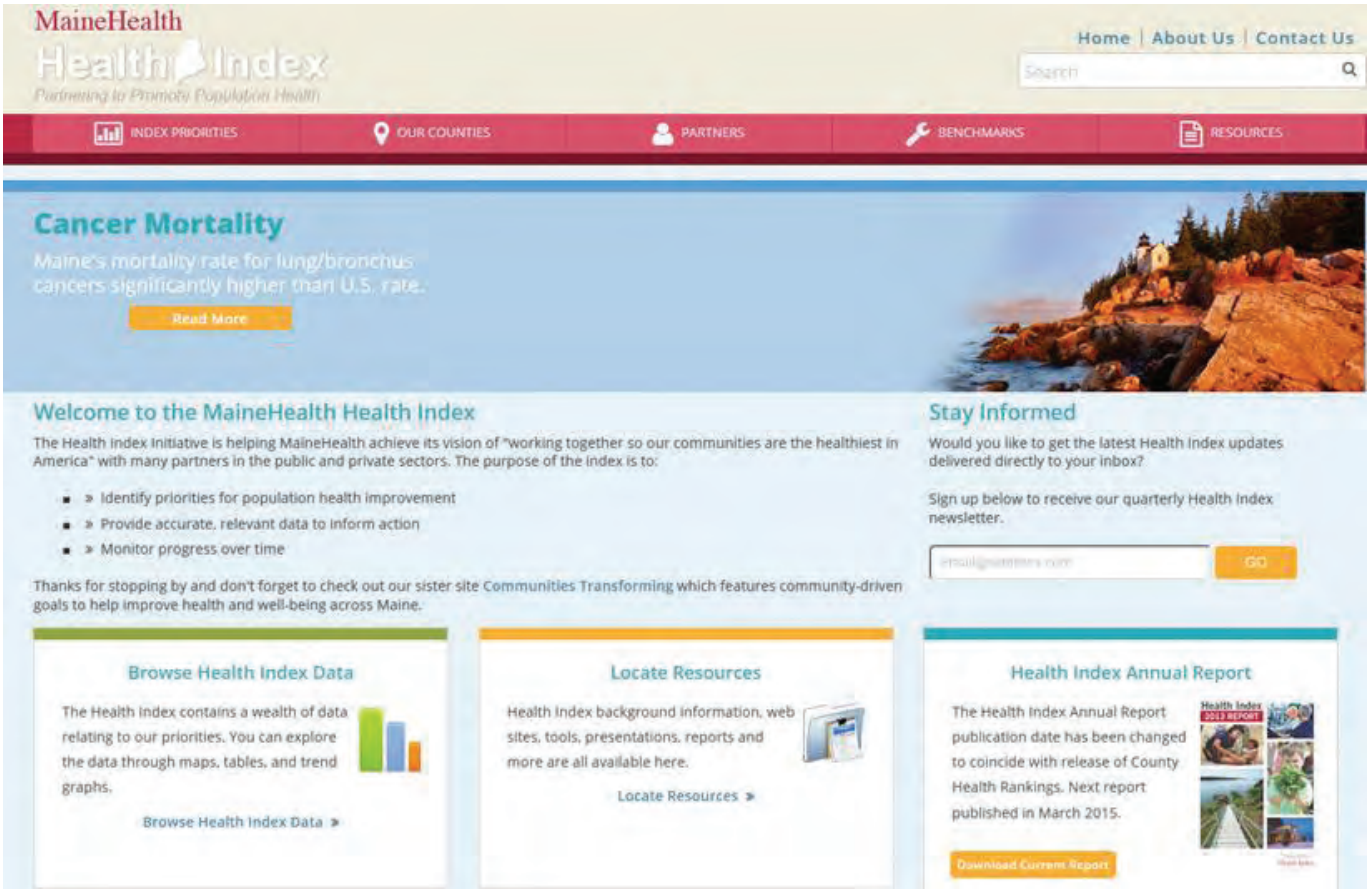
- Interactive maps that illustrate differences among counties
- Trend graphs that highlight changes over time
- In-depth information about priority issues

Locate Resources

- Links to national and county-level comparisons
- Strategies and success stories
- Access to current and past Health Index Reports

Quarterly Health Index e-Newsletter

- A great way to keep up with new features, timely reports, people and projects
- It's easy to sign up on the website home page: www.mainehealthindex.org



AMERICA'S HEALTH RANKINGS®
UNITED HEALTH FOUNDATION
www.americashealthrankings.org

Maine Summary from America's Health Rankings® 2014 Edition

Maine's overall rank decreased from the 16th healthiest state in the nation in the 2013 edition to the 20th healthiest in the 2014 edition.

Determinants: 75% weight in overall rank	Rate of No. 1 State	Maine Rate	Maine Rank
Behaviors: 25% weight in overall rank			
Prevalence of smoking (Percent of adult population)	10.3	20.2	32
Prevalence of binge drinking (Percent of adult population)	9.6	17.2	31
Drug overdose deaths (Deaths per 100,000 population)	3.0	11.0	12
Prevalence of obesity (Percent of adult population)	21.3	28.9	24
Physical inactivity (Percent of adult population)	16.2	21.9	14
Percent of 9th graders graduating high school within four years	93.0	87.0	9
Community & Environment: 22.5% weight in overall rank			
Violent crime (Offenses per 100,000 population)	123	123	1
Occupational fatalities (Deaths per 100,000 workers)	2.2	3.7	11
Infectious disease (Combined score Chlamydia, Pertussis, Salmonella)	-0.9	-0.28	17
Chlamydia (Cases per 100,000 population)	233.0	257.0	2
Pertussis (Cases per 100,000 population)	1.6	55.5	44
Salmonella (Cases per 100,000 population)	6.8	12.1	15
Percent of children in poverty (Under age 18)	9.2	20.9	35
Air pollution (Micrograms of fine particles per cubic meter)	4.9	7.6	12
Public & Health Policies: 12.5% weight in overall rank			
Lack of health insurance (Percent of population)	3.8	10.7	12
Public health funding (Dollars per person)	$219	$83	22
Immunization–children (Percent ages 19 to 35 months)	82.1	68.0	35
Immunization–adolescents (Percent ages 13 to 17 years)	81.3	66.7	21
Clinical Care: 15% weight in overall rank			
Low birthweight (Percent of live births)	5.7	6.6	8
Primary care physicians (Number per 100,000 population)	324.6	130.2	14
Dentists (Number per 100,000 population)	107.6	51.1	35
Preventable hospitalizations (Number per 1,000 Medicare enrollees)	28.2	55.1	21
All Determinants Ranking	**0.71**	**0.29**	**18**

Outcomes: 25% weight in overall rank	Rate of No. 1 State	Maine Rate	Maine Rank
Diabetes (Percent of adult population)	6.5	9.6	22
Poor mental health days in previous 30 days (Adults self-report)	2.5	3.8	30
Poor physical health days in previous 30 days (Adults self-report)	2.8	4.0	30
Disparity in health status (By educational attainment)	15.5	26.1	15
Infant mortality (Deaths per 1,000 live births)	4.2	6.6	31
Cardiovascular deaths (Deaths per 100,000 population)	184.7	215.4	9
Cancer deaths (Deaths per 100,000 population)	145.7	205.4	40
Premature death (Years lost before age 75 per 100,000 population)	5,345	6,645	20
All Outcomes Ranking	**0.34**	**0.01**	**29**
Overall Ranking	**0.91**	**0.30**	**20**

Line items in red indicate a MaineHealth Health Index Priority.

America's Health Rankings® is produced by the United Health Foundation, the American Public Health Association and Partnership for Prevention.

HOW MAINE DIFFERS ACROSS COUNTIES

Where we live matters to our health, and one of the greatest disparities in the U.S. is the variation of health between communities. Health status is impacted across Maine by disparities such as household income, level of education and access to medical care. County Health Rankings© is intended to provide a tool for each state to identify where disparities exist and where there are opportunities for action.

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

www.countyhealthrankings.org

Health Outcome Ranking over Time (Lower number = healthier population)

Maine Counties (N=16)	2010	2011	2012	2013	2014	2015
MaineHealth Service Area						
Androscoggin	11	12	11	6	7	13
Cumberland	3	3	3	2	3	2
Franklin	1	2	8	8	8	9
Kennebec	8	9	9	7	5	8
Knox	6	7	5	5	6	6
Lincoln	4	5	7	11	9	5
Oxford	16	16	15	12	10	7
Sagadahoc	7	4	1	3	2	1
Somerset	14	14	14	15	15	16
Waldo	9	8	6	10	12	12
York	5	6	4	4	4	4
Northern Maine Counties						
Aroostook	13	13	12	13	13	14
Hancock	2	1	2	1	1	3
Penobscot	10	11	10	9	11	11
Piscataquis	12	10	13	16	16	15
Washington	15	15	16	14	14	10
New Hampshire Counties (N=10)						
Carroll County	8	7	6	6	7	7

METRICS IN HEALTH OUTCOMES RANKING
MORTALITY (50% weight in outcomes ranking)
Premature death (Years lost before age 75)
MORBIDITY (50% weight in outcomes ranking)
Poor or fair health (Percent of adults; self-report)
Poor physical health days in previous 30 days (Adults; self-report)
Poor mental health days in previous 30 days (Adults; self-report)
Live births with low birthweight (Percent <2500 grams)

County Health Rankings© is produced collaboratively by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

Health Disparities and Health Equity – What Is the Effect on Health?[1]

Health disparities and health equity are important considerations in any efforts to improve population health. Health disparities include risk factors and health outcomes where differences exist among various populations.

Across the country and in Maine, communities, policymakers, healthcare providers, and others are becoming increasingly aware of how factors such as ethnicity or income impact the overall health status of the population.

Health equity relates to differences in population health that result from unequal economic and social conditions. They are pervasive and avoidable, unjust and unfair. Effectively addressing concerns about health equity means that ALL voices, regardless of race, economic status, education and geography, are included in finding and implementing solutions to health issues like cancer or asthma.

Common demographic and socioeconomic factors that result in health disparities include the following:

- Gender
- Age
- Race and ethnicity
- Sexual orientation
- Income
- Education
- Health insurance status
- Immigration status
- Veteran status
- Disability status
- Geographic location

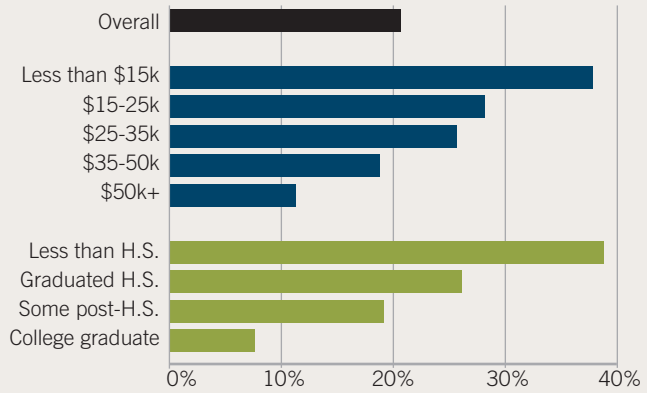
These factors alone cannot account for health disparities, but can serve as a starting point for further exploration. For instance, race alone might not account for different rates of mortality, but racial biases in the healthcare setting that delay screening and treatment have been shown to be a factor that affects health status.

Historically in Maine, health disparities have centered on income, education and geographic location (urban vs. rural).

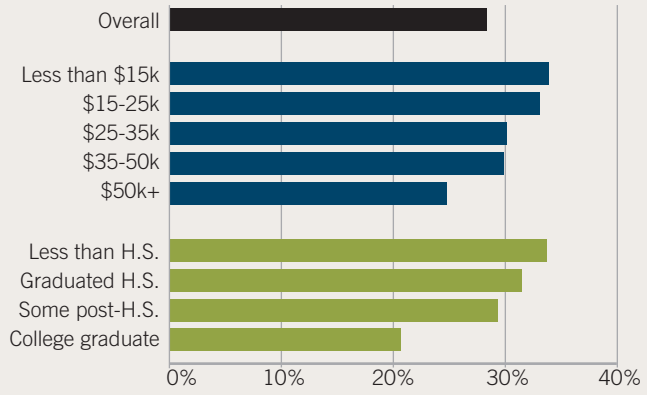
Examples of disparities in Maine include:[2]

- 39% of adults with less than a high school diploma smoke, compared to 8% of college graduates (Figure 1).
- The obesity rate among those that earn more than $50,000 annually is 25% while the rate is 34% for those that earn less than $15,000 (Figure 2).

Adults in Maine Who Smoke by Income and Education (2011-2013) Figure 1



Adults in Maine With Obesity by Income and Education (2011-2013) Figure 2



In recent years the increasing number of immigrants, asylees and racial/ethnic minorities in the state has yielded enough data to examine health disparities along these lines. For example, among Maine high school students, 63% of Hispanic students are at a healthy weight, compared with 70% of White students.[3]

LOCAL, STATE AND NATIONAL RESOURCES

Maine has several initiatives focusing on achieving health equity. As part of the Maine Center for Disease Control and Prevention's (CDC) State Innovation Model award, four agencies are implementing Community Health Worker initiatives to help underserved patients with health education and care navigation in order to produce better health outcomes. Specific subpopulations targeted include the uninsured, the elderly, and the disabled.[4]

Other resources include:

Office of Health Equity at the Maine CDC
- The statewide office devoted to health equity issues
- www.maine.gov/dhhs/mecdc/health-equity

Minority Health Program at the City of Portland's Public Health Division
- Maine's largest municipal health department houses staff and resources addressing health disparities
- www.portlandmaine.gov/467/Minority-Health-Program

Maine Migrant Health Program
- A statewide organization focused on improving the health of Maine's migrant and seasonal farmworkers
- www.mainemigrant.org

Daniel Hanley Center for Health Leadership Health Equity Council
- Maine's health leadership training institute has produced a video and facilitator's guide highlighting health disparities in Maine.
- www.hanleyleadership.org/events/#In-All-Fairness

Unnatural Causes
- A groundbreaking documentary series focusing on health disparities and health equity in the United States
- www.unnaturalcauses.org

Equity Indicators

PolicyLink, a national organization devoted to advancing economic and social equity, developed the Equity Indicators Framework to help communities define and track the state of equity in their regions. The Framework includes four sets of indicators:

Demographics — Who lives in the region and how is this changing?

Economic vitality — How is the region doing on measures of economic growth and well-being?

Readiness — How ready are the region's residents for the 21st-century economy?

Connectedness — Are the region's residents and neighborhoods connected to one another and to the region's assets and opportunities?[5]

Looking Ahead – What's Needed?

One major gap related to health disparities is the lack of robust, timely data that will help researchers and evaluators identify and understand other health disparities, as there are subgroups within groups in Maine (e.g., not all African immigrants come from the same country, and not all rural Mainers are in the same income bracket).

More training on health disparities and health equity is needed to help health students and practicing health care providers remain culturally competent and practice from a holistic viewpoint.

Another strategy is to create more opportunities for vulnerable and marginalized populations to participate in efforts to address health priorities. For example, public health and healthcare organizations might consider paid internships or leadership training for community members to gain needed knowledge and skills.

Increase Childhood Immunizations

MaineHealth continues to collaborate with organizations to implement clinical, community, and policy strategies to increase on-time childhood immunization rates in Maine.

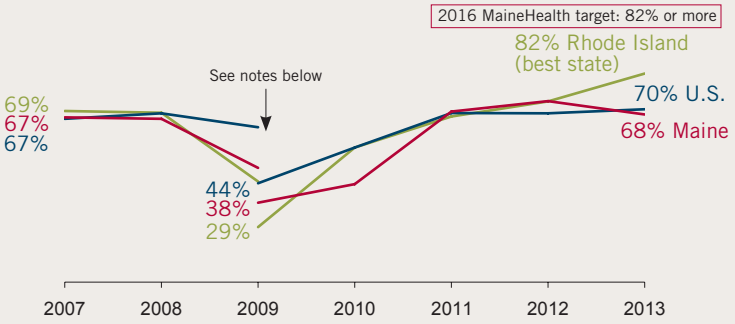
Maine's estimated up-to-date[6] rates among all 19- to 35-month-olds in Maine for 2011, 2012 and 2013 were statistically similar (Figure 3), suggesting the actual rate in Maine has not changed over the three years. Figure 4 presents Maine's estimated up-to-date rates for individual vaccines in 2013; those in red text are the seven in the series presented in Figure 3. The estimates presented in Figures 3 and 4 are from the National Immunization Survey.[7]

In January 2015, there was substantial variation across Maine's 16 counties in the percent of two-year-olds up-to-date on the series of seven immunizations (Figure 5). County rates were calculated from data submitted to ImmPact, Maine's Immunization Information System.[8]

How Maine Compares to the U.S.

Figure 3

Percent of 19- to 35-Month-Olds Up-to-Date for a Series of Seven Immunizations



In response to a national shortage of Haemophilus Influenza B vaccine in 2009, clinicians were encouraged to delay booster shots. These delays reduced up-to-date rates for the series graphed above.

In 2009, the National Immunization Survey began reporting a measure that more accurately estimated the true up-to-date rate in each state. These more accurate estimates (lines from 2009-2013) are not directly comparable to the older measure's rates in 2007-2009.

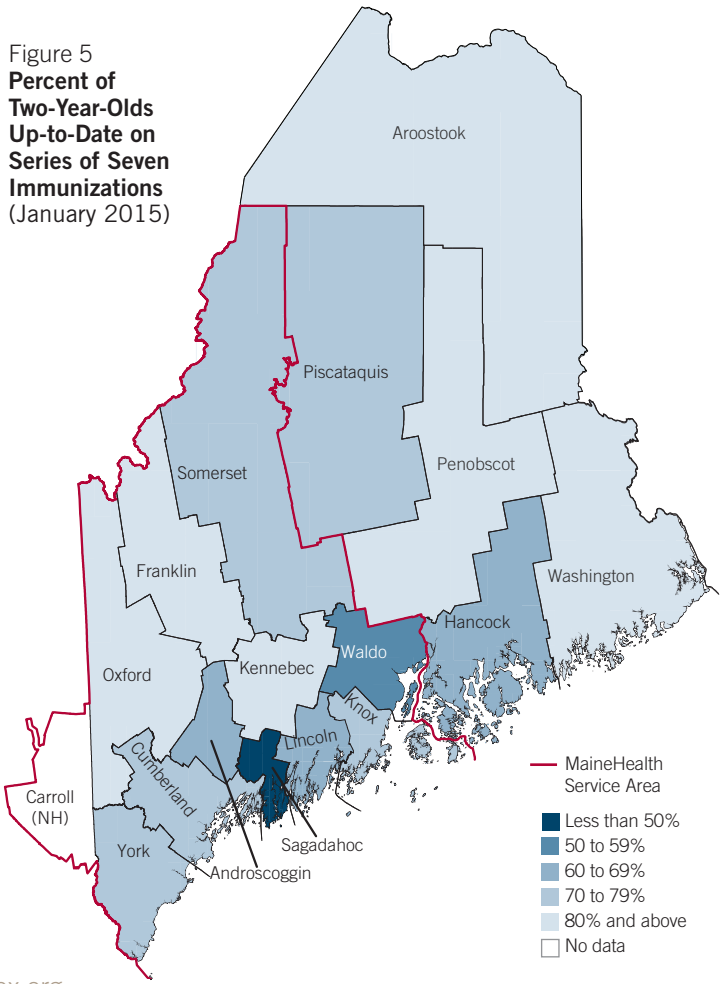
Percent Up-to-Date for Recommended Immunizations (2013) Figure 4

Vaccine	Estimated Percent Up-to-Date*	95% Confidence Interval*
19- to 35-month-olds		
4+ DTaP	88	82-94
3+ Polio	94	90-98
1+ MMR	91	87-96
HIB-FS	80	74-87
3+ HepB	85	79-90
1+ Var	91	86-95
4+ PCV	85	79-91
1+ HepA	80	74-86
Rotavirus	72**	65-79
13- to 17-year-olds		
1+ Td/Tdap	86**	81-90
1+ MCV	71	66-77
1+ HPV Female	60	51-69
1+ HPV Male	42	34-51

* Data is based on a sample of parents randomly selected to be interviewed. The values in the estimated percent of up-to-date column are the values for all children included in the sample. The confidence interval is a range of values that you can be 95% certain contains the true percent up-to-date for the total population.

** 2013 rate is significantly higher than the 2011 rate.

Figure 5
Percent of Two-Year-Olds Up-to-Date on Series of Seven Immunizations (January 2015)



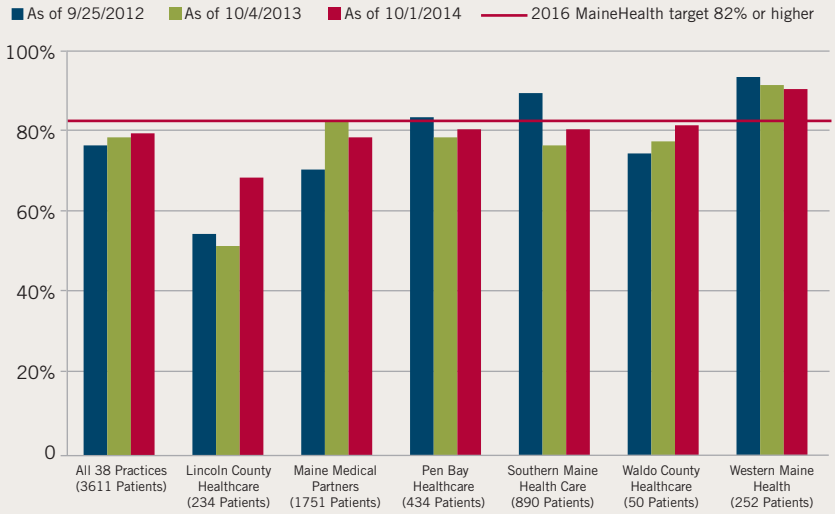
MAINEHEALTH AND PARTNERS RESPOND

CLINICAL STRATEGIES

Through the **First STEPS learning initiative,**[9] 20 pediatric and family medicine practices collaborated to increase child immunization rates. The up-to-date rate for 2-year-olds thorughout all 20 practices increased from 74% to 85% over 22 months.[10]

In January 2014, the Maine Center for Disease Control and Prevention, the Maine Office of Information Technology, and MaineHealth launched **Maine's first interface to transfer vaccination data directly from electronic medical records to ImmPact,** eliminating the need to manually enter data in both systems. MaineHealth sent 76,500 records in one year.[11]

Rates for 41 MaineHealth Practices: Percent of 19- to 35-Month-Olds Up-to-Date with Complete Series of Seven Immunizations[13] Figure 6



The 41 practices represented above are affiliated with MaineHealth member organizations. The first two rates for Southern Maine Health Care (as of 9/25/2012 and 10/4/2013) include data from five practices affiliated with SMHC's Medical Center in Biddeford. Data from practices affiliated with SMHC's Medical Center in Sanford were added into the 10/1/2014 rate. Data from practices affiliated with Franklin Community Health Network are not included in any of the rates presented.

MaineHealth's Childhood Immunizations Education and Training Program ensures clinical support staff are up to date on current evidence-based guidelines and competencies to vaccinate children safely and skilled to communicate with families about immunizations. In 2014 the program trained 126 clinical staff in 37 primary care practices; 97% of participants passed a comprehensive written test and a hands-on competency skills evaluation.[12]

COMMUNITY STRATEGIES

Developed by the Maine Immunization Coalition and the MH Childhood Immunizations Taskforce, the **Vax Maine Kids website and social media platforms** provide science-based information to families and the general public in clinical and community settings. In 2014:[14]

- The website had 7,730 new and returning visitors.
- Both Facebook likes and Twitter followers increased by 145%.

Kohl's Vax Kids,[15] a collaboration of the Barbara Bush Children's Hospital at Maine Medical Center and MH, targeted vaccine-hesitant parents in Cumberland and York counties. The community education media campaign was funded by Kohl's Cares; more than 22,000 people in 15 communities were reached.[14]

POLICY STRATEGIES

Through a partnership of private insurers, KidsVax and the Maine Vaccine Board, the **universal childhood vaccine purchasing program** saved Maine over $34 per child per year in 2013-2014. The state's total cost saving per year was over $4.21 million.[16]

GETTING TO THE NEXT LEVEL

CLINICAL

Implement a strategy to share local childhood immunization best practices across MaineHealth's service area.

COMMUNITY

Use the Vax Maine Kids website to increase awareness among Maine families about the importance of on-time childhood immunizations.

POLICY

Implement evidence-based policies that result in improved childhood immunization rates.

Decrease Tobacco Use

MaineHealth is expanding access to effective programs and therapies for helping tobacco users become tobacco-free, and partnering with community organizations to prevent youth from ever using tobacco.

Smoking rates among both Maine's adults and youth decreased significantly from 2011 to 2013.

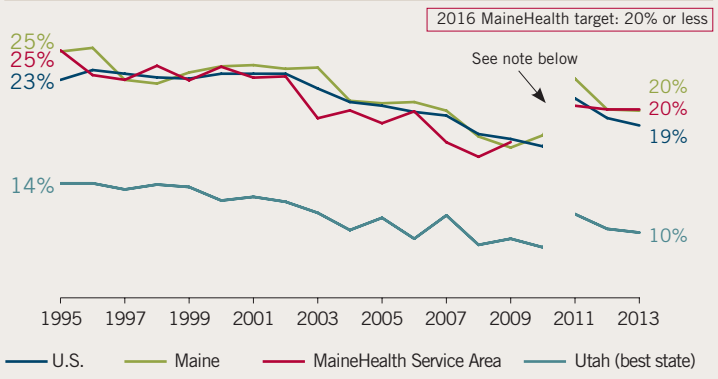
- While Maine's youth smoking rate in 1997 (39%) was one of the highest rates in the nation, rates have been below the national youth rates since 2001.[17] In 2013, Maine's youth smoking rate was 13%, statistically lower than Maine's rate in 2011 (15.5%).[18]
- The 2013 smoking rate among Maine's adults (20%) was statistically lower than the 2011 and 2000 rates (23% and 24%, respectively[19]) (Figure 7).

Recent adult smoking rates varied across socioeconomic groups, health status and county of residence[2] (Figures 8 and 9).

The majority (58%) of Maine's adults smokers made a serious attempt to quit in the 12 months prior to being interviewed (in 2011-2013). The percentages of adults trying to quit were similar across age, education and income groups. However, quit attempts were higher among smokers who had 3+ poor mental health days in the past month (63%).[2]

How Maine Compares to the U.S. Figure 7

Percent of Adults Who Smoke Daily or Some Days



Due to improvements in survey methods, the 2011, 2012 and 2013 estimates are considered more accurate than those made in previous years, particularly data from 2004-2010.[20]

Adult Smokers in Maine by Gender, Age, Income, Education and Poor Mental Health Days (2011-2013) Figure 8

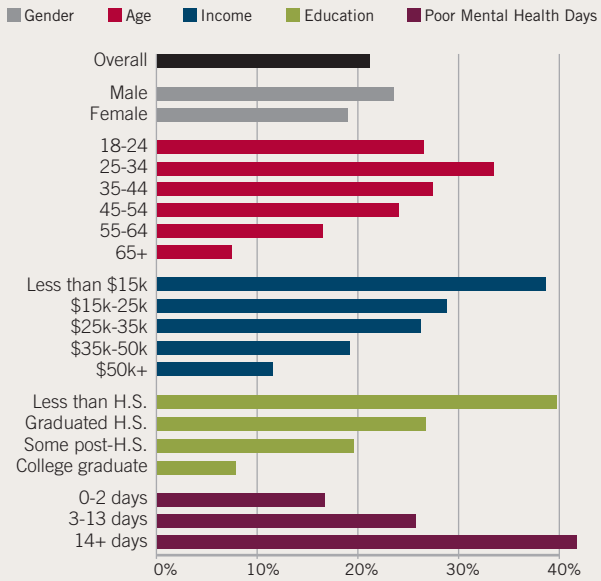
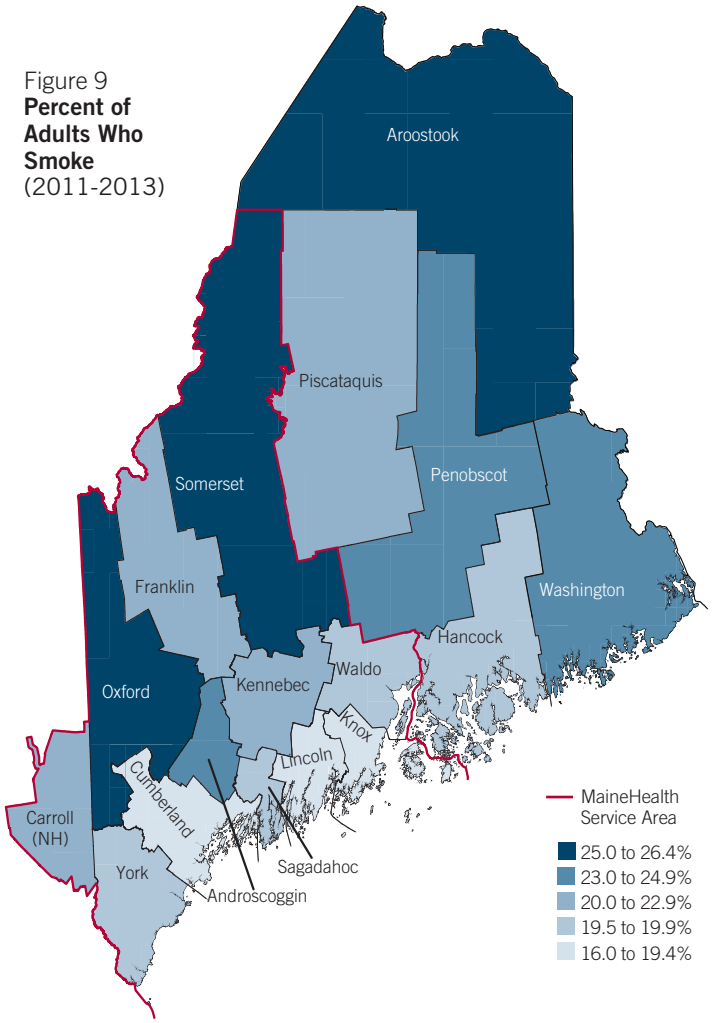


Figure 9
Percent of Adults Who Smoke
(2011-2013)



MAINEHEALTH AND PARTNERS RESPOND

CLINICAL STRATEGIES

From October 2013 through September 2014, **MaineHealth member hospitals provided counseling at bedside** to 4,542 inpatients with tobacco use. Of those counseled, 984 (22%) had a referral to the Maine Tobacco HelpLine.[21]

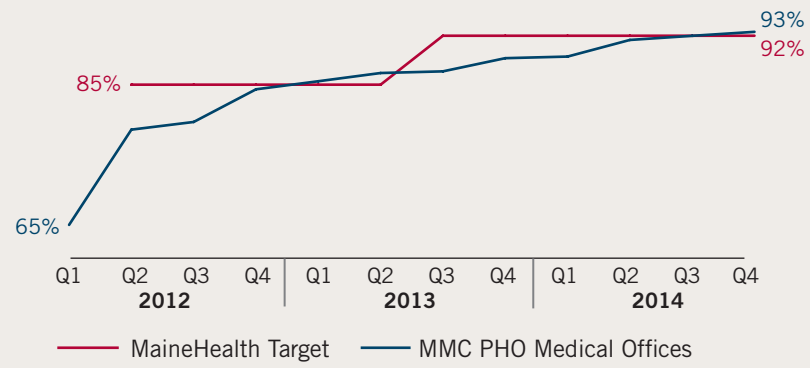
MMC Physician-Hospital Organization medical offices have steadily increased the percent of all adult patients (18+ years old) screened for tobacco use and, if identified as a tobacco user, provided cessation counseling[22] (Figure 10).

In 2012-2014, as part of the tobacco prevention and treatment programs funded by the **Partnership For A Tobacco-Free Maine,** the Center for Tobacco Independence worked with providers to increase referrals to the Maine Tobacco HelpLine (MTHL)[23] (Figure 11).

- Trainings that highlighted the benefits of referring patients were conducted in 441 health practices across the state.[24]
- MTHL collaborated with numerous healthcare systems statewide to implement electronic referral processes. Many systems send referrals directly from their electronic medical record (EMR); regular faxing is also used.
- Referrals from EPIC© EMR began in mid-February, 2014.

Patients Screened for Tobacco Use, and Counseled If Identified as a Tobacco User*
Rolling 12-month rates, ending in denoted quarter

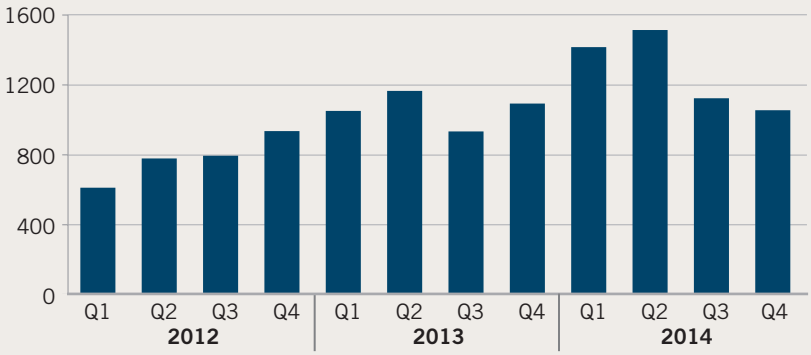
Figure 10



* Percent of all adults (18+-years old) with an office visit within the last 24 months who were screened at least once for tobacco use AND who received tobacco cessation counseling if identified as a tobacco user.

Referrals* to the Maine Tobacco HelpLine by Healthcare Providers Statewide

Figure 11



* Referrals include both messages sent directly from electronic medical record systems and faxes.

COMMUNITY STRATEGIES

Sidekicks,[25] an innovative tobacco risk reduction initiative for youth, was successfully pilot-tested in Lincoln County. Sixty-nine high school students were trained to have respectful, helpful conversations with their peers about tobacco use.[26]

POLICY STRATEGIES

The **Breathe Easy Coalition of Maine** administers two Gold Star Standards of Excellence programs to encourage Maine's hospitals and colleges/universities to implement tobacco-free policies.[27]

- In 2014, 31 of 38 Maine hospitals were recognized: 18 earned gold (met all 10 standards), 10 silver and 3 bronze.[28]
- All MaineHealth member hospitals received Gold or Silver recognition.[28]
- In 2014, 7 colleges/universities were recognized: 4 earned gold status, 4 silver and 1 bronze.[29]

GETTING TO THE NEXT LEVEL

CLINICAL

Increase use of performance feedback reports, including comparisons with other providers and practices, to improve care for tobacco dependence.

COMMUNITY

Maximize use of community-based programs to prevent youth from using tobacco products and to help those addicted to tobacco to quit.

POLICY

Implement evidence-based tobacco treatment processes and tobacco-free policies at all behavioral health organizations in Maine.

Decrease Obesity

MaineHealth remains focused on partnering with organizations to make clinical, policy and environmental changes that will help prevent children, youth and adults from becoming obese and treat those who are obese.

Recent trends of obesity in Maine are encouraging. Though the estimated percent of adults with obesity has increased slightly in 2011-2013, the amount of increase per year was smaller than the annual increases during 2002-2010[19] (Figure 12). Even more encouraging is that obesity rates among Maine's students in grades 5 and 9-12 have remained statistically steady from 2009-2013[18] (Figure 13). "Slowing the rise" of obesity rates is an intermediate point toward the ultimate goal of decreasing the prevalence of obesity.

Increasing healthy eating is a key strategy for decreasing obesity in Maine.

- In 2011-2013, the percent of Maine's adults who reported eating five or more fruits and vegetables per day varied across demographic groups and by self-reported poor health status[2] (Figure 14).
- The percent of Maine's students who reported eating five or more fruits and vegetables daily, and who reported drinking zero sugary beverages per day increased significantly from 2009 to 2013[18] (Figure 13).

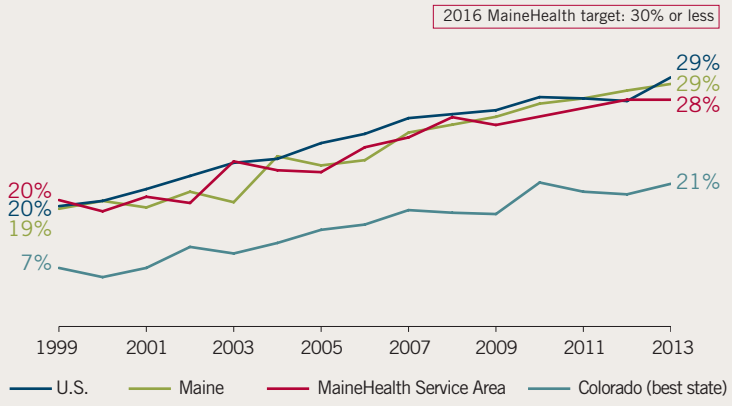
Obesity and Healthy Eating Among Maine Students Figure 13

	2009	2013
Obesity		
Grade 5	23%	22%
Grades 7 - 8	10%	14%*
Grades 9 - 12	12%	13%
Eat 5+ Fruits and Vegetables Daily		
Grade 5	28%	33%*
Grades 7 - 8	19%	19%
Grades 9 - 12	15%	17%*
Drink Zero Sugary Beverages Daily		
Grade 5	69%	78%*
Grades 7 - 8	69%	77%*
Grades 9 - 12	72%	74%*

* Percent in 2013 is significantly higher, statistically than the percent in 2009.

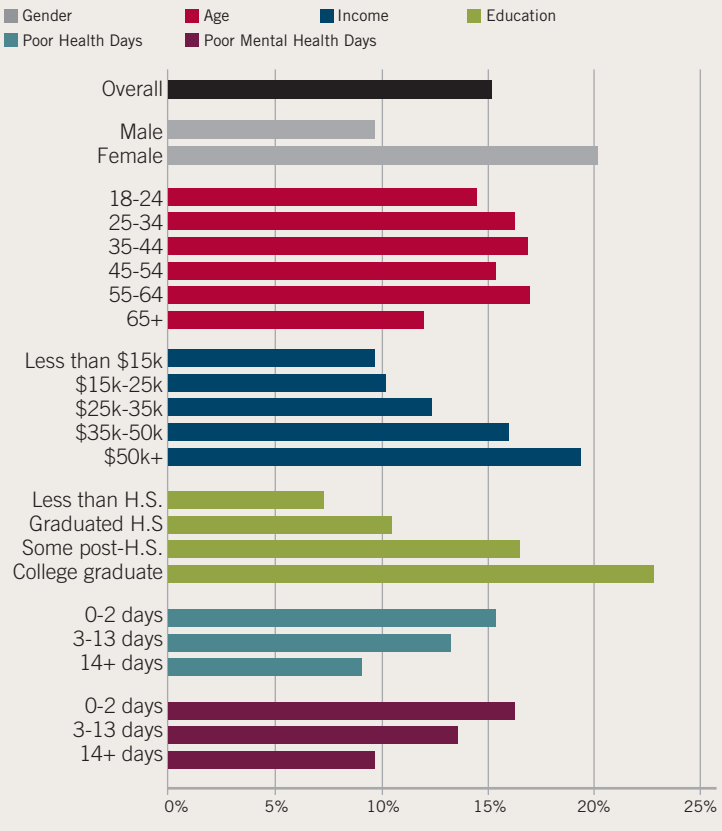
How Maine Compares to the U.S. Figure 12

Percent of Adults Who Are Obese — Body Mass Index ≥ 30



Adults Who Eat 5+ Fruits and Vegetables Per Day Figure 14

by Gender, Age, Income, Education, and Poor Mental and Physical Health Days (2011-2013)



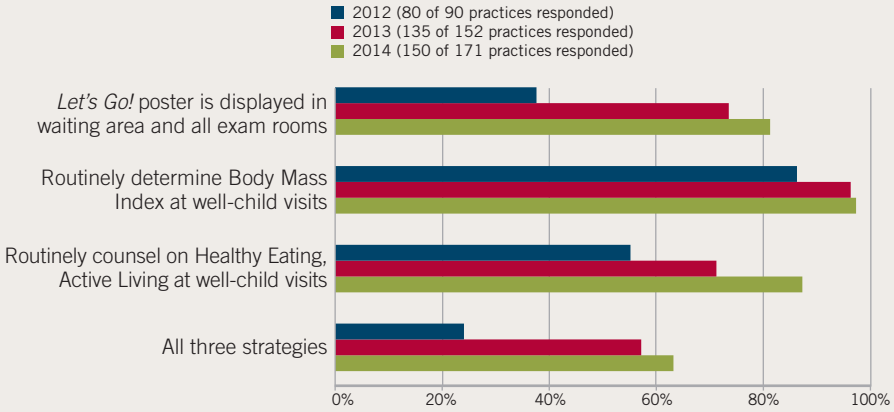
MAINEHEALTH AND PARTNERS RESPOND

CLINICAL STRATEGIES

A Harvard Pilgrim Health Care Foundation grant helped *Let's Go!* Healthcare[30] **continue to expand** its reach in Maine, New Hampshire and Massachusetts.[31]

- **The number of participating** primary care providers increased to 725 in 2014.
- Pediatric patients totaled 349,881.
- **Figure 15 shows** the increase in percent of healthcare practices that implemented all three of the recommended *Let's Go!* strategies for healthcare settings.

Healthcare Practices Implementing *Let's Go!* Strategies Figure 15

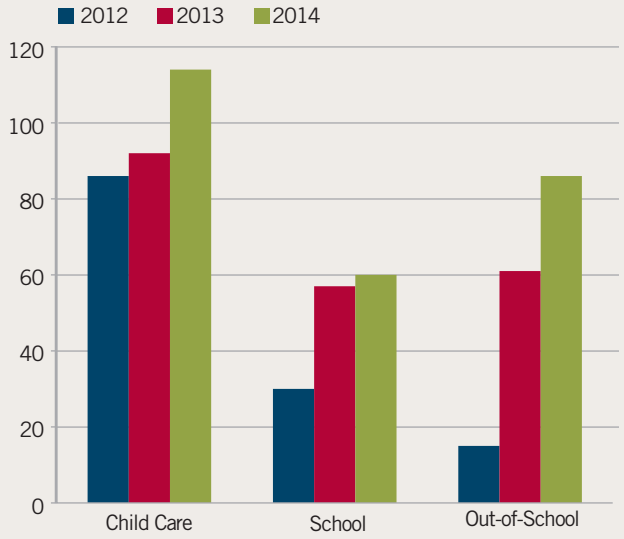


COMMUNITY STRATEGIES

Let's Go![32] **also expanded in schools, out-of-school and child care programs** (Figure 16).[31]

- All MaineHealth (MH) member hospitals[33] implementing *Let's Go!* programs met 100% of their annual targets in all sectors (child care, schools, out-of-school and healthcare).

Number of *Let's Go!* Sites Achieving Recognition Figure 16



The two-year HOMEtowns Partnership program[25] concluded in September 2014, having implemented evidence-based activities to promote healthy eating and physical activity that reached more than 300,000 people in seven rural counties in Maine.

- The work was funded by a $2.4 million Community Transformation Grant from the U.S. Centers for Disease Control and Prevention.
- The partnership's success was featured in a national study of 12 notable collaborations among hospitals, public health and community organizations. The study was funded by the Robert Wood Johnson Foundation and others.[34]

POLICY STRATEGIES

MaineHealth, *Let's Go!* and its partners, including the Maine Public Health Association, advocated for passage of a strong **Child Nutrition and WIC Reauthorization Act of 2015.**[35]

The Partnership for a Healthier America's Hospital Healthy Food Initiative (HHFI) continues to guide the work of 10 MH hospitals[36] as they create healthier cafeteria environments and more nutritious patient meals: increasing access to fruits, vegetables and healthier beverages, lowering the cost of healthy meals, labeling food with nutrition information, using healthier cooking techniques and making the healthy choice the easy choice.[37]

GETTING TO THE NEXT LEVEL

CLINICAL

Increase provider knowledge and adherence to recommended management and treatment guidelines for childhood obesity. Pilot an approach to address adult obesity in primary care practices.

COMMUNITY

Communicate and disseminate HOMEtowns Partnership activities and other successful programs via www.DiscoverTransformShare.org.

POLICY

Continue to increase access to healthy foods and beverages by strengthening partnerships with vendors and distributors. Expand the HHFI work to Memorial Hospital and Franklin Memorial Hospital.

Decrease Preventable Hospitalizations

MaineHealth remains focused on high-quality community-based primary care to manage chronic illnesses and improve care coordination as patients transition from one setting to another.

Ambulatory care-sensitive conditions (ACSC) are conditions for which good outpatient care can potentially prevent the need for hospitalization, or for which early intervention can prevent complications or more severe disease.[38] About half of Maine's ACSC hospitalizations can be attributed to heart failure and chronic obstructive pulmonary disease/asthma.[39] Other conditions in the ACSC rates presented in Figures 17 and 18 include diabetes, hypertension (when it is the primary reason for the hospitalization), angina (when no procedure is completed), convulsions, bacterial pneumonia, kidney/urinary tract infection, gastroenteritis, cellulitis and dehydration.

Maine's rate of ACSC hospitalizations decreased more from 2011 to 2012 than in any other one-year period since 1999 (Figure 17).[40] ACSC rates were lowest in southern, central and mid-coast Maine counties (Figure 18).[41]

While not included in the ACSC rates, injuries due to falls are a major cause of hospitalizations that can often be prevented. Older adults are hospitalized for fall-related injuries five times more often than they are for injuries from other causes.[42] In 2011, falls among Maine residents age 65 and older resulted in 3,032 hospitalizations and 13,076 emergency department visits that did not end in a hospitalization.[43] Maine's rate of hospitalization for hip fracture was 5.7 per 1,000 Medicare beneficiaries. This rate was slightly lower than the national average of 6.2 per 1,000 beneficiaries.[44]

How Maine Compares to the U.S.

Figure 17

Hospitalizations for Ambulatory Care-Sensitive Conditions per 1,000 Medicare Enrollees

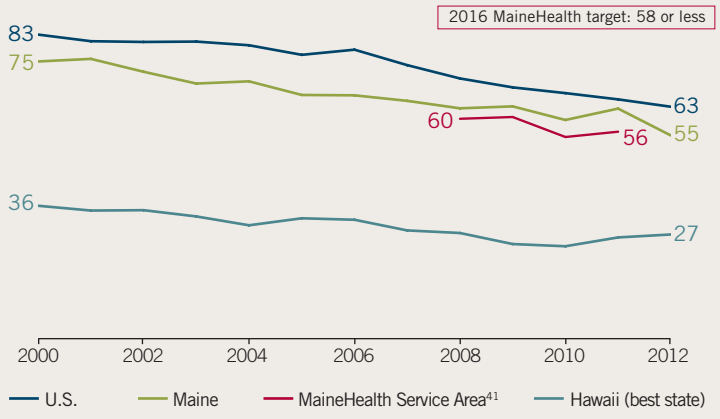
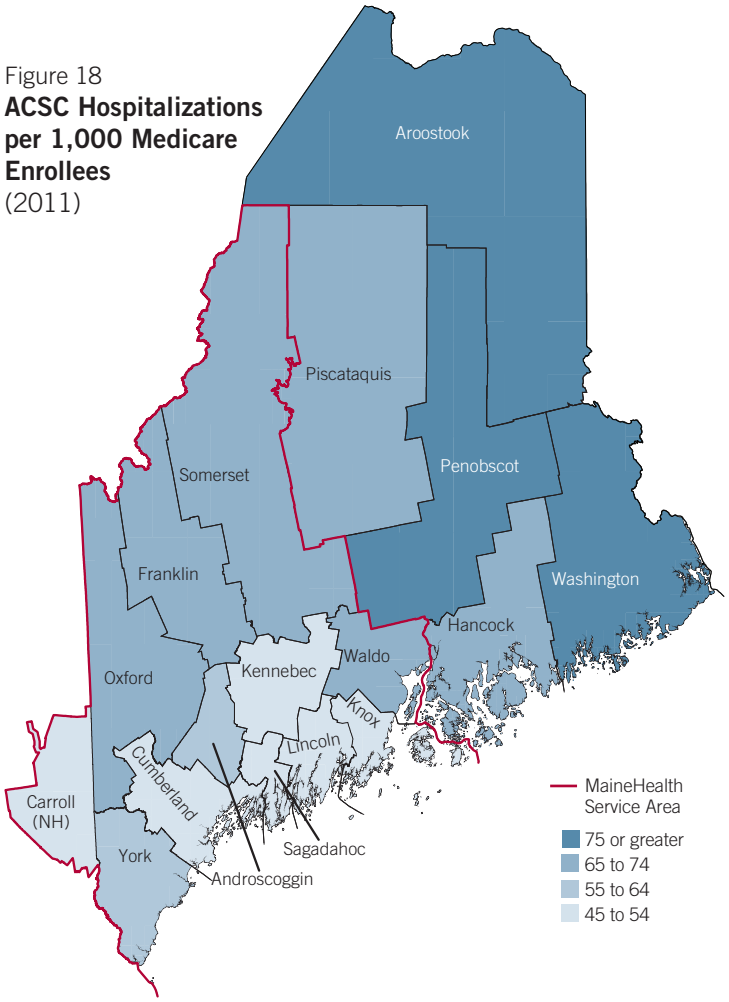


Figure 18
ACSC Hospitalizations per 1,000 Medicare Enrollees
(2011)



MAINEHEALTH AND PARTNERS RESPOND

CLINICAL AND COMMUNITY STRATEGIES

Preventing unnecessary hospitalizations requires close alignment and coordination of both clinical and community strategies to provide care that is evidence-based, provided by integrated care teams and patient- and family-centered. Examples of activities are listed below:

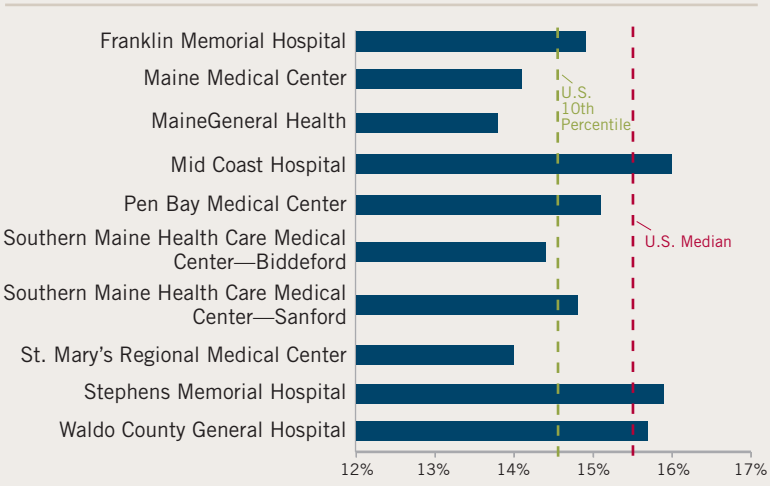
A MaineHealth strategic goal is that all 55 practices employed by MaineHealth members are eligible to attain the highest Patient Centered Medical Home[45] (PCMH) recognition by 2017. As of December 2014, 35 (64%) practices had attained this level.[46]

Within MaineHealth practices 79% of patients age 65 or older who had visited the office within the last year were screened for risk of falling. This was up from 25% screened in 2013.[47]

MaineHealth continued using its Home Diuretic Protocol (HDP) with heart failure (HF) patients who were receiving home health and telehealth monitoring services. This protocol empowers home health nurses to respond quickly to signs of worsening fluid retention using predetermined orders for treatment, often enabling patients to stay in their homes, where they want to be. Over the past two years, use of the HDP has resulted in a readmission rate of only 17%, compared to 21% among all HF patients across the MaineHealth system.[48]

Risk Standardized All-cause 30-Day Readmission Rates per 100 Admissions of Medicare Beneficiaries
July 2012-June 2013

Figure 19



NOTE: rates are not available for LincolnHealth because the sample size was too small.

MaineHealth hospitals continued efforts to reduce 30-day readmission rates.

- All MaineHealth hospitals strive to utilize the **Transitions of Care Bundle** for all patients being discharged. The Bundle includes addressing risk, medication reconciliation, timely communication between hospital and outpatient providers, a timely follow-up visit with the regular care provider, and patient education with Teach-back.[49]
- **Maine's Community-based Care Transitions Program (CCTP)**[50] provided clinical support and nonclinical resources to 2,971 patients discharged from four MH hospitals, from October 2013 through September 2014.[51] A description of CCTP (organizations involved and services provided) is provided in the endnotes section.[49]
- Seven MaineHealth hospitals had all-cause 30-day readmission rates,[52] adjusted to account for types and severity of illness, that were below the median rate for hospitals across the U.S.[53] (Figure 19). Four of these hospitals had rates that were below the 10th percentile.

POLICY STRATEGIES

Increasing patients' use of End-of-life planning and Advance Directives is a key priority for the MH system. To help achieve this objective, clinicians systemwide surpassed a goal of having 50% complete the "Critical Conversations: Engaging Patients in Advanced Care Planning" training by October 1, 2014. As of December 2014, 82% of over 2,200 physicians and mid-level providers, 89% of 2,900 nurses and 76% of 1,500 general clinical staff were trained.[54]

GETTING TO THE NEXT LEVEL

CLINICAL

Increase patients participation with healthcare teams, by helping them: engage in self-care, understand choices, help others, improve healthcare systems, and improve the community.

COMMUNITY

Ensure all long-term care facilities serving MaineHealth organizations are fully engaged in the quality improvement activities of the Senior Living Collaborative.

POLICY

Continue implementing the EPIC© electronic medical record system across MaineHealth care providers, to optimize care coordination.

Decrease Cardiovascular Deaths

MaineHealth remains focused on managing risk factors to prevent cardiovascular disease and maximizing the quality of care of patients who have cardiovascular disease.

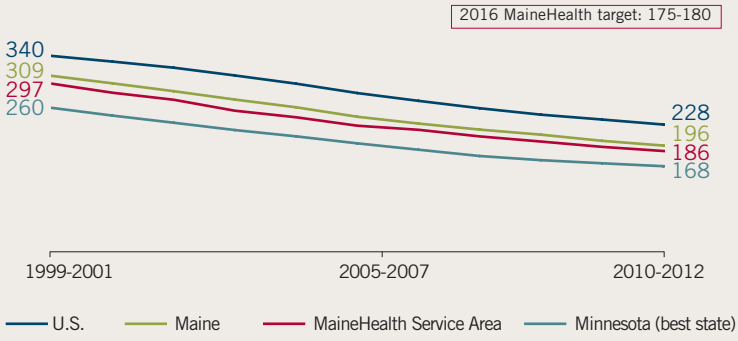
Maine's age-adjusted rates for deaths due to cardiovascular disease were consistently lower than the U.S. rates from 1999 to 2012. Likewise, the death rates in the MaineHealth Service Area were consistently lower than Maine's statewide rates (Figure 20). Examining change over time, the age-adjusted rates for the U.S., Maine and the MaineHealth Service Area decreased by similar levels from 1999 to 2012.[55]

Maine's death rates decreased for all categories of cardiovascular disease from 2000-2002 to 2010-2012 (Figure 21). The largest percent decreases were for heart attack and coronary heart disease. In 2010-2012, Maine's rates for overall cardiovascular death, as well as rates for heart disease, coronary heart disease and heart attack, were significantly lower than the U.S. rates.[55]

In 2010-2012, deaths due to heart attack varied widely across Maine. Counties in the 12-county service area had lower rates than counties in Northern and Eastern Maine[55] (Figure 22).

How Maine Compares to the U.S. Figure 20

Cardiovascular Death Rate: 3-Year Rolling Averages
Age-Adjusted Rates per 100,000 Population



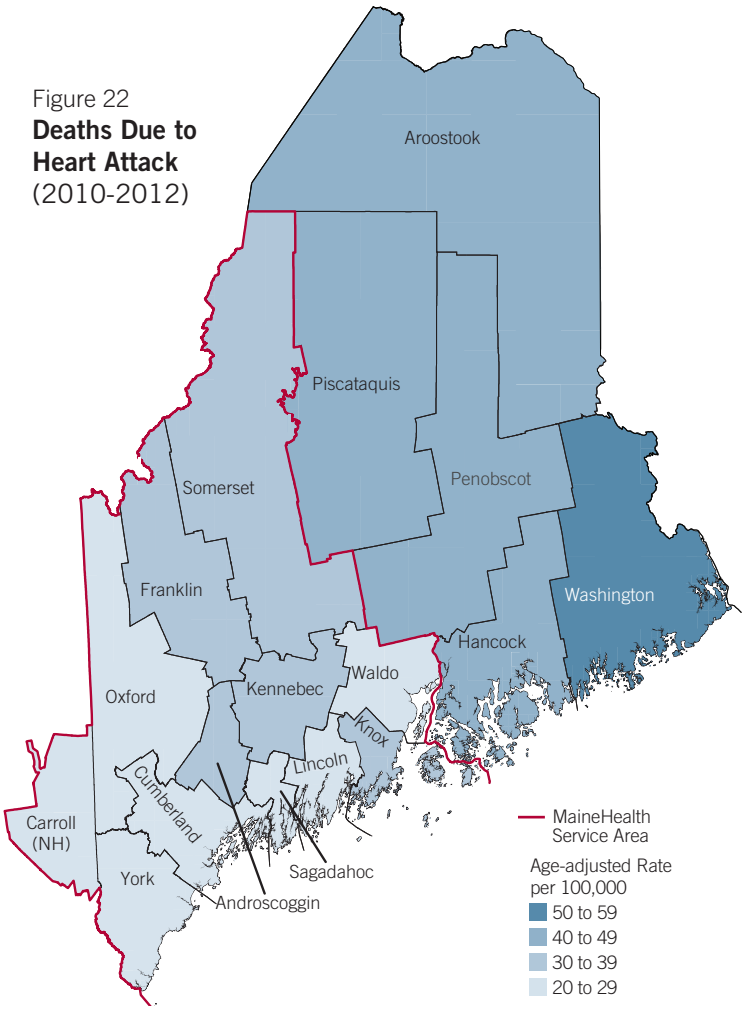
Cardiovascular Death Rates in Maine Figure 21

	2000-2002	2010-2012	Percent decrease
Cardiovascular Disease, Total	298	196*	34%
Heart Disease	222	149*	33%
Coronary Heart Disease	156	88*	44%
Heart Attack	57	31*	45%
Heart Failure	18	17	7%
Stroke	56	35	37%

Rates are calculated per 100,000 population and age-adjusted to the year 2000 U.S. standard population.

* Maine rates are significantly lower than U.S. rates.

Figure 22
Deaths Due to Heart Attack
(2010-2012)



MAINEHEALTH AND PARTNERS RESPOND

CLINICAL STRATEGIES

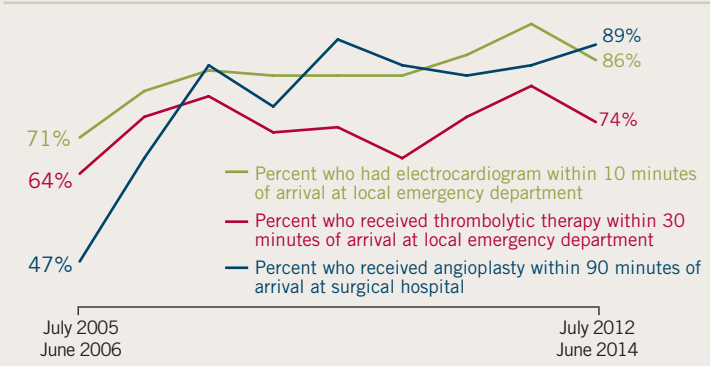
Million Hearts® [56] is a public-private initiative co-led by the U.S. Centers for Disease Control and Prevention and the Centers for Medicare and Medicaid Services to prevent one million heart attacks and strokes by 2017. Strategies focus on empowering people to make healthy choices, and improving care for people with high blood pressure, high cholesterol and tobacco dependence. Examples of accomplishments by MaineHealth organizations in 2014:

- Trained 228 clinicians in evidence-based techniques for measuring blood pressure; over 1,000 clinicians have been trained since 2009.[57]
- Among the 33,207 patients with a diagnosis of hypertension who are cared for at practices in the MMC Physician-Hospital Organization, 65%[58] had blood pressure in control at the time of their last measurement; the Million Hearts® national target is 70% by 2017.[56]
- MaineHealth organizations began implementing changes to cholesterol care management processes, to align with revised guidelines that were released in November 2013 by the American College of Cardiology and the American Heart Association.[59]

Maine Medical Partners (MMP) implemented a blood pressure (BP) management program in all family and internal medicine practices from April to September 2014. MMP reached out to 2,100 patients who either did not have a BP reading in the past two years or had elevated BP levels. Of these, 900 got a BP screening and an additional 650 were treated for high BP.[60]

MaineHealth's AMI PERFUSE Network[61] continued efforts to increase the percent of patients having a heart attack who are provided evidence-based treatment within the nationally recommended time frames[62] (Figure 23).

Percent Patients* with Acute Myocardial Infarction Receiving Treatment within Recommended Timeframes**
(MaineHealth's AMI PERFUSE Network) Figure 23



* Data presented does not include patients with unavoidable circumstances that delayed treatment beyond the strived-for timeframe.

** Timeframes are set by American College of Cardiology and the American Hospital Association.

COMMUNITY STRATEGIES

The American Heart Association (AHA) partnered with WMTW to air "Heart Health 8," a television and online series that focuses on specific heart-related health topics each month and includes interviews with medical experts and local survivors of heart disease and stroke.[63]

In 2014, AHA trained over 1,000 people across Maine to use Hands-Only CPR — a simple two-step lifesaving technique.[63]

Oxford County Moves,[25] a community-based initiative of Oxford County Wellness Collaborative, Healthy Oxford Hills and Stephens Memorial Hospital, made it easier for residents to be physically active.[26]

- Mapped routes for walking, running and cycling, with input from over 240 residents and community stakeholders.
- Formed free indoor walking groups that meet weekly.

GETTING TO THE NEXT LEVEL

CLINICAL

Promote utilization of cardiac rehabilitation for patients with advanced heart failure, accessed through the new Medicare benefit.

COMMUNITY

Increase public awareness of the symptoms of heart attacks and strokes, and the fact that obtaining treatment quickly can improve outcomes.

POLICY

Engage employees in cardiovascular disease reduction with employee wellness programs.

Decrease Cancer Deaths

MaineHealth is striving to lower the incidence of cancers by reducing tobacco use and obesity rates while increasing survivorship by maximizing cancer screening and expanding access to community-based treatment.

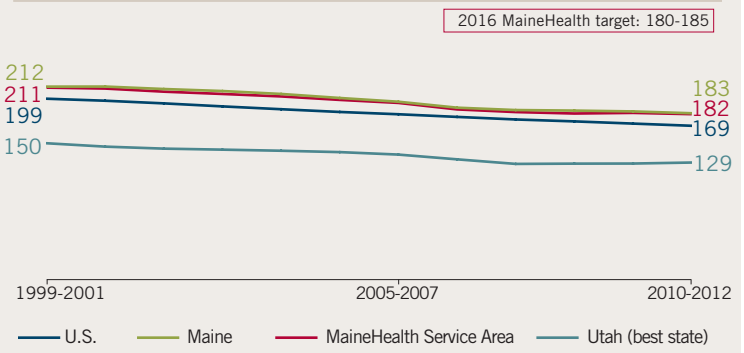
Although Maine's age-adjusted death rates for all malignant cancers combined have decreased over time (Figure 24), the state's rates remain higher than national rates.[55] These higher rates are primarily due to Maine's historically high prevalence of tobacco use. Cancers that scientific studies have proven can be caused by tobacco use are listed in a footnote of Figure 25. Examining 2011 cancer data (the most recent available), Maine's incidence and death rates for tobacco-related cancers were significantly higher than national rates (Figure 25).[64] In 2011, 50% of all cancer deaths in Maine were linked to tobacco use.[64]

For many of the cancers where tobacco use is a risk factor, the 5-year survival rates are very low (e.g. less than 20% for lung/bronchus and esophagus cancers). Lung/bronchus cancer is the leading cause of cancer death for both men and women — in Maine and the U.S.[65] The best long-term strategy for reducing these deaths is to eradicate tobacco use. Improvements in screening and treatment have resulted in improved outcomes for those diagnosed with these cancers.

How Maine Compares to the U.S.

Figure 24

Cancer Death Rates: 3-Year Rolling Averages
Age-Adjusted Rates per 100,000 Population



Maine Cancer Incidence and Death Rates

Figure 25

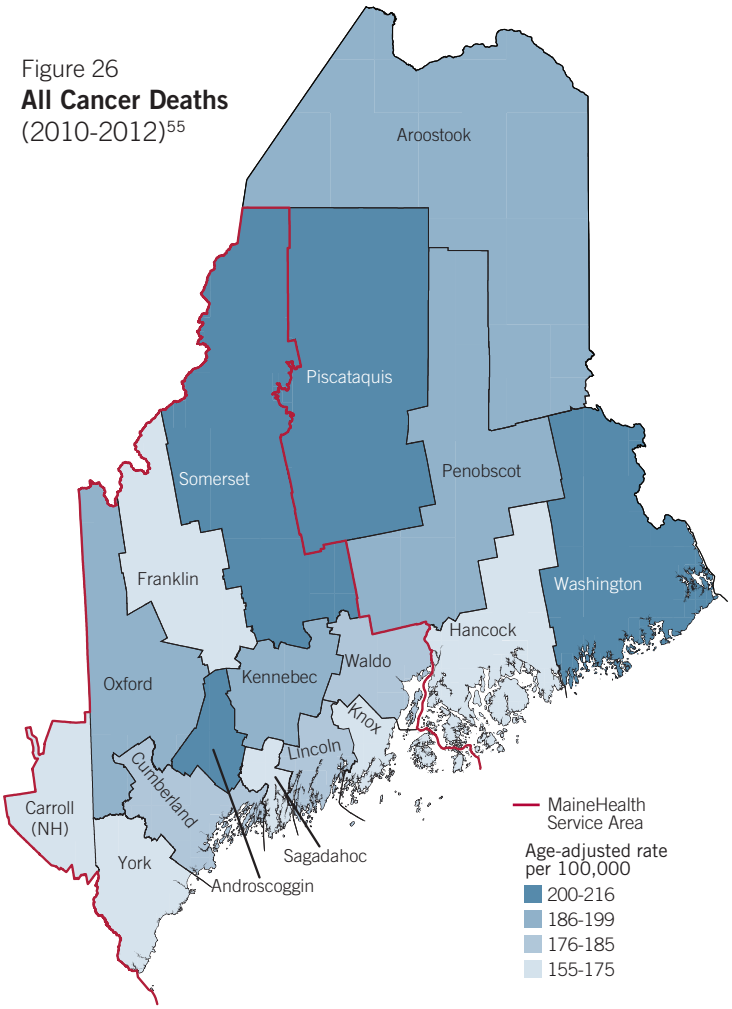
	Incidence Rates		Death Rates	
	2006	2011	2006	2011
All malignant cancers	536*	478*	194*	182*
Lung and bronchus	80*	69*	62*	52*
Other tobacco-related	95*	93*	38	38*
Esophagus	7*	6*	6*	6*
Urinary bladder	30*	30*	6*	6*
Colon and Rectum	50*	39	17	15
Prostate	171*	115**	24	20
Breast (female only)	128	127	21	17
Cervix Uteri	6	7	2	***

Rates are per 100,000 population and age-adjusted to the year 2000 U.S. population.

* Maine rate is significantly higher than the rate among U.S. Whites.
** Maine rate is significantly lower than the rate among U.S. Whites.
*** Rates and counts are suppressed due to fewer than 10 cases within time period.

Tobacco-related cancers include: lung and bronchus, laryngeal, oropharyngeai, esophageal, stomach, pancreatic, kidney and renal pelvis, urinary bladder, cervical cancers, and acute myeloid leukemia.

Figure 26
All Cancer Deaths
(2010-2012)[55]



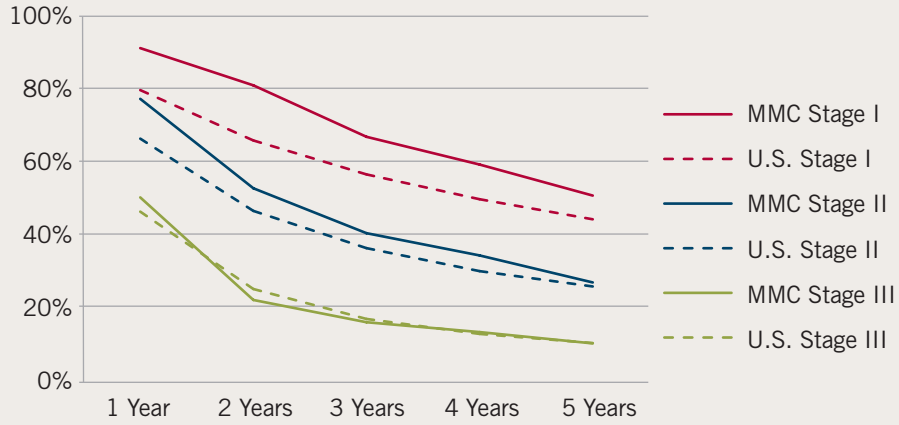
MAINEHEALTH AND PARTNERS RESPOND

CLINICAL STRATEGIES

Regional cancer plan developed. MaineHealth members, affiliates and partners completed a regional strategic plan to develop an integrated, patient-centered and subspecialized model for cancer care across the system.[66]

Survival rates for patients treated for early-stage lung cancer at the Maine Medical Center (MMC) Cancer Institute are higher than U.S. benchmarks[67] (Figure 27).

Observed Survival for Lung Cancer Cases Diagnosed in 2003-2006
Maine Medical Center (MMC) vs. 1489 Facilities Across U.S. Figure 27



Feasibility of the Comprehensive Lung Cancer Screening Program Piloted.[66]

- The MMC Cancer Institute, Chest Medicine Associates, Spectrum Medical Group, and the MMC Center for Outcomes Research and Evaluation piloted a screening program in FY2014 through funding from the Maine Cancer Foundation (MCF). The program is based on screening guidelines that the U.S. Preventive Services Task Force adopted in December 2013, and includes shared decision-making counseling by a physician, to ensure that patients understand the risks and benefits of a computed tomography (CT) scan to screen for lung cancer.
- Based on early success, the program is continuing in FY2015, with additional funding from the MCF.

Expanded Access to Cancer Genetics Services through Telemedicine.[66]

- Through a grant from the MCF, the MMC Cancer Risk and Prevention program and MaineGeneral Medical Center implemented a second telemedicine site in July 2014. The MCF also funded implementation of the first telemedicine site with Waldo County Hospital in 2012.
- From January-December 2014, 58 patients received telegenetic services at the Waldo and MaineGeneral sites.

COMMUNITY STRATEGIES

Launched in January 2011, the **MaineHealth Cancer Resource web portal, www.mainehealthcancer.org,** continued to provide people throughout Maine access to up-to-date educational information about cancers, as well as information about events that are taking place across the state. There were nearly 170,000 visits to the site from January 2013 to December 2014.[68]

POLICY STRATEGIES

In 2014, the Maine legislature passed a law requiring health insurance policies that cover chemotherapy to include coverage for orally administered anticancer medications equivalent to the coverage for chemotherapy administered intravenously or injected. In addition to being more cost-effective than IV or injected chemotherapy, patients can self-administer oral medications at home.[69]

GETTING TO THE NEXT LEVEL

CLINICAL

Implement all components of the new MaineHealth Oncology Plan, including tumor-specific care guidelines.

COMMUNITY

Increase public awareness that lung cancer is the leading cause of cancer death for both men and women, and about screening choices.

POLICY

Finalize Maine's Comprehensive Cancer Control Plan for 2015-2020, and then implement components.

Decrease Prescription Drug Abuse and Addiction

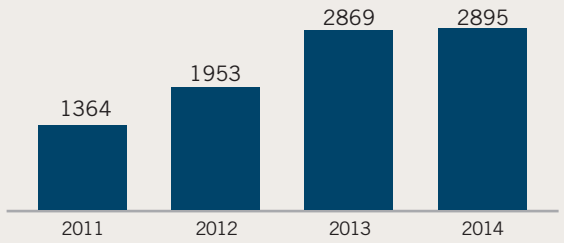
Prescription drug abuse and addiction continue to be major health problems in Maine and the nation.

Since 2000 the number of deaths related to drug overdose has doubled — both nationally and in Maine — surpassing that of motor vehicle accidents. In 2013, there were 142 deaths attributed to motor vehicle accidents and 157 to drug overdose in Maine (Figure 31).[70]

In 2006, when Maine began tracking the number of drug-affected babies, there were 200 reports statewide, 1.4% of all births. By 2014, the number of reports was almost 1,000, or about 8% of total births. There is substantial variation across Maine, ranging from 3% in Franklin and Sagadahoc counties to 16% in Penobscot County.[71]

The number of Emergency Medical Services (EMS) calls related to drug and medication overdose plateaued between 2013 and 2014. Of the almost 3,000 calls related to overdose, EMS administered naloxone, a drug that blocks opiate receptors and therefore prevents overdose, to 829 patients.[72]

Emergency Medical Service (EMS) Drug and Medication Overdose Calls Figure 29



Maine's Prescription Monitoring Program (PMP) was created to detect and prevent prescription drug misuse and diversion. In 2014, enrollment in the PMP became mandatory for prescribers of controlled substances. The "days supply"[73] of a medication is defined as the number of days a prescription will last if taken as prescribed and enables comparison between medications of varying strengths and doses.

Statewide, Kennebec and Somerset counties had the highest per person days supply of opiates in 2014. Cumberland, Franklin and Sagadahoc counties had the lowest rates[74] (Figure 30).

How Maine Compares to the U.S. Figure 28

Deaths Due to Drug Overdose: Age-Adjusted Rates of Deaths per 100,000[55]

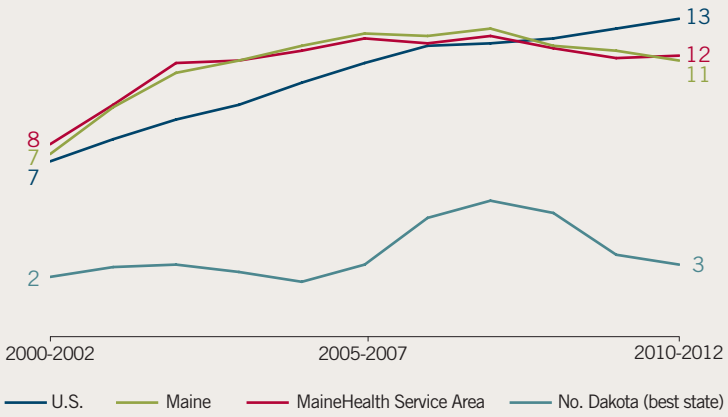
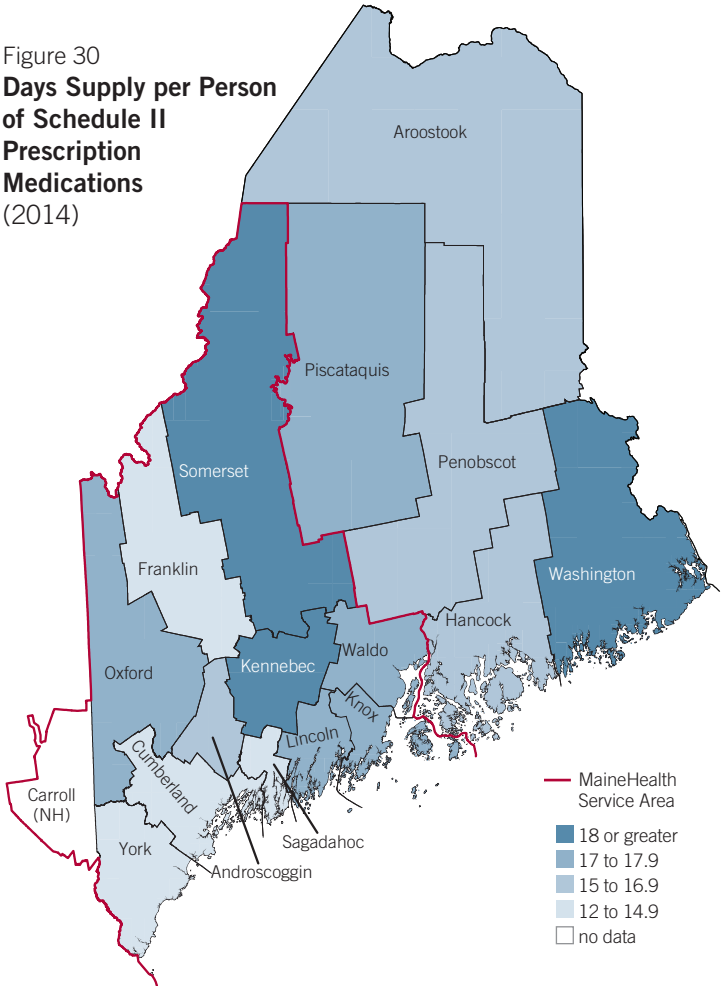


Figure 30
Days Supply per Person of Schedule II Prescription Medications
(2014)



MAINEHEALTH AND PARTNERS RESPOND

CLINICAL STRATEGIES

Maine Medical Partners implemented guidelines for opioid prescribing for chronic pain. These guidelines incorporate use of the Prescription Monitoring Program, assessment of substance abuse risk, ceiling dose amount, behavioral health referrals and it details diagnoses for which the medical literature does not suggest a benefit from opioids.[75]

Quality Counts, an independent, multi-stakeholder regional healthcare collaborative dedicated to transforming healthcare in Maine, established a group in 2014 to address the issue of chronic pain. The Maine Chronic Pain Collaborative seeks to improve patient-provider partnerships, improve the capacity of primary care practice teams, and increase their confidence and competence in dealing with chronic pain.[76]

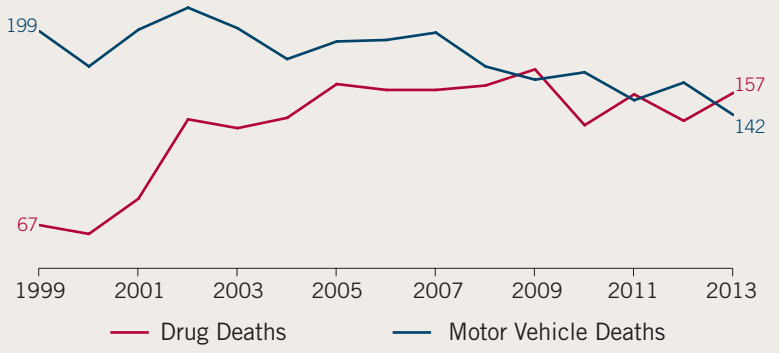
Maine Medical Center held its second conference presenting transdisciplinary approaches for caring for drug-affected mother and baby dyads to more than 100 health professionals. Topics included treatment of neonatal abstinence syndrome, intrapartum and postpartum pain management, and caring for babies experiencing withdrawal.[77]

COMMUNITY STRATEGIES

Secure, Monitor and Dispose of Medications.

- A recent statewide collection in Maine amassed over 19,000 pounds of medications, the largest amount gathered during any fall collection. This brought the total for nine Maine collections to over 150,000 pounds.[78]
- Disposing of unused medications reduces the chance of drug diversion. In a 2013 survey, 12% of high school students reported taking a prescription medication without a prescription.[18]
- In 2015, the Kennebec County Sherriff's Office was the first law enforcement agency in Maine trained to carry naloxone, also known as Narcan, to prevent overdose.[79]

Drug and Motor Vehicle Deaths in Maine, 1999-2013 Figure 31



POLICY STRATEGIES

As part of an overall **Harm Reduction Program,** MaineGeneral Health, an affiliate of MaineHealth, implemented the state's first large-scale program to provide Emergency Opiate Overdose Kits (EOOK) to at-risk patients and family members. In a 4-month period in 2014, over 500 EOOKs were distributed. In addition to providing education to kit recipients, MaineGeneral conducted community-based seminars in Augusta and Waterville.[80]

GETTING TO THE NEXT LEVEL

CLINICAL

Expand Prescription Monitoring Program to:

- Include morphine equivalent for prescriptions.
- Integrate data with existing Electronic Medical Records.
- Increase data interoperability with other states.

COMMUNITY

- Educate public on risk factors for overdose.
- Continue to expand use of naloxone by law enforcement and first responders.

POLICY

- Support continued dissemination of Guidelines for Opioid Prescribing for Chronic Pain and systemwide training on pain management strategies.
- Support development and expansion of drug disposal options in Maine.
- Expand distribution and implementation of EOOK toolkit by other health systems in Maine.

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    BRFSS introduced two changes to their telephone survey this year that affected data presented in this report. The first change is a revised method of analysis. Survey data is always adjusted to reflect who completes a survey in comparison to the population being surveyed. Previously, BRFSS had used a process called post-stratification that allowed them to correct for about half a dozen differences among the completed surveys and the population. Starting with this edition, a process called raking has been adopted, which allows them to now adjust for over a dozen differences. This becomes increasingly important as you get more diverse segments within the population and improves the accuracy of the survey estimates.

    The second change is to survey households that use a cell phone as their primary residential phone and do not have a landline. This portion of the population is increasing rapidly, and the prior, landline-only surveys were not reaching these households. The CDC conducted a study and found four demographic groups in which the majority live in households without landlines: adults aged 25 to 34, adults living with only unrelated roommates, adults renting their home and adults living in poverty. The survey still does not capture responses from those without a phone, and the CDC, similar to all organizations conducting phone surveys, faces increasing difficulty reaching those who screen all calls. UnitedHealth Foundation. America's Health Rankings® – 2012 Edition, p. 29.
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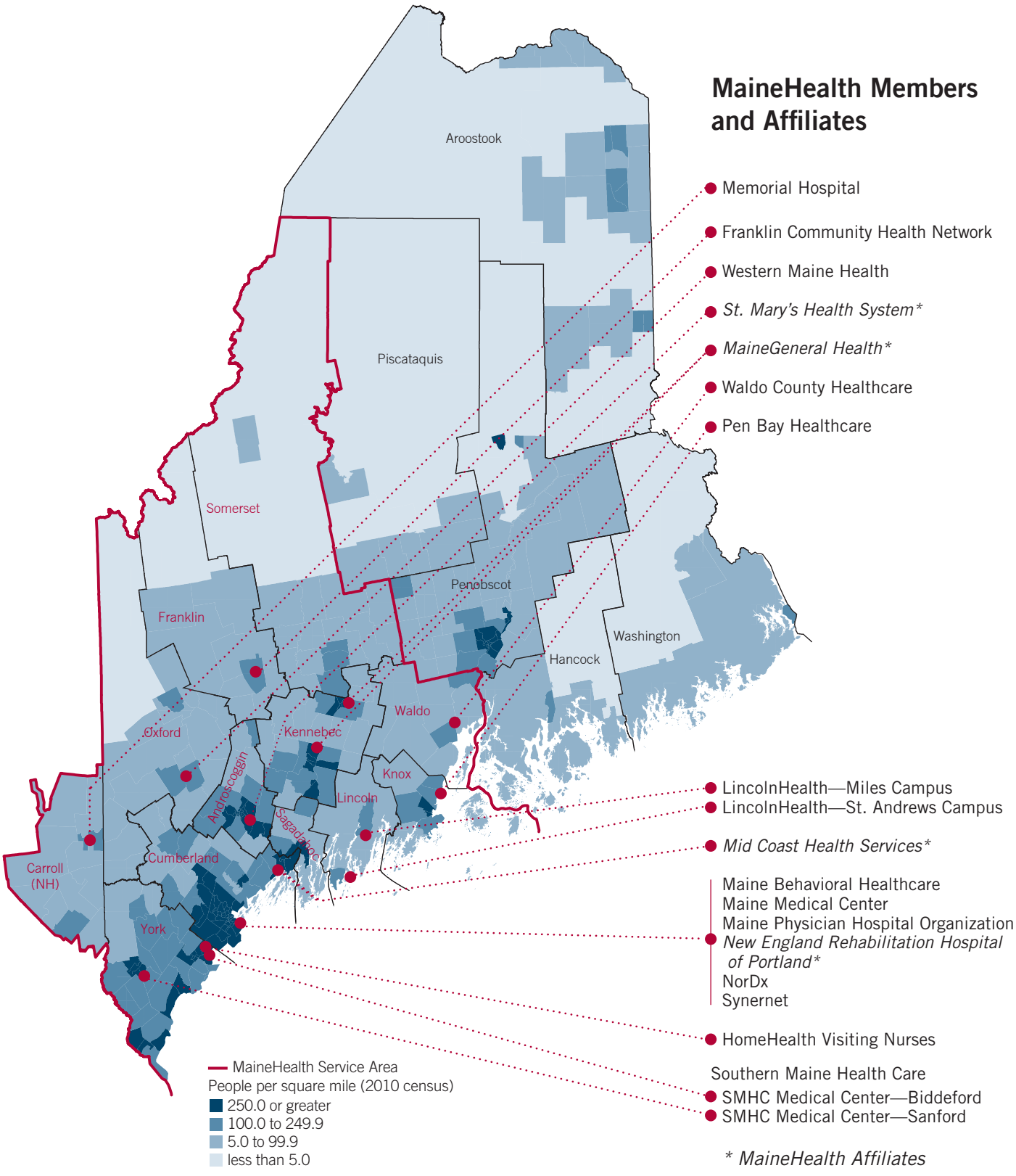
MaineHealth Service Area

Just over 1 million people live in the 12 counties that constitute the MaineHealth Service Area.



MaineHealth Members and Affiliates

- Memorial Hospital
- Franklin Community Health Network
- Western Maine Health
- *St. Mary's Health System**
- *MaineGeneral Health**
- Waldo County Healthcare
- Pen Bay Healthcare
- LincolnHealth—Miles Campus
- LincolnHealth—St. Andrews Campus
- *Mid Coast Health Services**
- Maine Behavioral Healthcare
  Maine Medical Center
  Maine Physician Hospital Organization
  *New England Rehabilitation Hospital of Portland**
  NorDx
  Synernet
- HomeHealth Visiting Nurses

Southern Maine Health Care

- SMHC Medical Center—Biddeford
- SMHC Medical Center—Sanford

** MaineHealth Affiliates*

Franklin Community Health Network

LincolnHealth

Maine Medical Center

Maine Behavioral Healthcare

Memorial Hospital

Pen Bay Healthcare

Southern Maine Health Care

Waldo County Healthcare

Western Maine Health

HomeHealth Visiting Nurses

Maine Physician Hospital Organization

NorDx

Synernet

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