Measuring our success in improving the health of our communities
Working together so our communities are the healthiest in America.
— MaineHealth Vision

Health Index 2018 Report contents

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Priorities at-a-glance: How are we doing?

**Increase Childhood Immunizations**
Page 8

The rate of toddlers up-to-date for immunizations in 2017 was statistically similar to the rates in 2015 and 2016.

**Decrease Tobacco Use**
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The rate of adults who smoked every day or some days in 2015-17 was statistically lower than the rates in the previous three years (2011-13).

**Decrease Obesity**
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The rate of adults with obesity in 2015-17 was statistically similar to the rates in the previous six years (2011-16).

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The rate of cardiovascular deaths in 2015-17 was statistically similar to the rate in 2012-14.

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The rate of cancer deaths in 2015-17 was statistically similar to the rate in 2012-14.

**Decrease Prescription Drug Misuse and Dependence**
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The rate of drug overdose deaths in 2015-17 was statistically higher than the rate in 2012-14.
About the Health Index

This is the ninth consecutive year the MaineHealth Health Index Report has been published. It provides an annual review of progress on seven high-priority population health issues that impact the health status of people and communities across the state of Maine. Used by policymakers, community organizations, hospital leaders, clinicians and other stakeholders, the Report has earned a reputation as an authoritative source of relevant and useful data and a high-level analysis of trends in key health outcomes.

The Health Index was conceptualized in 2009 by MaineHealth and our partners (clinicians, researchers, public health experts and others). It was in response to a challenge from the health system’s board of trustees to develop a tool that could help assess the impact of our focused population health strategies and interventions (such as referrals to telephonic counseling for tobacco users) while tracking overall population health metrics (such as the prevalence of tobacco use among all adults).

Over the years, a number of updates have been made to the Health Index initiative:

- A seventh priority, “Decrease Prescription Drug Misuse and Dependence,” was added in 2012
- Continuous alignment of Health Index systemwide activities with the Community Health Needs Assessment strategies completed by the local health systems in order to maximize the impact of our collaborative efforts to improve the health of our communities
- Health Index measures are included in the MaineHealth System Quality Dashboard (see below)
- The Health Index website, www.mainehealth.org/healthindex, was launched in March 2018. The site features easy-to-search descriptions of strategies being implemented as well as data and graphics presenting progress, all designed to accelerate learning about and adoption of evidence-based interventions that will ultimately improve individual and community health.

Feedback and suggestions about this report and the website, as well as requests for copies of prior years’ Health Index reports, are welcome and should be directed to cowant@mainehealth.org.

MaineHealth System Quality Dashboard

In 2017, the MaineHealth Chief Medical Officer brought together chief medical officers, chief nursing officers and medical staff presidents from across MaineHealth to form the MaineHealth Clinical Leadership Council. The purpose of this council is to align and prioritize clinical initiatives across the health system and to present recommendations for annual clinical goals and performance targets to the MaineHealth Board of Trustees.

Using the vision of MaineHealth as their “true north,” our clinical leaders aligned with the Health Index priorities and measures as a way of assessing whether in fact “our communities are the healthiest in America,” and identified projects that support achievement of the Health Index targets. Eight of the nine annual MaineHealth system quality goals for FY19 involve work that directly or indirectly impacts the Health Index long-term outcomes. Our clinical and community health teams are working together, with support from the MaineHealth Center for Health Improvement, to implement evidence-based strategies.

The Council tracks overall system and individual member hospital performance monthly, identifying best practices and opportunities for improvement, and submits reports around this work to the Quality Committee of the MaineHealth Board of Trustees. The System Quality Dashboard and site-specific dashboards are distributed monthly to system leaders, hospital and medical staff leaders, and the MaineHealth Board of Trustees.

### FY19 System Quality Dashboard goals

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<th>Category</th>
<th>Description</th>
<th>Goal</th>
<th>Notes</th>
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<td>Opioid dependence treatment (IMAT)</td>
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<td>≥700 new patients served in the MaineHealth network</td>
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<td>Tobacco use disorder treatment</td>
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<td>Childhood immunizations</td>
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<td>≥62% of 2-year-old patients up-to-date on all 10 vaccines (“combo 10”) recommended by 2nd birthday</td>
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<td>Colorectal cancer screening</td>
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<td>≤17.5% of patients with HbA1c &gt;9.0%</td>
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<td>(rolling 12 month)</td>
<td>≥65% of patients age 0-17 with trauma screening</td>
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<td>Reducing falls with injury</td>
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<td>Congestive heart failure admissions</td>
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<td>≤677 hospitalizations per 1,000 CHF patients</td>
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<td>COPD emergency department visits</td>
<td>(rolling 12 month)</td>
<td>≤717 emergency department visits per 1,000 COPD patients</td>
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Goals in red impact Health Index priorities
Adverse Childhood Experiences (ACEs) are stressful or traumatic experiences, occurring during the first 18 years of life, which can cause lifelong implications for learning, behavior, health and adult functioning, which include:

- Abuse — physical, emotional, sexual
- Neglect — physical, emotional
- Household challenges — household mental health conditions, incarcerated household member, mother treated violently, household substance misuse and parental separation/divorce

In addition, there are many other experiences that can cause a traumatic response and impact function and health. Some examples include:

- Death of a parent
- Homelessness
- Bullying
- Intimate partner violence
- Peer-to-peer violence
- Witnessing violence in community or school

Children exposed to multiple ACEs have significantly higher rates of developmental delays, anxiety, depression, behavioral concerns and academic problems. Having multiple ACEs is also associated with longer-term adolescent and adult health issues. These include unhealthy high-risk behaviors such as smoking, alcohol/drug misuse and promiscuity, and having chronic health conditions, such as diabetes, cardiovascular disease, cancer, chronic lung disease and depression. Importantly, as the number of experiences increase, the risk of harm and long-term health issues also increase for both adolescents and adults.

Adverse Childhood Experiences are common in Maine. In 2017, 23% of Maine’s high school students reported three or more ACEs. The percentages varied significantly across counties, ranging from 20% to 37% (Figure 1). Furthermore, the percentage of high school females that experienced three or more ACEs was 10 points higher than males (28% versus 18%). Over 40% of students who identified as gay, lesbian or bisexual experienced three or more ACEs.

Fortunately, children are resilient and can thrive in spite of trauma when supported by caring adults and provided with safe and nurturing environments in their communities. Several evidence-based treatments are proven to be highly successful in reducing the negative effects of trauma and increasing resiliency. As a result, these treatments can enable the healthy development of children’s brains and bodies and can reduce the risk of unhealthy behaviors and chronic illnesses as adults. Many of these treatments are available throughout Maine.

Reporting a traumatic experience is the first step toward healing, which is why MaineHealth providers screen children for trauma using two questions that can identify a wide range of adverse childhood and adolescent experiences. These questions are designed to begin conversations between families and providers in order to connect them to behavioral health services and community supports. Increasing use of these screening questions is the focus of this System Quality Dashboard goal in fiscal year 2019.

Identifying and treating ACEs and trauma during childhood is critical to improving the lives of some of our most vulnerable residents, enhancing the health of our communities, and, over time, even reducing costs of medical care.
Where we live matters to our health, and one of the greatest disparities in the United States is the variation of health among communities. The County Health Rankings© provides information for each state to identify where disparities exist and where there are opportunities for action.8

The table below presents each county’s Health Outcomes ranking from 2013 to 2019. The Health Outcomes ranking is based on five measures, listed below, that represent how long people live, how people rate their health and the percentage of newborns with low birth weight. A second ranking published for each county, Health Factors ranking, represents focus areas — health behaviors, clinical care, social and economic factors, and the physical environment — that influence how long and how well we live. The Health Factors ranking can be found on the County Health Rankings & Roadmaps website, [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

The healthiest county in the state, per the 2019 edition of the County Health Rankings is **Cumberland County.**8

<table>
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<th>Health Outcome rankings over time*</th>
<th>2013</th>
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Line items in red indicate counties within the MaineHealth service area

*Lower number = healthier population

### Metrics in Health Outcomes ranking

**Length of Life (50% weight in Outcomes ranking)**

Premature death (years lost before age 75)

**Quality of Life (50% weight in Outcomes ranking)**

Poor or fair health (% 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 birth weight (% <2,500 grams)
Of the five metrics included in the Health Outcomes rankings (see table on page 4), the premature death measure has the largest influence on year-to-year changes in counties’ ranks; this measure has a weight of 50% in the calculation of the ranking.9 The premature death measure is the number of years of potential life lost due to death before the age of 75 per 100,000 population. The age 75 is used because this is close to the average life expectancy in the United States.10 Years of potential life lost is calculated by:

1. subtracting each person’s age at death from 75 (years lost), and then
2. adding together the years lost for all those who died before age 75; note that those who die at age 75 or older contribute zero years to the total.

The usefulness of using years of potential life lost is that it gives greater weight or influence to the deaths of younger persons. For example, when a 3-month-old dies of sudden infant death syndrome, 75 years is added to the total number of years lost. When a 35-year-old dies of a drug overdose, 40 years are added. But when a 73-year-old dies of cancer, only two years are added to the total.

By giving more weight to deaths at younger ages, years of potential life lost provides an important perspective on opportunities that we can take to improve the health of our communities. Deaths in younger populations are more likely to be preventable than deaths in older populations.11 Some examples:

• Preventing youth and adults from misusing prescription drugs as well as treating those with dependence on such drugs can help reverse the recent surge in premature deaths due to drug overdoses.12
• Helping people make healthier lifestyle changes around diet, exercise and tobacco use/nicotine products can help reduce premature deaths due to both cancer and heart disease.11

Figure 213 presents trends for the five leading causes of premature death in Maine. In recent years, the biggest influence on premature death rates has been the increase in unintentional poisonings (purple line). These poisoning deaths were predominantly drug overdoses involving one or more forms of opioids—whether heroin, illegally used fentanyl or prescribed opioids.14 Premature death rates vary substantially across counties in the MaineHealth service area (Figure 3).15
The MaineHealth Health Index initiative focuses on monitoring seven high-priority health issues:

- Childhood Immunizations
- Tobacco Use
- Obesity
- Preventable Hospitalizations
- Cardiovascular Health
- Cancer
- Prescription Drug Misuse and Dependence

Within these priorities, key indicators and outcomes are identified, facilitating comparisons with the United States overall, with other states and within Maine. These maps provide an overview of the key outcome measures by county, both statewide and within the MaineHealth service area (including Carroll County, New Hampshire). Pages 8 to 14 provide additional information and data regarding each priority.
Tobacco Use

% of adults who smoked daily or some days (2016)\(^1\)

MaineHealth service area:
- 23.5 to 26.9%
- 20.0 to 23.4%
- 16.5 to 19.9%
- 13.0 to 16.4%

Maine’s rate: 19.8%

Obesity*

% of adults with body mass index ≥30 (2016)\(^1\)

MaineHealth service area:
- 33.5 to 36.9%
- 30.0 to 33.4%
- 26.5 to 29.9%
- 23.0 to 26.4%

Maine’s rate: 29.9%

*There were no statistically significant differences between individual county rates and Maine’s rate.

Cancer

Age-adjusted rates for all cancer deaths per 100,000 population (2015-2017)\(^1\)

MaineHealth service area:
- 195.0 to 209.9
- 180.0 to 194.9
- 165.0 to 179.9
- 150.0 to 164.9

Maine’s rate: 172.5

Prescription Drug Misuse and Dependence

Age-adjusted rates for all drug overdose deaths per 100,000 population (2015-2017)\(^1\)

MaineHealth service area:
- 53.7
- 34.0 to 38.4
- 28.5 to 33.9
- 24.0 to 28.4
- 18.5 to 23.9
- 14.0 to 18.4

Maine’s rate: 28.1

*There were no statistically significant differences between individual county rates and Maine’s rate.
Immunizing children is one of the most successful public health strategies, greatly reducing morbidity and mortality. By continuing to increase on-time vaccination rates, we protect entire communities from infectious diseases.

The U.S. Centers for Disease Control and Prevention (CDC) currently recommends 10 immunizations be fully administered to all children by age 2. To be considered up-to-date for all 10 vaccines, a 2-year-old child must have received all recommended doses of each vaccine (24’ doses in all) within specific time frames established by the CDC. Not even one dose can be missed or administered late.20

This strict definition is the reason that rates for the 10-vaccine bundle are so much lower than the rates for any individual immunization. Across MaineHealth practices, as of September 2018, the aggregated up-to-date rates for individual immunizations ranged from 72% to 97% while the aggregated rate for the 10-vaccine bundle was only 59%.21

As a result of increasing the focus on and coordination of activities to improve immunization rates systemwide, MaineHealth achieved the September 2018 target of the MaineHealth System Quality Dashboard FY18 goal six months early. The aggregated rate for the 10-vaccine bundle increased from 55% in May 2017 to 59% in April 2018 and remained at that rate (Figure 12). During this time period, up-to-date rates also improved for nine of the 10 individual vaccines. The largest increases were for the influenza vaccine (from 67% to 72%) and pneumococcal vaccine (from 89% to 94%), followed by hepatitis A vaccine (from 90% to 93%) and hepatitis B vaccine (from 91% to 93%).21

At this time, the National Immunization Survey does not calculate up-to-date rates for the 10-vaccine bundle. Thus, to compare Maine’s rates to rates of the United States, Figure 116,22 shows the seven-vaccine bundle rates (19+ doses on time). The fluctuations in Maine’s National Immunization Survey estimated rates (teal line) are due to the statistical limitations of calculating each estimate using data from a small sample of 200 to 250 parents interviewed.22 The Maine Center for Disease Control and Prevention reports more accurate up-to-date rates (orange line) for this bundle, using data for nearly all 2-year-olds in the state, which provides enter in to Maine’s statewide immunization registry. From 2012 to 2017, Maine’s up-to-date rates for the seven-vaccine bundle were higher than the nation’s.16
Decrease Tobacco Use

MaineHealth providers continue to connect patients to effective programs and therapies for helping tobacco users become tobacco-free and to partner with community organizations to prevent youth from ever using tobacco.

Tobacco use is the leading cause of preventable illness and death. On average, smokers die 10 years earlier than nonsmokers.23

Maine has made progress in reducing the burden of tobacco use. The percentage of Maine adults who smoked cigarettes in 2017 was significantly lower than the percentage in 2011 (Figure 13).24 This recent decline is primarily the result of Maine’s success in reducing youth smoking over the past two decades; as youth who do not smoke become adults, they are having a progressive effect on the adult rates. Since 2011, Maine has seen a significant increase in the rate of 18- to 24-year-olds who have never smoked (from 60% in 2011 to 79% in 2017).24

However, we must continue efforts to not only maintain this progress but also to accelerate it. There are still approximately 187,400 adults in Maine who currently smoke cigarettes.24,25 Furthermore, in 2017, 14% of Maine’s high school students reported using some tobacco product (cigarettes, cigars and/or smokeless tobacco) in the past 30 days. This is particularly alarming when looking at 2018 data from a national youth survey which demonstrates up to a 78% increase in recent use of electronic devices from 2017, driven in part by newer products such as JUUL.26

MaineHealth providers are focused on increasing the number of active tobacco-users whom they proactively refer to the Maine Tobacco HelpLine. This means patients are registered with the HelpLine, mailed quit support materials and called by a counselor. Studies have shown that when health care providers advise patients to quit tobacco and assist them in accessing treatment services, quit rates go up. Research also shows improved quit rates when smokers use tobacco quitline counseling over the phone.27

Although MaineHealth did not reach its target (Figure 14),28 the achieved rate of 12.09 referrals per 100 active tobacco users translates to 3,040 primary care patients referred via the Epic electronic medical record to the HelpLine from September 2017 to August 2018. Including non-Epic referrals, MaineHealth providers referred 3,643 patients, 993 of whom received counseling.28
Decrease Obesity

MaineHealth remains focused on partnering with organizations to make clinical, policy and environmental changes that will help children, youth and adults eat healthy and be physically active.

In recent years, rates of adult obesity in Maine and in the MaineHealth service area have begun to stabilize. Having stable rates over time can be viewed as an intermediate step toward the ultimate goal of decreasing obesity. During 2011-2017, the estimated adult obesity rate in Maine ranged from 27.8 to 30.0 percent; importantly, there were no statistically significant increases or decreases during this period (orange line in Figure 15). Obesity rates also have been stable among fifth graders as well as seventh and eighth graders. During the five-year period from 2013-17 (which is the most recent data available), rates ranged from 19.1% to 22.6% and 14.2% to 15.3%, respectively, with no statistical differences in the rates. The most encouraging trend is that there was a significant decrease in obesity among Maine’s third graders, from 20.8% in 2015 down to 12.3% in 2017.

After years of successfully implementing strategies to reduce childhood obesity, Let’s Go!, with support from MaineHealth and Maine Medical Partners, developed a program for adults. The latest evidence indicated that improvements in adults’ weight are best achieved through small, incremental changes in healthy eating and physical activity. The program developed, Small Steps, incorporates four key healthy eating and active-living messages:

• Move More — it’s a great way to improve your health
• Eat Real — foods that come from nature give you energy
• Drink Water — it’s the best choice
• Rest Up — good sleep restores your body and mind

Implementing Small Steps in primary care requires a practice to be knowledgeable about healthy eating and active-living messages, follow workflow procedures that support the assessment of lifestyle habits, be comfortable initiating compassionate conversations about setting health improvement goal(s) and develop and document follow-up plans for patients.

As of September 2018, clinical teams at 25 of 38 MaineHealth adult primary care practices were trained in the standard of care for adults with obesity (Figure 16).
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 care setting to another.

One metric often used to monitor preventable hospitalizations is the rate of admissions for 12 ambulatory care-sensitive conditions.33 For these chronic/acute conditions, patients who are provided with high-quality, community-based primary health care often can avoid hospitalizations or more severe disease that requires treatment within a hospital.34 As of 2014, the three conditions with the highest admission rates are heart failure, bacterial pneumonia and chronic obstructive pulmonary disease (COPD)/asthma.35

The hospitalization rates of ambulatory care-sensitive conditions in the MaineHealth service area and for Maine overall increased slightly from 2014 to 2015. The service area’s rate remains lower than the U.S. rate, although from 2012 to 2015, the U.S. rate decreased more than the service area rate (Figure 17).18

MaineHealth continues to prevent unnecessary hospitalizations by coordinating clinical and community strategies into patient- and family-centered care that is provided by collaborative, integrated teams.

In fiscal year 2018, MaineHealth organizations implemented strategies in hospitals, ambulatory practices, other health care settings and community settings to intensify care coordination for high-utilizers of emergency department and inpatient care. In particular, care management efforts supported patients with heart failure who had 3+ hospitalizations in the last year and patients with COPD who had 3+ visits to the emergency department in the past year. Strategies that reduce emergency department visits also help prevent admissions for COPD.

Among patients with heart failure who were cared for by MaineHealth providers, hospitalization rates (for any reason) were higher at the end of fiscal year 2018 than at the beginning of the year, although the rates did decline in the last quarter of the year (Figure 18).36 Similarly, emergency department visits rates among COPD patients were higher at the end of fiscal year 2018 than at the beginning.36

MaineHealth is continuing efforts to provide care coordination for high-utilizing patients with heart failure and COPD. In 2019, priority strategies include vaccinating for influenza, developing care plans to improve the management of disease systems, monitoring and managing mental health status, and end-of-life planning.

Visit mainehealth.org/healthindex for a more in-depth look at actions being taken to decrease preventable hospitalizations.
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.

For decades, age-adjusted rates for deaths due to cardiovascular disease steadily decreased across the United States. A reduction in the prevalence of smoking and exposure to secondhand smoke, advancements in technologies to diagnose and treat cardiovascular disease, and more effective use of heart medications have been instrumental in this reduction. However, this long-running decline in mortality has recently slowed in the United States and in the MaineHealth service area (Figure 22). While the U.S. age-adjusted rate did significantly decrease from 228 per 100,000 population in 2010-12 to 219 per 100,000 population in 2015-17, this decrease was much smaller than the decline from 2000 to 2009. Meanwhile, there were no statistically significant differences in the recent three-year rates for cardiovascular mortality (from 2010-12 through 2015-17) within the MaineHealth service area.

Coronary heart disease includes conditions such as heart attacks that restrict or reduce blood flow to the heart. Since 2000, the age-adjusted rates for deaths due to coronary heart disease have been significantly lower in the MaineHealth service area than in the United States overall. Further, the death rate in the MaineHealth service area decreased significantly in recent years, from 81 per 100,000 population in 2010-2012 to 75 per 100,000 population in 2015-2017. However, the United States had a larger decline between these time periods (109 per 100,000 population to 95 per 100,000 population); the magnitude of change was more than double that in the MaineHealth service area.

Helping patients manage their blood pressure is a key strategy employed by physician practices within the MaineHealth Accountable Care Organization. Among patients diagnosed with hypertension, the percentage whose blood pressure was under control (<140/90 mm Hg) has improved substantially over the past three fiscal years, from 68% as of September 2015 to 76% as of September 2018 (Figure 20). The September 2018 Health Index target of 72% or more was first met in June 2017 and the hypertension control rate has remained above the target since then. As of September 2018, nine of the 10 MaineHealth local health systems and affiliated organizations were at or above 72%.

Visit mainehealth.org/healthindex for a more in-depth look at actions being taken to decrease cardiovascular deaths.
Decrease Cancer Deaths

MaineHealth aims to provide access to the best cancer care, at the right place and at the right time, as close to home as possible, while also helping decrease cancer incidence by reducing tobacco use and obesity.

For decades, the age-adjusted rates for cancer deaths in Maine and the MaineHealth service area have been significantly higher than rates in the United States overall. This is partly because of the high smoking rate in Maine. For three of 11 tobacco-related cancers — lung/bronchus, esophageal and bladder — the most recent death rates (2015-17) were significantly higher in Maine and in the MaineHealth service area than in the nation as a whole. Rates for the other eight tobacco-related cancers were similar to U.S. rates.19

It is concerning that in recent years the death rates for all cancers have not changed in the MaineHealth service area, while rates across the United States have continued to decrease. The rate in the MaineHealth service area was 171.6 per 100,000 population in 2012-14 and 171.2 per 100,000 population in 2015-17. In contrast, the all-cancer death rates for the United States decreased significantly over this time period, from 163.6 per 100,000 population to 155.5 per 100,000 population (Figure 21).19

Among men and women in Maine, colorectal cancer is currently the fourth and third most commonly diagnosed cancer, respectively, and the third leading cause of cancer death.39 In contrast with other cancers, colorectal cancer death rates have declined more in the MaineHealth service area than in the United States since 2000. The age-adjusted rate in the MaineHealth service area went from being significantly higher than the national rate in 1999-01 (23.1 per 100,000 population versus 21.0 per 100,000 population, respectively) to lower than the national rate in 2015-17 (13.1 per 100,000 population versus 14.1 per 100,000 population, respectively).19

A key factor that contributed to the decline in Maine’s rate was the increased use of evidence-based colorectal cancer screenings. Screenings help identify tumors in earlier stages, when treatment is most effective. When a colonoscopy screening is performed, colorectal cancers can even be prevented by removing precancerous polyps.40 Primary care practices within the MaineHealth network of care are working to continue increasing colorectal cancer screening rates among their 50- to 75-year-old patients. As a result of this work, the 2018 fiscal year goal set by the MaineHealth System Quality Dashboard was achieved (Figure 22).28 Of the eight local health systems, four surpassed and three were within 0.4% to 4.0% of reaching the target goal.28
Decrease Prescription Drug Misuse and Dependence

MaineHealth is implementing chronic disease management strategies to prescribe opioids appropriately, to educate about and prevent opioid use disorder, and when needed, treat the disorder as close to home as possible.

In recent years, Maine had the seventh-largest increase in age-adjusted drug overdose death rates in the United States, rising from 12.2 per 100,000 population in 2011-13 to 28.1 in 2015-17. The increase was similar within the MaineHealth service area (Figure 23).19 Maine’s surge has continued during 2018, with 354 overdose deaths. While there were 15% fewer deaths in 2018 than in 2017 (417), it was more than double the number of deaths in 2011 (155).14

As prescription forms of opioids become more tightly controlled, some individuals with opioid use disorder have turned to more available illegally used drugs including heroin and, more recently, fentanyl. Heroin was involved in 32% of the drug overdose deaths in 2016 but only 21% of the deaths in 2018. Meanwhile, non-pharmaceutical fentanyl and other lethal forms of synthetic opioids, alone or in combination with other drugs, caused 61% of deaths in 2018. This was up from 52% of deaths in 2016.14

Although drug overdose deaths are often associated with young people who use street drugs, the proportion of older adults dying of overdose has increased since the turn of the century. In 2000-02, 12% of those who died of a drug overdose in the MaineHealth service area were 15- to 24-year-olds and 30% were 45+-year-olds. In 2015-17, only 7% were 15- to 24-year-olds, while 40% were 45+-year-olds.41

In response to this public health crisis, MaineHealth developed a comprehensive set of evidence-based strategies that incorporate appropriate prescribing of opioids; education of patients, clinicians and communities; and the prevention and treatment of opioid use disorder.

MaineHealth providers42 reduced the number of patients prescribed high-risk43 levels of opioids by 65 percent over three years, from 686 patients as of September 2015 to 239 as of September 2018.44 To assist those struggling with opioid use disorder, the MaineHealth network of care implemented an integrated treatment model. The most intensive treatment is provided at specialty hubs, while intermediate- and long-term treatment is provided at primary care patient-centered medical homes. As of August 31, 2018, MaineHealth had provided treatment through this model to 1,009 patients; this number surpassed the System Quality Dashboard target for fiscal year 2018 (Figure 24).28

Visit mainehealth.org/healthindex for a more in-depth look at actions being taken to decrease prescription drug misuse and dependence.
References and notes

7. The Potentially Traumatic Events trauma screener is effective at identifying a wide range of recent traumatic events. The two questions asked are:
   • Has anyone hurt or frightened you or your child recently or in the last year?
   • Has anything bad, sad, or scary happened to you or your child recently or in the last year?

   When a significant event is identified through screening, children are then screened to determine post-traumatic stress symptomology to help determine next steps for treatment. In addition, MaineHealth practices screen utilizing the Center for Youth Wellness ACE https://centerforyouthwellness.org/ Questionnaire to identify lifelong exposure to 10 categories of adverse childhood experiences. Used in conjunction with the Potentially Traumatic Events screener provides an in-depth clinical picture. For more information, visit https://mainehealth.org/-/media/community-health/aces-documents/pediatric-screening-toolkit-may-2019.pdf?la=en.
20. For more information regarding the CDC’s immunization schedule, visit https://www.cdc.gov/vaccines/schedules/.


29. Let’s Go! is an obesity prevention initiative working with communities to create environments that support healthy choices. Bringing evidence-based strategies for healthy living into schools, child care and out-of-school programs, health care practices, and workplaces, Let’s Go! reaches children and adults where they live, learn, work, and play. Let’s Go! 5-2-1-0 helps children form healthy habits that will last a lifetime using Let’s Go!’s nationally recognized 5-2-1-0 message: 5 or more fruits and vegetables; 2 hours or less of screen time; 1 hour or more of physical activity; and 0 sugary drinks—every day. Let’s Go!’s Small Steps program supports adults in making simple changes for better health, such as moving more, eating real food, drinking water, and getting adequate rest. Together, these programs are effecting change across communities, one healthy choice at a time.

30. The Small Steps Program, from Let’s Go!, a program of the Barbara Bush Children’s Hospital at Maine Medical Center, is an initiative to prevent, assess and manage adult patients at high-risk levels of morphine equivalents 2015-2018. [Unpublished raw data]. MaineHealth Accountable Care Organization (Publisher, Distributor). (January 2019). Adapted by Allerding, K. (March 2018)


42. The prescribing data reported are just for those providers in practices at LincolnHealth, Maine Medical Partners, Pen Bay Medical Center, Waldo County General Hospital and Western Maine Health. The data were acquired from the Epic Electronic Medical Record system, and only these five local health systems were using Epic during the whole three-year period referenced.

43. High-risk is defined as an estimated daily morphine equivalent of ≥100mg; this level of morphine is considered a high risk for addiction and overdose.


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for more information, visit mainehealth.org/healthindex
<table>
<thead>
<tr>
<th>Health Index Priority</th>
<th>Short-term measure and target (Achieve by fiscal year end, September 30, 2019)</th>
<th>Long-term measure and target (Most recent data available at fiscal year end, September 30, 2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase Childhood Immunizations Measure</td>
<td>% of 2-year-old patients provided care at MaineHealth family medicine and pediatric practices who are up-to-date on all 10 vaccines (“combo 10”) recommended by 2nd birthday (Epic EHR data)</td>
<td>% of 19- to 35-month-olds in Maine who are up-to-date for bundle of seven vaccines (National Immunization Survey data)</td>
</tr>
<tr>
<td>Baseline</td>
<td>Target</td>
<td>Baseline</td>
</tr>
<tr>
<td>59.3% as of 4/2018</td>
<td>≥62%</td>
<td>85% in 2014</td>
</tr>
<tr>
<td>Decrease Tobacco Use Measure</td>
<td>Cessation referrals to Maine Tobacco HelpLine per 100 active smokers provided care at MaineHealth practices*</td>
<td>% of adults in the MaineHealth service area who smoke cigarettes daily or some days</td>
</tr>
<tr>
<td>Baseline</td>
<td>Target</td>
<td>Baseline</td>
</tr>
<tr>
<td>10.57 as of 5/2018</td>
<td>20.0</td>
<td>18% in 2014</td>
</tr>
<tr>
<td>Decrease Obesity Measure and Target</td>
<td>Among MaineHealth family and internal medicine practices using Epic Electronic Health Record: ≥80% completed training on adult obesity standard of care &amp; ≥50% implemented components of standard of care</td>
<td>% of adults in MaineHealth service area with a body mass index ≥30.0 (indicating obesity)</td>
</tr>
<tr>
<td>Baseline</td>
<td>Target</td>
<td>Baseline</td>
</tr>
<tr>
<td>28% in 2014</td>
<td>≤26% in 2020</td>
<td></td>
</tr>
<tr>
<td>Decrease Preventable Hospitalizations Measure one</td>
<td>Most recent annual rate of emergency department visits per 1,000 COPD patients served by MaineHealth providers</td>
<td>Rate of hospitalizations for ambulatory care-sensitive conditions per 1,000 Medicare enrollees</td>
</tr>
<tr>
<td>Baseline</td>
<td>Target</td>
<td>Baseline</td>
</tr>
<tr>
<td>754 as of 6/2018</td>
<td>≤717</td>
<td></td>
</tr>
<tr>
<td>Measure two</td>
<td>Most recent annual rate of hospitalizations per 1,000 CHF patients served by MaineHealth providers</td>
<td>45 in 2013</td>
</tr>
<tr>
<td>Baseline</td>
<td>Target</td>
<td></td>
</tr>
<tr>
<td>712 as of 6/2018</td>
<td>≤677</td>
<td></td>
</tr>
<tr>
<td>Decrease Cardiovascular Deaths Measure</td>
<td>Among 18- to 85-year-old patients with hypertension provided care at practices in the MaineHealth Accountable Care Organization, % with blood pressure in control (&lt;140/90mm Hg)</td>
<td>3-year, age-adjusted rate of cardiovascular deaths per 100,000 population</td>
</tr>
<tr>
<td>Baseline</td>
<td>Target</td>
<td>Baseline</td>
</tr>
<tr>
<td>68% in 2015</td>
<td>≥75%</td>
<td>185 in 2012-2014</td>
</tr>
<tr>
<td>Decrease Cancer Deaths Measure</td>
<td>Among eligible 50- to 75-year-olds provided care at MaineHealth practices, % who had appropriate screening for colorectal cancer</td>
<td>3-year, age-adjusted rate of cancer deaths per 100,000 population</td>
</tr>
<tr>
<td>Baseline</td>
<td>Target</td>
<td>Baseline</td>
</tr>
<tr>
<td>62% as of 10/2015</td>
<td>≥80%</td>
<td>172 in 2012-2014</td>
</tr>
<tr>
<td>Decrease Prescription Drug Misuse and Dependence Measure</td>
<td># of new patients who received treatment for opioid dependence in the MaineHealth network</td>
<td>3-year, age-adjusted rate of overdose deaths per 100,000 population</td>
</tr>
<tr>
<td>Baseline</td>
<td>Target</td>
<td>Baseline</td>
</tr>
<tr>
<td>0 as of 10/2018</td>
<td>≥700</td>
<td>14.2 in 2012-2014</td>
</tr>
</tbody>
</table>

*Patients who had an office visit in the past 12 months
MaineHealth and the communities we serve

MaineHealth is a not-for-profit integrated health system consisting of eight local hospital systems, a comprehensive behavioral healthcare network, diagnostic services, home health agencies, and more than 1,600 employed and independent physicians working together through an Accountable Care Organization. With more than 19,000 employees, MaineHealth is the largest health system in northern New England and provides preventive care, diagnosis and treatment to 1.1 million residents in Maine and New Hampshire.

Regional Entities
MaineHealth Accountable Care Organization
Maine Behavioral Healthcare
MaineHealth Care at Home
NorDx

People per square mile (2010 census)
- 250.0 or greater
- 100.0 to 249.9
- 5.0 to 99.9
- Less than 5.0

Urban regions (2010 census)
- 50,000 or greater
- 2,500 to 49,999

MaineHealth service area

Franklin Community Health Network
St. Mary’s Health System*
Memorial Hospital

Coastal Healthcare Alliance
Waldo County General Hospital
Pen Bay Medical Center

LincolnHealth
Miles Campus
St. Andrews Campus

Southern Maine Health Care
SMHC Medical Center — Sanford
SMHC Medical Center — Biddeford

MaineGeneral Health*
Mid Coast-Parkview Health*
Western Maine Health
Maine Medical Center
Spring Harbor Hospital (Maine Behavioral Healthcare)
New England Rehabilitation Hospital of Portland*

*Affiliates