A Statewide View of Rural Health
Maine Rural Health Profiles

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Prepared by the Maine Rural Health Research Center for the Maine Health Access Foundation

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When referencing or using any of the tables, maps, or other materials in the Maine Rural Health Profiles, please use the following recommended citation:


Acknowledgments: The authors thank Vinton Valentine, PhD, the Director of the Geographic Information Systems program at the University of Southern Maine, for his work developing the maps included in the Maine Rural Health Profiles.
Fast Facts:

**Geography and Demographics**
- Highest percentage of residents aged 65 or older living in poverty in the state
- Highest percentage of residents aged 25 or older who have not obtained a high school degree

**Health Status**
- Health challenges include obesity in adults, sedentary lifestyle, a higher diabetes prevalence, and higher than average rates of COPD diagnoses and hospitalizations compared to the rest of the state
- Based on the County Health Rankings, Aroostook ranks among the lowest 1/4 of counties in the state on most measures (e.g., health outcomes, length of life, health behaviors)

**Health Resources**
- More nursing home beds per capita among residents aged 65 and over than any other county in the state
- The county’s supply of rural health clinics and federally qualified health center sites exceeds the state per capita average, despite having fewer primary care and dental providers per capita compared to the state average

**Access and Insurance**
- Second lowest percentage of residents who have visited a dental provider in the past year of all counties in the state
- Highest percentage of women aged 50 and over who have had a mammogram in the past two years

**Health Care Economy**
- The health care sector is the largest source of jobs, employing 19 percent of workers in Aroostook County
- Health care workers are paid annual wages 15 percent higher than the average for all employment in Aroostook County
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INTRODUCTION

This profile provides a snapshot of the state of health and the health system in Aroostook County. The profile is intended to inform and promote local discussions and strategic planning for transforming health and health care in communities. Rapid changes in health care payment and delivery systems are driving health care providers, payers, and other stakeholders to consider how the current delivery system might evolve. This is especially true in rural communities where the historical vulnerabilities of small populations, the lack of scale in the health infrastructure, and remote location are creating pressures on health care providers and communities to reimagine strategies for sustaining—or evolving to—a high performance rural health system.

This profile presents a summary look at the health status of Aroostook County’s residents, its health system, health system resources (such as workforce and facilities for health services provision), health care economy, and access to care. By design, this profile focuses on health care delivery sites, with special attention to hospital-based resources, and long-term services and supports. Many indicators are compared to the state as a whole. Maps showing the distribution of health service delivery sites within the county are included as appendices (pages 21-28).

This profile was developed using secondary data—combining federal and state licensure and provider information with resources such as the Maine Shared Health Needs Assessment & Planning Process (SHNAPP) Project reports and the University of Wisconsin Population Health Institute and Robert Wood Johnson Foundation’s County Health Rankings. Data sources are listed and described in Appendix I. Funding for this project was provided by the Maine Health Access Foundation.
Maine’s northernmost county, Aroostook County is bordered to the north, east, and west by Canada. With the largest total land area of all Maine counties (6,672 square miles), Aroostook County is larger than the states of Connecticut and Rhode Island combined. Aroostook County has the sixth largest total population (71,230 residents) and the second lowest population density (10.7 residents per square mile) in the state. Aroostook County is a rural county. As indicated in Table 1, the U.S. Census counts 80.3 percent of residents as living in a rural area, which is 30.9 percent higher than the state average. Presque Isle and Caribou are the largest urban areas in the county. A large swath of Aroostook County is made up of unorganized territories, which are sparsely populated.

Aroostook County’s population is 95.4 percent white, 1.5 percent American Indian/Alaska Native (AI/AN), and 0.6 percent black. Two American Indian tribes are located in Aroostook County: the Aroostook Band of Mi’kmaq Indians in Presque Isle and the Houlton Band of Maliseet Indians in Houlton. An estimated 1,064 AI/AN individuals live in Aroostook County—the third largest AI/AN population of any county in the state.

The median household income in Aroostook County ($37,855) is the third lowest in the state, ahead of Piscataquis and Washington counties. Of all Maine’s counties, Aroostook County has the highest proportion of residents aged 65 and over living in poverty (11.8 percent). Aroostook County has the second highest percentage of residents living with a disability (21.2 percent), behind Piscataquis County. Aroostook County has the third highest unemployment rate in the state (6.0 percent), behind Somerset and Washington counties. With regard to educational attainment, Aroostook County has the highest percentage of residents aged 25 and over who have not obtained a high school degree (14.6 percent) and the third lowest percentage of residents who have obtained a bachelor’s degree or more advanced degree (16.9 percent), after Somerset and Piscataquis counties.

1 There are multiple definitions of rural. The U.S. Census Bureau’s urban-rural classification of counties identifies two types of urban areas: Urbanized Areas of 50,000 or more people and Urban Clusters of at least 2,500 and less than 50,000 people. “Rural” areas in this scheme encompass all population, housing, and territory not included within an urban area. Population density is also a common measure used to delineate rural and urban areas, especially when measuring highly rural areas (such as “frontier” areas). Yet another classification scheme is the Office of Management and Budget’s Rural-Urban Continuum Codes (RUCCs). They distinguish metropolitan (metro) counties by the population size of their metro area, and nonmetropolitan (nonmetro) counties by degree of urbanization and adjacency to metro areas. Two of the nine categories for counties are considered completely rural.

2 Persons identifying as AI/AN, Asian, two or more races, and other are shown in the “Other” category in Table 1.
Table 1: Aroostook County | Socio-demographic and Economic Characteristics

<table>
<thead>
<tr>
<th>SOCIO-DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
<th>Relative difference¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percent</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Total population</td>
<td>71,230</td>
<td>1,328,320</td>
<td>10.7</td>
</tr>
<tr>
<td>% living in rural areas</td>
<td>57,176</td>
<td>80.3</td>
<td>814,819</td>
</tr>
<tr>
<td>Under 20</td>
<td>15,809</td>
<td>22.2</td>
<td>305,325</td>
</tr>
<tr>
<td>20-64</td>
<td>41,479</td>
<td>58.2</td>
<td>803,374</td>
</tr>
<tr>
<td>65 and older</td>
<td>13,942</td>
<td>19.6</td>
<td>219,621</td>
</tr>
<tr>
<td>Living with a disability</td>
<td>15,109</td>
<td>21.2</td>
<td>205,251</td>
</tr>
<tr>
<td>White</td>
<td>67,959</td>
<td>95.4</td>
<td>1,264,047</td>
</tr>
<tr>
<td>Black</td>
<td>414</td>
<td>0.6</td>
<td>14,637</td>
</tr>
<tr>
<td>Other</td>
<td>2,857</td>
<td>4.0</td>
<td>49,636</td>
</tr>
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</table>

**RACE**

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<th>Percent</th>
<th>Number</th>
<th>Percent</th>
<th>Relative difference¹</th>
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</thead>
<tbody>
<tr>
<td>White</td>
<td>67,959</td>
<td>95.4</td>
<td>1,264,047</td>
<td>95.2</td>
<td>+0.3</td>
</tr>
<tr>
<td>Black</td>
<td>414</td>
<td>0.6</td>
<td>14,637</td>
<td>1.1</td>
<td>-47.3</td>
</tr>
<tr>
<td>Other</td>
<td>2,857</td>
<td>4.0</td>
<td>49,636</td>
<td>3.7</td>
<td>+8.1</td>
</tr>
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**POPULATION ESTIMATES: 2032**

<table>
<thead>
<tr>
<th>POPULATION ESTIMATES: 2032</th>
<th>Number</th>
<th>Percent</th>
<th>Number</th>
<th>Percent</th>
<th>Relative difference¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total projected population</td>
<td>67,068</td>
<td>1,300,166</td>
<td>28.0</td>
<td>+2.7</td>
<td></td>
</tr>
<tr>
<td>Projected 65 and older</td>
<td>18,788</td>
<td>28.0</td>
<td>354,718</td>
<td>27.3</td>
<td>+2.7</td>
</tr>
<tr>
<td>Projected 85 and older</td>
<td>2,436</td>
<td>3.6</td>
<td>44,883</td>
<td>3.5</td>
<td>+5.2</td>
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**ECONOMIC DEMOGRAPHICS**

<table>
<thead>
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<th>ECONOMIC DEMOGRAPHICS</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
<th>Relative difference¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median household income</td>
<td>$37,855</td>
<td>$48,453</td>
<td>-21.9</td>
</tr>
<tr>
<td>Individuals living below 150% Federal Poverty Level (FPL)</td>
<td>20,101</td>
<td>29.0</td>
<td>302,733</td>
</tr>
<tr>
<td>Individuals living below 100% FPL</td>
<td>11,339</td>
<td>16.3</td>
<td>175,624</td>
</tr>
<tr>
<td>Under 18 living below 100% FPL</td>
<td>3,221</td>
<td>23.7</td>
<td>48,741</td>
</tr>
<tr>
<td>65+ living in poverty</td>
<td>1,568</td>
<td>11.8</td>
<td>18,434</td>
</tr>
<tr>
<td>Population aged 25+</td>
<td>50,773</td>
<td>73.2</td>
<td>931,969</td>
</tr>
<tr>
<td>Less than high school</td>
<td>7,400</td>
<td>14.6</td>
<td>81,217</td>
</tr>
<tr>
<td>High school graduate</td>
<td>19,398</td>
<td>38.2</td>
<td>314,565</td>
</tr>
<tr>
<td>Some college, or Associate’s degree</td>
<td>15,409</td>
<td>30.3</td>
<td>273,624</td>
</tr>
<tr>
<td>Bachelor’s degree+</td>
<td>8,566</td>
<td>16.9</td>
<td>262,563</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>6.0</td>
<td>4.4</td>
<td>+36.4</td>
</tr>
</tbody>
</table>

See Appendix I for a breakdown of data sources.

¹ The relative difference column presents the variance between the percent values for the county and the state. The purpose of this column is to highlight where there are differences between the county and the state and does not signify statistical significance.
Health Status

We assessed county-level health status using two recent sources: the 2016 County Health Rankings and the 2015 SHNAPP Project. The SHNAPP Project has compiled population health assessment data to support a collaborative, statewide community health needs assessment process led by the Maine Center for Disease Control and Prevention and the state’s four largest health systems. County Health Rankings, a project of the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, uses national data to rank the health of each county relative to others in each state, using a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work, and play.

Aroostook County’s health challenges include higher than average rates of obesity in adults, sedentary lifestyle, COPD diagnoses and hospitalizations, diabetes prevalence, hospitalizations and emergency department visits due to diabetes, hypertension prevalence, and hospitalization due to hypertension (Table 2). The SHNAPP Project found that adult residents of Aroostook County are less likely than residents of the state as a whole to engage in binge drinking and chronic heavy drinking. In addition, high school students in Aroostook County are less likely than students in the state as a whole to have used marijuana in the past 30 days.

The County Health Rankings place Aroostook County fifteenth among Maine’s 16 counties for Health Outcomes, noting factors such as higher than average rates of premature death and poorer reported quality of physical and mental health. Aroostook County ranks twelfth for Health Factors that influence the population’s health. Within Health Factors, the report ranks Aroostook County thirteenth in health behaviors due to a higher than average rate of adult obesity, lower rates of physical activity, lack of access to exercise opportunities, and a higher than average rate of teen births. Aroostook County ranks fourteenth in clinical care owing largely to a higher than average rate of preventable hospital stays, and a lower number of primary care physicians and dentists per capita. Aroostook County ranks twelfth in social and economic factors due in part to a greater than average percentage of children eligible for free lunch under the National School Lunch Program, and sixth in physical environment due to the favorable, lower than average percentage of residents with a long commute who drive alone and the unfavorable, higher than average rate of severe housing problems.

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3 All SHNAPP Project indicators referenced in this text and included in Table 2 are statistically significant based on a 95 percent confidence level. This means that the county is significantly better or worse than the state average on all SHNAPP Project indicators included in this report.
# AROOSTOOK COUNTY

## Table 2: Aroostok County

### Health Status Indicators Relative to State Average

| ▲▼ | Red arrows indicate poor health status. The direction of the arrow indicates if the indicator is lower or higher than the state average. |
| ▼▲ | Green arrows indicate positive health status. The direction of the arrow indicates if the indicator is lower or higher than the state average. |

- ▲ Adults living in poverty
- ▲ Children living in poverty
- ▲ Adults who rate their health fair to poor
- ▲ Adults with 14+ days lost due to poor physical health
- ▲ Adults with three or more chronic conditions
- ▲ Overall mortality rate per 100,000 population
- ▲ Ambulatory care sensitive condition hospital admission rate per 100,000 population
- ▲ Ambulatory care-sensitive condition ED rate per 100,000 population
- ▲ Asthma ED visits per 10,000 population
- ▲ COPD diagnosis
- ▲ COPD hospitalizations per 100,000 population
- ▲ Diabetes hospitalizations (principal diagnosis)
- ▲ Pneumonia hospitalizations per 100,000 population
- ▲ Colorectal cancer incidence per 100,000 population
- ▲ Lung cancer incidence per 100,000 population
- ▲ Acute myocardial infarction hospitalizations per 10,000 population
- ▲ Acute myocardial infarction mortality per 100,000 population
- ▲ Coronary heart disease mortality per 100,000 population
- ▲ Hypertension prevalence
- ▲ High cholesterol
- ▲ Hypertension hospitalizations per 100,000 population
- ▲ Diabetes prevalence (ever been told)
- ▲ Diabetes ED visits (principal diagnosis) per 100,000 population
- ▲ Diabetes hospitalizations (principal diagnosis) per 10,000 population
- ▲ Unintentional fall related injury ED visits per 10,000 population
- ▲ Sedentary lifestyle – no leisure-time physical activity in past month (adults)
- ▲ Obesity (adults)
- ▲ Live births to 15-19 year olds per 1,000 population
- ▲ Secondhand smoke exposure (youth)
- ▲ Median household income
- ▲ Adults with visits to a dentist in past 12 months
- ▲ Homes with private wells tested for arsenic
- ▲ Adults immunized annually for influenza
- ▲ Always wear seatbelt (adults)
- ▲ Always wear seatbelt (high school students)

- ▼ Female breast cancer incidence per 100,000 population
- ▼ Melanoma incidence per 100,000
- ▼ Prostate cancer incidence per 100,000 population
- ▼ Children with confirmed elevated blood lead levels (% among those screened)
- ▼ Binge drinking of alcoholic beverages (adults)
- ▼ Chronic heavy drinking (adults)
- ▼ Past-30-day marijuana use (high school students)
- ▼ Substance-abuse hospital admissions (adults)

### County Health Rankings

- ▲ Health outcomes (rank: 15/16)
- ▲ Length of life (rank: 14/16)
- ▲ Quality of life (rank: 16/16)
- ▲ Health factors (rank: 12/16)
- ▲ Health behaviors (rank: 13/16)
- ▲ Clinical care (rank: 14/16)
- ▲ Social & economic factors (rank: 12/16)
- ▲ Physical environment (rank: 6/16)

Health Resources

**Acute and outpatient care**

There are four hospitals in Aroostook County: Cary Medical Center in Caribou, Northern Maine Medical Center in Fort Kent, Houlton Regional Hospital in Houlton, and The Aroostook Medical Center in Presque Isle. Houlton Regional Hospital is designated as a Critical Access Hospital (Tables 3 and 4). There are four Veterans Affairs (VA) sites: the Caribou Community-Based Outpatient Clinic, Fort Kent Access Point Clinic, Houlton Access Point Clinic, and the Caribou Vet Center. Additional ambulatory care sites include two ambulatory surgery centers and one end-stage renal disease (ESRD) center; all three are located in Presque Isle. See Appendix A (page 21) for a map of ambulatory sites and services in Aroostook County and the state.

Emergency medical services in Aroostook County include eight ground transportation companies, licensed to bring patients from the site of an emergency to the hospital, and two non-transporting companies, licensed to treat patients at the site of an emergency until a transporting company arrives. There are also two air ambulance transfer services in Aroostook County.

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4 A Critical Access Hospital (CAH) is an acute care hospital certified under a specific set of Medicare Conditions of Participation. CAHs may have no more than 25 inpatient beds and must maintain an annual average length of stay of no more than 96 hours for acute inpatient care; offer full time, round-the-clock emergency care services; and be located in a rural area at least a 35 mile drive (or closer in some circumstances) from any other hospital or CAH. The designation provides a sustainable model of acute care services to meet the needs of vulnerable rural communities.
### Table 3: Aroostook County | Acute and Outpatient Care

<table>
<thead>
<tr>
<th>ACUTE AND OUTPATIENT CARE</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of sites</td>
<td>Beds per 1,000 population</td>
</tr>
<tr>
<td>Hospitals (all)</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td>Critical Access Hospitals</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACUTE AND OUTPATIENT CARE</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of sites</td>
<td>Sites per 10,000 population</td>
</tr>
<tr>
<td>VA Facilities (other than hospital)</td>
<td>4</td>
<td>0.6</td>
</tr>
<tr>
<td>ESRD Facilities</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Ambulatory Surgery Centers</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>12</td>
<td>1.7</td>
</tr>
</tbody>
</table>

See Appendix I for a breakdown of data sources.

The Aroostook Medical Center is part of Eastern Maine Healthcare Systems, while Cary Medical Center, Houlton Regional Hospital, and Northern Maine Medical Center are independent. The hospitals in Aroostook County provide a wide array of services as detailed in Table 4.
### Table 4: Aroostook County | Hospital Services

<table>
<thead>
<tr>
<th>HOSPITAL SERVICES</th>
<th>Cary Medical Center</th>
<th>Northern Maine Medical Center</th>
<th>Houlton Regional Hospital</th>
<th>The Aroostook Medical Center</th>
<th>Aroostook County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Beds</td>
<td>65</td>
<td>49¹</td>
<td>25</td>
<td>89</td>
<td>228</td>
</tr>
<tr>
<td>Total Beds Set Up/Staffed</td>
<td>40</td>
<td>36</td>
<td>25</td>
<td>58</td>
<td>159</td>
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</tbody>
</table>

#### SERVICE

<table>
<thead>
<tr>
<th>Service</th>
<th>Cary Medical Center</th>
<th>Northern Maine Medical Center</th>
<th>Houlton Regional Hospital</th>
<th>The Aroostook Medical Center</th>
<th>Aroostook County</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Medical/Surgical Care (Adult)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>General Medical/Surgical Care (Pediatric)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Outpatient Surgery</td>
<td>x</td>
<td>x</td>
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#### INTENSIVE CARE

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<tr>
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<th>Houlton Regional Hospital</th>
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<th>Aroostook County</th>
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</thead>
<tbody>
<tr>
<td>Medical/Surgical Intensive Care</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Neonatal Intensive Care</td>
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<tr>
<td>Neonatal Intermediate Care</td>
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<tr>
<td>Pediatric Intensive Care</td>
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<tr>
<td>Cardiac Intensive Care</td>
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#### CARDIOLOGY

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<tr>
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<th>Cary Medical Center</th>
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<th>The Aroostook Medical Center</th>
<th>Aroostook County</th>
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<tbody>
<tr>
<td>Adult Cardiology</td>
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<tr>
<td>Adult Cardiac Surgery</td>
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<td>Adult Interventional Cardiac Cath Lab</td>
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<tr>
<td>Invasive Cardiology Services</td>
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<tr>
<td>Cardiac Rehab Care</td>
<td>x</td>
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</table>

#### DIAGNOSTICS

<table>
<thead>
<tr>
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<th>Cary Medical Center</th>
<th>Northern Maine Medical Center</th>
<th>Houlton Regional Hospital</th>
<th>The Aroostook Medical Center</th>
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<td>MRI Hospital</td>
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<td>Diagnostic Radioisotope Facility</td>
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<tr>
<td>Endoscopic Ultrasound</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Computed Tomography Scanner</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

#### BEHAVIORAL HEALTH

<table>
<thead>
<tr>
<th>Service</th>
<th>Cary Medical Center</th>
<th>Northern Maine Medical Center</th>
<th>Houlton Regional Hospital</th>
<th>The Aroostook Medical Center</th>
<th>Aroostook County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol/Drug Inpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol/Drug Outpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric Inpatient</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric Outpatient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric Emergency</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### OTHER SERVICES

<table>
<thead>
<tr>
<th>Service</th>
<th>Cary Medical Center</th>
<th>Northern Maine Medical Center</th>
<th>Houlton Regional Hospital</th>
<th>The Aroostook Medical Center</th>
<th>Aroostook County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetric Care</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Oncology</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** American Hospital Association (AHA) Annual Survey (2012 & 2014). AHA data for hospital-based services was not verified. Hospital-based services actually offered may differ from what is indicated in Table 4. Hospital bed counts were verified with the Medicare Provider of Service File and data from the Maine Department of Licensing and Regulatory Services (DLRS) for hospitals whose AHA bed count included nursing facilities and other discrepancies. See Appendix I for additional information.

¹Data from Maine DLRS, as AHA licensed bed count for Northern Maine Medical Center includes long term care beds.
HEALTH RESOURCES

Primary care

Aroostook County is home to 26 primary care practices (Table 5), of which two are dedicated pediatric practices, located in Houlton and Presque Isle. Two of the primary care practices are designated as patient-centered medical homes, one located in Fort Fairfield and one in Presque Isle; ten additional primary care practices have designations as health homes. One primary care practice, located in Presque Isle, is designated as a behavioral health home. There is one community care team, located in Caribou. There are 16 federally qualified health center sites located throughout Aroostook County. There are seven rural health clinics, all of which have also been counted as primary care practices. There are no school-based health centers located in Aroostook County. There are two safety net dental clinics, in Houlton and Eagle Lake. There are more primary care practices, health homes, federally qualified health center sites, rural health clinics, and safety net dental clinics in Aroostook County per capita than in the state as a whole. Maps showing the locations of specific types of primary care practices are provided as Appendices B and C (pages 22 and 23, respectively).

Table 5: Aroostook County | Primary Care Practices and Sites

<table>
<thead>
<tr>
<th>PRIMARY CARE PRACTICES AND SITES</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of sites</td>
<td>Sites per 10,000 population</td>
</tr>
<tr>
<td>Primary Care Practices¹</td>
<td>26</td>
<td>3.7</td>
</tr>
<tr>
<td>• Patient-Centered Medical Homes</td>
<td>2</td>
<td>0.3</td>
</tr>
<tr>
<td>• Health Homes</td>
<td>10</td>
<td>1.4</td>
</tr>
<tr>
<td>• Federally Qualified Health Center Sites</td>
<td>11</td>
<td>1.5</td>
</tr>
<tr>
<td>• Rural Health Clinics</td>
<td>7</td>
<td>1.0</td>
</tr>
<tr>
<td>Behavioral Health Homes</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Community Care Teams</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>School-Based Health Centers²</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Safety Net Dental Clinics</td>
<td>2</td>
<td>0.3</td>
</tr>
</tbody>
</table>

See Appendix I for a breakdown of data sources.

¹Primary care practice data was provided by the Maine Health Management Coalition.
²School-Based Health Center sites per 10,000 population is calculated per 10,000 population under 20.
HEALTH RESOURCES

Behavioral health: Mental health and substance use disorder services

As presented in Table 6, there are 17 mental health treatment facilities and 13 substance abuse treatment facilities in Aroostook County (eight facilities offer both), along with one behavioral health home. Psychiatric inpatient services are available at Northern Maine Medical Center and Houlton Regional Hospital. Psychiatric outpatient services are provided at Northern Maine Medical Center and The Aroostook Medical Center. Psychiatric emergency services are available at Northern Maine Medical Center. None of the hospitals in Aroostook County offer alcohol/drug outpatient services. See Appendix D (page 24) for a map showing locations of mental health treatment facilities, substance abuse facilities, methadone clinics, and buprenorphine providers in Aroostook County and the state.

Table 6: Aroostook County | Behavioral Health

<table>
<thead>
<tr>
<th>BEHAVIORAL HEALTH</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health and Substance Use Disorder Services</td>
<td>Number of sites</td>
<td>Sites per 10,000 population</td>
</tr>
<tr>
<td>Mental Health Treatment Facilities</td>
<td>17</td>
<td>2.4</td>
</tr>
<tr>
<td>Substance Abuse Treatment Facilities</td>
<td>13</td>
<td>1.8</td>
</tr>
</tbody>
</table>

MEDICATION-ASSISTED TREATMENT

| Medication Clinics | 0 | 0 | 11 | 0.1 |
| Buprenorphine Providers¹ | 11 | 1.5 | 142 | 1.1 |

See Appendix I for a breakdown of data sources. The SAHMSA definition of treatment facilities can be found at: https://findtreatment.samhsa.gov/locator/about. It does not include mental health professionals in private practice (individual) or in a small group practice unless they are licensed or certified as a mental health clinic or (community) mental health center.

¹Buprenorphine providers includes all physicians authorized to treat opioid dependency with buprenorphine. The actual number of physicians providing medication-assisted treatment is unknown.
HEALTH RESOURCES

Workforce

Aroostook County is home to more physician assistants, licensed pharmacists, registered nurses, and social workers per capita than the state average (Table 7). There are fewer physicians, primary care physicians, nurse practitioners, dentists, dental hygienists, psychiatrists, and psychologists per capita than the state average.

Table 7: Aroostook County | Health Workforce

<table>
<thead>
<tr>
<th>HEALTH CARE WORKFORCE</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per 1,000 population</td>
</tr>
<tr>
<td>Physicians, total professionally active</td>
<td>164</td>
<td>2.3</td>
</tr>
<tr>
<td>• Practicing primary care physicians</td>
<td>64</td>
<td>0.9</td>
</tr>
<tr>
<td>• Psychiatrists</td>
<td>4</td>
<td>0.1</td>
</tr>
<tr>
<td>• General surgeons</td>
<td>12</td>
<td>0.2</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>51</td>
<td>0.7</td>
</tr>
<tr>
<td>Physician assistants</td>
<td>71</td>
<td>1.0</td>
</tr>
<tr>
<td>Registered nurses</td>
<td>800</td>
<td>11.2</td>
</tr>
<tr>
<td>Dentists, total professionally active</td>
<td>28</td>
<td>0.4</td>
</tr>
<tr>
<td>Dental hygienists</td>
<td>43</td>
<td>0.6</td>
</tr>
<tr>
<td>Psychologists</td>
<td>11</td>
<td>0.2</td>
</tr>
<tr>
<td>Pharmacists (licensed)</td>
<td>64</td>
<td>0.9</td>
</tr>
<tr>
<td>Social workers</td>
<td>220</td>
<td>3.1</td>
</tr>
</tbody>
</table>

See Appendix I for a breakdown of data sources.
HEALTH RESOURCES

Long-term services and supports

As shown in Table 8, Aroostook County has eleven nursing facilities with a combined 605 licensed beds for a ratio of 43.4 beds per 1,000 people aged 65 and older. There are also 42 residential care facilities of various sizes with a combined 541 licensed beds. There are 7.6 residential care facility beds per 1,000 Aroostook residents of all ages. There are no assisted living facilities in Aroostook County. Four nursing facilities and two residential care facilities offer Alzheimer’s care and support. Maps showing the location of long-term care facilities can be found in Appendices E-H (pages 25-28).

Hospice care is provided by two organizations listed by 211Maine as operating in Aroostook County; one, Hospice of Aroostook, is based in the county. Home health care is provided by six agencies that are located in Aroostook County, as well as additional agencies based in other counties. There are two adult day programs operating in Aroostook County. The Aroostook Area Agency on Aging, located in Presque Isle, is the local resource organization for seniors and caregivers.

Table 8: Aroostook County | Long-term Services and Supports

<table>
<thead>
<tr>
<th>LONG-TERM SERVICES AND SUPPORTS</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of sites</td>
<td>Bed count</td>
</tr>
<tr>
<td>Nursing Facilities/Skilled Nursing Facilities¹</td>
<td>11</td>
<td>605</td>
</tr>
<tr>
<td>Residential Care Facilities</td>
<td>42</td>
<td>541</td>
</tr>
<tr>
<td>Assisted Living</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LONG-TERM SERVICES AND SUPPORTS</th>
<th>Number of sites</th>
<th>Sites per 10,000 population</th>
<th>Number of sites</th>
<th>Sites per 10,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer’s Facilities</td>
<td>6</td>
<td>0.8</td>
<td>93</td>
<td>0.7</td>
</tr>
<tr>
<td>Adult Day Programs</td>
<td>2</td>
<td>0.3</td>
<td>36</td>
<td>0.3</td>
</tr>
<tr>
<td>Hospice Providers</td>
<td>2</td>
<td>0.3</td>
<td>29</td>
<td>0.2</td>
</tr>
<tr>
<td>Home Health</td>
<td>6</td>
<td>0.8</td>
<td>55</td>
<td>0.4</td>
</tr>
</tbody>
</table>

See Appendix I for a breakdown of data sources.
¹ Nursing Facilities/Skilled Nursing Facilities beds per 1,000 population is calculated per 1,000 population over 65.
HEALTH RESOURCES

Public health

Aroostook County is the only county in the Aroostook Public Health District. There are two Healthy Maine Partnerships in the district, Healthy Aroostook and Power of Prevention.
ACCESS AND INSURANCE

Health care access

Compared to Maine’s other counties, Aroostook County has the highest percentage of women aged 50 and over who have had a mammogram in the past two years (85.8 percent) and the second highest percentage of residents who have had a checkup in the past year (73.3 percent), behind Piscataquis County. Aroostook County has the second lowest percentage of residents who have visited a doctor, dental hygienist, or dental clinic in the past year, behind Somerset County. As presented in Table 9, Aroostook County residents are more likely to have foregone needed medical care due to cost and lacked a personal doctor or health care provider over the past year, compared to the state as a whole.

Table 9: Aroostook County | Health Care Access

<table>
<thead>
<tr>
<th>HEALTH CARE ACCESS</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
<th>Relative difference¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Checkup in past year</td>
<td>73.3</td>
<td>71.8</td>
<td>+2.1</td>
</tr>
<tr>
<td>Adults who have visited dental</td>
<td>53.4</td>
<td>64.7</td>
<td>-17.4</td>
</tr>
<tr>
<td>provider in past year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women 50+ who have had a mammogram</td>
<td>85.8</td>
<td>81.8</td>
<td>+4.8</td>
</tr>
<tr>
<td>in past two years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No personal doctor or health care</td>
<td>13.0</td>
<td>11.6</td>
<td>+12.3</td>
</tr>
<tr>
<td>provider</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not get needed medical care</td>
<td>11.7</td>
<td>10.6</td>
<td>+10.0</td>
</tr>
<tr>
<td>due to cost in past year</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System (BRFSS) (2012-2014). Data regarding visits to dental providers and mammography screening are collected every other year. The dental provider and mammography screening data provided above are from the 2012 and 2014 BRFSS surveys.

¹The relative difference column presents the variance between the percent values for the county and the state. The purpose of this column is to highlight where there are differences between the county and the state and does not signify statistical significance.
ACCESS AND INSURANCE

Insurance coverage

Aroostook County has a slightly lower percentage of residents with private insurance compared to the state average (64.9 percent of those insured), and a higher percentage of residents with public coverage (53.1 of those insured) (Table 10). Aroostook County has the fourth highest percentage of insured individuals with public insurance coverage in the state.

Table 10: Aroostook County | Insurance Coverage

<table>
<thead>
<tr>
<th>INSURANCE COVERAGE</th>
<th>AROOSTOOK COUNTY</th>
<th>STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian noninstitutionalized population</td>
<td>70,257</td>
<td>1,313,789</td>
</tr>
<tr>
<td>With health insurance coverage</td>
<td>62,586</td>
<td>1,177,659</td>
</tr>
<tr>
<td>Private Source</td>
<td>40,592</td>
<td>874,521</td>
</tr>
<tr>
<td>Public Source</td>
<td>33,241</td>
<td>493,357</td>
</tr>
<tr>
<td>Uninsured</td>
<td>7,671</td>
<td>136,130</td>
</tr>
<tr>
<td>Civilian noninstitutionalized population under 18 years</td>
<td>13,849</td>
<td>268,615</td>
</tr>
<tr>
<td>Uninsured</td>
<td>711</td>
<td>13,515</td>
</tr>
</tbody>
</table>

Source: American Community Survey (2009-2013). See Appendix I for additional information. People may have more than one source of insurance.

Public coverage includes the federal programs Medicare, Medicaid, and the Children’s Health Insurance Program (CHIP), individual state health plans, and other medical assistance programs.
HEALTH CARE ECONOMY

As indicated in Table 11, the health care sector is the largest source of jobs in Aroostook County, employing 19 percent of workers in the county, followed by manufacturing (14 percent), educational services (10 percent), and retail trade (10 percent). Workers in the health care sector are spread across four hospitals and another 183 establishments that provide nursing and residential care and ambulatory health care services. Relative to the national economy, health care employment is 1.6 times more concentrated in Aroostook County, meaning that health care makes up a 60 percent larger share of the county’s employment base than it does nationally. In particular, there is a very high concentration of workers and establishments in the nursing and residential care facilities industry; three times the concentration of establishments and 2.7 times the employment than found at the national level. Employment in hospitals is also highly concentrated (1.65) in Aroostook County relative to the nation.

Overall, the health care sector accounts for 22 percent of total wages in Aroostook County. Health care workers are paid annual wages of $39,200 on average—15 percent higher than the average for all employment in the county. Average wages for hospital workers and ambulatory health care services workers are significantly higher at $52,900 and $41,700 respectively, while nursing and residential care facilities pay average wages of $22,750—well below the average wage for workers in Aroostook County and the second lowest wage for nursing and residential care facility workers in the state.

<table>
<thead>
<tr>
<th>INDUSTRY DESCRIPTION</th>
<th>Establishments</th>
<th>Employment</th>
<th>Share of total employment</th>
<th>Concentration</th>
<th>Average annual wage</th>
<th>Relative wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory health care services</td>
<td>123</td>
<td>1,302</td>
<td>0.05</td>
<td>0.96</td>
<td>$41,699</td>
<td>1.22</td>
</tr>
<tr>
<td>Hospitals</td>
<td>4</td>
<td>2,010</td>
<td>0.07</td>
<td>1.65</td>
<td>$52,958</td>
<td>1.55</td>
</tr>
<tr>
<td>Nursing and residential care facilities</td>
<td>60</td>
<td>1,876</td>
<td>0.07</td>
<td>2.70</td>
<td>$22,755</td>
<td>0.66</td>
</tr>
<tr>
<td>Health care total</td>
<td>187</td>
<td>5,188</td>
<td>0.19</td>
<td>1.59</td>
<td>$39,211</td>
<td>1.15</td>
</tr>
<tr>
<td>All industries</td>
<td>2,406</td>
<td>27,424</td>
<td>1.00</td>
<td>1.00</td>
<td>$34,228</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: Department of Labor Quarterly Census of Employment and Earnings reported by County (2014). The figure for nursing homes and residential facilities varies from the figure in Table 8 due to a difference in definitions used by the Department of Labor and Maine’s Department of Licensing and Regulatory Services. Concentration helps indicate or explain whether an industry in a region makes up more or less of the economy compared to a benchmark place—usually the U.S.
Ambulatory Surgical Centers and End-Stage Renal Disease (ESRD) Facilities

Data Sources: Maine DLRS - Facility Addresses; MEGIS - Counties, Towns, Population by Town, NG911 Roads Geocoding Service
Data Sources: Maine Quality Counts and Maine.gov - Facility Addresses; MEGIS - Counties, Towns, Population by Town, NG911 Roads Geocoding Service
Federally Qualified Health Center Sites

Statewide
- Federally Qualified Health Center Site (81)
- Aroostook County
- Counties

Aroostook County
- Federally Qualified Health Center Site (11)

Persons per Sq. Mi. by Town (Census 2010)
- 0.1 - 9.1
- 9.2 - 26.1
- 26.2 - 48.3
- 48.4 - 102.3
- 102.4 - 166.9
- Unpopulated

Data Sources: CMS.gov, Maine Primary Care Association - Facility Addresses; MEGIS - Counties, Towns, Population by Town, NG911 Roads Geocoding Service

This map includes nine FQHC look-alike sites, all located in Lewiston or Auburn in Androscoggin County.
Data Sources: SAMHSA - Facility Addresses; MEGIS - Counties, Towns, Population by Town, NG911 Roads Geocoding Service
Nursing Facilities

Statewide
Number of Beds
- 1-29 beds (8)
- 30-59 beds (37)
- 60-89 beds (38)
- 90-110 beds (11)
- 120-149 beds (7)
- 210+ beds (2)

Aroostook County
Number of Beds
- 30-59 beds (7)
- 60-89 beds (4)

Persons per Sq. Mi. by Town (Census 2010)
- 0.1 - 9.1
- 9.2 - 26.1
- 26.2 - 48.3
- 48.4 - 102.3
- 102.4 - 166.9
- Unpopulated

Data Sources: Maine DLRS - Facility Addresses; MEGIS - Counties, Towns, Population by Town, NG911 Roads Geocoding Service
Data Sources: Maine DLRS - Facility Addresses; MEGIS - Counties, Towns, Population by Town, NG911 Roads Geocoding Service
Assisted Living Facilities

Statewide
- Assisted Living Facility (42)
- Aroostook County
- Counties

Aroostook County
- Assisted Living Facility (0)

Persons per Sq. Mi. by Town (Census 2010)
- 0.1 - 9.1
- 9.2 - 26.1
- 26.2 - 48.3
- 48.4 - 102.3
- 102.4 - 166.9
- Unpopulated

Data Sources: ALMS - Facility Addresses; MEGIS - Counties, Towns, Population by Town, NG911 Roads Geocoding Service
Data Sources: Alzheimer’s Association - Facility Addresses; MEGIS - Counties, Towns, Population by Town, NG911 Roads Geocoding Service
DATA SOURCES

The Maine Rural Health Profiles are based on 27 data sources. The data sources are described in detail below, with a summary of each source, the related metrics included in this workbook, notes, and limitations. The title of each data source is a clickable hyperlink which leads to the data source itself, or to a webpage with additional information.

211Maine.org (211)
What it is: 211Maine is a hotline established to help residents find answers to a wide range of issues including, but not limited to: Alzheimer’s resources, child care, consumer help, counseling, elder care, emergency shelter, health care, HIV/AIDS testing, home care, legal assistance, senior services, substance abuse, and transportation.

211Maine metrics in these profiles:
· Hospice providers

Note: This project uses 211Maine hospice provider data from 2014.

ALMS
What it is: ALMS is Maine’s search engine for Regulatory Licensing and Permitting, supporting the Health and Human Services, Public Safety, and Professional and Financial Registration departments.

ALMS metrics in these profiles:
· Residential care facilities

Note: This project uses ALMS data on residential care facilities from 2015.

Alzheimer’s Association
What it is: The Alzheimer’s Association is the leading voluntary health organization in Alzheimer’s care, support, and research. The Maine chapter of the Alzheimer’s Association provides resource directories for each county.

Alzheimer’s Association metrics in these profiles:
· Alzheimer’s facilities
· Adult day programs

Note: This project uses data from Alzheimer’s Association county-level resource directories updated between June 2015 and November 2015.

American Community Survey (ACS)
What it is: The ACS is an annual survey of approximately three million households in the United States. It is conducted by the U.S. Census Bureau, and it is the largest survey other than the decennial census that is administered by the Census Bureau. The data are weighted to be representative of Maine’s population, and a method developed by the University of Missouri yields county-level estimates. The survey includes a breadth of topics that are helpful in understanding the characteristics of communities.
ACS metrics used in these profiles:
- Total population
- Population under 20 years of age
- Population 20-64 years of age
- Population 65 years of age and older
- Population living with a disability
- Race
- Median household income
- Percentage of population at or below 150% FPL
- Percentage of population at or below 100% FPL
- Percentage under 18 years of age living below 100% FPL
- Percentage 65 years of age and older living below 100% FPL
- Educational attainment
- Civilian noninstitutionalized population insurance status
- Civilian noninstitutionalized population under 18 insurance status
- Commercially insured residents

Note: This project uses 2009-2013 ACS 5-year estimates collected between January 1, 2009 to December 31, 2013. 5-year estimates were used in lieu of less precise 1-year and 3-year estimates.

**American Hospital Association Annual Survey Database (AHA)**

What it is: The AHA Annual Survey Database is a comprehensive census of United States hospitals based on the AHA Annual Survey of Hospitals, conducted by the American Hospital Association since 1946. The data are reliable across time and can be used autonomously as a reference on hospitals; or in conjunction with other datasets by matching on the Medicare Provider Number or National Provider Identifier (NPI). The database is complemented with data from secondary sources including the U.S. Census Bureau and accrediting organizations.

AHA metrics in these profiles:
- Hospital service indicators
- Hospital bed count

Note: This project uses data from the 2012 and 2014 AHA Survey Databases.

**Area Health Resources File (AHRF)**

What it is: The AHRF draws from an extensive county-level database assembled annually from over 50 sources. AHRF products include county and state ASCII files, an MS Access database, an AHRF Mapping Tool, and a Health Resources Comparison Tool (HRCT). These products are made available at no cost by the Health Resources and Services Administration, Bureau of Health Workforce, National Center for Health Workforce Analysis to inform health resources planning, analysis, and decision making.

AHRF metrics in these profiles:
- Dental hygienists (National Center for Healthcare Analysis and Data 2009)
- Dentists, total professionally active (American Dental Association, 2013)
- Nurse practitioners (Centers for Medicare & Medicaid Services, 2014)
- Pharmacists (National Center for Healthcare Analysis and Data, 2009)
- Physician assistants (CMS NPI File, 2014)
· Physicians, total professionally active (American Medical Association, 2013)
· Practicing primary care physicians (American Medical Association, 2013)
· Psychiatrists (American Medical Association, 2013)
· Psychologists (National Center for Healthcare Analysis and Data, 2009)

Note: This project uses AHRF data from five different sources that date from 2009-2014. Data sources for each profession are provided above.

**Maine Behavioral Risk Factor Surveillance System (BRFSS)**

What it is: The BRFSS is an annual survey of Maine residents aged 18 and older funded by the Centers for Disease Control and Prevention (CDC). It is Maine’s longest running and largest survey used to monitor population health statistics over time for a wide range of topics. The survey includes questions on lifestyle and behaviors related to health risk factors and leading causes of death and disease. Topics include smoking, weight and obesity, physical activity, and use of preventive health services. The data are weighted to be representative of Maine’s population.

BRFSS Survey metrics in these profiles:
· Adults who have visited a dental provider in the past year
· Checkup in past year
· Did not get needed medical care due to cost in the past year
· No personal doctor or health care provider
· Women age 50 and older who have had a mammogram in the past two years

Note: Access information is culled from BRFSS data from 2012-2014. Data regarding visits to dental providers and mammography screening are collected every other year. Therefore, dental provider and mammography screening data provided in the profiles are from the 2012 and 2014 BRFSS surveys.

**Centers for Medicare and Medicaid Services (CMS), Provider of Services File**

What it is: The Provider of Services File contains data on characteristics of hospitals and other types of health care facilities, including the name and address of the facility and the type of Medicare services the facility provides, among other information. The data are collected through the Centers for Medicare & Medicaid Services (CMS) Regional Offices. The file contains an individual record for each Medicare-approved provider and is updated quarterly. The data is a resource to a variety of stakeholders, including researchers and application developers.

Provider of Services File metrics in these profiles:
· Federally Qualified Health Centers
· Nursing facilities data
· Hospital bed counts

Note: This project uses Provider of Services data updated in September 2015.

**County Health Rankings**

What it is: The annual County Health Rankings & Roadmaps program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The Rankings measure health factors including high school graduation rates, obesity, smoking, unemployment, access to healthy foods, air and water quality, income, and teen births in nearly every county in America. The
Rankings provide a snapshot of how health is influenced by where we live, learn, work, and play.

Note: 2016 County Health Rankings metrics are used in the Health Status table (Table 2 in each county profile).

**Cutler Institute for Health and Social Policy**

What it is: The Cutler Institute for Health and Social Policy at the Muskie School of Public Service at the University of Southern Maine is dedicated to developing innovative, evidence-informed, and practical approaches to pressing health and social challenges faced by individuals, families, and communities.

Cutler Institute metrics in these profiles:
- School-based health centers

Note: State-funded school-based health center locations were provided by George Shaler, Senior Research Associate & Director of the Maine Statistical Analysis Center, in December 2015.

**Division of Licensure and Regulatory Services (DLRS)**

What it is: The mission of the Division of Licensing and Regulatory Services is to support access to quality and effective health care and social services for Maine citizens by developing and applying regulatory standards that help people have safe and appropriate outcomes. The DLRS is responsible for licensing medical and long-term care facilities, assisted living facilities, residential care facilities, private non-medical institutions, mental health service providers, substance abuse agencies, and programs and services to children. DLRS maintains an online database of the state's health care providers.

DLRS metrics in these profiles:
- Hospital bed count
- Nursing facilities
- Home health
- End-Stage Renal Disease facilities
- Ambulatory surgery centers
- Hospice providers

Note: This project uses DLRS data from 2014-2015.

**Maine Department of Labor, Center for Workforce Research and Information, Unemployment and Labor Force (DOL)**

What it is: Data is derived from the Local Area Unemployment Statistics (LAUS) program. LAUS is a federal-state cooperative program that develops monthly estimates of the labor force, employment, unemployment, and unemployment rates for the state, counties, labor market areas, metropolitan and micropolitan statistical areas, cities, and towns.

DOL metrics in these profiles:
- Unemployment rate

Note: This project uses average annual unemployment rates for 2015.
Maine Emergency Medical Services (EMS) Run Reporting System
What it is: Maine EMS is a bureau within the Department of Public Safety. The Maine EMS system includes the Board of EMS, the Maine EMS staff, six regional EMS offices, and the Medical Direction and Practice Board.

Maine EMS metrics in these profiles:
· EMS companies

Note: The EMS data used for this project was included in the Maine EMS Run Reporting System 2014 Annual Report.

Maine Health Management Coalition (MHMC)
What it is: The Maine Health Management Coalition (MHMC) is a nonprofit organization whose over 70 members include public and private purchasers, hospitals, health plans, and doctors working together to measure and report health care value. MHMC helps employers and their employees use this information to make informed decisions.

MHMC metrics in these profiles:
· Primary care practices

Note: The MHMC primary care practices data included in this project was updated on November 30, 2015.

Maine Oral Health Program
What it is: The Maine Oral Health Program is part of the Division of Population Health at the Maine CDC, a Division of the Maine Department of Health and Human Services.

Maine Oral Health Program metrics in these profiles:
· Safety net dental clinics

Note: The safety net dental clinic information included in this project is from the Oral Health Program's “Dental Clinics and Services for Maine Residents” directory updated in July 2015.

Maine Quality Counts
What it is: Maine Quality Counts is an independent, multi-stakeholder, regional health care collaborative dedicated to transforming health and health care in Maine. The organization seeks to improve health care by leading, collaborating, and aligning improvement efforts. Maine Quality Count’s 75+ members are major care delivery organizations, payers and employers, as well as individuals, providers, and associations. The Dirigo Health Agency’s Maine Quality Forum, Maine Quality Counts, and the Maine Health Management Coalition work together to lead the Maine Patient Centered Medical Home (PCMH) Pilot.

Maine Quality Counts metrics in these profiles:
· Patient Centered Medical Homes
· Health Homes
· Community Care Teams
Note: Maine Quality Counts provided the project team with PCMH, Health Home, and CCT locations dated January 13, 2016.

**Occupational Employment Statistics Survey (OES)**

What it is: The Maine Department of Labor, Center for Workforce Research and Information prepares the Occupational Employment and Wage Estimates for Maine using the OES. Data is derived from the Quarterly Census of Employment and Wages (QCEW) program. QCEW is a federal-state cooperative program that collects employment and wage information for workers covered by state unemployment insurance laws and for Federal workers covered by the Unemployment Compensation for Federal Employees program. Data includes wage, employment, address, and coding information for individual establishments.

OES metrics in these profiles:
- Registered nurses
- Social workers

Note: This project uses OES data from 2014. OES has withheld the number of registered nurses and/or social workers for several Maine counties. OES withholds employment estimates for several reasons, including the need to protect the confidentiality of survey respondents, or failure to meet data quality standards. In order to ensure confidentiality of survey respondents, or failure to meet data quality standards. In order to ensure confidentiality, OES does not provide the reason that a particular estimate was not released.

**Office of MaineCare Services, Participating Behavioral Health Home Organization Provider Information (OMS)**

What it is: The Office of MaineCare Services oversees MaineCare—Maine's Medicaid program. OMS keeps and updates a list of Behavioral Health Homes serving adults and a list of Behavioral Health Homes serving children.

Office of MaineCare Services metrics in these profiles:
- Behavioral Health Home organizations

Note: The list of Behavioral Health Homes serving adults and children that was used for this project was updated in November 2015.

**Maine Demographic Projections, Office of Policy and Management (OPM)**

What it is: The Office of Policy and Management has released population projections for Maine and its counties and towns for 5-year intervals to 2032, based on 2012 U.S. Census Bureau population estimates. The projections are broken down by county, age, and sex.

Maine Demographic Projections metrics in these profiles:
- Total projected population
- Projected 65 and older
- Projected 85 and older
**Department of Labor Quarterly Census of Employment and Wages (QCEW)**

What it is: This data series includes all employment covered under unemployment insurance and excludes non-employed workers, railroad workers, and some government employees. Data for employment, establishments, and wages are reported using the North American Industrial Identification System (NAICS) which arranges industries into hierarchical groupings. This analysis includes the highlighted industries at the “three-digit NAICS level.”

QCEW metrics in these profiles:
- All health care economy data

Note: Nondisclosure rules do not allow for sufficient analysis at more detailed industry levels. However, it is assumed that employment in various industries is included in the higher level industries we report on: ambulatory health care services, hospitals, and nursing and residential care facilities. This project uses annual averages from 2014.

**Behavioral Health Treatment Services Locator (SAMHSA)**

What it is: The Behavioral Health Treatment Services Locator is an online source of information for persons seeking treatment facilities in the U.S. or U.S. Territories for substance use disorders and/or mental health problems. The Locator is a product of SAMHSA's Center for Behavioral Health Statistics and Quality (CBHSQ) and is compiled from responses to CBHSQ's annual surveys of treatment facilities (the National Survey of Substance Abuse Treatment Services and the National Mental Health Services Survey). All information is updated annually based on facilities’ responses to the annual substance abuse and mental health facility surveys.

SAMHSA metrics in these profiles:
- Mental health treatment facilities
- Substance abuse treatment facilities

Note: See link above and then click “About” for a description of facilities that are and are not eligible for inclusion in the Locator. SAMSHA updates the services locator data on a rolling basis. The data included in this project were accessed on November 18, 2015.

**Buprenorphine Treatment Physician Locator (SAMHSA)**

What it is: The SAMHSA Buprenorphine Treatment Physician Locator allows users to find physicians authorized to treat opioid dependency with buprenorphine by state.

SAMHSA Buprenorphine Treatment Physician Locator metrics in these profiles:
- Physicians authorized to prescribe buprenorphine

Note: SAMSHA updates the treatment physician locator data on a rolling basis. The data included in this project were accessed January 7, 2016.
**Opioid Treatment Program Directory (SAMHSA)**
What it is: The SAMHSA Opioid Treatment Program Directory allows users to search for programs providing methadone for the treatment of opioid addiction in each state and territory of the U.S.

SAMHSA Opioid Treatment Program Directory metrics in these profiles:
- Methadone treatment programs

Note: SAMSHA updates the program directory data on a rolling basis. The data included in this project were accessed November 10, 2015.

**Maine Shared Health Needs Assessment & Planning Process (SHNAPP)**
What it is: The Maine Shared Health Needs Assessment & Planning Process (SHNAPP) Project—a collaborative of the Central Maine Medical Family, Eastern Maine Healthcare Systems, MaineGeneral Health, MaineHealth and the Maine CDC—works to improve the health status of Maine residents and track results. The SHNAPP reports provide an in-depth look at population health status, risk factors, barriers to care, demographics, and social factors affecting Maine communities. They also include qualitative responses from a broad sample of stakeholders representing every county in Maine. Together, this data provides unique perspectives on the collective health of Maine people.

Note: 2015 SHNAPP metrics are used in the “Health Status Indicators Relative to State Average” table included in each county profile.

**U.S. Census**
What it is: The U.S. Census Bureau counts every resident in the United States. It is mandated by Article I, Section 2 of the Constitution and takes place every 10 years.

U.S. Census metrics in these profiles:
- Percentage of people living in rural areas
- Persons per square mile

Note: This workbook includes Census data from 2010. Persons per square mile was calculated using ACS 2011-2013 population data and 2010 Census land area data.

**U.S. Department of Agriculture, Economic Research Service, Rural-Urban Continuum Codes**
What it is: The U.S. Department of Agriculture’s Rural-Urban Continuum Codes (RUCCs) are a classification system that distinguishes metropolitan counties by the population size of their metro area, and nonmetropolitan counties by degree of urbanization and adjacency to a metro area.

Note: RUCCs are referenced in the narrative description of a county’s rurality in the “Geography and Demographics” section of each profile. All RUCCs are from 2013.
VA Maine Healthcare System

What it is: The VA Maine Healthcare system serves Maine veterans through the delivery of “timely quality care by staff who demonstrate outstanding customer service, the advancement of health care through research, and the education of tomorrow's health care providers.” The VA Maine Healthcare System website includes the locations of all VA Maine Healthcare facilities, including Togus VA Medical Center, Community-Based Outpatient Clinics, and Vet Centers.

VA Maine Healthcare System metrics in these profiles:
· VA Hospital
· VA Facilities (other than hospital)

Note: Locations of VA Maine Healthcare facilities were accessed from the VA Maine Healthcare System website in November 2015.
GLOSSARY

**ambulatory surgery center**: licensed centers that perform surgeries that generally do not exceed 90 minutes in length and do not require more than four hours recovery or convalescent time.

**Area Agency on Aging**: a nonprofit organization, funded through the federal Older Americans Act, which is dedicated to planning and implementing social services for adults age 60 and older.

**assisted living facility**: Maine defines an assisted living facility as providing a comprehensive array of support services to consumers in private apartments in buildings that include a common dining area. These programs may include meal delivery, housekeeping and chore assistance, and case management. These programs also provide medication administration directly or indirectly.

**behavioral health home**: a behavioral health agency that serves as a health home (see below) for people with mental health and substance use disorders.

**buprenorphine**: buprenorphine is used in medication-assisted treatment to help people reduce or quit their use of heroin or other opiates, such as pain relievers like morphine. Unlike methadone treatment, which must be administered in a highly structured clinic, buprenorphine is the first medication to treat opioid dependency that is permitted to be prescribed or dispensed in physician offices, significantly increasing treatment access.

**community care team (CCT)**: CCTs are multi-disciplinary, community-based, practice-integrated care management teams that work closely with the patient-centered medical home practices (see below) to provide enhanced services for the most complex, most high-needs patients in the practice.

**County Health Rankings**: a project of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute that utilizes national data to rank the health of each county relative to others in each state, using a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work, and play.

**Critical Access Hospital (CAH)**: an acute care hospital certified under a specific set of Medicare Conditions of Participation. CAHs may have no more than 25 inpatient beds and must maintain an annual average length of stay of no more than 96 hours for acute inpatient care; offer full time, round-the-clock emergency care services; and be located in a rural area at least a 35 mile drive (or closer in some circumstances) from any other hospital or CAH. The designation provides a sustainable model of acute care services to meet the needs of vulnerable rural communities.

**end-stage renal disease (ESRD) facility**: includes renal transplantation centers, renal dialysis centers, and renal dialysis facilities.

**federal poverty level (FPL)**: a measure of income issued every year by the Department of Health and Human Services; federal poverty levels are used to determine eligibility for certain programs and benefits, including subsidies for Marketplace health plans, and Medicaid and CHIP coverage.
federally qualified health center (FQHC): federally designated and funded clinics that serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors. Certain tribal organizations and FQHC look-alikes (an organization that meets PHS Section 330 eligibility requirements, but does not receive grant funding) may also receive special Medicare and Medicaid reimbursement.

frontier: the most remote and sparsely populated places along the rural-urban continuum, with residents far from health care services, schools, grocery stores, and other necessities. Frontier is often thought of in terms of population density and distance in minutes and miles to population centers and other resources, such as hospitals. Frontier areas may be defined at the community level by county, ZIP code or census tract; however, they are most often delineated by county.

health home: offers coordinated care to individuals with multiple chronic health conditions, including mental health and substance use disorders. The health home is a team-based clinical approach that includes the consumer, their providers, and family members, when appropriate. The health home builds linkages to community supports and resources, and enhances coordination and integration of primary and behavioral health care to better meet the needs of people with multiple chronic illnesses.

Healthy Maine Partnership (HMP): HMPs are funded by tobacco settlement dollars and implement initiatives and policies at both the state and local level that reduce chronic disease risk, reduce or eliminate involuntary exposure to secondhand smoke, prevent tobacco use, increase access to healthy foods, and increase opportunities to be physically active.

home health care agency: provides health care services to patients under the care of a physician in the patient’s place of residence. This differs from a personal care agency, which hires/employs unlicensed assistive personnel to provide assistance with activities of daily living to individuals in the places in which they reside, either permanently or temporarily.

Maine Shared Health Needs Assessment & Planning Process (SHNAPP) Project: The SHNAPP Project has compiled population health assessment data to support a collaborative, statewide community health needs assessment process led by the Maine Center for Disease Control and Prevention and the state’s four largest health systems.

mental health treatment facility: facilities that provide mental health treatment services and are funded by the state mental health agency or other state agency or department; mental health treatment facilities administered by the U.S. Department of Veterans Affairs; and private for-profit and nonprofit facilities that are licensed by a state agency to provide mental health treatment services, or that are accredited by a national treatment accreditation organization (e.g., The Joint Commission, National Committee for Quality Assurance, etc.).

nursing facility (also skilled nursing facility): facility primarily engaged in providing skilled nursing care and related services for residents who require medical or nursing care, rehabilitation services or health-related care and services above the level of room and board.
patient-centered medical home: a model or philosophy of primary care that is patient-centered, comprehensive, team-based, coordinated, accessible, and focused on quality and safety.

population density: a measurement of the number of people per unit of geographic area (e.g., square mile).

public health district: eight geographic districts within Maine designed to improve coordinated delivery of essential public health services.

residential care facility: provides housing and assistance with services, including activities of daily living and instrumental activities of daily living.

Rural Health Clinic (RHC): a federally designated health clinic certified to receive special Medicare and Medicaid reimbursement. They are only required to provide outpatient primary care services and basic laboratory services. RHCs must be located within rural areas that have health care shortage designations.

safety net dental clinic: clinics that strive to provide oral health care to individuals and their families regardless of their ability to pay.

school-based health center (SBHC): primary care clinics based in primary and secondary school campuses. Most SBHCs provide a combination of primary care, mental health care, substance abuse counseling, case management, dental health, nutrition education, health education, and health promotion.

substance abuse treatment facility: a facility with licensure/accreditation/approval to provide substance abuse treatment from a state substance abuse agency or a national treatment accreditation organization (e.g., The Joint Commission, Commission on Accreditation of Rehabilitation Facilities, National Committee for Quality Assurance, etc.); staff who hold specialized credentials to provide substance abuse treatment services; and authorization to bill third-party payers for substance abuse treatment services using an alcohol or drug clinical diagnosis.

unorganized territory (UT): UTs have no local, incorporated municipal government. In Maine there are over 400 unorganized townships, plus many coastal islands that do not lie within municipal boundaries. The land area of UTs is slightly over one half the area of the entire state. Approximately 9,000 year-round residents live in UTs, plus additional seasonal residents. The Maine Legislature serves as the “local governing body” for UTs, as it annually reviews and approves the various budgets from state agencies and county government necessary to provide services and property tax administration in UTs.