Primary care physicians are defined as those practicing in family/general practice (FP), general internal medicine (GIM), and general pediatrics (Gen Ped).

In 2015, there were 609 active direct patient primary care physicians in North Dakota (Figure 1). Of those, 403 (66%) practiced in urban areas, 111 (18%) in large rural areas, 35 (6%) in small rural areas, and 60 (10%) in isolated small rural areas.

In general, urban areas are defined as those with a core city population of 50,000 or greater. Large rural areas have a population between 10,000 and 49,999; small rural areas are between 2,500 and 9,999, and isolated small rural areas have populations less than 2,500.

The greatest primary care physician disparity is in isolated small rural areas, which have 22% of the population, but only 10% of the primary care physicians.

More than two-thirds (66%) of North Dakota’s primary care physicians practice in urban areas where more than half (51%) of the population resides.

Urban areas have the highest primary care physicians to population ratio (1.0 per 1,000). The ratio in large rural areas is 0.7, small rural is 0.7, and isolated small rural is 0.4 per 1,000.

More than half (61%) of North Dakota practicing primary care physicians either attended medical school or received residency training (or both) in North Dakota. The comparable percentage for North Dakota’s non-primary care physicians is 34% (340).

Of the primary care physicians practicing in North Dakota, 42% went to medical school in North Dakota, and 48% did their residencies in North Dakota.

Nearly one-third (29%) of primary care physicians practicing in North Dakota obtained both their medical school and at least one residency training in North Dakota.

Figure 1. Comparison of Percentage of Primary Care Physicians Associated by Rural/Urban Status of North Dakota Population

- Population: 61%
- Primary Care Physicians: 66%

- Urban: 51%
- Large Rural: 21%
- Small Rural: 6%
- Isolated Small Rural: 22%

Figure 2. Location of Medical School and Residency for Primary Care Physicians Currently Practicing in North Dakota

- Residency in ND: 19%
- Both Med School & Residency in ND: 29%
- Med School in ND: 13%
- No Medical School or Residency in ND: 39%
Primary care physicians in large, small, and isolated small rural areas are more likely to be male (66% and 70%).

Primary care physicians in small and isolated small rural areas are older than their urban and large rural counterparts.

More than half of the primary care physicians are in family medicine (59%; 360/609).

77% of the primary care physicians in small rural and 72% in isolated small rural areas practice family medicine.

Nearly one-third of the urban primary care physicians are in general internal medicine.

The percentage of general pediatric primary care physicians is twice as high in urban and large rural areas as in small/isolated small rural areas.

## Conclusions

The urban areas of North Dakota have 66% of the primary care physicians – and a far greater proportion of the state’s non-primary care physicians – while only having 51% of the total population in North Dakota. The population of North Dakota’s small and isolated small rural areas have disproportionately fewer primary care physicians per person than their urban counterparts. Statewide, only slightly more than one-third of the primary care providers are female.

## Data

The physician data are from the 2015 American Medical Association Physician Masterfile.

### Table 1. Age and Sex of Primary Care Physicians in North Dakota by Rural/Urban Status

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Female</th>
<th>Male</th>
<th>Age</th>
<th>Mean</th>
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</thead>
<tbody>
<tr>
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<td>609</td>
<td>218</td>
<td>391</td>
<td></td>
<td>49.0</td>
</tr>
<tr>
<td>%</td>
<td>36%</td>
<td>36%</td>
<td>64%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>403</td>
<td>150</td>
<td>253</td>
<td></td>
<td>48.0</td>
</tr>
<tr>
<td>Large Rural</td>
<td>111</td>
<td>38</td>
<td>73</td>
<td></td>
<td>49.9</td>
</tr>
<tr>
<td>Small Rural</td>
<td>35</td>
<td>12</td>
<td>23</td>
<td></td>
<td>52.1</td>
</tr>
<tr>
<td>Isolated Small Rural</td>
<td>60</td>
<td>18</td>
<td>42</td>
<td></td>
<td>52.3</td>
</tr>
<tr>
<td>Total</td>
<td>609</td>
<td>218</td>
<td>391</td>
<td></td>
<td>49.0</td>
</tr>
</tbody>
</table>

### Table 2. Specialty of Primary Care Physician by Rural/Urban Status

<table>
<thead>
<tr>
<th></th>
<th>FP</th>
<th>GIM</th>
<th>Gen Ped</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Urban</td>
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<td>123</td>
<td>62</td>
</tr>
<tr>
<td>Large Rural</td>
<td>72</td>
<td>21</td>
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<tr>
<td>Small Rural</td>
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<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Isolated Small Rural</td>
<td>43</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>360</td>
<td>164</td>
<td>85</td>
</tr>
</tbody>
</table>

- Nearly one-third of the urban primary care physicians are in general internal medicine.
- The percentage of general pediatric primary care physicians is twice as high in urban and large rural areas as in small/isolated small rural areas.

North Dakota Workforce Fact Sheets Are Available At: ruralhealth.und.edu/publications/health-workforce-factsheets

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