North Dakota patients can easily cross the South Dakota, Montana, and Minnesota borders to receive health care. Direct patient care physicians practicing in zip code areas that are adjacent to the North Dakota border or that are within 15 miles of the border are treating North Dakota patients. There are 65 bordering physicians that treat North Dakota patients.

Direct patient care physicians are defined as those who have regular contact with patients. They do not include physicians who predominantly teach or do research. They do include those working in hospitals and clinics and those who are semi-retired.

Based on estimations by the American Association of Family Practice, a provider can manage a panel size (number of patients a provider can be accountable for) of 1,400 to 1,750 patients per year. This means that with 65 bordering physicians and a possible panel size of 1,400 patients this could potentially be 93,800 patients served every year. Assuming that bordering physicians might only treat 25% to 50% of patients that are North Dakotans, that would approximately be 23,450 to 46,900 North Dakota patients served.

There are 65 Bordering Direct Patient Care Physicians:

- In 2011, there were 65 bordering direct patient care physicians treating some North Dakota patients.

- Thirty-four physicians reside in Minnesota, 30 reside in South Dakota, and one resides in Montana.

- Adding bordering physicians to all North Dakota direct patient care physicians of 1,432, brings the total to 1,497.

- The bordering physicians would make up 4.3% of the direct patient care physicians treating North Dakota patients.

- Over half of North Dakota’s bordering direct patient care physicians practice in Minnesota (52.3%).

Table 1: Demographics of Bordering Physicians

<table>
<thead>
<tr>
<th>State</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Average Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN</td>
<td>34</td>
<td>29</td>
<td>5%</td>
<td>49.0</td>
</tr>
<tr>
<td>MT</td>
<td>1</td>
<td>1</td>
<td>0%</td>
<td>47.0</td>
</tr>
<tr>
<td>SD</td>
<td>30</td>
<td>21</td>
<td>41%</td>
<td>56.9</td>
</tr>
<tr>
<td>All</td>
<td>65</td>
<td>51</td>
<td>100%</td>
<td>54.0</td>
</tr>
</tbody>
</table>

- Over three-fourths of bordering physicians are male (78.5%), with physicians in Minnesota having the highest proportion of males (56%).

- The mean age of bordering physicians was 54.0 years. The mean age is higher in South Dakota than other states (Minnesota to South Dakota, 49.0 to 56.9).

Table 2: Specialties of Bordering Physicians

<table>
<thead>
<tr>
<th>State</th>
<th>Primary Care</th>
<th>Surgery</th>
<th>Internal Medicine</th>
<th>Psychiatry</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN</td>
<td>21 62%</td>
<td>2 6%</td>
<td>2 6%</td>
<td>2 6%</td>
<td>4 12%</td>
</tr>
<tr>
<td>MT</td>
<td>0 0%</td>
<td>0 0%</td>
<td>0 0%</td>
<td>0 0%</td>
<td>1 100%</td>
</tr>
<tr>
<td>SD</td>
<td>25 83%</td>
<td>2 7%</td>
<td>0 0%</td>
<td>0 0%</td>
<td>3 10%</td>
</tr>
<tr>
<td>All</td>
<td>46 71%</td>
<td>4 6%</td>
<td>2 3%</td>
<td>2 3%</td>
<td>8 12%</td>
</tr>
</tbody>
</table>

- Nearly two-thirds of North Dakota’s bordering direct patient care physicians practice primary care (58%).

- South Dakota has the highest percentage of primary care practicing physicians with 83.3%, followed by Minnesota at 61.8%.
Conclusions

• The bordering direct patient care physicians have a significant impact on healthcare delivery within North Dakota, as they represent 4.3% of direct patient care physicians in North Dakota (65).

• Thirty-four physicians reside in Minnesota, 30 reside in South Dakota, and one resides in Montana.

• Over half of North Dakota’s bordering direct patient care physicians practice in Minnesota.

• Over three-fourths of bordering physicians are male.

• The mean age of all bordering physicians is 54.0.

• South Dakota has the highest percentage of primary care practicing physicians followed by Minnesota.

Data
The physician data are from the 2011 American Medical Association physician master file.

The panel size estimation is from the American Association of Family Practice.

For more information, contact

Gary Hart, PhD
701.777.3848 • gary.hart@med.und.edu

Mandi-Leigh Peterson, MA
701.777.6719 • mandi.peterson@med.und.edu

Abdimajid Ahmed
701.777.6842 • abdimajid.ahmed@med.und.edu

Center for Rural Health
University of North Dakota
School of Medicine & Health Sciences
501 North Columbia Road, Stop 9037
Grand Forks, ND 58202-9037
701.777.3848 • ruralhealth.und.edu