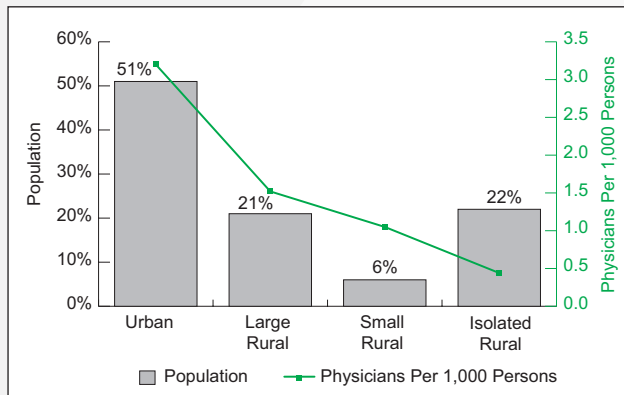


Availability of Direct Patient Care Physicians in North Dakota

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, clinics, and those who are semi-retired. International medical graduates (IMGs) and Canadian medical graduates are also included.

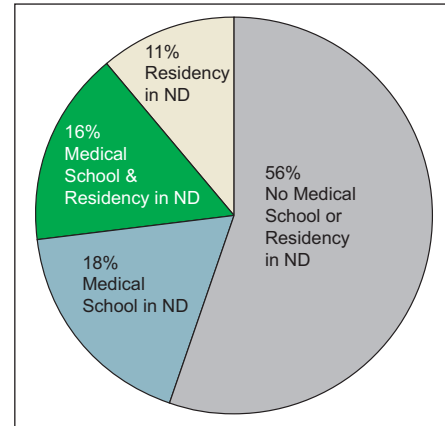
As of 2017, there were 1,610 direct patient care physicians practicing in North Dakota. Additionally, there were 2.10 physicians per 1,000 persons in North Dakota, 23% lower than the national average of 2.72 per 1,000. The availability of direct patient care physicians is associated with their sex, age, rural/urban status (defined by RUCA codes) and origin.

Figure 1. Rate of Physicians Associated with Rural/Urban Status of North Dakota Population



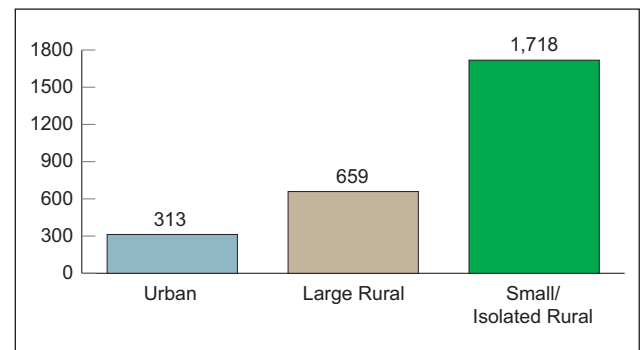
- Half of the population (51%) lived in urban areas, 27% lived in large or small rural areas, and 22% lived in isolated areas.
- Urban areas represented the highest rate of physician-to-population ratio (3.20 per 1,000).
- The greatest physician population disparity is in isolated rural areas, which have 22% of the population, but only 5% of North Dakota physicians, or 0.44 physicians per 1,000 people.

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



- Almost half (45%, 715) of direct patient care physicians practicing in North Dakota received either medical school education, residency training, or both in North Dakota.
- Of the physicians practicing in North Dakota, 34% (545) went to medical school in North Dakota, and 27% (433) completed their residencies in the state.
- Approximately 16% (263) of the physicians in North Dakota obtained both their medical school and residency training in North Dakota.

Figure 3. Number of Patients per Physician in North Dakota by Rural/Urban Status



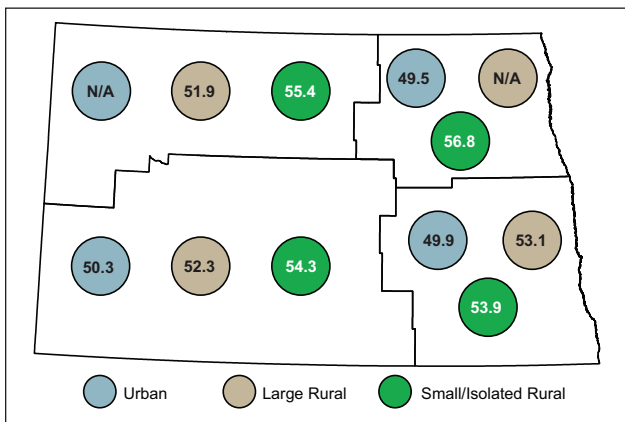
- There were twice as many patient per physician in large rural areas than urban areas, and more than five times as many for small/isolated rural areas.

Table 1. Demographics of Physicians Practicing in North Dakota by Rural/Urban Status

Rural/Urban Status	All		Female		Male		Age
	N	%	N	%	N	%	Mean
Urban	1,237	77%	357	29%	880	71%	50.0
Large Rural	248	15%	76	31%	172	69%	52.1
Small Rural	50	3%	15	30%	35	70%	54.7
Isolated Rural	75	4%	24	32%	51	68%	55.5
All	1,610	100%	472	29%	1,138	71%	50.7

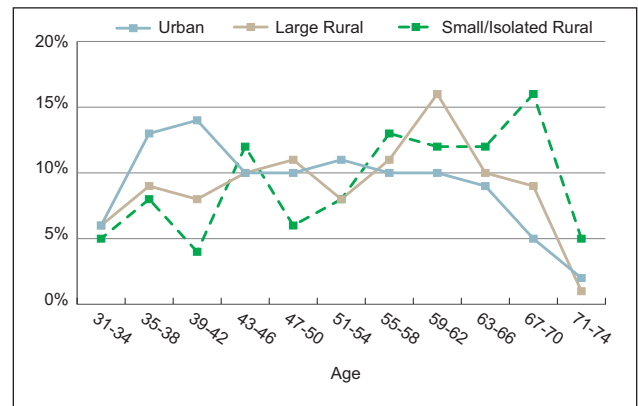
- More than three-fourths of North Dakota’s direct patient care physicians practiced in urban areas (77%).
- Nearly three-fourths of physicians in North Dakota were male (71%), with physicians in urban and large rural areas having the highest proportion of males.
- The mean age of physicians was 50.7 years. The mean age increased as areas became more rural (urban to isolated rural, 50.0 to 55.5).

Figure 4. Average Age of Physicians for Rural/Urban Status across North Dakota



- Physicians in the northeast region had the largest age difference between urban and rural areas, with the average age in urban being 49.5, compared to 56.8 in rural.
- Rural physicians across the state were relatively older than their urban counterparts.

Figure 5. Physicians in North Dakota by Age Group and Rural/Urban Status



- Both large rural and small/isolated rural physicians were older than urban physicians.
- Large, small, and isolated rural areas had proportionally more physicians age 59 and older than did urban areas.

Conclusions

- The urban areas of North Dakota made up slightly more than half the population, but had more than seven times as many physicians per person than isolated and small rural areas, which had slightly less than one-fourth the population.
- 45% of direct patient care physicians currently practicing in North Dakota graduated from medical school and/or completed a residency in North Dakota.
- Rural areas in North Dakota had about one-third of the direct patient care physicians as urban areas.
- The mean age of physicians by rural/urban location varied notably across North Dakota regions. Rural areas had older physicians.

Data

- The physician data are from the 2017 American Medical Association Physician Masterfile.
- The national average for the physician per population is from the 2017 State Physician Workforce Data Report.