



## University of North Dakota School of Medicine and Health Sciences Graduates' Residencies and Current Practice Areas

*This fact sheet is Number 9 in a series of analyses regarding physicians in North Dakota.*

Of the 853 graduates of the University of North Dakota (UND) School of Medicine and Health Sciences (SMHS) that are currently practicing physicians, 289 (33.9%) did their residency training in North Dakota and 564 (66.1%) did their residency training out-of-state. Overall, 292 (34.2%) of these physicians currently practice in North Dakota and 561 (65.8%) practice out-of-state.

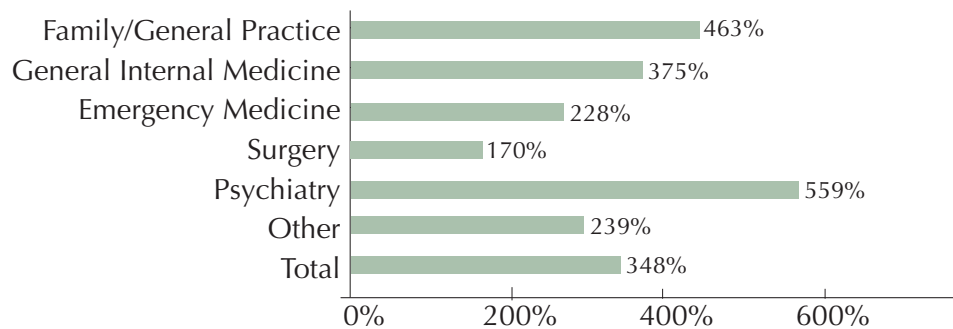
Of UND SMHS graduates, 517 did their residencies out-of-state because their residency specialty was not offered within North Dakota. Of these graduates who completed residencies out-of-state (due to specialty not being offered in-state), 29% have returned to North Dakota and are currently practicing in the state.

**Table 1. Number and percent of all 853 medical school graduates from UND SMHS who practice in North Dakota or out-of-state by where they did their residency as defined by type of residency available in North Dakota.**

	North Dakota Residency				Out-of-State Residency				
	North Dakota Practice		Out-of-State Practice		North Dakota Practice		Out-of-State Practice		
	N	%	N	%	N	%	N	%	
Family/General Practice	353	130	65.7%	68	34.3%	22	14.2%	133	85.8%
General Internal Medicine	129	29	69.0%	13	31.0%	16	18.4%	71	81.6%
Emergency Medicine	95	5	55.6%	4	44.4%	21	24.4%	65	75.6%
General Surgery	81	4	36.4%	7	63.6%	15	21.4%	55	78.6%
Psychiatry	71	12	80.0%	3	20.0%	8	14.3%	48	85.7%
Other*	124	7	50.0%	7	50.0%	23	20.9%	87	79.1%
<b>Total</b>	<b>853</b>	<b>187</b>	<b>64.7%</b>	<b>102</b>	<b>35.3%</b>	<b>105</b>	<b>18.6%</b>	<b>459</b>	<b>81.4%</b>

\* UND SMHS graduates who do not practice in listed specialties

**Figure 1. Percent more likely to practice in North Dakota if they do residency within North Dakota. (calculated from Table 1)**



- Family/general practice physicians who complete their residency in North Dakota are 4.6 times more likely to practice in the state, and psychiatrists are 5.6 times more likely than those trained out-of-state.
- Overall, physicians who did their residency in North Dakota are 3.5 times more likely to practice in North Dakota.

The most common types of residency specialties not available in North Dakota are obstetrics/gynecology, radiology, general pediatrics, anesthesiology, orthopedics, dermatology, and ophthalmology. Of the 853 graduates from UND SMHS, 432 of them completed a residency out-of-state in one of these specialties.

**Table 2. Number and percent of 432 medical school graduates from UND SMHS who did one of the seven most common types of residency trainings offered outside of North Dakota (and not in North Dakota) by if they currently practice in North Dakota or out-of-state.**

		Out-of-State Residency			
		North Dakota Practice		Out-of-State Practice	
		N	%	N	%
Obstetrics/Gynecology	127	32	25.2%	95	74.8%
Radiology	83	21	25.3%	62	74.7%
General Pediatrics	81	20	24.7%	61	75.3%
Anesthesiology	61	14	23.0%	47	77.0%
Orthopedics	35	16	45.7%	19	54.3%
Dermatology	24	10	41.7%	14	58.3%
Ophthalmology	21	9	42.9%	12	57.1%
Total	432	122	28.2%	310	71.8%

- About two out of five graduates from UND SMHS who leave the state for residency in orthopedics, dermatology, and ophthalmology return to North Dakota to practice.
- About one out of four graduates from UND SMHS who leave the state for residency in obstetrics/gynecology, radiology, general pediatrics, or anesthesiology return to North Dakota to practice.
- Of the practicing physicians in North Dakota, 61% received no medical school or residency training in North Dakota (Health Workforce Fact Sheet 1).
- 143 physicians who graduated from the UND SMHS did their residency training in other specialties not included in Table 1 (59% of those are practicing in North Dakota).

## Conclusions

- Of all the UND SMHS graduates who are currently providing direct patient care who could have completed a residency in North Dakota (number equals 853):
  - 53.4% left North Dakota for their residency training and are not practicing in North Dakota
  - 12.3% left North Dakota for their residency training and are practicing in North Dakota
  - 21.9% did their residency in North Dakota and are not practicing in North Dakota
  - 12.0% did their residency in North Dakota and are practicing in North Dakota

- Overall these practicing UND SMHS graduates account for 39% of North Dakota's practicing physicians (Health Workforce Fact Sheet 1).
- Overall medical school graduates from UND SMHS who did their residency in North Dakota are 348% more likely to be practicing within North Dakota than the UND SMHS graduates who did their residency out-of-state. The comparable figures are 463% for family physicians, 559% for psychiatrists, and 375% for general internists. Clearly those UND SMHS graduates who did their residency in North Dakota are substantially more likely to practice direct patient care in North Dakota than their counterparts who left the state for their residency.
- For all those UND SMHS graduates who left North Dakota for residencies that were not offered within the state, only 28% are practicing in North Dakota. Those specialists most likely to return to practice in North Dakota specialized in orthopedics (46% returning), ophthalmology (43%), and dermatology (42%). Those specialists least likely to return to practice in North Dakota specialized in obstetrics/gynecology, radiology, anesthesiology, and general pediatrics (a primary care specialty). Their percents of return were very similar ranging from 23% through 25%. Plainly those UND SMHS graduates who did their residency outside of North Dakota because the specialty residency types of their choice were not available in North Dakota are substantially less likely to practice direct patient care in North Dakota than those whose specialty resident training was available within the state.

## Data

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

---

### For more information, contact

**Marilyn G. Klug, PhD**

701.787.0089 • marilyn.klug@med.und.edu

**Gary Hart, PhD**

701.777.3848 • gary.hart@med.und.edu

**Mandi-Leigh Peterson, MA**

701.777.6719 • mandi.peterson@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